

## Working Capital Management and Cash Holdings of Banks in Ghana

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### Abstract

The impact of working capital management on profitability and liquidity is hardly contended. The main thrust of this work is to ascertain the relationship between working capital management and bank cash holding in Ghana. Panel data covering the ten-year period 1999 – 2008 was analyzed within the framework of the random effects technique was used for the presentation and analysis of findings. The results show that while debtors' collection period, cash conversion cycle, capital structure, bank size have significantly negative relationship with the cash position of banks, creditors payment period and profitability have significantly positive relationship with the cash position of banks in Ghana. The revelations in this paper go to inform bank directors and policy makers on the direction of managing bank working capital in order to ensure adequate liquidity.

**Key Words:** Working Capital Management, Cash Holdings, Banks, Ghana.

### 1. Introduction

As the global economy gets out of the credit crunch- a condition where credit is either not available or expensive to attract-, certain lessons need not be brushed under the carpet so soon. Among the key reasons advanced by experts as the main causes of the crunch were questionable corporate governance practices, inadequate stock market regulation, mismanagement of the general economy and bad practices of market participants. Eventually, banks and other financial institutions were plunged into liquidity problems. In as much as the global economy puts in efforts to handle the major causes of the crunch managers of financial institutions should also search for measures to ensure adequate liquidity. One of such measures that this paper seeks to address is the management of working capital. Working capital management is the regulation, adjustment, and control of the balance of current assets and current liabilities of a firm such that maturing obligations are met, and the fixed assets are properly serviced. Deakins et al, (2003) assert that this process tends to enhance management of cash flow and cash conversion cycle in addition.

The way that working capital is managed has a significant impact on profitability and cash holdings of firms, (Deloof, 2003). Efficient working capital management is known to have many favourable effects: it speeds payment of short-term commitments on firms (Peel et. al, 2000); facilitates owner financing; reduces working capital as a cause of failure among small businesses (Berryman, 1983); ensures a sound liquidity for assurance of long-term economic growth and attainment of profit generating process (Wignaraja and O'Neil, 1999); and ensures acceptable relationship between the components of firms working capital for efficient mix which guarantee capital adequacy, (Osisoma, 1997). On the other hand, there is general consensus from literature that inefficient working capital management also induces small firms' failures (Berryman, 1983), overtrading signs (Appuhami, 2008), and inability to propel firm liquidity and profitability, (Eljielly, 2004; Peel and Wilson, 1996; Shin and Soenen, 1998).

Consequently, there appears to be a certain level of working capital requirement, which potentially maximizes returns. Firms may have an optimal level of working capital that maximizes their value. For all countries, both developed and developing, one of the fundamental objectives of working capital management is to ensure that the organization has sufficient, regular and

consistent cash flow to fund its activities. This requirement is particularly heightened for financial institutions like banks. For banking business, being liquid is not negotiable, at least for two reasons; to meet regulatory requirement and to ensure that they have enough liquid funds to meet customer withdrawals. Working capital management is aimed at sustaining strong profitability together with sound liquidity which in turn leads to strong cash holdings for ensuring effective and efficient customer services. Banks in Ghana have been experiencing average cash holdings of 45 % (BoG, 2010), though this has consistently been missed.

Most empirical theory of working capital management is related to large corporate enterprises and in developed economies. Obviously, financial management of banks and large enterprises bear strong similarities. However, there is a significant disparity which substantiates the study of financial management in banks. Since banks of developing countries experience difficulties in accessing external finance, they rely more strongly on customer deposits than larger banks from developed economies. Working capital management thus plays an important role in the liquidity of banks in developing countries.

Working capital related problems are cited among the most significant reasons for the failure of rural and community banks in Ghana (Owusu-Frimpong, 2008). As working capital management is related to short-term financial planning and cash level or liquidity in general represents a significant indicator for short-term performance, the effective and efficient working capital management should be of crucial importance, hence this study.

The important role played by banks in developing countries like Ghana has been acknowledged, over the past years. Not only are banks important for vitality of retail and microfinance business sectors, but they also serve as a major source of funding for non-financial firms (Abor, 2005) and provide new jobs for citizens in the country. Besides, banks also have a significant qualitative input to the Ghanaian economy through development of innovative financial products. Furthermore, the importance of banks to the development of the Ghanaian economy is much more profound, given the low level of development of our capital market. The banking industry also appears not to be unattractive, given the recent influx of both Ghanaian and foreign banks into the country.

