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# A Study of the Effects of Working Capital Management on SME's Financial Performance: A Case of Zam Manufacturing Limited

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**ABSTRACT**

**In Zambia, Small Medium Enterprises represent 97% of all businesses, contributes 70% of the country's Gross Domestic Product and employs 88% of the country's workforce (FSDZ, 2021). In-spite of this, most small medium enterprises are victims of acute business failure attributed to inadequate managerial acumen, restricted technical skills, limited access to capital and poor internal financial management. The aim of the study was to investigate the relationship between working capital management and small medium enterprises' financial performance. Cash conversion cycle was used as a comprehensive measure of working capital, which was further broken down to accounts collection period, inventory conversion period and accounts payable period was adopted as independent variables while gross operating profit was used as the dependent variable. Multiple regression analysis was applied to elucidate the relationship between working capital management and firm financial performance. The results revealed that accounts collection period and accounts payable period had a negative relationship with gross operating profit. While inventory conversion period showed a positive relationship with gross operating profit. Based on the regression analysis results, it was recommended that Zam Manufacturing Limited adopts 85% cash sales and 15% credit sales of its total sales target. Furthermore, departmental managers must undergo regular training in aspect of working capital under their responsibility to improve capacity. Additionally, the company should regulate the risk of overtrading by gradually monitoring and controlling growth.**

***Keywords***-- Cash Conversion Cycle, Gross Operating Profit, Multiple Regression, Small Medium Enterprises, Working Capital

## I. INTRODUCTION

Sadiq (2017) states that small and medium enterprises consist of the majority of enterprise in all economies in the world. According to Brisha and Pula (2015) the Organization for Economic Cooperation and Development estimates that SMEs account for 90% of firms and employs 63% of the workforce in the world. In Zambia, SMEs represent about 97% of all businesses, contributes 70% of the country's Gross Domestic Product and employs 88% of the country's workforce (FSDZ, 2021). Small medium enterprises play a crucial role in the social and economic development of any nation through improving quality of life for households, creation of jobs, wealth formation, increased tax collection for the government as well as contributing to the country's Gross Domestic Product (Kambone, 2017). In-spite of the widespread recognition of small medium enterprises contribution most small medium enterprises in Zambia are victims of acute business failure which is mainly attributed to insufficient business infrastructure, inadequate managerial and technical skills, limited access to capital and poor internal financial management (Chisala, 2008). The World Bank (2013) reports that access to finance is the top most cited impediment to investment and growth of business operations in Zambia. Additionally, CIMA (2014) underscores that mismanagement of working capital management is the most common cause of business failure.

Working capital is an investment of a firm's capital in current assets and the use of current liabilities to fund part of the investment (Napompech, 2012). Working capital is concerned with short term financing of business operations to ensure adequate liquidity for the maintenance of efficient flow of the day to day operations. It is simply the excess of current assets over current liabilities thus *(Working Capital = Current Assets – Current Liabilities)*. Current assets are those assets that can be easily transformed in to liquid and are expected to be realized within twelve months of the end of a reporting period. These assets include cash and cash equivalents, accounts receivables and inventory. Conversely current liabilities are obligations to suppliers that are expected to mature within twelve months of the end of a reporting period, they consist of account payable, short-term loans and bank overdrafts. The management of current assets and current liabilities is vital in creating value for shareholders to this regard, the ability of financial managers to effectively manage cash, receivables, inventory and payables has a substantial impact on the financial performance of a business. Consequently, working capital management becomes key to business strategy and to financial managers

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to ensure survival, growth and profitability of small medium enterprises.

Working Capital Management is the administration of all aspects of both current assets and current liabilities, to minimize risk of bankruptcy while maximizing the return on assets (CIMA, 2014). It is described as a financial management strategy that focuses on maintaining efficient levels of current assets and current liabilities to ensure that a firm has sufficient cash flow to meet its short-term maturing obligations (Akoto et al, 2013). Raheman and Nsar (2007) states that working capital management is a very important component of corporate finance because it directly affects the liquidity and profitability of a firm. Liquidity and profitability are the salient goals of Working Capital Management. As a result, management of the trade-off between liquidity and profitability is critical as on one hand firms with excessive liquidity risk reducing profitability and on the other firms focusing more on maximizing return on capital risk reducing liquidity to levels that effect day to day business operations. Therefore, the main objective of working capital management is to get the right balance between current assets and current liabilities to ensure current assets are sufficiently liquid to minimize the risk of insolvency and maximize the return on capital employed in order to minimize investments in working capital (CIMA, 2014). Thus, efficient working capital management involves planning and controlling the current assets and current liabilities in a manner that eliminates the risk of inability to meet short-term maturing obligations and to avoid excessive investment in these assets (Mathuva, 2010).

