The Effect of Accounts Receivable Management on the Performance of Tanzanian Agricultural Firms

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Abstract: The purpose of the study was to investigate the impact of accounts receivable on the firm's performance. The study involved thirty-four Tanzanian agricultural firms for a period of twelve years, starting from 2006 to 2007. The study employed panel data analysis using both fixed effect and random effect model to analyze the impact of accounts receivable on the performance of the firm. The study results revealed a significant negative relationship between ACP and profitability of the firm in the case of liquidity; it showed a significant positive relationship between ACP and the liquidity of the firm. The research results suggest that financial managers may push up the profitability of the firm by reducing the number of accounts receivable to the reasonable minimum number of days while the firm may boost its liquidity by investing more in accounts receivables

Keywords: Accounts receivable, Profitability, Liquidity, Working Capital Management, Debt Ratio

1.0 Foundation of the study

Tanzania is the middle poor economy country, even though it had entrusted with enormous natural resources includes fertility land, rivers, lakes, mineral, ocean, and pleasant climatic conditions that allow verities of economic activities. Together with those natural resources, the country still ranks as the world's poorest country since 36% of its populations live below the poverty line (CIA Fact book, 2012). The country, its economy depends more on the agricultural sector. The agricultural sector contributes 29% of the DGP and 66% of the labour forces. In addition to that, the sector provides 65% of the raw material to the Tanzanian industries (URT, 2018 and Chongela, 2015). The excellent performance of the agricultural sector depends on the efficient management of the working capital, particularly accounts receivables.

1.1 Background of the study

Working capital management is the management of short term investment and short finances (Tadesse, 2016). The management of short term investment involves the management of cash, accounts receivable, inventories and other necessary short term investments while the management of short finances includes the management of accounts payable and other short finances (Dinku, 2013). Accounts receivable are among the necessary components of working capital that occurs when goods are sold to the customer and the payments of the particular goods expected to be paid at a later period. Usually, the period does not exceed one year accounting period; rationally is not more than 90 days. Accounts receivable is the management of trade credit; it is the market tool since it bridges the gap between production and distributions of goods and services (Brigham & Houston, 2007).

The primary purpose of account receivable management is to tradeoff between the two twin conflicting objectives of the firms, i.e. liquidity and profitability. The aim of the account receivable can be attained by optimal accounts receivable. The optimal account receivable is determined by comparing the benefits associated to the accounts receivable and the cost associated with the accounts receivable. The optimal account receivable may be achieved through the implementation of the principles of accounts receivable includes allocation of authority relating to credit sales, credit terms, credit investigation and collection policies.

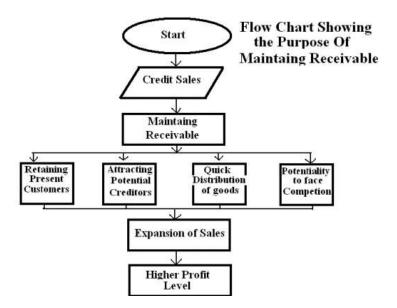
The Accounts receivable unit is the unit responsible for the management of account receivable, the availability of the effective and efficient account receivable unit may push up sales while the excellent principle of credit terms such as lenient credit terms may promote more sales as well as high profitability of the firm. Also, cash discount may help aerial payments as well as a large volume of sales since it is lowering prices. Credit investigations enable the company to provide credit sales to the appropriate credit customers since it evaluates the creditworthiness of the customer, and apart from that, the credible collection policies may shun the company far away from the doubtful debts. A part of the principle governing accounts receivable, also accounts receivable, can be influenced by the following factors include sales terms, financial stability of the company, demand and supply, and trend of the company.

Accounts receivable are among the necessary components of working capital that occur when goods sold to the customer, and the payments of the particular goods are expected to be paid a later period. Usually, the period does not exceed one year accounting period; rationally is not more than 90 days. Accounts receivable is the management of trade credit; it is the market tools since bridge the gap between production and distributions of the goods and services. The accounts receivable is the sales magnetic

since it attracts potential customers to buy a particular product because it gives enough time the customer to evaluate the qualities of the goods as well as sufficient time for settling the debts (Robert N. Anthony).

