

Assessing the Effect of Working Capital Management on the Profitability of Small Business in Chiro Town, West Hararghe Zone, Ormia Region, Ethiopia

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Abstract

An optimal working capital management is expected to contribute certainly to the profitability of firms. The main purpose of the study was to assess the effect of working capital management on profitability of small business in Chiro town, West Hararghe, Ethiopia. To collect primary data semi-structured questionnaire survey and key informant interview were employed. By using non-probabilistic purposive sampling technique, cross-sectional data were collected from 15 sampled small businesses. The effect of the inventory conversion period, accounts receivable period, accounts payable period and cash conversion cycle on return on asset was analyzed through descriptive statistics, Pearson's Correlation and linear regression by using SPSS version 20. The result shows that there is positive relationship between accounts receivable period and accounts payable period with profitability of small business. However, inventory conversion period and cash conversion cycle have a negative significant impact on profitability.

Keywords: Working capital Management, Small business, Profitability and Ethiopia.

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1. Introduction

1.1 Theoretical background

Management of working capital which aims at maintaining an optimal balance between each of the working capital components, that is, cash, receivables, inventory and payables is a fundamental part of the overall corporate strategy to create value and is an important source of competitive advantage in businesses (Raheman and Nasr, 2007). Working capital management, which deals with the management of current assets and current liabilities, directly affects the liquidity and profitability of the company. However, an appropriate attention usually is not given for. The ability of the firm to continuously operate for longer period is depending on how they deal with investment in working capital. There are much empirical evidences in the financial literature that present the importance of working capital management (Deloof 2003; Teruel and Solano, 2007).

The maintenance of cash at a desirable level for the purpose of settling liabilities on maturity and using the investment opportunities that are indicative of the flexibility of the economic entity, moreover the availability of material needed for production in order to enable the entity to provide the needs of its customers is indicative of the importance of working capital (Padachi, 2006). Managers have shortened the cash cycle through shortening the period of receivables collections and inventory turnover and lengthening the period of settling liabilities, in order to increase company profitability (Nobanee and Alhajjar, 2009). Any decision made by the managers of the entity in this context can significantly affect return of the entity stock which shall transform company value and ultimately increase shareholders wealth (Nobanee and Alhajjar, 2009).

1.2 Statement of the problem

Small businesses are the sources of innovation that they tend to occupy specialized market and competitive strategy which set them apart from other companies. This might include reengineering products or services to meet customers demand, exploring innovative distribution or developing new market (FeMSEDS, 2011). Most of small businesses do not care about their working capital position, most have only little regard for their working capital position and most do not even have standard credit policy. Many do not care about their financial position, they only run business, and they mostly focus on cash receipt and what their bank account position (Kehinde, 2011).

Due to the inability of financial managers to properly plan and control the current assets and current liabilities of their firms, the failure of a large number of businesses can be attributed to the inefficient working capital management (Talat and Sajid, 2008). Inadequate working capital leads the company to insolvency. On the other hand, too much working capital results in wasting cash and ultimately the decrease in profitability (Bryman, 2008). The fact that an organization makes profits is not necessarily an indication of effective management of its working capital because a firm can be gifted with assets and profitability but short of liquidity (shortage of cash available) if its assets cannot readily be converted into cash (Eljelly, 2004). Thus, Management strategy aimed at maintaining

a balance between liquidity and profitability has far reaching consequences on the growth and survival of the firm. Thus, the manager of a business entity is in a dilemma of achieving desired tradeoff between liquidity and profitability in order to maximize the value of a firm.

A number of studies (Samuel and Tarekegn, 2011; Ephrem, 2011) have been conducted both in developing country and in Ethiopia on the working capital management and its profitability. However, no evidence has identified on working capital management on profitability of small business and there is a knowledge gap on the study area. Therefore, this study aimed to analyze the impact of working capital management on profitability of small business in Chiro town.

