

# Governance Structures and Bank Performance: An Empirical Study of Commercial Banks In Uganda

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**Abstract:** This quantitative correlational study is devoted to three internal governance structures and one external governance structure that influence commercial banks' performance. The paper focuses on the relationship between board composition, board size, audit committee independence, and capital adequacy ratio and commercial banks' performance in Uganda. The data was analyzed using partial correlation analysis statistical technique after controlling for bank size and leverage. Based on survey data collected from the commercial banks in Uganda, the study results revealed that board composition, board size, and capital adequacy ratio are positively associated with bank performance in Uganda. In contrast, audit committee independence is negatively associated with commercial banks' performance in Uganda. However, the study yielded only two bank governance structures that have a statistically significant positive relationship with commercial banks' performance in Uganda. These governance structures are the internal governance structures of board composition and board size. The author recommends that the Bank of Uganda as the regulator and supervisor of banks and financial institutions in Uganda, should ensure that the governance structures discussed in this paper are strictly adhered to. This arrangement will ensure more effective internal and external governance structures, thereby enhancing bank performance in Uganda.

**Key words:** board composition, board size, audit committee independence, capital adequacy ratio, commercial banks, Uganda.

## INTRODUCTION.

The purpose of the internal governance mechanisms is to establish internal governance structures such as board composition, board size, audit committee independence, etc. that guide and monitor firms' activities. These mechanisms comprise internal control monitoring and disclosure/transparency monitoring (Fanta et al., 2013; Kamau et al., 2018). Board composition refers to the proportion of outside directors to the inside directors, and the resulting structure of the board comprises of inside and outside directors (Cadbury Report, 1992; James & Joseph, 2015; Liang et al., 2013; Mehrotra, 2016; Praptiningsih, 2009). The Cadbury Report (1992) emphasizes that at least three non-executive directors should be on a board of directors. Appointing more outside board members to the board increases board independence, which helps to mitigate managerial opportunism arising from agency problems (Baktas & Kaymak, 2009; Fama & Jansen, 1983). The main advantages of board independence are that it allows the board to exercise greater autonomy when making decisions, scrutinizing management actions, and enables the separation of management and control functions (James & Joseph, 2015; Lim et al., 2007; Pandya, 2011).

Board size refers to the total number of directors on the board of directors of a firm (Hasan & Xie, 2013; Mehrotra, 2016; Praptiningsih, 2009). In practice, a large board would ensure better performance in terms of adequate advice on management decisions, reduction in managers' discretionary powers, and easy detection of the managers' opportunistic behavior (Andre & Vallelado, 2008). The audit committee independence as an internal governance structure of a board plays a vital role in ensuring sound financial reporting and fraud detection (Cohen et al., 2002).

The external governance mechanisms originate from outside firms, and their aim is to protect the interests of the stakeholders plus enhancement of firm performance. For banks, these mechanisms are imposed by statutory regulators such as central banks and international regulatory protocols such as the Basel III Accord (Basel Committee on Banking Supervision, 2011,2015). The most critical attribute for the regulatory monitoring mechanism in banking is the capital adequacy ratio. It is a measure of the amount of a bank's capital expressed as a percentage of its risk-weighted credit exposure (James & Joseph, 2015). The capital adequacy ratio is used to ensure that banks absorb reasonable levels of losses before insolvency sets in (Al-Tamimi & Obeidat, 2013; James & Joseph, 2015).

This study investigates the influence of the internal and external governance structures on commercial banks' performance in Uganda. As submitted by Beltratti and Stulz (2010), effective governance structures curb bank risks and enhance their performance. Furthermore, effective bank performance creates economic stability, healthy financial markets, which drive investments and bolster confidence among depositors and investors (Cohen et al., 2002; Maher & Andersson, 2000). The internal and external governance structures considered in this study are board composition, board size, independent audit committee, and capital adequacy ratio. The dependent variable for the study is bank performance measured as return on assets (Shoeyb et al., 2016). The banking sector has experienced a dynamic and turbulent environment in Uganda during the last two and a half decades

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due to inadequate governance structures (Oloo, 2011; Tumusiime-Mutebile, 2012). The banks which collapsed inflicted emotional torture among the stakeholders comprising of customers, employees, the general public, shareholders, regulators, and the banking sector as a whole (Adnan et al., 2015; Hull, 2010, Isaac & Nkemdilim, 2016). This study is an attempt to investigate the relationship between internal and external governance structures and commercial banks' performance in Uganda.

### **Objective of the Study.**

The objective of the study is to investigate if there are statistically significant relationships between board composition, board size, audit committee independence, capital adequacy ratio and commercial banks' performance in Uganda after controlling for bank size and leverage.