Accounts receivable is very crucial since, directly, it affects the two conflicting objectives of the firms. The management of working capital, as well as accounts receivable, is vital in the liquidity as well as the profitability of the firm since poor management of accounts receivable has attributed to the bankruptcy of many businesses (Ahmadiand, Arasi, & Garajafary, 2012). Both the liquidity and profitability have a great weighty, but Liquidity plays significant roles since the company can survive with no profit but cannot survive with illiquidity. The firm with illiquidity is termed as a dead firm while the firm with no profit is equated as a sickness business. The importance of accounts receivable is not only because of its influence on firm's performance but also because it occupies a large part of working capital, it is believed that accounts receivable hold more than 40% of the total working capital of the frim (Robert N. Anthony). Researches on working capital management revealed that accounts receivable occupy a large amount of firm's investment; hence, proper efficiency management of accounts receivable is inevitable towards the uplift of sales volume as well as the profitability of the business. In addition to that, accounts receivable enable the firms to defeat competitors since credit sales attract more potential customers. Not only that, but also credit sales speed up distribution of the goods and services, and it is from that notion thus why the accounts receivable is considered as the soul of the business (Ahmadiand et al., 2012). The diagram below states the way how the accounts receivable affects the profitability of the firm.

Flow chart showing the purpose of maintaining receivable



1.3 Statement of the problem

Because of the stiff competition among the business sector, financial managers in collaboration with top management should craft soft mechanisms that may enable the company to survival for the long term (Shivakumar & Thimmaiah, 2016). Generally, the accounts receivable are among of business strategy used by the managers to sustain in antagonism since it boosts the earnings of the firm through a high volume of sales and price discrimination (Gaglani, 2014). Although account receivable exploiting positive effects but also it has some drawbacks such as; tie-up of funds (credit sanctions), credit administration, credit investigation, collection costs, defaulting cost and delinquency cost. Hence proper efficiency of accounts receivable is inevitable for the reason that it has both a negative and positive impact to the two twin's performance of the firm. The objective of the study was to investigate the effect of accounts receivable management on the performance of the Tanzanian agricultural firm.

1.4 Objectives of the study

The following are the specific objective of the study;

- i. To examine the relationship between the Average Collection Period (ACP) and the profitability of the Tanzanian agricultural firm.
- ii. To evaluate the relationship between the Average Collection Period (ACP) and the liquidity of the Tanzanian agricultural firm.

1.5 Researches questions

- i. What is the impact of the Average Collection Period (ACP) on the printability of the firm?
- ii. What is the relationship between the Average Collection Period (ACP) and the liquidity of the firm?

1.6 Researches hypotheses

- i. Ho- There is no relationship between the Average Collection Period (ACP) and the profitability of Tanzanian agricultural firm
- ii. H1- There is a relationship between the Average Collection Period (ACP) on the profitability of the Tanzanian firm.
- iii. Ho- There is no relationship between the Average Collection Period (ACP) and the liquidity of the Tanzanian agricultural firm
- iv. H1- There is the relationship between the Average Collection Period (ACP) and the liquidity of the Tanzanian agricultural firm

2. Empirical studies

(Madishetti, Dr. Srinivas and Kibona, 2013) on his studies examined the relationship between accounts receivable and accounts payable on the profitability of the Tanzanian SMEs. The study used the sample size of 30 Tanzanian SME for five years using the regression analysis to analyze the relationship between the independent variables and dependent variables. The study revealed a significant negative correlation between the average collection period and gross profit of the firm. The research suggests that financial managers may uplift the profitability of the firm by increasing the average collection period. The results of (Madishetti, Dr. Srinivas and Kibona, 2013) conform to the theory of financing advantages.

