



**CORPORATE GOVERNANCE, FIRM  
CHARACTERISTICS, EXTERNAL ENVIRONMENT  
AND PERFORMANCE OF FINANCIAL INSTITUTIONS  
IN UGANDA**

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NAIROBI**

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## DECLARATION

This research thesis is my original work and has not been presented for any award of a degree in any university.


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To my caring and devoted parents Mr. David .E. N. Wakaisuka and Mrs Erivaida, N.  
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## ACRONYMS AND ABBREVIATIONS

ADV/AST	Advance to Asset Ratio
AMFIU	Association of Micro Finance Institutions in Uganda
BoD	Board of Directors
CAR	Capital Adequacy Ratio
CEOD	Chief Executive Officer Duality
D/R	Debt to Equity Ratio
DR	Debt Ratio
EPS	Earnings Per Share
ESC	Environmental Social and Corporate Governance
FCFs	Free Cash-Flows
ICGU	Institute of Corporate Governance in Uganda
IFAC	International Federation of Accountants
LA	Liquid Assets
MDIs	Micro Finance Deposit-Taking Institutions
MFIs	Micro Finance Institutions
NA	Net Advance
NDP	National Development Plan
NNPAs	Net Non-Performing Assets
OECD	Organization for Economic Co-operation and Development
PAT	Profit After Tax
ROA	Return On Asset
ROE	Return On Equity
SMEs	Small and Medium Enterprises

SPSS	Statistical Package for Social Sciences
TA	Total Assets
TD	Total Deposits
UBOS	Uganda Bureau of Statistics

## **ABSTRACT**

This study looked at corporate governance, firm characteristics, external environment and firm performance of financial institutions in Uganda. The study aimed at examining: the relationship between corporate governance and firm performance; the intervening/mediating effect of firm characteristics on the relationship between corporate governance and firm performance; the moderating effect of external environment on the relationship between corporate governance and firm performance; and the joint effect of corporate governance, firm characteristics and external environment on firm performance. Equally four hypotheses were developed including: there is no significant relationship between corporate governance and firm performance of financial institutions; there is no significant intervening effect of firm characteristics on the relationship between corporate governance and firm performance of financial institutions; there is no significant moderating effect of external environment on the relationship between corporate governance and firm performance of financial institutions; and there is no significant joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions. Methodologically, a population of one hundred and three (103) financial institutions (commercial banks, MFIs and insurance companies) both local and foreign were investigated. A positivistic research philosophy and correlation descriptive research designs were adopted in the study. Preliminary statistical tests were undertaken among which were: Cronbach alpha, descriptive statistics such as the mean, standard deviation, coefficient of variation and correlation analysis. Hierarchical multiple regression analysis was then used to test the hypotheses and furthermore, the partial least square modelling to determine the path coefficients and structural model. The response rate was 97.2 percent. The findings reveal that: there is a statistically positive and significant relationship between corporate governance and firm performance; there is a partial intervening effect of firm characteristics on the relationship between corporate governance and firm performance; there is no moderation effect of external environment on the relationship between corporate governance and firm performance and there is a statistically positive and significant joint effect of corporate governance, firm characteristics and external environment on firm performance. The results of this study add to existing knowledge in the area of corporate governance and firm performance by displaying that the relationship between corporate governance and firm performance of financial institutions is not direct but rather is intervened by firm characteristics. Therefore, this study helps financial institution management through board of directors to appreciate the effect of quality of audit, leverage and asset structure on the performance of financial institutions. In addition, the Government and regulatory authorities in Uganda such as the Central Bank, Insurance Regulatory Authority and Association of Micro-Finance Institutions in Uganda, can use these findings to regulate the nature of firm characteristics and monitoring of financial institutions. The study also has limitations, recommendations and areas for further research.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Corporate governance is making an equilibrium among commercial, social, individual and communal goals while encouraging the effectual use of resources, accountability, the use of authority and stewardship and at the same time, supporting the interests of individuals, corporations and society (Nkundabanyanga, Ahiazu, Sejjaaka & Ntayi, 2013; Noriza, 2010). Firm characteristics are attributes that are seen as “drivers” to business relations (Eriotis, Dimitrios & Zoe, 2007). Firm characteristics as acknowledged by earlier scholars play a role in reducing agency conflicts and informational gap. They include, firm size, age of the firm, leverage, family control, quality of auditing and asset structure (Adeyemi & Fagbemi, 2010).