Cash Conversion Cycle is defined as the time lag between the expenditure for the purchase of raw materials and the collection of sales of finished goods (Deloof, 2003). It comprises of three components that denotes the cycle - Accounts Collection Period; the time taken to collect trade receivables from customers, Accounts Payment Period; the time taken to pay the firm's suppliers & Inventory Conversion Period; time taken to convert the inventory held into finished goods for sale (Mathuva, 2010). Cash conversion cycle is the mostly used measure of working capital management hence, in this study it will be used as the independent variable together with its components to measure working capital management while profitability will be a measure of financial performance expressed as a proxy of Gross Operating Profit adopted as the dependent variable. The main objective of this study is to investigate the relationship between working capital management and profitability at Zam Manufacturing Limited for the period from 2002 to 2018. The importance of the study is to provide an in depth understanding of the effects of prudent working capital management on a firm's financial performance for business owners and their managers. The findings from this study supported by the results and recommendations from the empirical studies is meant to offer profound insight for line managers on how to manage the scarce company resources while ensuring adequate cashflow, rising profitability and avoiding the pitfalls of bankruptcy with an overall goal to safeguard shareholder value. Another benefit for SMEs is that when the principles of this study are appropriately applied it will create a platform for increased SMEs success thereby contributing significantly to GDP, government revenues and employment. The main impact for Zam Manufacturing Limited is that the result of the study will inform, guide and direct management decisions on the design and implementation of an effective and efficient working capital management policy.

### *1.1 Statement of the Problem*

Capital has been regarded as one of the main limiting factors to the development and success of Small Medium Sized Enterprises (MCTI, 2008). Padachi (2006) adds that the failure rate for small business is higher than larger business due to weak financial management particularly poor working capital management and inadequate long-term financing. ZAM Manufacturing Limited is a small medium enterprise operating in the paper manufacturing industry in Zambia. Since inception the company has had no working capital management policy to govern its decisions and actions regarding cash flow management. The closest to a working capital management policy has been a management directive to implement 70% cash sales and 30% credit sales strategy introduced in 2014 in an effort to improve and maintain adequate cash to finance the day to day operations of the business. Despite the enactment of this directive the firm has continued to experience persistent inadequate cash flows to support the operations of the firm.

Overtime the problem of inadequate cash flows has negatively affected the operations of the company resulting in dissatisfied customers, failure to meet production targets, regular stock-outs of raw materials and finished goods, de-motivated employees, delays in settlement of maturing obligations, lost sales and declining revenues which has led to eroded shareholder equity as a result of continuous loss making. The difficulty arising from this problem is that it has the potential to cripple the operations of the firm and eventually lead to insolvency and organizational failure. The literature review gathered and analyzed has revealed that there has been narrow Zambian empirical studies undertaken to provide significant empirical evidence on the effects of working capital management on small medium enterprises' financial performance in Zambia. Therefore, it is important that a study is undertaken that can be used to inform and direct organizational policy at Zam Manufacturing Limited to aid managers implement sound working capital strategies to improve and strengthen the firm's financial performance.

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### *1.2 Research Objectives*

- To investigate the effects of cash conversion cycle on profitability
- To examine the effects of accounts collection period on profitability
- To establish the effects of inventory conversion period on profitability
- To analyze the effects of account payable period on profitability

### *1.3 Research Questions*

- What is the effect of cash conversion cycle on profitability?
- What is the effect of accounts collection period on profitability?
- What is the effect of inventory conversion period on profitability?
- What is the effect of account payable period on profitability?