(Dinku, 2013) examined the impact of working capital management on the profitability of the firm. The study used the financial statement of the sample size of 67 SME's from Bahir Dar city Administration for one year. The study applied Ordinary Least Squares (OLS) to analyze the relationship between independent and dependent variables. And finally, the result evidenced the existence of a significant negative correlation between the average collection period, average inventory period, and cash conversion cycle to the profitability of the firm. The results asserted that the firm might boost its profit by reduces the average collection period. The reduction of the average collection period may pull up the profitability of the firm since it minimizes the fund tie-up in the account receivable. And rationally accounts receivable is the least earnings assets.

(Uchenna, Mary, & Okelue, n.d.) examined the impact of working capital management on the profitability of the firm. They used the sample size of four Nigerian manufacturing companies for twelve years. The study used multiple regression analysis to analyze the impact of working capital on the firm's profitability. The study revealed that the components of working capital include accounts receivable has a significant effect on the firm's profitability. For instance, the average collection period has yielded a positive relationship with the profitability of the firm.

(Mutekwa, 2017) investigated the impact of working capital on the profitability of material companies in South Africa using the sample size of 21 for twelve years. The study applied the fixed-effect model regression analysis to demarcate the causal relationship between working capital components and the profitability of the firm. The study showed a significant negative correlation between the Average Collection Period and the profitability of the firm.

(Muhammad, Saminu Jibril, Wambai, Ibrahim, & Ahmad, 2015) examined the impact of working capital on the profitability of Nigerian food product firms with the sample size of seven Nigerian listed companies for five years. The study employed the general least squares regression analysis to analyze the relationship between the impact of working capital and profitability of the business. The study result revealed a positive correlation between the average collection period and the profitability of the firm.

(Gaglani, 2014) studied the impact of receivable on the working capital using the sample of nine textile companies for two years. The study employed ANOVA to analyze the contribution of receivable on the working capital. The study results revealed a significant contribution of accounts receivable to the working capital, total assets, total sales, as well as profitability of the business.

(Napompech, 2012), the effect of working capital on the profitability of the firms. The study employed a 255 sample size of listed companies on the Thailand stock exchange three. The study years comprise deferent business sectors includes the agricultural sector of which the panel data analysis was employed. The study results revealed a negative relationship between the average collection period and the profitability of the business.

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(Waithaka, 2012) examined the relationship between working capital and the financial performance of Kenyan's agricultural firms using the sample size of seven companies listed on the Nairobi Stock Exchange. The study employed both descriptive and inferential statistics to analyze the causal relationship between working capital and the firm's financial performance, and the study results revealed a significant positive impact of accounts receivable and the performance of the firm.

3.0 Research methodology

3.1 Population and sample

The population of the study is agriculture companies operated in Tanzania. The purposive sampling procedure was used to sample the sample size of 34 Tanzanian agricultural companies, and the sample size was chosen due to the availability of financial data starting from 2006 up to 2017.

3.2 Data sources

The study used the financial statement as secondary data of the selected agriculture firms to evaluate the impact of accounts receivable on the performance of agricultural firms. The data extracted from the financial statements were imported into the Microsoft excel sheet to calculated the needed data since secondary data contain vague information at once. Data exploration was done carefully to ensure the reliability and validity of the data. Accounts receivable treated as an independent variable while both Returns on Total Assets (ROTA) and Current Ratio (CR) were treated as dependents variable and debts ratio was treated as control variables. The panel data analysis using the fixed-effect model was employed to analyze the relationship between accounts receivable management and firm performance. The selection of the fixed-effect model depends on the results of the Hausman test since the choice of whether fixed effect or random effect is determined by the Hausman test, not to the discretion of the researcher.