In spite of its importance and attractiveness, not all banks have had it easy operating in the country. While some banks have had to liquidate others have been forced to submerge into others. Even though strong empirical support may not be found to support the assertion that poor working capital management practices could play a major role in bank performance and failures, very few would deny it. These are the major motivations for the current study. Specifically, the study unveils the relationship between working capital management and the cash holding of banks in Ghana.

The rest of the paper is organized four sections: a review of empirical studies; methodology for the study; discussion of empirical results and; summary and conclusion.

## **2. REVIEW OF RELATED RESEARCH LITERATURE**

### *2.1 Theoretical considerations*

The main objective of working capital management is to maintain an optimal balance between each of the working capital components. Business success heavily depends on the financial executives' ability to effectively manage receivables and loans, inventory, and payables (Filbeck and Krueger, 2005). Firms can reduce their financing costs and/or increase the funds available for expansion projects by minimizing the amount of investment tied up in current assets.

Van Horne (1995) explains that, working capital management is the administration of current assets in the name of cash, marketable securities, receivables and staff advances, and inventories. Osisioma (1997) demonstrated that good working

capital management must ensure an acceptable relationship between the different components of a firm's working capital so as to make an efficient mix, which will guarantee capital adequacy. Thus, working capital management should make sure that the desirable quantities of each component of the working capital are available for management. However, the question is "What determines the necessary components of a bank's working capital and how much of such necessary components can be regarded as adequate or desirable?"

The necessary components of an organization's working capital, basically, depend on the type of business and industry. Cash, debtors, receivables, inventories, marketable securities, and redeemable futures can be recognized as the common components of organization's working capital. However, the question is to recognize the factors that determine the adequacy of working capital based on growth, size, operating cash flow, etc. The inability to understand the determining factors and measurement of adequate amounts of working capital will lead an organization to bankruptcy.

The three main motives advanced by Keynes, (1936) for holding cash offer the framework within which research works on cash holdings are based. The transaction motive for holding cash is to cater for the day to day operating activities of the firm. While the precautionary motive explains that cash is also kept by firms to meet certain unforeseen circumstances, the speculative motive says that could also be kept or invested in order to take advantage of the effect of perceived future fluctuations in interest rates. The reason for keeping cash together with the business cycle of the firm would influence the level of investment in working capital.

Generally, investment in working capital could be grouped into permanent and variable. Permanent investment in working is the portion of working capital kept to sustain the level of sales which is not affected by seasonality while variable working capital is the additional working capital required during periods of fluctuations in sales. It is expected the permanent working capital would be financed by long term capital while variable working capital is financed by short term capital. Companies meet their working capital needs through the aggressive policy, conservative policy and the moderate policy. A company using the aggressive policy funds its current liabilities with minimal current assets. In other words current liabilities far exceed its current assets. On the contrary, a company going by the conservative policy keeps more current assets as against current liabilities. The aim is to reduce their liquidity risk by having enough current assets to meet current liabilities. But moderate working capital policy is meant to adequately match current assets against current liabilities. The level of working capital requirement is influenced by the industry in which the firm operates.

Banks throughout the world have mandatory liquidity position to maintain in addition to ensuring that they have enough liquid funds to meet customer withdrawals. Section 31 of the Banking Act (2004) of Ghana states *inter alia* that the Bank of Ghana may prescribe (a) that a bank shall hold liquid assets or a specific amount and composition; (b) the amount provided for under paragraph (a) either ascertain percentage of all bank's deposit liabilities or in another manner, and; (c) different percentages for different classes of deposits or assets, as the Bank of Ghana may determine in any particular case. The section also outlines some penalties for non-compliance.

## 2.2 Review of Empirical Literature

Prior researchers have approached working capital management (WCM) in numerous ways. Some studies done included: the working capital management and corporate performance (Raheman et al. 2010; Padachi, 2006; Deloof, 2003), Cash Conversion Cycle and Profitability, (Uyar, 2009), determinant factors of working capital management (Nazir and Afza, 2008) and WCM Practices in UK SMEs and Financial management (Chittenden, Poutziouris, Michaelas, 1998). All these studies tend to postulate an optimal way efficient working capital policies could lead to profit maximization and which in turn, leads to increase firm wealth (Lazaridis I, Tryfonidis D, 2006; Besley S, Meyer R, 1987). Filbeck and Krueger (2005) survey the importance of efficient working capital management by analyzing the working capital management policies of 32 non-financial industries in the US. According to their findings, significant differences exist among industries in working capital practices overtime. Moreover, these working capital practices, themselves, change significantly within industries overtime.