## II. LITERATURE REVIEW

Working capital management is an important component in analyzing the financial performance of an organization (Yankovskaya, V.V., et al, 2021). Decisions involving working capital management are strategic and fundamental to the operation of a business as they affect a firm's profitability and value (Vural et al, 2012). The focus of working capital management is to maintain an efficient level of current assets and current liabilities (Lilian, 2013). According to CIMA (2014) working capital management is the organization of all aspects of both current assets and current liabilities with the goal to minimize the risk of insolvency while maximizing return on assets. Firms investing excessively in working capital will eventually result in a substandard return on assets while insufficient amounts of it will lead to difficulties in maintaining day to day operations (Deloof, 2003). Therefore, an effective working capital management ensures that firms have adequate current assets which are readily accessible to meet the short term maturing expenses while at the same time ensuring that the firms' assets are invested in the most productive activities to attain a positive return on capital employed (Enow and Brijlal, 2014). Consequently, working capital management is one way to ascertain the financial health of an organization. There are a number of perspectives advocated by several scholars regarding the relationship between working capital management and financial performance.

Napompech (2012) undertook research to examine the effect of working capital management on profitability using a regression analysis based on a panel sample of 255 companies listed on the Thailand stock exchange from 2007 through to 2009. The research finding indicated there is a significant negative relationship between gross operating profit and inventory conversion period, cash conversion cycle and accounts receivable period. Firm managers can increase firm profitability by shortening the cash conversion cycle, inventory conversion period (producing and selling goods faster) and accounts receivable period (accelerating debt collection). However, the results also established that there is an inverse relationship between payable deferral period and profitability hence profitability cannot be increased by lengthening the account payable period.

Alipour (2011) applied the statistical tools of multiple regression and Pearson's correlation to analysis effect of working capital on firm profitability. The study examined the relationship between working capital management and profitability. A sample size of 1063 companies listed on the Tehran stock exchange was selected using panel data analysis for a period from 2001 – 2006. The study showed that there is a negative relationship between account collection period, cash conversion cycle and inventory conversion period with profitability (expressed through gross operating profit). There is also a significant relation between accounts payable period and profitability. The conclusion of the study determined that there is a significant relationship between working capital management and profitability.

Dong and Su (2010) used cash conversion cycle and its components as a measure working capital management and gross operating profit as a measure of profitability. The study attempted to investigate the relationship between working capital management and profitability by using firms listed on the Vietnam stock market for the period from 2006 to 2008. The results demonstrated that there is a strong negative relationship between cash conversion cycle and profitability – the longer the period of cash conversion cycle the less profit a firm will gain. The findings further revealed a negative relationship between inventory conversion period and account collection period with profitability while there was a positive relationship between accounts payable period and profitability – the longer the time taken to pay creditor the more profit a firm attains.

Zawaira and Mutenheri (2014) conducted a study to determine the impact different components of working capital management on profitability of 32 nonfinancial firms listed on the central stock exchange from a period 2010 - 2012. The regression analysis results showed that profitability had no association with receivable collection period, inventory conversion period and cash conversion cycle. However, it was established that there was a relationship between payable deferral period and profitability. The study further revealed that liquidity and firm size enhanced firm profitability.

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Deloof (2003) carried out a study to investigate the relationship between working capital management and corporate profitability for a sample of 1009 large Belgian non-financial firm for the period of 1992 to 1996. The study used cash conversion cycle as a measure of WCM, average inventory days, accounts receivables and account payable as measures of trade credit and inventory policies. The results from Deloof's study shows that managers can create value for their shareholders by reducing the time taken to convert and sale inventory and to collect the debts from customers. The research also established that there is a negative relationship between accounts payable and profitability. Firms that are less profitable take long to settle their obligations to supplier

Owino (2014) conducted a study to establish the effect of working capital management on the profitability of 12 manufacturing companies in Kenya over a period of 5 years. The results of his research revealed on one hand there was no significant relationship between working capital components and profitability but on the other hand the size of the firm had a positive significant effect on the profitability.

Raheman and Nasr (2007) used a sample size of 94 Pakistani firms listed on the Karachi stock exchange from a period of 1999 to 2004. They studied the effects of different working capital variables to ascertain their relationship with firm profitability which included accounts collection period, inventory turnover period, accounts payable period and cash conversion cycle. Raheman and Nasr (2007) found a significant negative relationship between profitability measured through net operating profit and average collection period, inventory turnover days, average payment period and cash conversion cycle. They concluded that working capital management significantly affects profitability.