Business firms recognize the external environment as opportunities and threats presented by such aspects as socio-cultural, legal, political, economic, technological and infrastructural factors (Aboyomi & Oyobami, 2012). They add that external environment institutes the initial conditions facing entrepreneurs in any economy. It is important to note that firm performance does not happen in a vacuum but within a certain environment which has challenges and opportunities (Njanja, Ogutu & Pellisier, 2012).

Firm performance measures the efficiency of an institution and its ability to achieve its objectives in terms of revenues and profits (Ongore & Kusa, 2013). With the increased competition and the high demand for profitability by institutions, financial institutions are now moving towards an economic- oriented model departing from the social

approach that has been monitored for years (Prasad & Ravinder, 2012). The study was therefore based on ratios of the variables relating to Capital adequacy, Assets quality, Management efficiency, Earnings quality and Liquidity (CAMEL).

Corporate governance practices, firm characteristics, external environment and firm performance have been closely associated with the agency theory, stakeholder theory, Resource Dependency Theory (RDT) and Transaction Cost Theory (TCT). Agency theory embraces that managers will not perform to take full advantage of the returns to shareholders unless suitable governance structures are executed by firms to safeguard the interests of shareholders (Jensen & Meckling, 1976). The stakeholder theory states that in a modern day firm, managers are considered to have an inherent relationship with not only shareholders but also other stakeholders (Kock, Santalo & Diestre, 2012).

The RDT states that boards support firms to reduce dependence or gain resources (Pfeffer, 1972). Kor and Misangyi (2008) contend that RDT is a more affluent lens for understanding boards broadly because it stresses that external directors supplement the ability of a firm to protect itself against the external environment, reduce uncertainty, or co-opt resources that increase the firm's ability to raise funds or increase its status and recognition. Besides, the TCT is considered as the basic theoretical framework that analyses the relation between the service provider and the customer process, implying that the theory embeds and governs both sides of the process. Transaction costs are the costs of negotiating, monitoring, implementing the exchanges between parties to a contract and measure the efficiency of a transaction (Zadeh & Eskandari, 2012).

Uganda's financial system is composed of financial institutions like commercial banks, licensed credit institutions, Micro finance Deposit-taking Institutions (MDIs), Licensed credit institutions, Microfinance institutions (MFIs), development banks, investment and stock brokerage firms, insurance companies, Savings and Credit Cooperatives (SACCO), and licensed foreign exchange bureaus. Uganda's financial institutions have developed since 1906, when the National Bank of India (later Grindlays bank) and then Standard Chartered Bank and Uganda Cooperative Bank were established (Bategeka & Okumu, 2010).

Prior to Uganda's independence in 1962, government-owned organizations controlled most banking in Uganda. In 1966 the Bank of Uganda, was in charge of the issue of currency and also managed foreign exchange reserves, became the central bank. The financial institutions in Uganda were directed and regulated by the Bank of Uganda, according to Bank of Uganda Statute 1993. In July 1999, the Bank of Uganda issued a policy statement which classified financial institutions into four tiers. Tier IV-financial institutions which are not controlled by Bank of Uganda and are not accredited to take in deposits from the public but may offer collateral or non-collateral loans. Tier III-MDIs, tier II- credit institutions and tier I- commercial banks which hold current, savings and fixed deposit accounts for both retail and corporate in local and foreign currency. In addition, commercial banks are authorized to transact the business of foreign exchange in all currencies.