### **Research Hypotheses.**

The null hypotheses for the study are:

**Ha<sub>0</sub>:** There is no statistically significant positive relationship between board composition and commercial banks' performance in Uganda.

**Hb<sub>0</sub>:** There is no statistically significant positive relationship between board size and commercial banks' performance in Uganda.

**Hc<sub>0</sub>:** There is no statistically significant positive relationship between audit committee independence and commercial banks' performance in Uganda.

**Hd<sub>0</sub>:** There is no statistically significant positive relationship between capital adequacy ratio and commercial banks' performance in Uganda.

### **LITERATURE REVIEW.**

This section reviews literature about the internal and external characteristics of board composition, board size, capital adequacy ratio and audit committee independence. It also reviews literature on the control variables of bank size and leverage and commercial banks' performance in Uganda.

**Board composition.** Board composition is one of the critical elements of the board structure for the internal control monitoring mechanism of corporate governance. For a long time, the board structure for banks concerning composition and size has been on top of the agenda for international bodies such as the European Union and the Basel Committee on Banking Supervision (Steponova & Ivantsova, 2012). This is because board composition is viewed in many governance studies as a tool that can influence top management decisions in a firm. The above argument is in line with the corporate governance philosophy that an active board should be capable of enhancing organizational performance through effective monitoring and control of management to ensure that the corporate governance system within the organization does not breakdown (Adebayo et al., 2014; Mehrotra, 2016; Sunil & Santanu, 2012; Velnampy, 2013). A board of directors has the responsibility of ensuring that a firm has an effective internal control system that functions normally (Jansen, 1993). The other essential duties for a board of directors are resource dependency, monitoring, and controlling management performance (Abdullah, 2004; James & Joseph, 2015; Pandya, 2011). The above responsibilities assist the board in ensuring proper utilization of organizational resources and protection of the stakeholders' interests. It is, therefore, of essence that boards of directors should concentrate on service, control and strategic direction of the organizations they monitor.

Although many firms are managed by executive directors who possess specialized skills, expertise, knowledge and vast experience, resource dependency theory advocates that independent directors contribute new ideas, information, and expertise gained from other organizations to boards where they are executive directors (Andres & Vallelado, 2008; Htay et al., 2013; James & Joseph, 2015; Nyamongo & Temesgen, 2013). Furthermore, board independence enhances bank performance because the outside directors have to protect their reputation, and as such, they ensure that boards carry out effective monitoring of management (Steponova & Ivantsova, 2012). It is, therefore, evident that when boards dominated by independent directors to monitor firms, such boards enrich their strategies and positively influence their performance. Based on this evidence, Bank of Uganda (BOU or Central Bank) which is charged with the banking regulatory and supervisory functions in Uganda, ensures that board compositions for the commercial banks in Uganda comprise of both outside and inside directors (BOU Annual Supervision Report; 2014; Financial Institutions Corporate Governance Regulations, 2005).

Past studies have used quantitative approaches to establish the association between board composition and firm performance. For instance, Grove et al. (2009) adopted a quantitative approach in their study on US banks and found positive effects of outside directors on assets' returns. There are also studies on board composition and bank performance from emerging markets where correlational analysis has been used. For instance, the Bino and Tomar (2012) study on Jordanian banks yielded a positive relationship between board composition and bank performance. In practice, this is what should be expected because the presence of such directors on the board leads to improved supervision of management, reduced conflict of interest among stakeholders, and enhanced strategic decisions, all of which enhance the banks' performance (Joseph & James, 2015).

However, other researchers reported contradictory results regarding the relationship between board composition and firm performance. This category includes researchers from emerging markets such as Laing and Li (1999) from China; Kula and Tatoglu (2006) from Turkey, Kyereboah and Biekpe (2006) from Ghana. They all reported negative relationships between board composition and firm performance. At the same time, there are researchers such as Abdullah (2004); Daily and Dalton (1994); Hermalin and Weisbach (2003); Tian and Lau (2004); Aebi et al. (2012); James and Joseph (2015) who did not find any statistically significant relationship between board composition and firm performance.

Although the quantitative approaches are widely used to study the board composition internal governance structure, these quantitative approaches usually fail to assess the processes within boards. Fortunately, mixed methods approaches can be used to assess processes such as different verbal behaviors exhibited by board members in boards (Currall et al., 1999). This is because

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mixed methods approaches provide a complete understanding of research problems (Creswell, 2014).

The review of studies has revealed that research on the relationship between board composition and bank performance has not produced converging results and, therefore, the need for further exploration of this relationship.

