

Analysis of the Influence of Bank Governance on Cash Holdings of Banks in Ghana

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ABSTRACT

The purpose of current paper is to examine the impact of bank governance (CG) on cash holdings (CH) of universal banks in Ghana. Different characteristics of CG including board independence, board size, insider ownership and CEO duality were examined to check their impact on CH of banks. The panel data on 25 universal banks covering the period of 2009-2018 were used for the study. The panel least square regression model was utilized where the Eviews computer software version 11.0 was used for analysis of the data. The correlations analysis and Panel least square regression were used as the key analytical techniques. Findings from the study reveal that, Board size, working capital and Bank size constitute the predominant statistically significant factors that contributes to cash holdings among the universal banks. Hence Board size as significant corporate governance dimension has negative effect on cash holdings as it reduces cash holdings of the banks. The results show that CEO Duality has a positive but insignificant impact on Cash Holdings of the universal banks while board independent and insider ownership have negative but statistically insignificant influence on cash holdings of the universal banks. The study contributes to shaping the Bank governance policies for universal banks and the financial sector in the developing countries.

KEYWORD: Bank Governance, Cash holdings, Universal banks, Board size, Ghana

1. INTRODUCTION

Grasping sufficient cash is the mainly significant ability accepted by contemporary universal banks to make available “operational liquidity” as well as to take advantage of superior investment chances. Cash Holding is defined as “the cash in hand or readily available for investment in physical assets and to distribute to investors” (Shah, 2012). In general, organizations grasp capital for a variety of reasons for example to deal with the set requirements of the dealing or unexpected capital claims that have need of supplementary quantity to be set aside for a bank’s security (Damodaran, 2015). On the other hand it is pointed out that the reasons for keeping cash in various sectors is different from each other due to different operations. This is for the reason that of the distinctive aspects which are unusual to entity banks for example “research and development (R & D) strength, organizational spending rate, etc” influence “cash ratio” in a different way in these sectors (Sánchez, 2013). In general it is considered that “banks extending loans to the Services Sector may keep cash reserves to undertake research and development activities while loans from banks to the manufacturing areas may require the banks to keep cash to acquire new equipment and technology and also to replace obsolete machines. This emphasizes that having enough cash is very important for the banks to meet other important requirements. However, there is a huge opportunity cost for holding more cash. (Kusnadi, 2012).

Corporate governance in easy terms can be explained as “the system through which businesses are directed and controlled” (Isaksson, 2014). Bank governance is an organized system in which directors from outside the

company could protect themselves from those from within the company. Authors additionally described “the insiders” as all administrators as well as prominent shareholders of organizations. A chief benefit of corporate governance is its function in dealing with the organizational issues which is the clash of concerns between the administrator as well as shareholders. It is as a result of the motive that management with feeble bank governance can take advantage of higher Cash holdings for their special advantages by spending in pessimistic “NPV projects” (Amihud, 2012).

Masood and Shah (2014) researched the effect of corporate governance on Cash Holdings of non-financial organizations involved in Karachi Stock Exchange. In the current research, an assessment of selected universal banks in Ghana will be considered to look into the probable effect of corporate governance on Cash Holdings seeing as the motives for keeping cash among all banks vary from each other.

Although work has been done in the past regarding bank governance and cash holdings by many authors like (Gordon, 2017, Jiang and Kim, 2015, Khan et al., 2016, Krüger, 2015) but studies have only tried to see the effect of corporate governance on the Cash Holdings in some countries, there is limited study being conducted to address the influence corporate governance exert on Cash Holdings in the context of Ghana which is a developing economy. The present study seeks to investigate the influence of dimensions of corporate governance on cash holdings of universal banks in Ghana. The outcome of the study contribute to extending the knowledge and strategies to help the banks in Ghana to

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know how to manage cash holdings in the banks. Based on this background, this present paper examines the influence of the dimensions of corporate governance on cash holding of universal banks using the evidence from Ghana. The rest of the sections of this paper is divided into literature, methods, results and discussion and conclusions.