As well, the Insurance Regulatory Authority (IRA) was recognized under section 14 of the insurance statute 1996, now the insurance act (chap 213), laws of Uganda, 2000 which came into effect on the 14<sup>th</sup> day of April, 1996 and began operation in April

1997. The main objective of the authority was to guarantee the effective administration, supervision, regulation and govern the industry of insurance in Uganda. The insurance sector has existed for some time but not many Ugandans take insurance cover as a priority, with policy holders mostly doing it out of statutory obligation or as a job-related benefit (Kyatusiimire, 2015).

IRA is working towards establishing an electronic register which would help insurers scrutinize clients and understand their insurance background before underwriting the requested policy. Performance of insurance in Uganda is important to the economy since this sector is among the sectors expected to spur economic growth and help in the realization of Uganda's vision 2040, given the fact that Uganda is now executing her second National Development Plan (NDP II) intended to boost the economy towards middle income status by 2020 (UBOS, 2016). Olayungbo and Alkinlo (2016) declare that the upward share of the insurance sector in the aggregate financial sector is fundamentally every developing and developed country has repositioned consideration to the insurance growth nexus.

In addition, Oling, Rwabizambuga and Rodriguez (2014) said that MFIs are organizations that offer savings and or credit facilities to micro and small scale business people. MFIs provide financial services to poor people who have difficulties in obtaining these services from most formal institutions because their businesses, saving levels and credit needs are all small. Although the microfinance industry is committed to educate the public and government about its practices, there has been some concern over the recovery uncertainty (loans without collateral, group lending, progressive loan structure, immediate repayment arrangements, regular repayment schedules and

collateral substitutes) used by some MFIs (Quayes & Tanweer, 2013). They argued that MFIs may fail to meet the full promise of their mission (reducing poverty) without continuing grants. The sector moved away from credit to other products, but then again a number of major institutions have still remained overwhelmingly loan-driven (Wright & Rippey, 2003). In addition, there is concern in the Ugandan microfinance community that the regulation may be too strict in some areas and may damage the performance of the industry.

### **1.1.1 Corporate Governance**

Corporate governance has been defined as the system by which companies are directed and controlled (Fitriya & Locke, 2012). It is involved with the obligations and responsibilities of a company's board of directors to magnificently lead the company, and their connections with its shareholders and other stakeholder groups (Pass, 2004). Corporate governance is important to any economy, first, given that its systems are increasingly being seen as a pre-requisite for both social and economic development in developing economies, like Uganda (Wanyama, Burton & Christine, 2013). Second, good corporate governance practices boost firm performance through better management and prudent allocation of firms' resources (Tsifora & Aleftheriadou, 2007). Corporate governance has been operationalised as ownership structure, information disclosure, financial transparency and board profile (Barako, Hancock & Izan, 2006; Bodaghi & Ahmadpour, 2010).

Information disclosure discusses the process and utilization of information, its role in allocation of resources to firms and the entities responsible for generating, verifying and regulating information disclosure (Healy & Palepu, 2001). Adam and Mehran

(2003) posited that the reputation of governance and information disclosure to financial institutions is crucial to the operations of the firm, and the depositors as well as the shareholders. Information disclosure and financial transparency have been chosen because these practices translate the firm's performance through superior returns as a result of timely and accurate publicity since information disclosure is making information accessible to interested and affected parties in a manner that is understandable to them (Akhtaruddin, 2005). Crowther (2000) traced an archaeology of corporate reporting which showed that, over time, the amount of information provided, first to shareholders, then to potential investors and to other stakeholders has gradually increased as firms have recognized the benefit in providing increased disclosure.

Sullivan (2005) contended that the question of financial transparency is an essential component of performance of financial institutions. Financial transparency is defined as the extent to which investors have timely, meaningful, reliable and ready access to any required financial information about a company (Wanyama et al., 2013). Preparation of annual financial statements carry the responsibility of presenting them so that they provide an accurate picture of the financial results in a manner that can be defended in terms of credible framework. The best defense to criticism is through open and transparent disclosure, since this eliminates the risk of the incredibly damaging consequences that occur when it is revealed that disclosures have been less than total.