1.3 Objectives

- ✓ To assess the effect of inventory conversion period on profitability of small business;
- ✓ To analyze the effect of accounts receivable period on profitability of small business;
- ✓ To assess the effect of accounts payable period on profitability of small business;
- ✓ To evaluate the impact of cash conversion cycle on profitability of small business in Chiro town.

1.4 Research Hypothesis

H1: There is significant negative relationship between Inventory Conversion Period (ICP) and Profitability of the small business.

H2: There is significant and positive relationship between Average Receivable Period (ARP) and Profitability of the small business.

H3: There is significant positive relationship between Average Payment Period (APP) and Profitability of the small business.

H4: There is significant negative relationship between Cash Conversion Cycle (CCC) and Profitability of the small business.

2. Research Methodology

2.1. Sample Size, Sampling Design and Method of Data Collection

To collect primary data semi-structured questionnaire survey and key informant interview were employed. The secondary data was collected from published literatures and unpublished documents (from West Hararghe small enterprises offices). By using non-probabilistic purposive sampling technique, cross-sectional data were collected from 15 sampled (9 from wood and metal works, 6 from supermarkets) of small businesses based on their potential availability. The necessary data were obtained from copies of 2019 audited financial statements in the form of income statements, statement of financial position and cash flow statements of sampled respondents. There are 210 small enterprises and 17 types of small businesses in Chiro town. From them only two small businesses (1.wood and metal works 2.supermarkets) were selected for the study due to availability and accessibility of the data at the time of the study and also these firms are submit financial statements and necessary records to their concerned agency.

2.2 Data Analysis

2.2.1 Descriptive statistics

Descriptive analysis was the first step and showed the frequency of responses mean on the effect of working capital management on profitability. By using this method the mean, standard deviation, maximum and minimum values of the required variables have been computed.

2.2.2 Quantitative Analysis

Inferential analysis such as Pearson's Correlation, linear regressions and ANOVA analysis were used by using SPSS software. Pearson's correlation was used to measure the degree and direction of association between different variables under consideration. Linear regression a was used to estimate the causal relationships between profitability variable, Working Capital efficiency variables and other chosen variables, and ANOVA analysis was used to test the hypothesis of the study.

2.2.3 Description of Variables and Calculation Formula

Table 1: Description of Variables, formula and Research Hypotheses

Variables	Abbreviation	Definition	Calculation Formula	Expected Hypothesis
Dependent	ROA	Return on Asset		
Explanatory	ICP	Inventory Conversion Period	$ICP = \frac{Average\ Inventory}{Net\ Sales} \times 365$	Negative
	ARP	Accounts Receivable Period	$ARP = \frac{Accounts\ Receivable\ Period}{Net\ Sales} \times 365$	Positive
	APP	Accounts Payable Period	$APP = \frac{Accounts\ Payable\ Period}{Net\ Sales} \times 365$	Positive
	CCC	Cash Conversion Cycle	$CCC = (ARP + ICP) - APP$	Negative
Control	CR	Current Ratio = Liquidity	$CR = \frac{Current\ Assets}{Current\ Liabilities}$	
	LnSlac	Natural Log of Sales = Size of the Company	Natural Logarithm of Net Sales	
	FTA	Financial Assets to Total Assets	$FTA = \frac{Short\ term\ Loans\ and\ Advances}{Total\ Assets}$	
	DAR	Total Debt to Total Asset Ratio = Leverage	$DAR = \frac{Total\ Debt}{Total\ Assets}$	

2.2.4 Model Development and Specification

The methodology and empirical framework to evaluate the impact of working capital management on profitability of small business is developed by (pedachi, 2006; Stephen & Elvis, 2011). The following regression equations were used to obtain estimates:

$$ROA = \beta_0 + \sum_{i=1}^n \beta_i X_i + \epsilon_i$$

Model 1: $ROA = \beta_0 + \beta_1 ICP + \beta_2 CR + \beta_3 LNSlac + \beta_4 FTA + \beta_5 DAR + \epsilon_i$

Model 2: $ROA = \beta_0 + \beta_1 ARP + \beta_2 CR + \beta_3 LNSlac + \beta_4 FTA + \beta_5 DAR + \epsilon_i$