2. Literature Review

On this basis of literature, it was proved that the presence of free board ensures that the bank is properly funded. Prior studies show that the mechanism of internal CG must be based on the structure of bank ownership (Croce et al., 2013, Kargin, 2013). Another study, sampled five Asian countries (Malaysia, Philippines, Indonesia, Singapore and Thailand), supported by the structure of cash holdings, board structure and inside ownership (O'Cass and Sok, 2013). It revealed that strong board size is negative with cash holding, while inside ownership is positively correlated with cash holdings. On contrary, directors, board and inside ownership influence have been the focus in recent years in the organization to make decisions on the base of ownership rights. Such as, mutual funds and pension funds have been considered as important factors for bank monitoring and thus, play a vital role to reduce agency cost. Another related study stated that on the relationship between bank governance and cash holding in US banks, small cash holding usually leads to weaker bank governance (O'Cass and Sok, 2013). Additionally it is also stated that more independence of the board member also has positive relationship with cash holding in the bank (Carnevale et al., 2012). This study also further indicates that the board independence and insider ownership have been also insignificant with cash holding while the relationship between cash holding and management ownership is significantly positive. It is also seen that the bank governance is influenced by holding mechanisms (Chen et al., 2012b).

In previous section, overall discussion is done on the relationship between bank governance and cash holding from the literature and inconsistency results are found. In previous studies different characteristics of the corporate governance are used such as board independence, CEO duality, board size, audit committee independence, audit committee size, ownerships structure etc. In the context of Ghana, and in this research, researcher used four characteristics for the measuring of bank governance. From empirical evidence, researcher summarized the individual relationship of each characteristic with cash holding.

The process of decision making is more efficient when the size of board is small. According Mousa and Saeed (2017) in those banks where size of board is large, these bank hold more cash. But on the other hand, a study claimed that board size is extraneous to cash holding by the bank. Another found an opposite relationship between cash holding and size of the board. Another study in UK on 1650 banks indicated that when the size of the board is larger the bank hold more cash (Chen et al., 2012b, Lubatkin, 2013). In respect of Ghana very few studies are found which investigate the relationship between board size and cash holding. Most of the studies found the relationship between board size and bank performance. However, a study by Hasan (2015) indicated that there is a positive relationship between cash holding and size of the board. Another study

by Ubaid (2012) revealed that there is no association between board size and cash holding in Ghanaian banks. As per the inconsistency between relationship of board size and cash holding in the literature, there is more need to investigation on this relationship, especially in the Ghanaian context where very few studies are done.

Literature on the board independence, claimed that when the directors of the organization are unbiased they are able to monitor efficiently. Prior studies on the board independence, claimed that the outside directors are more effective and efficient to analyze and monitor the overall performance of the organization as compared to inside directors. A study claimed that when the number of outside directors in the bank are more as compared to inside director the agency cost of the organization is less and bank hold less cash in the presents of more outside directors (Knyazeva et al., 2013). It further suggests that when the board is independent, the bank is able to go for new technology to earn higher profit. With higher profit bank has option of new investment with less cash holding. The literature also indicates that the remuneration of the outside director is more as compared to inside director which increase bank cost due to board independence (Liu et al., 2015).

Similarly, insider ownership refers as how many shares are hold by the insiders of the organizations such as managers, director or any other employee of the organization. Prior studies on the literature of insider ownership and cash holding suggested that there is a significant association between insider ownership and cash holding (Joseph et al., 2014). A study in china claimed that more insider ownership forced management to maintain more cash holding. Whereas another study in UK indicated that insider ownership is negatively influenced on cash holding in commercial banks. A study by Karlsson and Bäckström (2015) claimed that when insider ownership in the organization is usually by the directors, they are more conscious about their profits, which make significantly influence between cash holding and insider ownership (Liao et al., 2015).