Raheman and Nasr (2007) examine working capital management effect on liquidity as well on profitability of the firm. In this study, they use sample of 94 Pakistani firms listed on Karachi Stock Exchange for a period of 6 years from 1999–2004. Similar to Shin and Soenen (1998), Deloof (2003), results of this study show that a strong negative relationship between components of the working capital management and profitability of the firm. In other study, Lyroudi and Lazaridis (2000) used food industry in Greece to examine the cash conversion cycle (CCC) as a liquidity indicator of the firms and attempts to determine its relationship with the current and the quick ratios, with its component variables, and investigates the implications of the CCC in terms of profitability, indebtedness and firm size. The results of their study indicate that there is a significant positive relationship between the cash conversion cycle and the traditional liquidity measures of current and quick ratios. The cash conversion cycle also positively related to the return on assets and the net profit margin but had no linear relationship with the leverage ratios. Conversely, the current and quick ratios had negative relationship with the debt to equity ratio, and a positive one with the times interest earned ratio. Finally, there is no difference between the liquidity ratios of large and small firms.

### 2.2.1 Determinants of cash level of firms

Among the key factors which influence level of cash position of firms include but not limited to leverage, firm size, growth opportunities, efficiency of firms, firm profitability, age, previous level of cash and firm risk.

#### *Leverage*

The empirical evidences (Kim et al., 1998; Opler et al., 1999; Ferreira and Vilela, 2004; Ozkan and Ozkan 2004) demonstrate a reduction in cash levels when firms increase their financial leverage. This may be because the higher the financial leverage, the higher the costs of the funds used to invest in liquid assets (Baskin, 1987). In addition, as John (1993) maintains, firms that can access the debt market can resort to lending as a substitute for liquid assets.

#### *Size*

Size is another significant variable that affects cash holdings. The traditional models to determine the optimal cash levels (Baumol, 1952; Miller and Orr, 1966), or more recent models such as that of Mulligan (1997), demonstrate that there are economies of scale associated with the cash levels required to confront the normal transactions of the firm, so that larger firms can keep lower cash holdings. Moreover, firm size is related to another set of factors that may influence liquidity levels. More specifically, smaller firms suffer more severe information asymmetries (Berger, Klapper and Udell, 2001), more financial constraints (Fazzari and Petersen, 1993) and they are more likely to suffer financial distress (Rajan and Zingales, 1995; Titman and Wessel, 1988). Also, financial distress are associated with high fixed costs and these costs are proportionately greater for smaller firms (Warner, 1977). Thus, we would expect a negative relation between firm size and cash holdings.

#### *Growth opportunities*

The existence of growth opportunities in firms is an important factor that affect cash levels, as has been shown in various empirical studies (Kim et al., 1998; Opler et al., 1999; Ferreira and Vilela, 2004; Ozkan and Ozkan, 2004). As Myers and Majluf (1984) point out, firms whose value is largely determined by their growth opportunities have larger information asymmetry. Consequently, firms with greater growth opportunities incur higher external financing costs. They also suffer more serious agency conflicts associated with the debt, which can lead to underinvestment (Myers, 1977), insofar as it discourages shareholders from embarking on profitable projects. On the other hand, firms with more growth opportunities may also incur greater costs of financial distress (Harris and Raviv, 1990; Shleifer and Vishny, 1992). This is because their value depends on their growth opportunities rather than on tangible assets or specific cash flows. Thus, this type of firm will keep higher cash levels to avoid costs of financial distress. In this respect, John (1993) finds that firms with good growth opportunities but few tangible assets tend to keep higher cash holdings. Hence we might expect firms with more investment opportunities to keep higher liquidity levels, in order not to limit or cancel their profitable investment projects. Their value depends on carrying out these projects, so that the cost of not having sufficient cash to make the investments is higher. This notwithstanding where firms have projects on-going their levels of cash may dwindle as more of their cash are put into investment projects. Thus age and bank growth (measured as change in interest income) are used as proxies for firm growth.

#### *Profitability*

Profit is a source of cash flow for firms. The amount of profit made by a firm is either retained for funding future investment opportunities or distributed to shareholders as dividend. Even though the amount of profit made in a particular year by a firm does not automatically translate into exactly the same amount of cash, it is unlikely that less profitable firms would have more cash flows than highly profitable firms, all other things being equal. Therefore, profitable firms are expected to have more cash than less profitable firms.