An in-depth examination of existing literature drawn from empirical results and conclusions has revealed divergent views on the effects of working capital management on a firm' financial performance. A good number of scholars have insisted that accounts collection period, inventory conversion period and cash conversion cycle have a significant negative effect on profitability while accounts payable period has a strong positive effect on profitability (Alipour 2011: Napompech, 2012: Dong and Su, 2010). On one extreme end Owino (2014) argue that all the components of working capital management have no effect on profitability while Zawaira and Mutenheri (2014) contend that at least accounts payable period does have a significant positive effect on profitability. Deloof, (2003) advance that accounts collection period and inventory conversion period have a positive effect on financial performance and account payable period has a negative effect whilst cash conversion cycle has no effect at all. Another extreme angle is taken by Raheman and Nasr (2007) who concluded that all the components of working capital management have a significantly negative effect of profitability of the organization.

# III. METHODOLOGY

The study adopted the use of multiple regression a quantitative method of analyzing data to investigate the relationship between working capital management and profitability at Zam Manufacturing Limited. This approach is similar to the studies conducted by Handema and Haabazoka (2020) Napompech (2012); Deloof (2003); Lazaridis and Tryfonidis (2006). The following variables cash conversion cycle with its components 'accounts collection period, inventory conversion period and accounts payable period' was used as a comprehensive measure of working capital management *(independent variables),* whilst gross operating profit was adopted as a proxy of profitability *(dependent variable).*

### *3.1 Research Design*

The research was conducted at Zam Manufacturing Limited in Lusaka Zambia. Zam Manufacturing Limited operates in the paper manufacturing sector. The study adopted a case study approach to investigate the phenomenon of working capital in a small medium enterprise (Larina, L.B., et al, 2021).

### *3.2 Data Collection Tools*

The study mainly employed secondary data derived from approved audited financial statements for a period of 16 years starting 2002 – 2018. The secondary data was used to extract values for accounts receivable days, accounts payable days, inventory conversion days, cash conversion days, leverage, firm size and liquidity ratios with the aim to explain the interaction between working capital management and firm financial performance.

### *3.3 Data Analysis*

The data extracted from the audited financial statements was categorized as secondary time series data which was organized in Microsoft excel and then exported to the Eviews statistical software package which performed statistical analysis, forecasting and model simulations. The Eviews software was able to perform simple descriptive statistics, parametric and nonparametric hypothesis testing hence, suitable and adequate to perform the Descriptive statistics, Pearson correlation and Multiple regression (robust least squares) analyses used in the study.

# IV. RESULTS PRESENTATION

### *4.1 Descriptive Analysis*

The variables used in this study are described in terms of Mean, Median, Standard Deviation, Minimum

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and Maximum figures. The table provides a descriptive summary of all the variables used in the regression model.

| *Statistical Measure* | *APP* | *ACP* | *CCC* | *CR* | *DR* | *FS* | *GROSS* | *ICP* |
|---|---|---|---|---|---|---|---|---|
| Mean | 162 | 116 | 74 | 1.3 | 0.8 | 14 | 25 | 119 |
| Median | 106 | 107 | 77 | 0.8 | 0.8 | 14 | 1 | 73 |
| Standard Deviation | 199 | 49 | 274 | 1.3 | 0.4 | 2 | 62 | 164 |
| Minimum | 11 | 37 | -761 | 0.4 | 0.2 | 11 | 0 | 0 |
| Maximum | 858 | 214 | 486 | 5 | 1.5 | 16 | 253 | 533 |

**Figure 1:** Descriptive Analysis Results

The descriptive statistics shows that it took Zam Manufacturing Ltd an average of 162 days from contraction of debt to settle its maturing obligations. Accounts collection period averaged 116 days while inventory conversion period took 120 days. Cash Conversion Cycle took 74 days between the purchase of raw materials, conversion of materials into finished goods, sales of goods and receipt of funds from sales. GROSS as a measure of profitability was at 25% of total assets. The average size of Zam Manufacturing Limited as given by total asset was 14% whilst current assets were 1.3 times to current liabilities. Debt ratio as a measure of how much debt the entity used to finance its business recorded a mean of 0.8%.