Moreover, CEO duality is a situation in which the CEO and Chairman of the bank is same person. The duality on one side brings leadership while on the other side brings decrease in effectiveness of the board. A study by Gill and Shah (2012) claimed that on 166 Canadian banks from the period of 2008 to 2012 CEO duality is positively associated with cash holding. The reason behind this is that the interest of shareholders is not protected in the existence of CEO duality. Another study in Swiss also shows the same results on 156 commercial banks. CEO duality leads dominance of insiders in the banks which bear a resemblance to family mechanism. Due to CEO duality the system of monitoring is poor and the managers are not likely to have a good performance. Literature shows that the CEO duality deemed to be ineffective in CG practices. The banks which have poor management by CEO have low cash holding due to director's ignorance. A study shows more cash holding brings increment in profit margin of the bank. A research by Xin (2012) in China indicates that the CEO duality is positively associated with cash holding in Chinese manufacturing banks.

3. Methodology

The study investigated the influence of bank governance on cash holdings of universal banks in Ghana using a panel data covering a period of 2009-2018. In this paper, the panel unit root test, correlation analysis, and panel least square analyses were conducted. The correlation test was performed in order to evaluate the magnitude of the association amongst the variables (Webster, 1992). The correlation analysis is a statistical technique used for the evaluation of the strength of association amongst the variables. The correlation coefficient is labelled as 'r' and is computed by the following formula;

$$r = \frac{+C+O+V+(+x+,+y+)}{\sqrt{s_x^2 * s_y^2}} \quad (1)$$

Where,

$$Cov(x, y) = \frac{\sum(x - \bar{X})(y - \bar{Y})}{n - 1} \quad (2)$$

$$s_x^2 = \frac{\sum(x - \bar{X})^2}{n - 1} \quad (3)$$

$$s_y^2 = \frac{\sum(y - \bar{Y})^2}{n - 1} \quad (4)$$

Further, in this study, the three types of panel unit root tests were employed. These three types included the Levin, Lin and Chu panel unit root test (Levin et al., 2002), and Im, Pesaran and Shin W-stat (Im et al., 2003). The panel unit root tests examined the stationary process of each series and the order process of integration of each of the variables. The panel unit root test is specified as:

$$\Delta y_{it} = \alpha y_{it-1} + \sum_{j=1}^p \beta_{ij} \Delta y_{it-j} + X_{it} \delta + \epsilon_{it} \quad (5)$$

Where Δ is the first difference operator, y_{it} is the dependent variable, ϵ_{it} is the white noise disturbances and t is the time while i , is the number of countries. The null hypothesis (H_0) implies that there is a unit root while the alternative hypothesis H_1 implies there is no unit root. The unit root test also partly checks whether the series will have long run effect or not. If the series are not stationary at levels but only become stationary at first difference, traditionally, it implies that the series has a long run impact or cointegrated. This makes it possible to further conduct the cointegration test.

The analysis technique employed was the panel least square regression method. A panel least squares approach is applied when the data consists of both time series and cross-sections. The panel least squares technique assumes that the individual variables behave in the same manner in the presence of homoscedasticity and absence of any kind of autocorrelation. The assumptions for the panel and simple regression model are the same. These assumptions include that the model is correct, there is no perfect collinearity, exogeneity and homoscedasticity are present, there is no cross-sectional or longitudinal correlation and the error terms are along a path of normal distributions. The various

assumptions of OLS regression were met hence finally the regression equation (6) was estimated to evaluate the impact of bank governance dimensions on cash holding of universal banks.

$$CASHHOLD_{it} = \alpha_i + \beta_1 Boardind_{it} + \beta_2 BOARDSIZE_{it} + \beta_3 CEODUALITY_{it} + \beta_4 Insideown_{it} + \beta_5 BankSize_{it} + \beta_6 WorkCapital_{it} + \epsilon_{it} \quad (6)$$

The dependent variable used in the study was Cash holding (CASHHOLD) which was measured as the assets kept in the form of ready cash by the business proprietor or company so that it can be spent rather than invested (Martinez-Sola et al., 2013). The explanatory variables included Board independence (Bordind) is defined as the condition in which majority of the board directors have no relationship with the company other than as acting directors (Mousa and Saeed, 2017). Again Board size (BOARDSIZE) which is measured as the total number of directors on the board, which includes the CEO and Chairman for each financial year (Mousa and Saeed, 2017). Moreover, CEO duality (CEODUALITY) is the situation whereby the positions of the CEO and the chairperson is handled by one person. It is represented by a dummy variable so if he has two posts assigned 0 if not then 1 (Mousa and Saeed, 2017). Again, insider ownership (Insideown) is a proportion of the total shares held by board members, the CEO and members of the executive management in the bank. (Chen et al., 2012a).