**Board size.** Board size is the other internal governance structure covered in this study. A large board size is in line with the agency theory philosophy since such a board is more vigilant in monitoring and controlling a firm's top management. A large board has more human resources, experience, and a broad knowledge base (Andre & Vallelado, 2008; Mehrotra, 2016). Mehrotra (2016) submitted that board size is a significant determinant of effective board performance.

The optimal board size should be not less than eight directors but not more than 10 (Lipton & Lorsch, 1992; Cadbury Report, 1992). The optimal board size is based on the premise that large boards bog down the decision making process since it cannot expeditiously agree on decisions that are crucial to firm performance. In contrast, small boards reduce decision-making precision due to inadequate views and discussion (Mehrotra, 2016). It is also important to note that small boards have some advantages too. For instance, Yarmack (1996) posits that firms with small boards are highly valued in the capital markets. This position is supported by Bermig and Frick (2010), and they contend that smaller boards generate superior firm performance due to their effectiveness in monitoring top management at lower costs. Other researchers, such as Jensen (1993), Lipton and Lorsch (1992) advocate for small boards since corporate governance independent of other board attributes is affected by the board's size.

Methodological research on board size has mainly employed quantitative approaches in examining the relationship between board size and firm performance. Correlational analysis was used by Mehrotra (2016) while exploring the relationship between board size and firm performance of 100 US firms. The study revealed that firm performance was independent of board size. However, Staikouras et al. (2007) applied correlational analysis in a study of the operating performance of the banking industry of the South-Eastern European region. They found that board size had a statistically significant relationship with bank performance. The reviewed studies indicate that quantitative approaches have been employed to establish the nature of the relationship between board size and bank performance. Nevertheless, the results from these studies have been contradictory and inconclusive.

**Audit Committee Independence.** Audit committee independence ensures that independence in a firm's corporate governance is achieved (Cohen et al., 2002). Additionally, the credible assurance for a bank's activities are usually achieved through financial transparency (Zulkafli & Samad, 2007). According to Tumusiime-Mutebile (2012), independent internal and external auditors enhance banks' performance by ensuring that: i) A bank's financial statements are accurate ii) A bank's financial statements fairly reflect the correct financial position of the bank iii) Management's compliance with the policies and procedures of the bank are monitored. The same competencies are also emphasized by the Institute of Directors of Great Britain (2017). Within the bank, there must be an internal auditor who is independent of management reporting to the board's audit committee. This committee has the cardinal responsibility of protecting the shareholders' interests as far as financial oversight and control are concerned. Chou and Buchdadi (2017) asserted that the independent audit committee is viewed as a governance attribute that plays a critical role in the banking sector.

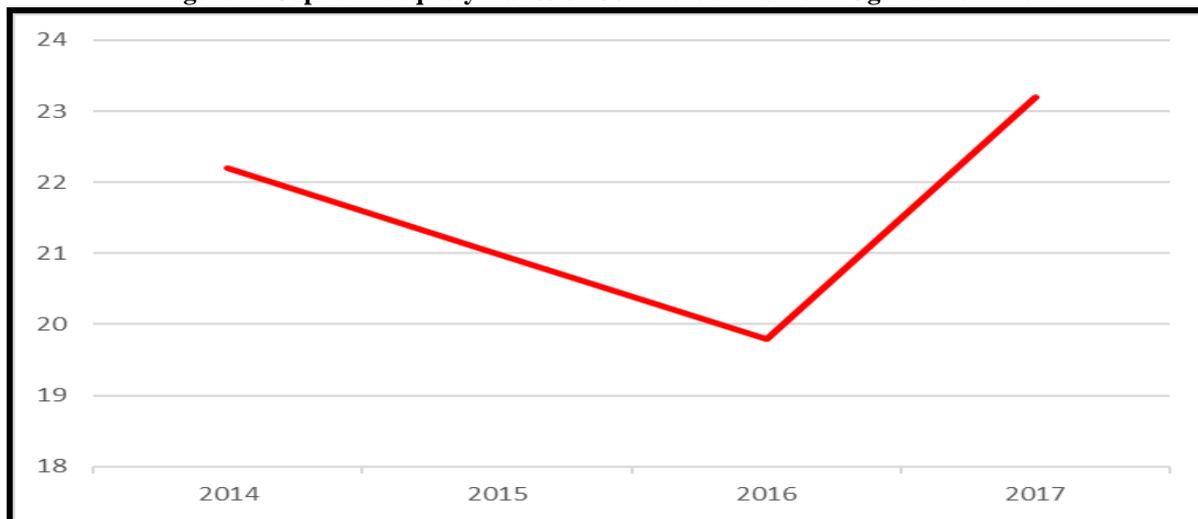
On the methodological research literature, Zábajňáková (2016) investigated the relationship between audit committee independence and performance of United Kingdom firms. She applied quantitative correlational analysis and deduced that the audit committee independence was negatively correlated with firm performance. Furthermore, Ahmed (2018) found that firm performance was positively correlated with audit committee independence while studying the characteristics of Jordanian firm performance. Given the outcomes of the past studies, it is evident that studies involving audit committee independence and firm performance have been carried out using quantitative methodology. However, the results have been inconclusive.