***4.2 Correlation Analysis***

The Pearson correlations matrix was used to test the strength and direction of the relationship between dependent variable GROSS and independent variables (Inventory Conversion Period, Accounts Payable Period and Accounts Collection Period). In addition, Pearson correlations was applied to detect the multicollinearity between independent and control variables used in the model.

| *Pearson Correlation Martrix* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ***Variables*** | ***ACP*** | ***APP*** | ***CCC*** | ***CR*** | ***DR*** | ***FS*** | ***GROSS*** | ***ICP*** |
| ***ACP*** | *1* | | | | | | | |
| | | | | | | | | |
| ***APP*** | ***0.426471*** | *1* | | | | | | |
| | *0.0878**** | .... | | | | | | |
| ***CCC*** | ***0.355392*** | ***-0.48039*** | *1* | | | | | |
| | *0.1615* | *0.0433*** | .... | | | | | |
| ***CR*** | ***0.044118*** | ***-0.48039*** | ***0.058824*** | ***1*** | | | | |
| | *0.8665* | *0.051**** | *0.8226* | .... | | | | |
| ***DR*** | ***0.031863*** | ***0.416667*** | ***-0.04902*** | ***-0.828431*** | ***1*** | | | |
| | *0.9034* | *0.0962* | *0.8518* | *0.00001** | .... | | | |
| ***FS*** | ***0.186275*** | ***-0.3799*** | ***0.789216*** | ***-0.252451*** | ***0.10049*** | ***1*** | | |
| | *0.4741* | *0.1325* | *0.0002** | *0.3283* | *0.7012* | .... | | |
| ***GROSS*** | ***-0.240196*** | ***-0.08333*** | ***-0.531863*** | ***0.580882*** | ***-0.32843*** | ***-0.745098*** | ***1*** | |
| | *0.3531* | *0.7505* | *0.028*** | *0.0145*** | *0.1981* | *0.0006** | .... | |
| ***ICP*** | ***0.426832*** | ***-0.13152*** | ***0.851182*** | ***-0.359829*** | ***0.25064*** | ***0.801551*** | ***-0.76929*** | ***1*** |
| | *0.0875**** | *0.6148* | *0.0000001** | *0.156* | *0.3319* | ***0.0001**** | *0.0003** | .... |

**Figure 2:** Pearson Correlation Matrix

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***4.3 Research Hypothesis – Revisited***

This study adopted a set of null hypotheses drawn from the conclusions of numerous literature reviews studied to be tested using quantitative analysis tools therefore, the conclusions below are informed by the results of the correlation analysis.

***Ho, there is a significant negative relationship between accounts collection period with gross operating profit.*** The correlation analysis revealed that GROSS was negatively correlated with Accounts Collection Period with a correlation coefficient of -0.240196 and this was found to be statistically insignificant. *Therefore, the null hypothesis was found to be true*.

***Ho, there is a significant negative relationship between cash conversion cycle with gross operating profit.*** The conclusion was that Cash Conversion Cycle was negatively correlated with Gross registering a correlation coefficient of -0.531863. The relationship was significant at 0.05 level of significance; *hence the null hypothesis was accepted.*

**Ho,** ***there is a significant negative relationship between inventory conversion period with gross operating profit***. The results showed that GROSS was negatively correlated with Inventory Collection Period with a correlation coefficient of -0.76929. This relationship this was found to be statistically significant at 0.01 level of significance. *Consequently, the null hypothesis was accepted*

***Ho, there is a significant positive relationship between accounts payable period with gross operating profit.*** GROSS was found to be negatively correlated with Accounts Payable Period recording a correlation coefficient of -0.083333. This relationship was statistically insignificant. *The result of the correlation rejected the null hypothesis.*

The correlation analysis further examined the relationship between GROSS and the control variables. GROSS was found to be positively correlated with Current Ratio showing a correlation coefficient of 0.580882. This relationship was significant at 0.05 level of significance. The relationship between GROSS and Debt Ratio was found to be negatively correlated establishing a correlation coefficient of -0.328431. However, this relationship was found to be statistically insignificant. Finally, it was established that GROSS was negatively correlated with FS recording a correlation coefficient of -0.745098. This relationship this was found to be statistically significant at 0.01 level of significance.

## V. DISCUSSION OF RESULTS

Table below summarizes the regression results from the model. All the regression coefficients are statistically significant at *5% confidence interval* as shown by the Z-statistics and their respective P-values. The coefficient of determination (R2) measures the proportion of the variation in the dependent variable that is explained by the independent variables. It measures the goodness of fit of the estimated model. The adjusted R-squared of our model is 0.525975 meaning that our independent variables accounted for about 52.6% of the total variation in the dependent variable (GROSS), holding all other factors constant. The probability of the F-statistic (which is the overall measure of statistical significance of a regression model) is highly significant with a P-value of 0.000000, this signifies that the model is a good fit.