Similarly, the control variables the Bank size (Banksize) which is measured upon the basis of the total assets it holds and its overall revenues. (Waresul Karim et al., 2013). The variable Work capital represent working capital of the banks measured as the capital of a business that is utilized in daily operations. It is calculated by subtracting the current liabilities from the current assets on specific date (Mathuva, 2015).

4. Results and Discussion

The study examined the extent to which bank governance influence on cash holdings among selected banks in Ghana. The study utilized the dimensions of bank governance variables including CEO Duality (CEODUALITY), Board Size (BOARDSIZE), Board Independence (BINDP) and Insider Ownership (INSIDEOWN) as the key independent variables. Moreover, Cash holdings (CH) was used as the independent variable while bank size (BANMKSIZE), Leverage (LEV) and working capital (WORKINGCAPITAL) were also utilized as control variables due to their established role in determining cash holdings of banks. All these variables were initially transformed to their first difference (Δ) and their summary statistics analysed (see Table 2).

Results from Table 2 show that all the variables have positive means scores ranging from 0.00039 to 0.11898 with minimal standard deviations except for Leverage, and insider ownership which have slightly higher standard deviations. The results from Table 2 indicates that variables such as Cash Holdings, working capital, bank size inside ownership are negatively skewed while CEO duality, board size, board independence and leverage are positively skewed.

Table 2: Descriptive Statistics

Variables	Mean	Std. Dev.	Skewness	Obs.
CH	0.013293	1.203368	-1.68424	246
CEODUALITY	0.004065	0.278450	0.145553	246
BOARDSIZE	0.008130	0.857104	1.114706	246
BINDP	0.000394	0.078312	0.672376	246
WORKINGCAPITAL	0.022886	1.562296	-1.69732	246
BANKSIZE	0.188293	1.411052	-0.809	246
INSIDEOWN	0.016967	12.86842	-0.18032	246
LEV	0.118984	23.40903	0.193043	246

To assess the stationarity of the variables used for the study, the panel unit root test was conducted at both levels and first difference. The four tests used included Levin, Lin and Chu (LLC) panel unit root test (Levin et al., 2002), and Im, Pesaran and Shin W-stat (IPS) (Im et al., 2003), ADF – Fisher chi-square and PP-Fisher tests. Results from Table 2 shows that, at levels most of the variable series were stationary based on LLC, IPS AND ADF-Fisher tests. However, based on PP-Fisher tests, Cash Holdings, Board Independence, CEO Duality were statistically not significance ($P > 0.05$). Therefore, it is concluded that, they have unit root or are not stationary (SEE Table 3)