**Capital Adequacy Ratio.** This is a variable for the regulatory monitoring mechanism for banks. The Basel III Accord (2010) set the minimum capital ratio of at least 8% of the risk-weighted assets (Bank for International Settlement, 2011). Globally, financial regulation and supervision are necessary for guiding the operations of banks and other financial institutions. The capital adequacy ratio and the Basel III Accord (2010) are the essential regulatory tools in the banking sector. Without effective financial regulation and supervision of banks, the crises that have ran down banks and other financial institutions in the past cannot be avoided (Saunders & Cornett, 2009). As submitted by Williams and Nguyen (2005), capital regulation generates two advantages for the banking sector: 1) protection of consumers and depositors, 2) reduction of systemic risks. In the banking sector, there has been a massive increase in financial regulation and continuous supervision of banks in the post-global economic meltdown of 2007/2008 era as a result of poor corporate governance of banks and other financial institutions (Hwa-Jin, 2016). According to Andres and Vallelado (2008), Hwa-Jin (2016), Onakoya et al. (2012), and Tumusiime-Mutebile (2012), financial regulation and supervision by statutory bodies in various countries are additional mechanisms for governance of banks. In Uganda, several banks have collapsed in the past due to weak financial regulation and supervision (Tumusiime-Mutebile, 2012).

The Bank of Uganda is empowered to carry out the financial regulation and supervision functions of all banks and other financial institutions in Uganda. This arrangement is of great importance to the banking sector's stakeholders because the banking business involves a high level of information asymmetry, which diminishes the stakeholders' capacity to monitor management decisions (Andre & Vallelado, 2008). The regulator of banks uses on-site inspection to review the banks' financial state, evaluate the adequacy of their risk management systems, and assess the degree of compliance with the laws, regulations and prudential guidelines (BOU Annual Supervision Report, 2014). The regulator also uses off-site inspection on a continuous basis through the collection and analysis of financial information. The capital adequacy serves the purpose of ensuring that banks can absorb reasonable levels of losses before becoming insolvent to a level where the depositors' money is lost (Al-Tamimi & Obeidat, 2013; James & Joseph, 2015). In 2017, Bank of Uganda reported that the capital adequacy ratios for commercial banks in Uganda were

much higher than the recommended Basel III Accord (2010) rate of 8% (BOU Annual Report, 2017). For the period 2014-2017, the capital adequacy ratios for commercial banks in Uganda were more than double, as depicted in Figure 1.

**Figure 1: Capital Adequacy Ratios of Commercial Banks in Uganda 2014-2017**



The methodological literature shows that studies involving the capital adequacy ratio and bank performance have been mainly quantitative. For instance, Umoru and Osemwegie (2016) investigated the relationship between capital adequacy and banks' financial performance in Nigeria using quantitative techniques. Their study revealed an increase in banks' capital base leads to a significant increase in return on assets. Another study carried out by Praptiningsih (2009) used a quantitative methodology and found that a statistically significant positive relationship existed between the capital adequacy ratio and bank performance. The findings of Fanta et al. (2013), supported the above results where, capital adequacy ratio had statistically significant positive with bank performance in a study of Ethiopian commercial banks. However, James and Joseph (2015) found a significant negative relationship between capital adequacy ratio and bank performance in a study on the banking sector in Malaysia. Therefore, it is evident that past studies involving capital adequacy ratio and bank performance were carried out using quantitative approaches, although the study results have been contradictory and inconclusive.

**Bank Size.** The natural logarithm of total assets an organization has measures the bank size. In this study, it is one of the control variables related to firm-specific characteristics that influence bank performance (Adnan et al., 2015). Large banks are capable of attracting various resources such as the best human resources in the market, financing sources, large customer bases, and the ability to embrace the latest technological advances, all of which can enhance efficiency. Accordingly, all these resources are expected to have a positive influence on bank performance. Bank size is a significant determinant of the type and variety of the services and products a bank can extend to its customers. Large banks have the capacity to provide large sets of services and products to their customers, and its effect is increased earnings in terms of commissions, fees, and interest income. These advantages imply that banks with large asset bases are characterized by low costs and high returns on assets (Aladwan, 2015; Baktas & Kaymak, 2009).