3.3 Empirical model

Empirical Model Model 1: relationship between accounts receivable and profitability of the firm The model is used to test the first hypothesis expressing that there is no relationship between Average Collection Period and profitability of the firm. Where ROTA/t=returns on total assets in firm f in year fACP. "Average Collection Period in firm j in year t =Debt Ratio in firm / in year t DRit U_{jj} =Disturbance term for profitability in firm j in year t BaBb = Parameters of estimationModel 2: relationship between receivable and liquidity of the frim Model two is used to verifying the hypotheses number two describing that there is no relationship between Average Collection Period and liquidity of the firm. Where CR/t=Current ratio in firm j in year t ACP_{n} =Average Collection Period in firm / in year t DRit -Debt Ratio in firm / in year t Ug =Disturbance term for liquidity in firm / in year /

3.4 Variables measurements

3.4.1 Average Collection Period (ACP)

Average Collection Period (ACP) is the period expressing the period firms spent to collect their debts from the credit customers since goods sold on credit. The average collection period is expressed by taking average accounts receivable times number of days in a year over total sales on credit (Deloof, 2003 and Brigham & Houston, 2007)

3.4.2 Returns on Total Assets (ROTA)

Returns on total assets (ROTA) is the ratio that expresses the way how the firm utilities its assets to generate earnings. Returns on total assets are equal to Earnings before Tax and Interest (EBIT) over the total assets of the firm. Rota is the measurement of the firm's performance; it measures the ability of the firm to create profit; the higher the rate, the better the performance of the business (Javid, 2014).

3.4. 3 Current Assets (CR)

The current ratio (CR) is the efficiency ratio that measures the ability of the firm to meets its maturity obligations. The current ratio is the proportionate ratio of current assets over current liabilities; the ratio above one indicates the strength of the firm meets its day to day and maturity obligation of the firm.

3.4.4 Debts Ratio (DR)

Debts Ratio (DR) is the financial ratio that expresses the portion of assets funded by the liabilities; the debt ratio is the proportion of total liabilities over total assets.

Results and discussions

. pwcorr ACP ROTA CR DR

	ACP	ROTA	CR	DR
ACP	1.0000			
ROTA	-0.0942	1.0000		
CR	0.1806	0.0906	1.0000	
DR	0.0906	-0.3534	-0.3084	1.0000

4.0 Findings and discussion

4.1 Pairwise correlation

Table 1 indicates the pairwise correlation of the variables included in the study. The study revealed negative associations between ACP and ROTA (profitability), while also the study revealed a negative relationship between DR and ROTA; on the other hand, the study revealed the positive correlation between ROTA and current ratio (CR). In the case of CR the study point outed positive relationship between CR and ACP, but negative relationship with DR. And for the case of ACP the study revealed positive relationship between ACP and DR. The study result suggests that managers may improve the profitability of the firm by shortening the collection duration period through appropriate debts collection procedures. The shorter the length of the accounts receivable indicates the low volume of funds invested in the accounts receivable, the lesser the investment in accounts receivable allows the firm to generate more earnings since it is believed that short term investment is the least earnings assets. In the case of liquidity, the study suggests that the firm can maintain liquidity of the firm by investing more in accounts receivable. The pairwise correlation analysis is just shed light because it does not tell us the causes of the consequences.

4.2 Correlation Analysis

I employed panel data analysis using fixed effect model analysis to evaluate the impact of accounts receivable on the firm's profitability. The fixed-effects model is the best model than pooled ordinary least squares (OLS) since it yields robustness results though it eliminates anything that is time-invariant. The fixed effects estimate indicated a significant negative relationship

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between ACP and ROTA with the coefficient of -0.0002143, and this suggests that the decline of days of accounts receivable let say by one day is associated with the increase in the ROTA by .021%. When I employed the random-effects model for comparison purposes the study revealed the same results since the estimated (REM) yield the significant negative relationship between ACP and ROTA with the coefficient of – 0.0002282 and this implies that the increase of a one day of accounts receivable is associated with the decline of the ROTA by 0.022%. The results for fixed effects and random effects both have revealed the same significant direction even though with the different coefficient. The fixed effect estimate indicated -0.0002143 coefficient, while the random-effects model showed the coefficient of -0.0002282. The results above allow the researcher to reject the null hypothesis by accepting the alternative hypotheses. Hence, the study results conform with (Deloof, 2003) findings that assets that there is a negative relationship between accounts receivable and profitability of Tanzanian agricultural firm.