Model 3: $ROA = \beta_0 + \beta_1 APP + \beta_2 CR + \beta_3 LNSlac + \beta_4 FTA + \beta_5 DAR + \epsilon_i$

Model 4: $ROA = \beta_0 + \beta_1 CCC + \beta_2 CR + \beta_3 LNSlac + \beta_4 FTA + \beta_5 DAR + \epsilon_i$

Where;

ROA is Return on Asset, ICP is Inventory Conversion Period, ARP is Accounts Receivable Period, APP is Accounts Payable Period, CCC is cash conversion cycle, CR is Current Ratio, LNSlac is firm size measured by natural logarithm of sale, FTA is Financial Assets to Total Assets, DAR is Leverage which is Total Debt to Total Asset Ratio and ϵ_i is the error term.

3. Results and Discussion

3.1 Descriptive Analysis

This section dealt with the results of overall descriptive statistics for the sampled small business. It indicated the mean, standard deviation, minimum and maximum value of the variables employed in the study. The descriptive statistics are calculated and presented in Table 2. The mean value of firms return on asset is 21.42 percent of total assets. The standard deviation is 25.23. It means that the value of the profitability can deviate from mean to both minimum and maximum sides by 25.23 percent. The higher the return on assets indicates that the firms is effective enough in generating profit from its available assets and the reverse is true for decrease in return on assets. Its minimum value is -0.723 while the maximum is -0.030 (Table 2).

The mean value of Inventory Conversion Period (ICP) was 131.74212 days. This means, firms in the sample needs on average 131.74212 days to sell inventory. As it is shown in Table 3.1, the standard deviation of ICP is 112.901281 days. To the sample firms the ICP ranges between 0.143 and 298.688 days of minimum and maximum values, respectively. The average of the account receivable period (ARP) shows that, firms in the sample wait 188.04080 days on average to collect cash from credit sales. The ARP can vary by 195.598568 days to both sides of the mean value. The minimum and the maximum ARP for the sampled firms are zero and 396.312 days, respectively. The minimum value of zero means the firm didn't use account receivable at all or a firm use cash to sell its product.

The small businesses wait an average of 317.63948 days to pay their credit purchases, which is very much long period and less profit. Those small businesses with less APP have more profitable than those who have more APP. As the APP is declined, profitability of the firms increases since they have more assets to invest than to settle their liabilities. Table 2 shown the standard for APP is 391.297297 days, so, comparing the mean value with the standard it showed that the small businesses wait a long period to pay their bill. This may be indicative of the fact that the small businesses are less profitable and that is the reason they fail to make the payment on time. The minimum and maximum period ranges between 2.000 and 887.086 days.

The Cash Conversion Cycle (CCC) used as a proxy to check the efficiency in managing working capital is on average 2.16647 days (Table 2). This value indicated the length of time, which the firms wait on average to cash conversion. There is no standard for CCC to compare with and so, the small businesses just use the previous years' trends to make a decision about the goodness or badness of the period for their business. The minimum value of -557.116 days shows a firm records a large inventory turn-over and/or cash collections from credit sales before making a single payment for credit purchases. It means that the ARP and/or the ICP are very short and/or the accounts payable period of the firm is very long. On the other hand, the maximum time for cash conversion period is 574.436 days which is a very long period and it shows that a firm records a large inventory turn-over and/or cash collections from credit and/or shortest payment period for credit purchases.