**Leverage.** Leverage is measured by the proportion of debt to equity in the firm's capital structure, and it is a firm-specific characteristic that influences bank performance (Onuonga, 2014; Adnan et al., 2015). It is the second control variable for this study. The significance of leverage is to indicate how risky a firm is (Quadri et al., 2015). Furthermore, the trade-off between strengthening equity governance and maximization of enterprise value is a result of high leverage of banking institutions (John et al., 2016).

**Bank Performance in Uganda.** The primary goal of governance structures is to create a balance of power-sharing among shareholders, directors, and management to enhance shareholder value and protect the interests of all stakeholders (Andres & Vallelado, 2008; Olof et al., 2007). An effective governance system that improves the long term shareholder value and investor confidence should involve corporate accountability, economic performance, reliable and quality of public financial information, integrity, and efficiency of capital markets (Adebayo et al., 2014; Simon & Karr, 2001; Velnampy, 2013). The second purpose of an effective governance system is to ensure that structures, processes, and mechanisms are put in place to raise the ethical standards, ensure accountability and transparency in a firm. These elements lead to better financial performance and enhancement of long-term shareholder value (Bauwhede, 2009; Okereke et al., 2011).

Baktas and Kaymak (2009), Levine (2004), and Tumusiime-Mutebile (2012) posit that the governance system in banks is different from other non-financial corporate firms due to the unique characteristics of banks. Banks have unique characteristics such as being heavily leveraged and owing their liabilities to a large number of depositors who would be at a loss in case of bank failure. Additionally, the governance system in banking emphasizes the protection of the depositors' interests and the importance of veracity of financial information (Caprio & Levine, 2002; Macey & O'Hara 2003). This situation creates a difficulty in evaluating the quality of assets held by the banks and the corresponding financial position by outsiders due to information

asymmetry as far as the balance sheets of banks are concerned ((Baktas & Kaymak, 2009; Tumusiime-Mutebile, 2012). At the same time, Caprio and Levine (2002) argue that the investment value in banks depends on effective governance, which in turn leads to low cost of capital for bank borrowers. This is because efficiently governed banks incur lower costs in their operations. However, banks' governance is adversely affected by situations where bank managers have enormous discretion to act in ways that do not favour the interests of the stakeholders. Such a scenario might lead to inefficient allocation of capital hurting the overall bank performance (Caprio & Levine, 2002). Furthermore, regulation and supervision play an important complementary role in the governance of banks. As argued by Tumusiime-Mutebile (2012), the banking sector regulators and supervisors have interest in sound governance mechanisms in banks from the financial system stability perspective.

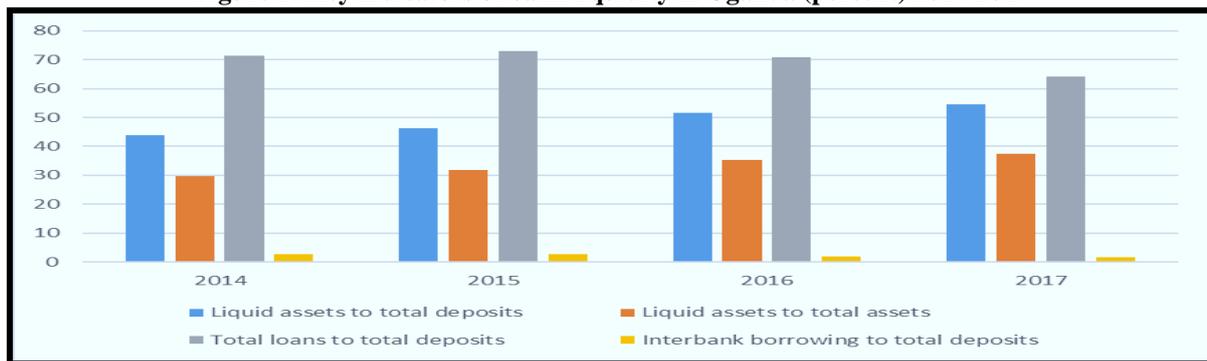
The statistics on commercial banks' performance in Uganda indicate that the banking system was safe and sound between 2014 and 2017. There was an overall growth in the ratios of liquid assets to total deposits and liquid assets to total assets. The figures for the ratios of liquid assets to total deposits, when compared to the minimum requirement of 20 percent, were very favourable. There was also a marked improvement in the total loans to total deposits ratios and interbank borrowing to total deposits ratios over the same period. Table 1 and Figure 2 present the statistics.