The importance and the role of transparency in ensuring the maintenance of financial institutions independence and discharging their accountability obligations need to be augmented (Sullivan, 2005). Therefore, the prominence of transparent reporting

practices extends beyond narrow institutional interests because they make a vital association to creating the trustworthiness of a country's financial system. As economies advance and pursue and establish their locations in the international market place, the countrywide reporting framework becomes essential to an expanded group of users. For most transition economies, Uganda inclusive, the accounting profession and the standard-setting framework in terms of market-based disclosures are still evolving which creates potential problems for the production of internationally credible financial reports.

Board profile is also important from the agency theory perspective in the sense that it enables the institution to engage in opportunistic activities because of their dominance (Sunil & Santanu, 2012). Boards also endeavor to safeguard shareholders' interest in an economic environment while maintaining managerial accountability to accomplish good firm performance (Demsetz & Villalonga, 2001).

Sheila, Syed and Ibrahim (2013) argued that the issue of corporate governance has become popular in the corporate world and has strongly influenced the ability of companies to raise funds from financial institutions, narrow the gap between the agents, principals, and help in building a strong financial system of the economy that is less susceptible to economic crises. This means that performance of financial institutions has substantive repercussion on investment, firm growth, industrial expansion, and economic development. Therefore, research on corporate governance, firm characteristics, external environment and firm performance of financial institutions is critical. Additionally, while there has been promptly an upward level of literature on firm performance issues in developed countries, little consideration has been paid in

developing countries. As well, there is an accumulative acknowledgement that financial sector development is a top priority to sustain economic growth in developing countries, mainly among the more successful reformers, such as Uganda.

Financial institutions should clearly define their authority and responsibilities which ultimately results into a system of internal controls that is regularly tested to ensure effectiveness. The weakness of corporate governance is possibly the most central factor answerable for the corporate failure penalties from the economics and corporate crises. There is much that can be done to improve the reliability of financial institutions' reporting through better accountability and transparency, the replacement of resources dedicated to audit function, audit quality and superior corporate governance policies (Saudagaran, 2003).

### **1.1.2 Firm Characteristics**

Firm characteristics are attributes that are seen as “drivers” of business relations with an aim of achieving the institution’s goals (Eriotis et al., 2007). Zou and Stan (1988) assert that firm characteristics are the firm’s demographic and managerial variables that comprise part of the firm’s internal environment. Various factors have been recognized as firm characteristics by previous scholars that demonstrate a role in reducing agency conflicts and informational gap. These factors include, firm size, age of the firm, leverage, family control, quality of auditing and asset structure (Abor, 2008). McGahan (1999) proclaim that 36 percent of the industry variance in profitability could be attributed to the firm characteristics and actions. Firm characteristics will be measured using leverage, asset structure and quality of auditing (Abor, 2008; Rouf, 2010). This is because these parameters are critical in Uganda’s situation given that majority of the

firms are small and about 70 percent of firms do not celebrate their fifth birthday, Uganda Bureau of Statistics (UBOS, 2011). Leverage can be stated as the ratio of the firm's debts to its assets. Leverage will make managers to generate and pay out cash, simply because interest disbursements are obligatory. Financial leverage is normally in form of a loan or other borrowings like debt. The earnings from the use of this debt should be re-invested with the aim of earning a bigger rate of return from it, than the cost of interest. Jensen and Meckling (1976) maintain that growing leverage encourages managers to be observant since it might lead to indebtedness of the firm.