Table 2. Result of Descriptive Statistics

Variables		N	Minimum	Maximum	Mean	Std. Deviation
Dependent	ROA	15	-0.030	0.723	0.21425	0.252286
	ICP	15	0.143	298.688	131.74212	112.901281
Explanatory	ARP	15	0.00	396.312	188.04080	195.598568
	APP	15	2.000	887.086	317.63948	391.297297
	CCC	15	-557.116	574.436	2.16647	348.183768
	CR	15	1.077	3.333	2.36547	0.900892
Control	LnSlac	15	0.833	16.067	8.16555	3.974811
	FTA	15	0.033	2.655	0.59920	0.808131
	DAR	15	0.010	3.270	0.63545	0.932603

Source: Own Survey Computation, 2020

3.2. Correlation Analysis

Correlation is a way to index the degree to which two or more variables are associated with or related to each other. Pearson's correlation analysis was used for the data to find the relationship between Working Capital Management (WCM) and net operating profit. The below Table 3 presents the result of the correlation analysis of profitability measures with cash conversion period, inventory collection period, account receivable conversion period and accounts payable period.

The correlation analysis also shows that (Table 3), the relationship between Inventory Conversion Period (ICP) and profitability measures is positive at a coefficient is 0.043 and insignificant p value 0.878. The result of correlation analysis shows a correlation between Accounts Receivable Period (ARP) and profitability measure (ROA) is positive with a coefficient of 0.727, and p - value of 0.002. It shows that there is highly significant correlation at 1%. This means that if number of days accounts receivable increase, profitability of small business also increase and vice versa.

Correlation between number of APP and ROA is positive at a coefficient is 0.318 and insignificant p value of 0.248. This implies if firms lengthen periods to settle their bills they can increase their return on asset. Which means if firms delay their payments they will earn more profits; the reason behind this is that firms can take the advantage of invest by paying late. Correlation between CCC and the operating profitability indicate insignificant positive relationship, with correlation coefficient of 0.066 and P value of 0.817 (Table 3). The implication is that the increase or decrease in cash conversion cycle will positively affect profitability of the firms. It means that the longer the firm's cash conversion cycle, the higher will be the profitability and vice versa.

Table 3. Pearson's Correlation Coefficient Matrix

		ROA	ICP	ARP	APP	CCC	CR	LnSlac	FTA	DAR
ROA	Pearson	1								
	Correlation									
	Sig. (2-tailed)									
	N	15								
ICP	Pearson	0.043	1							
	Correlation									
	Sig. (2-tailed)	0.878								
	N	15	15							
ARP	Pearson	0.727**	-0.403	1						
	Correlation									
	Sig. (2-tailed)	0.002	0.137							
	N	15	15	15						
APP	Pearson	0.318	-0.253	0.571*	1					
	Correlation									
	Sig. (2-tailed)	0.248	0.363	0.026						
	N	15	15	15	15					
CCC	Pearson	0.066	0.383	-0.211	-	1				
	Correlation				0.885**					
	Sig. (2-tailed)	0.817	0.159	0.450	0.000					
	N	15	15	15	15	15				
CR	Pearson	-0.157	-	0.237	0.012	-0.137	1			
	Correlation		0.791**							
	Sig. (2-tailed)	0.576	0.000	0.395	0.966	0.627				
	N	15	15	15	15	15	15			
LnSlac	Pearson	-0.276	0.181	-0.110	0.368	-0.416	-0.210	1		
	Correlation									
	Sig. (2-tailed)	0.320	0.519	0.697	0.177	0.123	0.453			
	N	15	15	15	15	15	15	15		
FTA	Pearson	-0.390	-0.069	-0.043	0.484	-	-0.114	0.296	1	
	Correlation					0.591*				
	Sig. (2-tailed)	0.151	0.806	0.879	0.067	0.020	0.686	0.284		
	N	15	15	15	15	15	15	15	15	
DAR	Pearson	0.552*	0.680**	0.228	0.110	0.225	-	-0.020	-	1
	Correlation						0.533*		0.082	
	Sig. (2-tailed)	0.033	0.005	0.415	0.697	0.420	0.041	0.944	0.772	
	N	15	15	15	15	15	15	15	15	15

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

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

Source: Own Survey Computation

3.3 Regression Analysis

3.3.1 Regression Results of Inventory Conversion Period (ICP)

Inventories are the core of small business and the firms might have to maintain the sufficient inventory level to avoid either the stock-outs or the excess balance. They require raw material and work-in-process for their production and finished goods for sale to customers which affect them to have higher inventory balance and longer inventory period. The excess balance would also cost the firm such as loss of benefit from short-term investment, having long outstanding stocks and obsolete inventories.