**Table 1: Key indicators of bank liquidity in Uganda (percent) 2014-2017**

Ratio	2014	2015	2016	2017
Liquid assets to total deposits	43.9	46.4	51.5	54.6
Liquid assets to total assets	29.7	31.7	35.3	37.4
Total loans to total deposits	71.4	73.1	70.8	64.1
Interbank borrowing to total deposits	2.6	2.7	2.0	1.5

Source: Bank of Uganda Annual Report 2017.

**Figure 2: Key indicators of bank liquidity in Uganda (percent) 2014-2017**



**Justification for the Study.**

The justification for the study is because Uganda is still a virgin area as far as studies on banks' governance structures are concerned. Effective governance structures are aimed at ensuring that banks perform to the expectations of the stakeholders. Since the banking sector plays important roles in financial intermediation and facilitation of a payment system in all economies, bank failures have a negative impact on the economic stability, banking sector, and stakeholders (Adnan et al., 2015; Hull, 2010). Previous studies have not investigated if there are statistically significant relationships between board composition, board size, audit committee independence, capital adequacy ratio, and commercial banks' performance in Uganda.

**METHODOLOGY.**

The research design adopted for this study is quantitative. Previous studies on internal and external governance structures have been predominantly quantitative (Duru et al., 2015; Fanta et al., 2013; James & Joseph, 2015; Liu et al., 2015; Mehrotra, 2016; Pandya, 2011; Salim et al., 2016; Zhou et al., 2016). A quantitative research design enables the collection and analysis of numerical data using procedures and statistical techniques to examine the relationships among variables (Creswell, 2014; Saunders et al., 2016; Sekaran & Bougie, 2014). This study employed a survey strategy to collect primary data from a population of 24 licensed commercial banks in Uganda at the time of the study, and the response rate was 87.50%. The researcher used a self-administered questionnaire with a 5-point Likert scale to collect primary data for the study. The research instrument Cronbach's reliability coefficient was established as 0.78 before the actual data collection took place.

The study applied partial correlation analysis to test the four study hypotheses after controlling for bank size and leverage. The justification for the choice of the partial correlational analysis method was on the basis that the study required the establishment of the strengths and direction of relationships between variables after controlling for the possible influence of the control variables on the bank performance variable (Creswell, 2014; Sekaran & Bougie, 2014). Microsoft SPSS was used to generate the zero-order and partial correlation matrices that were used to examine the influence in terms of direction, strength, and significance among the dependent and independent variables. Preliminary analyses using SPSS outputs were performed to ascertain that there was no

violation of the underlying assumptions of outliers, normality linearity, and homoscedasticity (Garson, 2012; Keith, 2006; Pallant, 2016).

1) Outliers Assumption- Compared the actual mean and the 5% trimmed mean for each variable of the study to ensure that there were no outliers in the data that was collected for the study as presented in Table 2.

**Table 2: Comparison of the Actual Mean and 5% Trimmed Mean for Outliers Assumption**

Variable	Actual Mean	5% Trimmed Mean	Difference
Board Composition	3.2857	3.2628	-0.0229
Capital Adequacy Ratio	3.2698	3.2637	-0.0061
Audit Committee Independence	3.0476	3.0529	0.0053
Board Size	3.1829	3.2023	0.0194
Leverage	3.7619	3.7897	0.0278
Bank Size	3.2697	3.2996	0.0299
Bank Performance	3.9143	3.9476	0.0333

The similarity of each pair of measures signified the absence of outliers in the data set. The assumption of outliers was also tested using box plots. For all the study variables there were no whiskers outside the boxes.

2. Normality Assumption - The Shapiro-Wilk's Test was used to ascertain whether the data for the study was normality distributed. The test yielded the results displayed in Table 3.

**Table 3: Results for the Shapiro-Wilk Test for Normality.**

Variable	Statistic	Degrees of Freedom	Significance
Board Composition	0.945	21	0.272
Board Size	0.950	21	0.503
Capital Adequacy Ratio	0.953	21	0.382
Audit Committee Independence	0.930	21	0.139
Leverage	0.910	21	0.058
Bank Size	0.943	21	0.253
Bank Performance	0.942	21	0.253

From Table 3 it is evident that all the significance values were more than 0.05 and the normality assumption was met. The study also applied the z-scores for skewness and kurtosis tests to establish the data normality. All the z-scores were in the interval -1.96 to +1.96, thereby satisfying the normality assumption.

3) The linearity and homoscedasticity assumptions were also tested by inspecting the scatter plot matrices from the SPSS output. They revealed a linear relationship between the dependent and independent variables and evenly distributed data points. Hence satisfying both assumptions.