model:1 The relationship between average collection period and profitability of the firm

xtreg ROTA	ACP DR TO						
acreg ADIA	DEP DIC, TO						
Random-effects	GLS regress	ion		Number	of obs	-	40
Group variable	: FIRMSCODE			Mumber:	of groups	-	3
R-mq: within				Obs per	group: mi	in -	
	n = 0.1523					ra =	
overall	1 = 0.1263				2514	A25 =	1
				Wald ch	12(2)		46.9
corr(u_1, %)	= 0 (assume	d)		Prob >	chi2	-	0.000
ROTA	Coef.	Std. Err.	=	P>1 m 1	[954 Co	onf.	Interval
ACP	0002143	.0000828	-2.59	0.010	000376	66	000052
DR	2488207	0392248	-6.34	0.000	- 325691	9.9	171941
_cons	.2247894	.0291752	7.70	0.000	16760	71	201971
	11/2/2017/2017						
sigma u	13219363						
sigma_u sigma_e	.13219363						
sigma_e rho	.14169736 .46534278 ACP DR, fe	(fraction	of varia	THE RELIGION OF			Day 2
sigma_e	.14169736 .46534278 ACP DR, fe (within) reg:		of varia	Number	of obs	-	
sigma_e xho xtreg ROTA / Fixed-effects Group variable	.14169736 .46534278 ACP DR, fe (within) reg: e: FIRMSCODE		of Varia	Number o	of obs		34
sigma_e rho . streg ROTA J Fixed-effects Group variable R-sq: vithin	.14169736 .46534278 ACP DR, fe (within) reg: e: FIRMSCODE		of Varia	Number o	of obs		34
sigms_e rho . strey ROTA / Fixed-effects Group variable R-sq: within between	.14169736 .46534278 ACP DR, fe (within) reg: c: FIRMSCODE = 0.0996		of varia	Number o	of obs of groups group: min	n -	408 34 12 12.0
sigms_e rho . streg ROTA / Fixed-effects Group variable R-sq: within between	.14169736 .46534278 ACP DR, fe (within) reg: e: FIRMSCOOR = 0.0996 n = 0.1507		of varia	Number o	of obs of groups group: min ave man	n -	34 12 12.0
sigms_e rho . streg ROTA / Fixed-effects Group variable R-sq: within between	.14169736 .46534278 ACP DR, fe (within) reg: e: FIRMSCODE = 0.0996 n = 0.1507 1 = 0.1255		of varia	Number of Number of Obs per	of obs of groups group: min ave	o -	34 12 12.0 12
sigms_e	.14169736 .46534278 ACP DR, fe (within) reg: e: FIRMSCODE = 0.0996 n = 0.1507 1 = 0.1255		of varia	Number of Number of Obs per	of obs of groups group: min ave man	-	34 12 12.0 12
sigms_e rho . streg ROTA J Fixed-effects Group variable R-sq: vithin between overall corr(u_i, %b)	.14169736 .46534278 ACP DR, fe (within) reg: E: FIRMSCOOR = 0.0996 n = 0.1507 L = 0.1255 = -0.0035	ression	•	Number of Number of State of S	of obs of groups group: min ave man		34 12.0 12 20.57 0.0000
sigms_e	.14169736 .46534278 ACP DR, fe (within) reg: e: FIRMSCODE = 0.0996 n = 0.1507 1 = 0.1255 = -0.0035 Coef. 0002262 2463139	Std. Err.	-2,68 -5,87	Number of Number	group: min group: min av ma: [95% Cor - 000395		34 12 12.0 12 20.57 0.0000 Intervall 0000607 1638599
sigms_e	.14169736 .46534278 ACP DR, fe (within) reg: FIRMSCOOR = 0.0996 n = 0.1507 L = 0.1255 = -0.0035	Std. Err.	-2.68	Number of Number	of obs of groups group: min avi max		34 12 12.0 12 20.57 0.0000 Intervall 0000607 1638599
sigma_e	.14169736 .46534278 ACP DR, fe (within) reg: e: FIRMSCODE = 0.0996 n = 0.1507 1 = 0.1255 = -0.0035 Coef. 0002262 2463139	Std. Err.	-2,68 -5,87	Number of Number	group: min group: min av ma: [95% Cor - 000395		34 12.0 12.0 12 20.57 0.0000
sigms_e	.14169736 .46534278 ACP DR, fe (within) xegs e: FIRMSCOOR = 0.0996 n = 0.1507 1 = 0.1255 = -0.0035 Coef. 0002282 2463139 .2249266	Std. Err.	-2,68 -5,87	Number of Number	group: min group: min av ma: [95% Cor - 000395		34 12 12.0 12 20.57 0.0000 Intervall 0000607 1638599