The result from this study is in line with the initial hypothesis which states that there is significant negative relationship between inventory conversion period and profitability of firms. Coefficient of inventory conversion period is negative (-0.002) and p-value of 0.012 attached to the test statistic shows that the variable is almost significant at 1% level (Table 5). This implies that when the average time required in converting materials into finished goods and then to sell those goods decreases, it leads to an increase in profitability.

This result is in line with the findings of (Teruel and Solano, 2007; Samiloglu and Demirgunes, 2008; Sen and Oruc, 2009; Falope and Ajilore, 2009; Ruichao, 2013) all points out that the companies with low inventory conversion period have more efficient working capital management. However, the findings contradict (Mathuva 2010; Gill *et al*, 2012; Naimulbari, 2012) who show positive relationship between ICP and profitability. In which their findings revealed that if the inventory takes more time to sell, it will encouraging the profitability (Profitability increases).

Table 4. Model Summary^b of inventory conversion period (ICP)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		Durbin-Watson
					F Change	Sig. F Change	
1	0.860a	0.740	0.596	0.160349	5.131	0.017	1.699

a. Predictors: (Constant), ICP, FTA, DAR, LnSlac, CR

b. Dependent Variable: ROA

Source: Own Survey Computation, 2020

Table 5. Coefficients^a of inventory conversion period (ICP)

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.832	0.290		2.868	0.019		
CR	-0.153	0.081	-0.546	-1.890	0.091	0.346	2.894
LnSlac	-0.003	0.012	-0.055	-0.295	0.774	0.838	1.193
FTA	-0.135	0.058	-0.432	-2.327	0.045	0.838	1.194
DAR	0.253	0.064	0.935	3.955	0.003	0.516	1.938
ICP	-0.002	0.001	-1.045	-3.133	0.012	0.259	3.857