**RESULTS AND DISCUSSION OF FINDINGS.**

In the Pearson Product-Moment Correlation matrices below the abbreviations represent the following: BP=Bank Performance, BC=Board Composition, BS=Board Size, ACI= Audit Committee Independence, CAR=Capital Adequacy Ratio, BaS=Bank Size, and LEV= Leverage.

**Table 4: Zero-Order Pearson Product-Moment Correlations.**

Variable	Statistic	BP	BC	BS	ACI	CAR	BaS	LEV
<b>BP</b>	Pearson Correlation	1.000						
	Sig. (1-Tailed)	-						
	N	21						
<b>BC</b>	Pearson Correlation	0.349**	1.000					
	Sig. (1-Tailed)	0.060	-					
	N	21	21					
<b>BS</b>	Pearson Correlation	0.369**	0.054	1.000				
	Sig. (1-Tailed)	0.050	0.408	-				
	N	21	21	21				
<b>ACI</b>	Pearson Correlation	-0.336**	0.133	-0.064	1.000			
	Sig. (1-Tailed)	0.068	0.282	0.392	-			
	N	21	21	21	21			

<b>CAR</b>	Pearson Correlation	-0.108	-0.274	0.281	0.396*	1.000		
	Sig. (1-Tailed)	0.321	0.115	0.108	0.038	-		
	N	21	21	21	21	21		
<b>BaS</b>	Pearson Correlation	0.234	-0.076	0.374*	-0.195	-0.168	1.000	
	Sig. (1-Tailed)	0.154	0.371	0.048	0.198	0.233	-	
	N	21	21	21	21	21	21	
<b>LEV</b>	Pearson Correlation	-0.296**	-0.037	0.213	0.675*	0.290	-0.133	1.000
	Sig. (1-Tailed)	0.097	0.436	0.177	0.000	0.101	0.283	.
	N	21	21	21	21	21	21	21

\*Correlation significant at 5% level, \*\*Correlation is significant at 10% level.

**Table 5: Partial Pearson Product-Moment Correlations<sup>a</sup>**

Variable	Statistic	BP	BC	BS	ACI	CAR
<b>BP</b>	Pearson Correlation	1.000				
	Sig. (1-Tailed)	-				
	N	21				
<b>BC</b>	Pearson Correlation	0.381**	1.000			
	Sig. (1-Tailed)	0.054	-			
	N	21	21			
<b>BS</b>	Pearson Correlation	0.424*	0.107	1.000		
	Sig. (1-Tailed)	0.035	0.331	-		
	N	21	21	21		
<b>ACI</b>	Pearson Correlation	-0.169	0.206	-0.253	1.000	
	Sig. (1-Tailed)	0.244	0.198	0.148	-	
	N	21	21	21	21	
<b>CAR</b>	Pearson Correlation	0.004	-0.290	0.324	0.269	1.000
	Sig. (1-Tailed)	0.494	0.115	0.088**	0.132	-
	N	21	21	21	21	21

<sup>a</sup> Bank Size and Leverage are the Control Variables.

\*Correlation significant at 5%, \*\*Correlation significant at 10%.

Ha<sub>0</sub> aimed to establish whether there was a statistically significant relationship between board composition and commercial banks' performance in Uganda. The study results in Table 5 revealed that there was a medium, positive and statistically significant partial correlation between bank performance and board composition after controlling for bank size and leverage,  $r = 0.381$ ,  $n=19$ ,  $p < 0.1$ , with high/low levels of bank performance being associated with high/low levels of board composition. Examination of the zero-order correlations in Table 4 for the same variable ( $r = 0.349$ ) suggested that, after controlling for bank size and leverage, there was a mild effect of 3.2% increase in the strength of the relationship between bank performance and board composition. This finding contradictory to the empirical evidence of Bino and Tomar (2012), who found that there was a negative relationship between board composition and bank performance. However, the study results supported the earlier findings of Duru et al. (2015); Liu et al. (2015) and Zhu et al. (2016).

Hb<sub>0</sub> aimed to establish whether there was a statistically significant relationship between board size and commercial banks' performance in Uganda. The study results in Table 5 revealed that there was a medium, positive and statistically significant partial correlation between bank performance and board composition after controlling for bank size and leverage,  $r = 0.424$ ,  $n=19$ ,  $p < 0.05$ , with high/low levels of bank performance being associated with high/low levels of board size. However, inspection of the zero-order correlations in Table 4 ( $r = 0.369$ ) suggested that after controlling for bank size and leverage, there was a sizable effect of a 14.9% increase in the strength of the relationship between bank performance and board size.