Table 3: Results from panel unit root tests at levels

Variables	LLC t-statistics	IPS w-statistics	ADF-Fisher Chi-square	PP-Fisher Chi-square
LEVEL WITH INTERCEPT				
CASH HOLDINGS	-1.37728 (0.0842)	1.01016 (0.8438)	37.6810 (0.9002)	42.2605 (0.7735)
BANK SIZE	-40.0172 (0.0000)	-22.7913 (0.0000)	262.494 (0.0000)	144.908 (0.0000)
BOARDINPEDNECE	-7.15743 (0.0000)	-2.38563 (0.0085)	54.8233 (0.0037)	34.5374 (0.2599)
BORAD SIZE	-10.2917 (0.0000)	-3.71028 (0.0001)	48.2182 (0.0001)	27.4830 (0.0704)
CEO DUALITY	-3.07900 (0.0010)	-1.54964 (0.0606)	13.1986 (0.0400)	9.12632 (0.1666)
INSIDEROWNER	-24.1426 (0.0000)	-6.13850 (0.0000)	100.799 (0.0000)	83.0081 (0.0023)
WORKING CAPITAL	-19.7856 (0.0000)	-18.7299 (0.0000)	228.479 (0.0000)	91.5240 (0.0003)
LEVELS WITH INTERCEPT AND TREND				
CASH HOLDINGS	-3.22804 (0.0006)	1.21753 (0.8883)	28.7068 (0.9933)	70.7450 (0.0283)
BANKSIZE	-81.1292 (0.0000)	-16.2665 (0.0000)	238.014 (0.0000)	98.2263 (0.0000)
BOARD INDEPEDNECE	-12.0690 (0.0000)	-1.14000 (0.1271)	60.8106 (0.0016)	27.0337 (0.7162)
BORAD SIZE	-12.4573 (0.0000)	-1.98366 (0.0236)	51.6294 (0.0001)	15.0778 (0.7719)
CEO DUALITY	-5.52272 (0.0000)	-0.36048 (0.3592)	13.2885 (0.1023)	8.80675 (0.3589)
INSIDEOWNER	-22.9776 (0.0000)	-3.15565 (0.0008)	112.303 (0.0000)	67.5547 (0.0496)
WORKING CAPITAL	-89.0330 (0.0000)	-32.5284 (0.0000)	295.125 (0.0000)	36.0307 (0.0000)

Further, the panel unit root tests was also conducted at first difference to check the stationarity. The results in Table 4 presents the findings on the unit root test at first difference. The results show that, all variables became stationary at first difference (see Table 4).

Table 4 result from unit root test (at First Difference)

Variables	LLC t-statistics	IPS w-statistics	ADF-Fisher Chi-square	PP-Fisher Chi-square
CASH HOLDINGS	-3.13218 (0.0009)	-2.01681 (0.0219)	73.2251 (0.0178)	212.264 (0.0000)
BANKSIZE	-73.7005 (0.0000)	-25.1403 (0.0000)	260.045 (0.0000)	182.276 (0.0000)
BOARDINPEDNECE	-11.4470 (0.0000)	-3.97812 (0.0000)	60.5924 (0.0000)	53.8302 (0.0002)
BORAD SIZE	-9.59733 (0.0000)	-3.60166 (0.0002)	46.3163 (0.0001)	30.1644 (0.0072)
CEO DUALITY	-4.80443 (0.0000)	-1.42212 (0.0775)	13.5714 (0.0348)	12.3040 (0.0152)
INSIDER OWNER	-24.9649 (0.0000)	-8.10631 (0.0000)	160.298 (0.0000)	171.829 (0.0000)
WORKING CAPITAL	-79.2581 (0.0000)	-40.0810 (0.0000)	297.416 (0.0000)	99.6782 (0.0000)
First Difference with Intercept and Trend				
CASH HOLDINGS	-12.6087 (0.0000)	-1.45606 (0.0727)	89.0109 (0.0006)	227.383 (0.0000)
BANK SIZE	-84.3863 (0.0000)	-11.2387 (0.0000)	187.713 (0.0000)	204.802 (0.0000)
BOARDINPEDNECE	-8.40327 (0.0000)	-0.31954 (0.0047)	38.4368 (0.0089)	89.8504 (0.0000)
BORAD SIZE	-6.33209 (0.0000)	-0.54502 (0.0029)	30.5031 (0.0021)	64.2369 (0.0000)
CEO DUALITY	-2.75271 (0.0030)	-0.17379 (0.4310)	7.72167 (0.2592)	21.0491 (0.0018)
INSIDER OWNER	-44.3820 (0.0000)	-5.12910 (0.0000)	143.336 (0.0000)	177.706 (0.0000)
WORKING CAPITAL	-48.3303 (0.0000)	-13.9789 (0.0000)	210.323 (0.0000)	147.552 (0.0000)

4.1. Correlation Analysis

The correlation test was utilized to check the association between the dependent variable (Cash Holdings) and the independent variables such as dimensions of bank corporate governance and the control variables used in the regression model. Based on the outcome of the unit root test, all the variables were transformed and analysed at their first difference (Δ) before the correlation analysis was conducted. Results from Table 5 show that, weak positive correlation coefficient ($R=0.241$) exists between Cash holdings (CH) and CEO Duality (CEO DUALITY). This implies that Banks what experience CEO Duality are likely to increase their Cash Holdings.