#### *Risk*

Firms that are risky tend to use cash holding as buffer against future uncertainties. Guney et al. (2007) contend that firms with more volatile cash flows are expected to hold more cash in an attempt to mitigate the expected costs of liquidity constraints. After short falling of liquid asset, when firms have valuable growth opportunities, then these opportunities are given up and firm value will drop. Minton and Schrand (1999) find that firms with higher volatile cash flow permanently forgo investment rather than reacting to cash flow shortfalls by changing the discretionary investment timing. Again, firms that hold a lot of debt are considered to be more risky than others. In order to manage working capital efficiently, there is the need that financial managers be able to plan and control current assets and current liabilities in a manner that eliminates the risk of inability to meet due short term obligations (Smith, 1993; Eljelly, 2004). Thus total debt to asset ratio is used to represent risk.

#### *Efficiency of firms*

Cash can be put into various uses such as for transaction, precaution and speculation purposes. In some situations the level of cash held by a company can be used as a basis for assessing how efficient the firm is. It is therefore expected that efficient firms run by rationale managers would put idle funds into investment vehicles if the returns on these vehicles are expected to be more than keeping cash. Generally, listing a firm improves on the efficiency of a firm because of the heightened requirements that listed firms have to meet. Consequently, it is expected that listed banks which are efficient would keep lower cash levels than unlisted firms.

### **3. Methodology**

The data used for the study was taken from Bank of Ghana. Financial statements of 28 commercial banks spanning the period of 1999 – 2008 were used.

#### *3.1 The Model*

Panel data methodology was used for the analysis. Apart from the fact that panel methodology allows researchers to undertake cross-sectional observations over several time periods, it can also control for individual heterogeneity due to hidden factors, which, if neglected in time-series or cross-section estimations leads to biased results (Baltagi, 1995). The basic model is written as follows:

$$Y_{it} = \alpha + \beta X_{it} + \varepsilon_{it} \tag{1}$$

Where the subscript  $i$  denotes the cross-sectional dimension and  $t$  represents the time-series dimension.  $Y_{it}$ , represents the dependent variable in the model, which is bank cash position.  $X_{it}$  contains the set of explanatory variables in the estimation model.  $\alpha$  is the constant and  $\beta$  represents the coefficients.

The following models were used for the study:

$$CTA_{i,t} = \alpha_0 + \beta_1 CPP_{i,t} + \beta_2 DCP_{i,t} + \beta_3 TDA_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 GRO_{i,t} + \beta_6 LIST_{i,t} + \beta_7 PROF_{i,t} + \beta_8 CTAC_{i,t} + \beta_9 AGE_{i,t} + \varepsilon_{it} \tag{2}$$

$$CTA_{i,t} = \alpha_0 + \beta_1 CCC_{i,t} + \beta_2 TDA_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 GRO_{i,t} + \beta_5 LIST_{i,t} + \beta_6 PROF_{i,t} + \beta_7 CTAC_{i,t} + \beta_8 AGE_{i,t} + \varepsilon_{it} \tag{3}$$

where the variables are defined in Table 1 together with the expected signs for the independent variables.

TABLE 1: Definition of variables (proxies) and Expected signs

VARIABLE	DEFINITION	EXPECTED SIGN
CTA	Cash Position (Dependent Variable) = Ratio of Cash and cash equivalent to Net Total Assets for Bank $i$ in time $t$	
CPP	Creditors' Payment Period= The ratio of bank short –term debt to interest expense x 365 for Bank $i$ in time $t$	Positive
DCP	Debtors Collection Period= The ratio of Bank current asset to Interest Income x 365 for Bank $i$ in time $t$	Negative
CCC	Cash Conversion Cycle = The difference between Debtors Collection Period and Creditors Payment Period for Bank $i$ in time $t$	Negative
TDA	Leverage = the ratio of Total Debt to Total Net Assets for Bank $i$ in time $t$	Negative
SIZE	Bank Size = The log of Net Total Assets for bank for Bank $i$ in time $t$	Positive
GRO	Bank Growth= Year on Year change in Interest Income for Bank $i$ in time $t$	Negative
LIST	For whether bank is listed on Ghana Stock Exchange (GSE) or not- Dummy Variable; 1 if bank is Listed on GSE otherwise 0	Negative
PROF	Profitability = Ratio of Earnings before Interest and Taxes to Equity Fund for Bank $i$ in time $t$	Positive
CTAC	Change in Cash Position = change in Bank Cash	Positive