Model 2: The relationship between the average collection period and the liquidity of the firm

. xtreg CR ACI							
Fixed-effects	(within) regr	ression		Number	of obs	_	408
Group variable				Number	of groups	-	34
R-sq: within	= 0.0333			Obs per	group: min	-	12
between	= 0.3985				avg	-	12.0
overall	L = 0.1387				max	-	12
				F(2,372):	-	6.41
corr(u_i, Xb)	= 0.3202			Prob > 1	F	-	0.0018
CR	Coef.	Std. Er	t. t	P> t	[95% Con	f. I	nterval]
ACP	.0053592	.00228	2.35	0.019	.000868	9 -	.0098504
DR	-2.995899	1.124635	-2.66	0.008	-5.207337	7.	.7844609
_cons	4.226734	.523376	7 8.08	0.000	3.197586		5.255882
sigma_u	2.5206832						
sigma_e	3.8003608						
rho	.3055234	(fractio	n of varia	nos dus t	ou i)		
F test that al		The second second		.73	08.00.000	> F	= 0.0000
	il u_i=0:	The second second			08.00.000	> F	= 0.0000
. xtreg CR ACI	ll u_i=0: P DR, re	F(33, 37		.73	08.00.000	> F	
. xtreg CR ACI	ll u_i=0: P DR, re s GLS regress	F(33, 37		73 Number	Prob		40
. xtreg CR ACI	Ll u_i=0: P DR, re s GLS regress e: FIRMSCODE	F(33, 37		Number Number	Prob	:	40
xtreg CR AC	Ll u_i=0: P DR, re s GLS regress e: FIRMSCODE	F(33, 37		Number Number	Prob of obs of groups r group: m	:	40 3
xtreg CR ACC Random-effect: Group variable R-sq: within between	Ll u_i=0: P DR, re s GLS regress e: FIRMSCODE = 0.0332	F(33, 37		Number Number	Prob of obs of groups r group: m	- -	40 3 1 12.
. xtreg CR ACC Random-effect: Group variable R-sq: within between	Ul u_i=0: P DR, re s GLS regress s: FIRMSCODE = 0.0332 n = 0.3921	F(33, 37		Number Number Obs pe	Prob of obs of groups r group: m a m	- in = vg =	40 3 1 12. 1 26.4
Random-effect: Group variable R-sq: within between overal:	DI u_i=0: P DR, re s GLS regress e: FIRMSCODE = 0.0332 h = 0.3921 1 = 0.1389	F(33, 37)		Number Number Obs pe	Prob of obs of groups r group: m a m	in =	40 3 1 12. 1 26.4
Random-effect: Group variable R-sq: within between overal:	DI u_i=0: P DR, re s GLS regress e: FIRMSCODE = 0.0332 h = 0.3921 1 = 0.1389	F(33, 37)	2) = 4	Number Number Obs pe	Prob of obs of groups r group: m a m hi2(2) chi2	in = vg = ax = =	40 3 1 12. 1 26.4 0.000
Random-effect: Group variable R-sq: within between overal:	Ul u_i=0; P DR, re s GLS regress e: FIRMSCODE = 0.0332 n = 0.3921 1 = 0.1389 = 0 (assume	F(33, 37)	z) = 4.	Number Number Obs pe Wald o Prob >	Prob of obs of groups r group: m a m hi2(2) chi2	= = = = = = = = = = = = = = = = = = =	40 3 1 12. 1 26.4
Random-effect: Group variable R-sq: within between overall	DI u_i=0: P DR, re s GLS regress e: FIRMSCODE = 0.0332 n = 0.3921 1 = 0.1389 = 0 (assume	F(33, 37)	er. = 4.	Number Number Obs pe Wald o Prob >	Prob of obs of groups r group: m a m hi2(2) chi2	= = = = = = = = = = = = = = = = = = =	40 3 1 12. 1 26.4 0.000