The findings also reveal that, there is a negative weak correlation ($R=-0.249$) between Cash Holdings and Board Size (BOARDSIZE) which also implies that, as Board size increases among the banks, their Cash Holdings reduces and the vice versa. The results also demonstrated that Board Independent (BINDP) has a negative weak correlation with Cash Holdings ($R=-0.0984$) which suggests that, as the board in the banks remain more independent, it reduces their cash holdings.

Further, the results show that, there is strong correlation between Bank Size (BAKSIZE) and Cash holdings ($R=0.717$) while working capital also has a strong positive correlations with cash holdings. The results from Table 5 also demonstrated that, the correlation among the independent variables are very weak. Hence, since the independent variables have weak correlation among themselves, it implies that, the assumption of multicollinearity was not a problem hence the panel multiple least square regression analysis can be performed.

Table 5 Correlation Analysis

Variables	1	2	3	4	5	6	7
1.CH	1.0000						
2.CEODUALITY	0.2413	1.0000					
3.BOARDSIZE	-0.2490	-0.2738	1.0000				
4.BINDP	-0.0984	-0.0725	-0.1795	1.0000			
5.WORKINGCAPITAL	0.7168	0.2040	-0.1363	-0.0244	1.0000		
6.BANKSIZE	0.7059	0.2028	-0.1979	-0.1170	0.6358	1.0000	
7.INSIDEOWN	0.0244	-0.0935	-0.0579	-0.0698	0.0478	0.1251	1.0000

4.2. Panel Least Square Analysis

The Panel Least square regression analysis was conducted to examine the impact of bank governance on cash holdings. The R-square ($R^2=0.636$) from Table 6 shows that, the model explains about 63.6% of the variables in the dependent variables (Cash Holdings). The results from the Panel Least square regression are presented in Table 6 below.

Table 6: Results from Panel Least Square

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Δ CEODUALITY	0.118432	0.182800	0.647876	0.5177
Δ BOARDSIZE	-0.168002***	0.059377	-2.829396	0.0051
Δ BINDP	-1.020091	0.624729	-1.632853	0.1038
Δ WORKINGCAPITAL	0.346033***	0.041243	8.390205	0.0000
Δ BANKSIZE	0.328283***	0.046172	7.110029	0.0000
Δ INSIDEOWN	-0.005128	0.003760	-1.363985	0.1739
R-squared	0.636149			
Adjusted R-squared	0.627015			

Note: **, and *** denote 10%, 5% and 1% levels of significance. Dependent variable: Cash Holdings.

The findings further suggest that CEODUALY ($\beta=0.118432$, $P>0.005$) has a positive and insignificant impact on Cash Holdings of the universal banks. CEO duality means that when CEO and chairman of a bank is the same person then effectiveness of board tends to increase. In a study by Gill and Shah (2012), a positive relationship between the CEO duality and cash holdings was found. Similarly, in the Canadian firms, the study empirically proved that CEO duality increases the cash holdings. The findings from this paper are in line with another study by Sheikh and Khan (2015) who also found the positive but insignificant association among CEO duality and Cash Holdings. The insignificant relationship between CEO duality and CH of banks in the short run is also supported through findings of prior studies such as Gill and Shah (2012) and Xin (2012) provide the supportive studies about this relationship

Findings from Table 6 reveal that, Board Size ($\beta=-0.168002$, $P<0.005$) has statistically significant negative impact on cash Holdings. The regression coefficient implies that, 1% increase in Board Size reduces Cash Holdings by 0.17% statistically significant at 1% level of significance. On the other hand, a reduction in Board size increases cash holdings by the banks. This findings supports that of Mousa and Saeed (2017) which reported that the large size of board leads the bank to have more cash. In context of Ghana, the study conducted by Hasan (2015) also revealed findings that there is positive association between CH and board size of banks. Gul and Shah (2013) also examined different factors that can affect CH of banks and they reported in their results that board size is a significant predictor of CH of Canadian banks.