<i>AGE</i>	Position, year on year. Bank Age = the log of bank age for Bank <i>i</i> in time <i>t</i>	Positive
<i>E</i>	The error term	

#### 4. Discussion of Empirical Results

##### 4.1 Descriptive statistics

Table 2 depicts the descriptive statistics of the variables used in the study. The mean (standard Deviation) proportion of cash held by banks to total assets, over the study period was about 24.84% (0.11). Banks appeared to have a cash conversion cycle of -6525 days (3,907) equivalent to about 18years on a 365-day cycle. This lends support to the much accepted view that most banks are highly levered. Consequently it is not surprising that total debt accounted for about 88 % (0.305) of total assets. The log of bank assets had a mean (standard deviation) of 7.9600(.6185) while bank growth averaged at about 59.92% but this feat appeared to be achieved by few banks as the variation is wide. Also, on the average, about 36% of banks are listed on the Ghana Stock Exchange. Lastly, banks performed well based on the ratio of earnings before interest and taxes to equity (with a mean of about 89.2%).

Table 2: Descriptive Statistics

VAR.	OBSERV.	MEAN	STD. DEV.	MINIMUM	MAXIMUM
CTA	190	0.24849	0.11017	0.05882	0.59981
CCC	187	-6524.6	3906.49	-26102.6	-1557.03
CPP	188	7690.44	4167.13	2004.02	29254.49
DCP	189	1195.88	616.02	6.646215	4891.48
TDA	190	0.87903	0.1056	0.305114	1.71267
SIZE	190	7.96	0.61856	5.94646	9.21754
GRO	160	0.59927	0.9261	-0.3152	8.15321
LIST	190	0.35789	0.48065	0	1
PROF	190	0.89208	0.65544	-0.90627	4.48232
CTAC	162	0.00244	0.54639	-0.79303	2.38451
AGE	188	1.08381	0.56826	0	2.04921

##### 4.2 Correlation Analysis and Variance Inflation Test

Two main tests were used to test the presence of multicollinearity among the regressors. The results of the two tests are reported in table 3. Virtually all the variables are not highly correlated. Because of the high level of correlation between Cash Conversion Cycle (CC) and Creditors Collection Period, the stepwise regression method was adopted. This gave rise to two models: model 1 which excluded CCC but included CCP and DCP; and model two which only used CCC. Subsequently the variance inflation factors (VIF) for the two models were estimated. The VIF means of model 1 and 2 of 1.50 and 1.43 respectively, fall within the benchmark for accepting that the regressors are not highly correlated and therefore the presence of multicollinearity is not significant.

Table 3: Correlation Matrix and Variance Inflation Factor Test

VAR.	CTA	CCC	CPP	DCP	TDA	SIZE	GRO	LIST	PROF	CTAC	AGE	VIF	1/VIF	VIF	1/VIF
CTA	1.0000														
CCC	0.0572	1.0000												1.42	0.7044
CPP	-0.094	-0.991	1.0000									1.67	0.5996		
DCP	-0.338	-0.361	0.4853	1.0000								1.48	0.6763		
TDA	-0.037	0.0942	-0.061	0.1595	1.0000							1.32	0.7576	1.29	0.7765
SIZE	-0.4140	-0.442	0.4746	0.4242	0.1207	1.0000						2.41	0.4143	2.18	0.4592
GRO	0.0490	0.1389	-0.124	0.0231	0.0707	-0.2188	1.0000					1.11	0.9016	1.1	0.9114
LIST	-0.053	-3E-04	0.0025	-0.022	-0.108	-0.0126	-0.140	1.0000				1.13	0.8843	1.13	0.8844
PROF	0.0914	0.1220	-0.124	-0.116	0.2309	0.0374	0.133	-0.164	1.0000			1.26	0.7968	1.22	0.8171
CTAC	0.1462	0.1194	-0.136	-0.148	0.0718	-0.1462	0.048	-0.04	0.2337	1.0000		1.07	0.9359	1.06	0.9399
AGE	-0.404	-0.317	0.3315	0.2459	-0.086	0.6432	-0.198	0.1892	0.0400	-0.011	1.0000	2.05	0.4877	2.03	0.4918
Mean															
VIF												<u>1.5</u>		<u>1.43</u>	

### 4.3 Discussion of Regression Results

The results of the two random-effect models are depicted in table 4 together with the results of the Hausman specification tests. The Hausman specification tests preferred random effects model to the fixed effects so only the random effects models are reported. The result is emphatic that debtors' collection period, creditors' payment period and cash conversion cycle are key factors which explain the level of cash held by banks in Ghana. In addition bank size, capital structure, profitability and bank age are important in explaining bank cash holding.