Random-effect: Group variable R-sq: within between overal: corr(u_i, X) CR ACP	DI u_i=0: P DR, re s GLS regress e: FIRMSCODE = 0.0332 n = 0.3921 1 = 0.1389 = 0 (assume Coef006498	F(33, 37)	er. = 4.23	Number Number Number Obs pe Wald Oprob	Prob of obs of groups r group: m an chi2(2) chi2 [95% C	= = = = = = = = = = = = = = = = = = =	40 3 1 12. 1 26.4 0.000 Interval
Random-effect: Group variable R-sq: within between overal: COTT(u_i, X) CR ACP DR	DI u_i=0: P DR, re s GLS regress e: FIRMSCODE = 0.0332 n = 0.3921 1 = 0.1389 = 0 (assume) Coef. .006498 -4.102509	F(33, 37) ion d) Std. E: .002150	er. = 4.23	Number Number Number Obs pe Wald Oprob	Prob of cbs of groups r group: m an chi2(2) chi2 [95% C	= = = = = = = = = = = = = = = = = = =	40 3 1 12. 1 26.4 0.000
Random-effect: Group variable R-sq: within between corr(u_i, X) CR ACP DR _cons	Ul u_i=0: P DR, re s GLS regress e: FIRMSCODE = 0.0332 n = 0.3921 1 = 0.1389 = 0 (assume Coef. .006498 -4.102509 4.574134	F(33, 37) ion d) Std. E: .002150	er. = 4.23	Number Number Number Obs pe Wald Oprob	Prob of cbs of groups r group: m an chi2(2) chi2 [95% C	= = = = = = = = = = = = = = = = = = =	40 3 1 12. 1 26.4 0.000 Interval

In model two, I regressed the fixed effects estimate to analyze the relationship between accounts receivable and the firm's liquidity. The fixed-effects model indicated a significant positive correlation between ACP and CR with the coefficient of 0.0053592; these results suggest that the decline of the days of accounts receivable let say by one day is associated with the decrease in the CR by 0.54 %. When I employed the random-effects model for comparison purposes, the study revealed the same results since also the estimate provided a significant positive relationship between ACP and CR with the coefficient of -0.006498 and this implies that the increase of a one day of accounts receivable is associated with the rise of the CR by 0.65.%. The results for fixed effects and random effects both have revealed the same significant direction even though with the different coefficient.

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The fixed effect estimate indicated a 0.0053592 coefficient, while the random effects model showed a coefficient of 0.006498. The results above allow the researcher to reject the null hypothesis by accepting the alternative hypotheses. Hence, the study results confirm that there is a relationship between ACP and CR. The results of the study suggest that the higher the accounts receivable, the more elevated the liquidity of the firm and vice versa is true.