The asset structure of a firm plays a substantial role in defining the firm's performance. For years researchers have been trying to describe how financial institutions adopt their asset and liability structures in order to optimally meet objectives of shareholders and management (Grzegort, 2013). The argument to which the firm's assets are physical should result in the firm having superior liquidation value (Titman & Wessels, 1988). Halaj (2008) declares that firms that capitalize heavily in tangible assets also have greater financial leverage since they borrow at lower interest rates if their obligation is secured with such assets. It is believed that debt may be more readily used if there are durable assets to serve as collateral (Ritter, 2005). Asset structure and leverage are seen as specific characteristics to financial institutions.

The quality of auditing is a service provided to an organisation intended to facilitate identification of actions for continuous enhancement and facilitate assessment of progress with improvement plans. Audit plays an important role in developing and enhancing the global economy and business firms since the auditors express an opinion on the fairness of financial statements (Al-Khaddash, Nawas, & Ramadan, 2013). This

is essential for the users of financial statements to gain assurance that the information is being reported, properly measured, and fairly accessible. Auditors must elevate their abilities in order to increase the probability to rely more on the auditor's report and audited financial statements which are more applicable, unbiased and precise for the decision makers. Audit quality is not just affected by auditor qualification, the company's internal control system might be another feature that affects audit quality (Al-Khaddash et al., 2013).

### **1.1.3 External Environment**

External environment are opportunities and threats offered by such external environment of such factors as socio-cultural, legal, political, economic, technological and infrastructural factors (Aboyomi & Oyobami, 2012). Galbraith, Bodriguezi and De-Noble (2008) affirm that external environment constitutes the preliminary conditions facing entrepreneurs in any economy. It is important to note that firm performance does not happen in a vacuum but within a certain environment which has challenges and opportunities (Njenja et al., 2012). Financial institutions today are facing extra-ordinary encounters in maintaining profitable persistence and achievements. Arising from rapid changes happening in today's marketplace and emerging corporate practices, it is more likely for financial institutions, to fall behind by not being in possession of the trends of their external environments (Albright, 2004).

External environment was measured using Information Technology (IT) and regulations (Bharadwaj, 2000). Regulation was chosen because it is the framework of a command and control of individual decisions. Regulations are equally important measures in an effort to prevent decision making that would take inadequate accountability of the public interest. Accordingly, perpetual capacity building is

necessary to warrant effective regulation of new and often complex financial products. Henceforth, the implementation of regulations to financial institutions strengthens the soundness and competitiveness of the financial sector (Financial Institutions Act (FIA), 2004). Furthermore, the legal framework is a key element of the corporate governance system of a nation since it illustrates that accountability and transparency cannot be attained unless there are relevant rules and regulations in place. It provides legal protection for investors and ensures their ability to exercise their rights (Gul & Tsui, 2004a).

In the mainstream of modern culture, IT is considered to be one of the answers to most problems and/or restrictions in business. It is seen as the way that a business can develop from the past and enter a brighter, more efficient future (Bharadwaj, 2000). The IT related resources serve as potential sources of competitive advantage. Government of Uganda (GoU) invested substantially in the IT physical infrastructure as a prerequisite for structural transformation of the economy since they are catalytic in nature. According to the National Development Plan (NDP) (2010/11-2014/15), IT was placed among the primary growth sectors. Consequently, to enhance the use and application of IT services in business and service delivery, government of Uganda implemented service delivery programmes through varying levels of success. Nonetheless, use and application of IT services in business and service delivery in Uganda, has remained poor, Ministry of Finance, Planning and Economic Development (MoFPED, 2014).

#### **1.1.4 Firm Performance**

Firm performance is how well a firm can use its assets as a primary mode of business to generate revenues and profits (Samina & Ayub, 2013). Combs, Crooks and Shook (2005) describe performance as the economic outcomes resulting from the inter-play

among a firm's attributes, actions and the environment. There are so many factors, which need to be considered while differentiating performance of financial institutions. To evaluate the performance of financial sector, the study used the CAMEL model, which measures the performance of financial institutions from each of the significant parameters like capital adequacy, assets quality, management efficiency, earning quality and liquidity. These parameters are adopted because they are appropriate and they can adequately assess the soundness and performance of financial institutions (Bank of Uganda, 2010; Prasad & Ravinder, 2012).