Dependent Variable: ROA

Source: Own Survey Computation

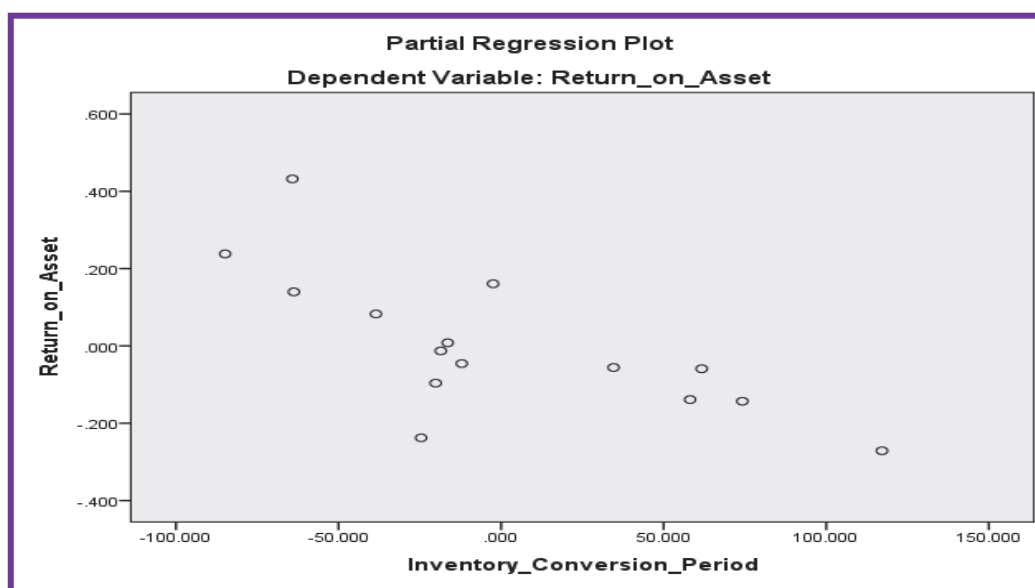


Figure 1. Inventory Conversion Period (ICP) in scattered plot

Source: Own Survey Sketch, 2020

3.3.2 Regression Results of Account Receivable Period (ARP)

Inline with the initial hypothesis, the result of the regressions analysis has significant impact on firms' profitability at 1% significant level. It has positive relationship of B coefficients of 0.001 with return on asset and p-value of 0.001 (Table 7). This positive relationship implies whenever collection period increases bad debt increase and hence profitability falls down and whenever collection period decreases bad debts decrease and hence profitability increases. The R² value 0.852 or 85.2% of account receivable period was highly explaining the dependent variable of return on asset (Table 6). The impact of account receivable period on the dependent variable (ROA) was very high which B coefficient of 0.001 (Table 7). This shows that when other variables in the regression model being constant, if number of days accounts receivable increased by one day, return on asset (ROA) of the firm on the average is increase by 0.1 percent.

The result is basically opposed with the findings of (DeLoof, 2003; Padachi, 2006; Samiloglu and Demirgunes, 2008; Lazaridis and Tryfonidis, 2006; Sen and Oruc, 2009; Falope and Ajilore, 2009), which indicates that there is a negative relation between account receivables and firms profitability. This negative relationship implies the

number of days to collect cash from credit customers becomes too long; it will adversely affect profitability of the firms. Such a variation is occurred due to an environmental difference and sample size they considered.

Table 6. Model Summary^b of Account Receivable Period (ARP)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		Durbin-Watson
					F Change	Sig. F Change	
2	0.923 ^a	0.852	0.770	0.121106	10.351	0.002	2.587

a. Predictors: (Constant), ARP, FTA, DAR, LnSlac, CR

b. Dependent Variable: ROA

Source: Own Survey Computation, 2020

Table 7. Coefficients^a of Account Receivable Period (ARP)

Model 2	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.338	0.161		2.105	0.065		
CR	-0.081	0.049	-0.289	-1.649	0.133	0.538	1.859
LnSlac	-0.010	0.009	-0.156	-1.133	0.287	0.868	1.152
FTA	-0.103	0.042	-0.329	-2.419	0.039	0.890	1.123
DAR	0.055	0.046	0.205	1.193	0.263	0.559	1.789
ARP	0.001	0.000	0.718	4.897	0.001	0.766	1.306