The moderate and significant positive relationship between board size and bank performance further supports the work of Johl et al. (2015), Kyereboah and Biekpe (2006) since they found a statistically significant positive relationship between these variables. However, the evidence from this study contradicted the work of Adusei (2011); Pathan and Faff (2013) and Staikouras et al. (2007), who found that board size had a negative influence bank performance. The positive correlation between board size and bank performance for this study implies that there is a direct relationship between board size and commercial banks' performance in Uganda. Board size being an internal governance structure, one would expect a large board size to have a significant relationship to bank performance due to a large pool of human capital with extensive knowledge, experience, and capacity to monitor management (Johl et al., 2015). On the other hand, a small board size would make the banks incur reduced agency costs, experience less coordination problems, and make critical decisions expeditiously, demonstrating effective governance and protection of shareholder value (Chou & Buchdadi, 2017).

For Hc<sub>0</sub> the aim was to establish whether there was a statistically significant relationship between audit committee independence and commercial banks' performance in Uganda. The study results in Table 5 showed that there was a weak, negative, and statistically non-significant partial correlation at a 5% level of significance between bank performance and audit committee independence after controlling for bank size and leverage,  $r=-0.169$ ,  $n=19$ ,  $p = 0.241$ . Low levels of bank performance were

associated with high levels of audit committee independence. Examination of the zero order correlations in Table 4 ( $r = -0.336$ ) suggested that, after controlling for bank size and leverage there was a sizable effect of 49.7% decrease in the strength of the relationship between bank performance and audit committee independence. The negative correlation coefficient between the two variables implied that the audit committee independence has adverse effects on bank performance. This study outcome supports the work of Zábajníková (2016), who came up with similar results in her study of the relationship between the independent audit committee and firm performance. However, the study results are inconsistent with the study findings of Chou and Buchdadi (2017) and Fanta et al. (2013), who found that audit committee independence had a positive influence on bank performance.

The purpose  $H_{d0}$  was to establish whether there was a statistically significant relationship between capital adequacy ratio and commercial banks' performance in Uganda. The study results in Table 5 revealed weak, positive, and statistically non-significant partial correlation at a 5% level of significance between bank performance and capital adequacy ratio, after controlling for bank size and leverage,  $r = 0.004$ ,  $n=19$ ,  $p = 0.494$ . Low/high levels of bank performance were associated with low/high levels of capital adequacy ratio. Examination of the zero-order correlations in Table 4 ( $r = -0.108$ ) suggested that, after controlling for bank size and leverage, this resulted in a 96.3% decrease in the strength of the relationship between bank performance and capital adequacy ratio. This result reinforces the works of Kipruto et al. (2017) and Umoru and Osemwegie (2016), who found a positive relationship between the two variables. On the contrary, James and Joseph (2015) found a negative correlation between capital adequacy ratio and bank performance.

## CONCLUSIONS

**Table 6: Summary of Test Results**

Variable of Study	Mean	SD	95% Conf. Int.		Test Statistic	Sig. 1-Tail	Null Hypothesis	Reject Hypothesis?
			Lower	Upper				
Board Comp.	3.29	0.75	2.95	3.63	1.77	0.054	$H_{a0}$	Yes
Board Size	3.18	1.07	3.39	4.14	0.77	0.035	$H_{b0}$	Yes
Audit Com. Ind.	3.27	1.24	2.48	3.61	0.18	0.241	$H_{c0}$	No
Cap Adeq. Ratio	3.05	0.58	3.04	3.50	2.21	0.494	$H_{d0}$	No

Table 6 presents a summary of the test results for the study leading to the following study conclusions.

1. There was a statistically significant medium and positive relationship between board composition and commercial banks' performance in Uganda. The null  $H_{a0}$  hypothesis is therefore rejected.
2. Therefore, there was a medium, positive and a statistically significant relationship between board size and commercial banks' performance in Uganda. The null  $H_{b0}$  hypothesis is therefore rejected.
3. Therefore, there was a non-statistically significant negative relationship between audit committee independence and commercial banks' performance in Uganda. The null  $H_{c0}$  hypothesis is therefore not rejected.
4. Therefore, there was a non-statistically significant relationship between capital adequacy ratio and commercial banks' performance in Uganda. The null  $H_{d0}$  hypothesis is therefore not rejected.

## RECOMMENDATIONS.

Sustainable performance of commercial banks in Uganda hinges on effective governance structures such as board composition, board size, audit committee independence, and capital adequacy ratio. The author recommends that the Bank of Uganda as the regulator and supervisor of banks and other financial institutions in Uganda, should ensure that the above financial and non-financial characteristics are strictly adhered to. This arrangement will ensure effective internal and external governance structures, thereby enhancing bank performance in Uganda.

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