| *Variable* | *Coefficient* | *Std. Error* | *Z-Statistic* | *P-value* |
|---|---|---|---|---|
| ***Constant*** | *299.1797* | *23.86571* | *12.53596* | *0* |
| ***ACP*** | *-0.030287* | *0.035996* | *-0.841395* | *0.4001* |
| ***APP*** | *-0.114784* | *0.011263* | *-10.19127* | *0* |
| ***CR*** | *-4.306788* | *1.825808* | *-2.358839* | *0.0183* |
| ***DR*** | *5.749633* | *5.76033* | *0.998143* | *0.3182* |
| ***FS*** | *-18.9308* | *1.583268* | *-11.95679* | *0* |
| ***ICP*** | *0.039601* | *0.012923* | *3.064307* | *0.0022* |
| ***R-Squared*** | *0.703734* | | | |
| ***Adj. R-squared*** | *0.525975* | | | |
| ***Prob. (F-statistic)*** | *0* | | | |

**Figure 3:** Multiple Regression Results

Estimated Equation: $\boldsymbol{GROSS = \propto + \beta_1 ACP + \beta_2 APP + \beta_3 CR + \beta_4 DR + \beta_5 FS + \beta_6 ICP + \varepsilon}$

***GROSS = 299.179686187 - 0.0302867170434*ACP - 0.114784232994*APP - 4.30678833096*CR + 5.74963298943*DR - 18.9308003268*FS + 0.0396011737951*ICP***

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The results from the regression analysis endeavored to address the objectives set at the beginning of the study therefore the discussion below systematically refer to the set objectives.

***i. To Investigate the Effects of Cash Conversion Cycle on Profitability***

Cash Conversion Cycle is a linear combination of the other independent variables Accounts Collection Period, Accounts Payable Period and Inventory Conversion Period hence, it's omitted from the regression model results.

***ii. To Examine the Effects of Accounts Collection Period on Profitability***

The regression analysis results showed that Accounts Collection Period was found to be negatively related to GROSS which implies that if Accounts Collection Period is increased by a unit (day), holding all other factors constant, GROSS will on average reduce by 3.03%. This finding is consistent with the studies conducted by Gill et al (2010), Lazaridis and Trifonidis (2006), Raheman and Nasr (2007) and Alipour (2011).

***iii. To Establish the Effects of Inventory Conversion Period on Profitability***

The analysis established that Inventory Conversion Period was found to be positively related to GROSS this position is advanced by investigations done by Kumaraswamy (2016), Deloof (2003), Kasozi (2017) and Enow and Brijlal (2014). The results entail that if Inventory Collection Period is to be increased by a unit (day), holding all other factors constant, GROSS will on average increase by 3.9%.

***iv. To Analyze the Effects of Account Payable Period on Profitability***

The results further revealed that Accounts Payable Period was found to be negatively related to GROSS. This position is supported by research done by Kasozi (2017), Napompech (2012), Bagh et al (2016) and Aguenaou et al (2015). The Implication is that if Accounts Payable Period is increased by a unit (day), holding all other factors constant, GROSS will on average reduce by 11.5%.

The regression analysis also provided results on the relation between GROSS and the control variables. Current Ratio as a measure of liquidity was found to be negatively related to GROSS, the effect is that if CR increased by a unit, holding all other factors constant, GROSS will on average reduce by 431 % (GROSS is highly sensitive to changes in CR) this is consistent with findings from Raheman and Nasr (2007).

Debt Ratio was found to be positively related to GROSS, the implication is that if DR increased by a unit, holding all other factors constant, GROSS will on average increase by 576 % (GROSS is highly sensitive to changes in DR) this result is supported by the findings of Dong and Su (2010).

Firm size was found to be negatively related to GROSS this means that if FS increased by a unit, holding all other factors constant, GROSS will on average reduce by 1893 % (GROSS is highly sensitive to changes in FS).

## VI. CONCLUSION AND RECOMMENDATIONS

Small Medium Enterprises represent about 97% of all businesses, contributes 70% of the country's Gross Domestic Product and employs 88% of the country's workforce (FSDZ, 2021). However, most firms in the small medium enterprise category suffer from acute business failure as a result of insufficient business infrastructure, inadequate managerial and technical skills, limited access to capital and poor internal financial management (Chisala, 2008). The purpose of this study was to investigate the effects of working capital management on Small Medium Enterprise' financial performance specifically at Zam Manufacturing Limited. Efficient working capital management is primarily responsible for planning and controlling the levels of current assets and current liabilities in a manner that eliminates the risk of inability to meet maturing short-term obligations and avoid excessive investment in assets (Mathuva, 2010). Further to this, the way working capital is managed can have a significant impact on a firm's liquidity and profitability (Deloof, 2003). In this study the descriptive statistics revealed poor management of the components of working capital management at Zam Manufacturing Limited when compared to industry norms which averaged around 15 – 60 days for all components.