Dependent Variable: ROA

Source: Own Survey Computation, 2020

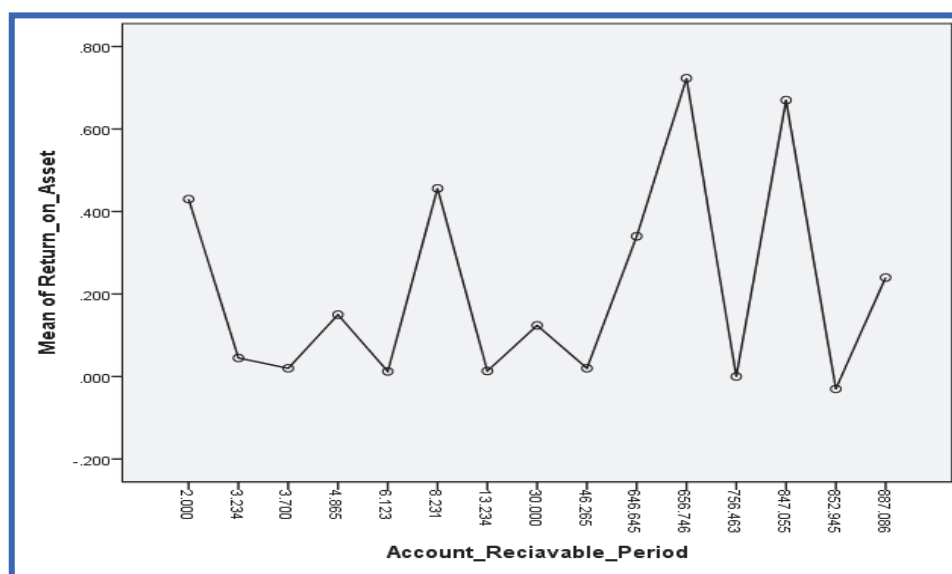


Figure 2: The mean plot of Account Receivable Period on Return on Asset

Source: Own Survey Sketch, 2020

3.3.3 Regression Results of Account Payable Period (APP)

Inline with the initial hypothesis, the result of the regressions analysis has significant impact on firms' profitability at 1%. It has positive relationship of B Coefficients of 0.000 with return on asset (Table 9). Positive significant relationship between accounts payable period and profitability can be explained by the increased availability of investing caused by the delayed payment of accounts payable. Such funds can thus be used for productive purposes that can increase profitability. The result also revealed that an increase in the number of day's accounts payable by 1 day is associated with an increase in profitability. The R² value 0.782 or 78.2% of account payable period was highly explaining the dependent variable (Table 8). The influence of Account Payable Period on the dependent variable (ROA) was very high which B coefficient of 0.000 (Table 9). There was no existence of autocorrelation because Durbin-Watson is approximately equals to two which is 1.971~2.00 (Table 8).

The positive relationship between the average payment period and profitability indicates that more profitable firms wait a longer time to pay their bills. This is in line with results of prior studies by (Dong and Su, 2010; Karaduman, 2012; Dănuleşiu, 2010; Mathuva, 2010; Gill, 2012).

However, the result is opposed with the findings of (Reheman et al., 2010; Mekonnen, 2011; Ray, 2012) who finds insignificant negative relationship between accounts payable period and profitability. A negative significant relationship between accounts payable period and profitability can be explained by the benefits of early payment discounts.

Table 8. Model Summary^b account payable period

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		Durbin-Watson
					F Change	Sig. F Change	
3	0.884 ^a	0.782	0.661	0.146892	6.459	0.008	1.971

a. Predictors: (Constant), APP, CR, LnSlac, FTA, DAR

b. Dependent Variable: ROA

Source: Own Survey Computation, 2020

Table 9. Coefficients^a of account payable period APP

Model 3	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.405	0.200		2.028	0.073		
CR	-0.037	0.056	-0.131	-0.653	0.530	0.605	1.653
LnSlac	-0.024	0.011	-0.379	-2.140	0.061	0.773	1.294
FTA	-0.191	0.058	-0.611	-3.270	0.010	0.693	1.444
DAR	0.094	0.053	0.346	1.754	0.113	0.622	1.607
APP	0.000	0.000	0.717	3.663	0.005	0.633	1.581

Dependent Variable: ROA

Source: Own Survey Computation, 2020

3.3.4 Regression Results of Cash Conversion Cycle (CCC)

Cash conversion cycle is equal to accounts receivable period plus inventory conversion period minus accounts payable period. Managing cash conversion cycle efficiently, means efficient management of these three items. By managing efficiently by making short accounts receivable period and inventory holding period and/or making long accounts payable period, managers can control the efficiency of cash conversion cycle and its impact on profitability.

Contrary with the initial hypothesis, the result of cash conversion cycle has positive relationship with firms' profitability and it has B coefficient value 0.001 (Table 11). This implies that an increase in the cash conversion cycle will help to manage the working capital of small business by 1%. The R² of this model is 0.616 this means 61.6 percentage of the variation in the dependent variable is explained uniquely or jointly by the independent variable (Table 10). The model is fit with F-statistics 4.007 and p-value is 0.034. It shows it is significant at 0.05 levels (Table 12). The positive relationship indicates when the cash conversion cycle increases the profitability also increases. It means that the small business wait long period for collecting their receivables and payment of their credits than their conversion of cycle.

Inline with (Sharma and Kumar, 2011; Gill, 2012) by using an environment in which there is a severe competition from multinational companies MNCs, found positive relationship which states an increase in the cash conversion cycle will generate higher profit for a company. However the finding is contrary with the results of (Lazaridis and Tryfonidis, 2006; Falope and Ajilore, 2009) who found negative relationship between cash conversion cycle and profitability of the firm. As indicated by Uyar (2009), firms with shorter cash conversion cycle could not require an external financing therefore, there is low cost of borrowing and this consequently increases their profitability.