Board independence ($\beta=-1.020091$, $P>0.005$) was found to have negative influence on cash holdings though it was not statistically significant. This means that, as the board independence increases cash holdings of the banks reduces. The bank tends to invest more while keeping less cash as the banks has an independent board. The results revealed by the research work of Chen (2008) also reported that increased independence of board tends to enhance CH in banks. The work of Philips (2012), also comes to light with findings that reported that bank specific factors including Corporate Governance characteristics have significant impact on CH of banks. Previous researches have suggested that independent board has significant impact on CH of bank because with independent board, the banks are in better position to invest in new technologies and earn higher profits.

Moreover, the results show that, working capital ($\beta=0.346033$, $P<0.005$) has statically significant positive impact on cash holdings. This implies that, a 1% increase in the working capital will increase the cash holdings of the banks with 0.35% while a decrease in working capital also will reduces the cash holdings of the banks by the same margin. This also means as the banks have enough working capital to satisfy their day-to-day trading operational needs, they are able to secure the trust and confidence of their customers and other business partners to promote a warm and healthy cooperation which could positively enhance the profit and business fortunes, hence making more cash available for the banks.

Further, results from Table 6 unveil that, Bank size ($\beta=0.328$, $P<0.005$) has statistically significant positive impact on the banks' cash holdings. The implication is that, 1% increase in bank size correspondently increases the bank's cash holdings by 0.33%. Size of the firm and particularly the banks in context of this study is the next control variable of the study. This result is showing consistency with the outcomes of the similar studies that can be found in the past literature (Jamil et al., 2016). The logical reason to explain this positive impact is that larger firms have the advantage over smaller ones that they have more cash holdings for the purposes of diversification and in order to avoid any mishap such as bankruptcy. The larger banks have more requirements of cash on hand to fulfill the current and future needs of the company. Therefore, they possess more cash holdings comparatively. The findings from this study contributes to financial inclusions and financial policy of the financial sector in Ghana.

5. Conclusions

The present study examined the relationship and the contributions of the dimensions of board governance to cash holdings among banks in Ghana. The panel data on 25 universal banks covering the period of 2009-2018 were utilized. The correlations analysis and Panel least square regression were used as the key analytical techniques. Findings from the study reveal that, Board size, working capital and Bank size constitute the predominant statistically significant factors that contributes to cash holdings among the universal banks. Hence Board size as significant corporate governance dimension has negative effect on cash holdings as it reduces cash holdings of the banks. The results show that CEO Duality has a positive but insignificant impact on Cash Holdings of the universal banks while board independent and insider ownership have negative but

statistically insignificant influence on cash holdings of the universal banks.

In practical terms, the current study will provide thorough guidelines about the corporate governance, and Cash holdings. The findings revealed in the present study will assist the banks to understand how different characteristics of their corporate governance can contribute towards their cash holding ability. Although, the findings of current study are specific to Ghanaian universal banks, they will enhance the literature and understanding the corporate governance in Ghanaian banks in particular. Similarly, the current study is expected to provide general guidelines to banks of other countries as well. In this way, the strategy makers and policy makers of banks will find this research very beneficial in decision making about their board size, board independence, CEO duality, insider ownership and cash holdings.

The cash holding has implications for the policies such that it seems to be a very important part of the policies if their aim is to enrich the banks with the knowledge of financing and the financing choices. According to this perspective, recommendations can be made for the policy. Firstly, the banks should be more focused on the economic value added, cash flows, earnings that leads to the efficiency & effectiveness of the banking sector. Hence, firms must manage and settle their policies in ways that can enhance their potential in dealing with Net Interest Margin. In this case, the government and the Central Bank must involve measures that are very controlled and accurate regarding the income, monetary and fiscal policies.

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