For the case of DR to the ROTA, the study results revealed a significant negative relationship between them. The study results suggest that an increase of the DR by one is associated to the decline of ROTA by 2.99. while for the case of CR and DR, the results also indicated a significant effect between them. The study results suggest that the higher the DR, the lower the liquidity if the firm, as well as the lower the profitability of the firms.

5. conclusion

In the world of stiff competitions to retain an existing customer, attract potential customers and quick distributions of the goods and services, the practices of accounts receivable are inevitable. In this study, I revealed a significant negative relationship between the average collection period (ACP) and profitability of the firm, while when I regressed model two, I find a significant positive correlation between the average collection period and liquidity of the firm. The results suggest that managers may pull up the profitability of the firm by shortening the number of days accounts receivable but on the other hand, may increase the liquidity of the frim by increases the number of days accounts receivable.

References

- Ahmadiand, M., Arasi, I. S., & Garajafary, M. (2012). Studying the relationship between working capital management and profitability at Tehran stock exchange: A case study of the Food Industry. *Research Journal of Applied Sciences, Engineering and Technology*, 4(13), 1868–1874.
- Brigham, E. F., & Houston, J. F. (2007). Fundamentals of financial management (Dasar-Dasar Manajemen Keuangan). In *Engineering and Process Economics* (Vol. 3). https://doi.org/10.1038/sj.ejhg.5200824
- Deloof, M. (2003). Does Working Capital. Pdf. 30, (November 2001).
- Dinku, T. (2013). Impact of Working Capital Management on Profitability of Micro and Small Enterprises in Ethiopia: The Case of Bahir Dar City Administration. *International Journal of Accounting and Taxation*, 1(1), 15–24. https://doi.org/10.15640/ijat
- Gaglani, S. R. and H. (2014). Impact of Receivables Management on Working Capital: A Study on Select Cement Companies. *International Journal of Management Research & Review IMPACT*, 4(6), 182–184.
- Javid, S. (2014). Effect of Working Capital Management on SME's Performance in Pakistan. *European Journal of Business and Management*, 6(12), 206–221.
- Madishetti, Dr. Srinivas and Kibona, M. D. (2013). Impact of Receivables and Payables Management on the Profitability of SME's in Tanzania. A Journal of Economics and Management. Pinnacle Research Journals, 2(3), 9–21.
- Muhammad, S., Saminu Jibril, R., Wambai, U. S. K., Ibrahim, F. B., & Ahmad, T. H. (2015). The Effect of Working Capital Management on Corporate Profitability: Evidence from Nigerian Food Product Firms. *Applied Finance and Accounting*, 1(2), 55. https://doi.org/10.11114/afa.v1i2.842
- Mutekwa. (2017). The Impact of Working Capital Management Components on the Profitability of Basic Materials. 5(3), 6018.
- Napompech, K. (2012). Effects of Working Capital Management on the profitability of Thai Listed Firms. *International Journal of Trade, Economics and Finance*, 3(3), 227–232. https://doi.org/10.7763/ijtef.2012.v3.205
 - 1. Shivakumar & Thimmaiah, D. N. B. (2016). Working Capital Management It's S Impact on Liquidity and Profitability a Study of Coal India Ltd. *International Journal of Research Granthaalayah*, 4(12), 178–187.
- Tadesse, Z. (2016). Relationship between Working Capital Management, Policies, and Profitability of Small Manufacturing Firms. *Walden University Scholar Works*, 19, 1–154.
- Uchenna, W., Mary, I., & Okelue, D. (n.d.). Asian Economic and Financial Review 2(8):966-982 Effects of Working Capital Management on Profitability: Evidence From The Top five Beer Brewery Firms In The World. 2(8), 966–982. Retrieved from http://www.aessweb.com/pdf-files/966-982.pdf
- Waithaka, A. (2012). The Relationship Between Working Capital Management Practices and Financial Performance of Agricultural Companies Listed at the Nairobi Securities Exchange.
- Robert N. Anthony: Management Accounting, Op. Cit., P.291