While creditors' payment period is positively related to bank cash holding, debtors' collection period is negatively related to bank cash holding. These results together show that as banks increase the length of time it takes to pay for loans, it reduces the burden on their cash and therefore gives them the opportunity to hold cash and cash equivalent. On the other hand, the results seem to suggest that prolonging the payment period for loans and advances granted to customers reduces the cash holding of banks. The benefit or otherwise of holding cash by banks can be looked at from the form in which cash is held and the opportunity cost of holding cash in that form. Given the current situation where investment return on cash equivalent is on the decline, the incentive to hold more cash is minimal if not for the precautionary and transaction motives. Consequently, in a situation where there is available investment opportunities, holding more cash can be detrimental to the bank. This notwithstanding, the fact still remains that banks are able to increase their cash holdings when they shorten their debtors' collection period relative to their creditors' payment period or shorten the cash conversion cycle.

The relationship between capital structure and bank cash position is negative and significant. Banks which use more debt reduce their cash position. This is in view of the fact that debt incurrence and maturity heighten the cash pressure on the financial resources of banks. Also, bigger banks appear to keep less cash as compared to smaller banks. High collateral capacity and high leverage associated with larger banks in Ghana enable them to keep low level of cash. Again the results confirm the fact that high growth firms normally hold little cash because most of the available cash are invested in long term investments other than keeping them in cash equivalents. But this result was not significant. The negative and significant nature of the age variable gives two indications: 1) that larger banks pursue high growth strategies in conflict with the life cycle theory and 2) have good reputation and connections with financial institutions. This allows aged banks to keep low level of cash and cash equivalent as compared to new banks. Moreover, although listed banks in Ghana are more efficient in the utilization of available funds, this result was not significant. In Ghana, profitable banks are more likely to have more cash reserves than unprofitable banks. Even though profitable firms pay more dividend than unprofitable banks (Marfo – Yiadom and Agyei, 2011), this results add that the increase in dividend payment, as a result of high profitability, does not totally wipe away the increase in profitability.



Table 4: Regression Result (Dependent Variable: CTA)

Var.	<i>Model 1</i>				<i>Model 2</i>			
	Coef.	Std. Err	t-stat	Prob.	Coef.	Std. Err	t-stat	Prob.
CPP	6.7	2.57	2.60	0.010				
DCP	-0.00	2E-05	-3.11	0.002				
CCC					-5.68	2.62	-2.17	0.032
TDA	-0.18	0.104	-1.68	0.096	-0.22	0.1059	-2.08	0.039
SIZE	-0.04	0.022	-1.96	0.052	-0.064	0.0219	-2.90	0.004
GRO	0.002	0.01	0.24	0.811	-5E-04	0.0098	-0.05	0.962
LIST	-0.02	0.017	-1.28	0.202	-0.023	0.1781	-1.28	0.202
PROF	0.033	0.017	1.95	0.053	0.04	0.0171	2.35	0.020
CTAC	0.015	0.016	0.93	0.353	0.017	0.0161	1.09	0.280
AGE	-0.45	0.022	-1.99	0.049	-0.039	0.023	-1.70	0.092
Constant	0.79	0.173	4.58	0.000	0.932	0.1694	5.50	0.000
R-sq		0.306			R-sq		0.2622	
Adj. R-sq		0.255			Adj. R-sq		0.2138	
Prob.		0.0000			Prob.		0.0000	
Haus. Test		14.51			Haus. Test		5.11	

## 5. CONCLUSION

Several studies have been conducted on working capital management theory and practice. This study aimed at contributing to existing literature on working capital management by extending it to financial institutions from a developing economy Ghana. The objective for undertaking this study was to ascertain the relationship between working capital management and the cash position of banks in Ghana. The results of the study show strongly that debtors' collection period, creditors' payment period and cash conversion cycle are key factors which explain the level of cash held by banks in Ghana. In addition bank size, capital structure, profitability and bank age are significant in explaining bank cash holding. Specifically, the results show that while debtors' collection period, cash conversion cycle, capital structure, bank size have significantly negative relationship with the cash position of banks, creditors payment period and profitability have positive relationship with the cash position of banks in Ghana. Consequently, not only does reducing the cash conversion cycle of firms improves firm profitability but it also has the tendency to improve the cash position of firms.

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