The study applied the Pearson correlation and multiple regression analysis models to make empirical conclusions about the data. The results of the analysis established that accounts receivable period had a negative relationship with gross operating profit which entails that profitability of a firm can increase when receivables days are reduced. Accounts payable period was found to be negatively associated with gross operating profit meaning delaying payments to suppliers would reduce firm profits. This is a rare result as most findings showed a positive relationship with Gross Operating Profit. Furthermore, inventory conversion period was found to have a positive relationship with gross operating profit hence maintaining a reasonably economical level of inventory would increase organization profitability. The results of cash conversion cycles showed a significant negative relationship with gross operating profit. This indicates that reducing the number of days for Cash Conversion Cycle will results in higher profits for an organization. It was also established that current ratio, debt ratio and firm size had a highly sensitive relationship with Gross regardless of the direction.

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The study was focused on the operations of a single firm, hence the results generated in this research should not be used as a general picture of the Small Medium Enterprise landscape in Zambia. As a result of this fact, there is an opportunity for further research to be done to investigate the relationship of working capital management and Small Medium Enterprise' financial performance in Zambia. In addition to the above statement, it is the view of the researcher that more investigation needs to be done to understand this relationship between working capital and the control variables as their impact on firm profitability was significant.

Caution must be applied by managers when managing and controlling aspects of working capital because the components are intertwined hence, they influence each other. Adjustment on one component will affect the rest of the components.

The following are the recommendations to Zam Manufacturing Limited for the design and implementation of a working capital management policy framework.

***6.1 Receivable management***

The descriptive statistics revealed that Zam Manufacturing Limited took 116 days to collect its receivables against an industry standard of 30 – 45 days and the regression results revealed a negative relationship with Gross.

- The company should establish guidelines that drive 85% cash sales of total revenues
- Limit wholesales and corporate credit sales to 10% of total revenues.
- The firm should cease or limit the amount of business transactions done with retail chain stores to 5% or less of its total sales revenue. This will release considerable amounts of receivables held by chain stores and supermarkets.
- Credit sales terms should range from 2, 5, 7, 14 and 21 days collection period, this will allow for improved liquidity and additionally early payment of significant amounts should attract a pre-agreed discount to encourage customers to pay early.
- Sales KPIs should be set in a way that re-enforces this policy, such as a reward for the sales persons that uphold and achieves the agreed cash and credit sales targets.

***6.2 Inventory management***

The descriptive statistics disclosed that the firm took 119 days to convert available raw materials into finished goods against an industry standard of 30 - 45 days while the regression analysis established a positive relationship with Gross.

- Zam Manufacturing Limited needs to setup systems that create forecasts to inform the establishment of minimum re-order quantities/month and the minimum safety quantity/month. Applying the Economic Order Quantity and Material Requirement Planning models can assist to ascertain the optimal re-order and safety stocks levels that ensures there is adequate stock to meet customers order timely as a result provide improved sales.

***6.3 Payables management***

The descriptive statistics showed that the company took 162 days to settle its matured obligations to suppliers against an industry standard of 30 - 60 days and the regression model revealed a negative relationship between Gross and Account Payable Period.

- The organization must put in place procedures that requires settlement of payables within a minimum of 30 days and a maximum of 60 days to ensure that the company is not charged interest for late payment, relations with service provides are not stressed to extent where suppliers withhold materials or services and litigation is not instituted against the firm.
- The entity should provide short credit terms to its customers while obtaining longer credit terms from suppliers.

***6.4 Overtrading management***

Overtrading is defined as transacting more business than the firm's working capital can normally sustain, thus placing serious strain on its cash flows and risking collapse or insolvency.

- Set a strategy that informs a gradually phased approach to growth and takes into account all the logistical and financial demands of growth at each stage.

***6.5 Other recommendations***

- Departmental managers must undergo regular training to improve their capabilities to manage aspects of working capital that fall within their departmental jurisdiction.
- Zam Manufacturing Limited should apply a 30/70 investment ratio plan were for every fixed asset investment 30% should go to working capital while 70% goes into assets.

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