Table 10. Model Summary^b of cash conversion cycle (CCC)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		Durbin-Watson
					F Change	Sig. F Change	
4	0.785 ^a	0.616	0.462	0.185030	4.007	0.034	2.228

a. Predictors: (Constant), CCC, CR, LnSlac, DAR, FTA

b. Dependent Variable: ROA

Source: Own Survey Computation, 2020

Table 11. Coefficients^a of cash conversion cycle (CCC)

Model 4	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.381	0.130		2.938	0.015		
CR	-0.015	0.074	-0.052	-0.199	0.847	0.616	1.624
LnSlae	-0.021	0.015	-0.336	-1.408	0.193	0.748	1.337
FTA	-0.180	0.082	-0.576	-2.181	0.057	0.609	1.642
DAR	0.168	0.055	0.621	3.071	0.012	0.939	1.064
CCC	0.001	0.001	-0.541	-2.057	0.067	0.555	1.801

Dependent Variable: ROA

Source: Own Survey Computation, 2020

Table 12. ANOVA^a of cash conversion cycle (CCC)

Model 4	Sum of Squares	Df	Mean Square	F	Sig.
Regression	0.549	4	0.137	4.007	0.034 ^b
Residual	0.342	10	0.034		
Total	0.891	14			

a. Dependent Variable: ROA

b. Predictors: (Constant), CCC, Current Ratio, LnSlae, DAR, FTA

Source: Own Survey Computation, 2020

4. Conclusion and Recommendations

4.1 Conclusion

The researcher found that the negative relationship between inventory conversion period and profitability. It shows that the longer it takes firms to replenish the inventory, the less profitable they will be. This suggests the undesirability of inventory due to longer inventory period leads to lower profitability. There is significant positive relation between profitability and the accounts receivable period. Showing that the longer it takes firms to receive their receivables the less profitable they will be. This positive relationship can be explained as the number of days to collect cash from credit customers becomes too short; it will favorably for profitability of the firms.

There was positive relationship and highly significant between accounts payable period and small business profitability. Positive significant relationship between accounts payable period and profitability can be explained by the increased availability of funds caused by the delayed payment of accounts payable. Such funds can thus be used for productive purposes that can increase profitability. The study has found that positive significant relation between cash conversion cycle and small business profitability. Cash conversion cycle is an additive function of accounts receivable period, inventory holding period and accounts payable period. Thus, managing cash conversion cycle efficiently means efficient management of these three items. The positive impact of cash conversion cycle on profitability indicates the small business wait long period for collecting their receivables and payment of their credits than their cash conversion cycle.

4.2 Recommendations

Based on the above findings the following recommendations were drawn.

- ✓ The results of the study revealed that ARP has a positive impact on profitability. Thus, it is recommended that the small businesses should reduce the period of converting account receivables into cash to its possible minimum days.
- ✓ The results suggest that managers can increase profitability of manufacturing firms by reducing the number of day's payable and shortening accounts receivable days.
- ✓ There are other many dependent and independent variables besides the variables mentioned above, that can explain working capital management and profitability. Therefore, further study should be included some other variables in the model.

Abbreviations

ANOVA: Analysis of variance; APP: Average Payment Period; ARP: Average Receivable Period; CCC: Cash Conversion Cycle; DAR: Total Debt to Total Asset; FTA: Financial Assets to Total Assets; ICP: Inventory Conversion Period; CR: Current Ratio; LnSale: Natural Log of Sale; ROA: Return on Asset.

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Authors' contributions

All authors had their own crucial role in the process of completing this study. Study design, data collection, and data analysis, critically review and provide comments on the content and structure of the paper. All authors read and approved the final manuscript.

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Availability of data and materials

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Competing interests

The authors declare that they have no competing interests.

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