CAMEL rating benchmark is a concise and obligatory tool for assessors and regulators and certifies a financial institution's strong conditions by assessing its different characteristics based on a multiplicity of information sources like financial statements, funding sources, macroeconomic data, budget and cash flow (Reddy & Prasad, 2011). In addition, CAMEL analysis approach is beneficial as it is an internationally standardized rating and provides flexibility between on-site and off-site investigation, hence, a central model in assessing financial institutions' performance. Nurazi and Evans (2005), Said and Saucier (2003) and Sarker (2005) are some of the scholars who used CAMEL approach as a rating criteria for financial institutions' performance.

Prasad and Ravinder (2012) contend that capital adequacy is essential for a financial institution to preserve depositors' optimism and prevent the institution from going insolvent. Capital adequacy reveals the overall financial situation of financial institutions and the ability of management to meet the need of additional capital. The Capital Adequacy Ratio (CAR) is developed to ensure that financial institutions can engross a reasonable level of losses occurred due to operational losses and conclude the ability of the institution in meeting the losses. The CAR include; Debt-Equity (D/E)

ratio which is ratio indicating the degree of leverage of a financial institution. It indicates how much of the financial institution's capacity is financed through debt and how much through equity. Advance to Assets (Adv/Ast) ratio (which the study centered on) is the ratio indicating a financial institution's aggressiveness to lend out money, which ultimately results in better profitability (Godlewski, 2003).

Halaj (2008) posit that the quality of assets is an imperative consideration to measure the strength of financial institutions. Broadly, the prime reason behind measuring the assets quality is to establish the component of non-performing assets as a proportion of the total assets. The ratios necessary to evaluate the assets quality are; Net Non-Performing Assets to Total Assets (NNPAs/TA) which reveals the competence of financial institutions in assessing the credit risk and, recovering the debts. Net Non-Performing Assets to Net Advances (NNPAs/NA) which is the most standard measure of assets quality determining the net non-performing assets as a percentage to net advances. Percentage change in net performing assets which tracks the movement in net non-performing assets over previous years.

Management efficiency is another critical element of the CAMEL model. The ratio in this fragment involves subjective analysis to measure the productivity and usefulness of management. The ratios used to evaluate management efficiency include; Total Advances to Total Deposits (TA/TD) and measures the efficiency and ability of the financial institution's management in transforming the deposits available with the financial institution excluding other funds like equity capital, into high earning advances. Profit per Employee (PPE) which shows the excess earned per employee resulting from dividing the profit after tax earned by the total number of employees.

Return on Asset (ROA) which is a measure of the profitability expressed in percentage by dividing Earnings Before Interest and Tax as a percentage of Total Assets (EBIT/TA) (Gupta, 2008).

The quality of earnings is a very substantial benchmark that governs the ability of a financial institution to earn dependably. It basically determines its profitability and explains its sustainability and growth in earnings in future. The following ratios explain the quality of income generation; Percentage growth in net profit (PAT Growth) which is the percentage change in net profit over the previous years. Net profit to average assets (PAT/AA) which measures return on assets employed or the efficiency in utilization of assets (Said, 2003).

Liquidity is another important factor of financial institutions. Financial institutions should take proper care to hedge the liquidity threat, at the same time ensuring good percentage of funds that are invested in extraordinary return creating activities, so that it is in a position to produce profit with provision of liquidity to the depositors. The following ratios have been reflected when measuring the liquidity: Liquid Assets to Total Deposits (LA/TD) which measures the liquidity available to the total deposits of the financial institution. Liquid Assets to Total Assets (LA/TA) which measures the total liquidity position of the financial institution (Prasad & Ravinder, 2012). Although financial institutions in Uganda remained adequately capitalized, there were concerns over the increased rate of credit growth impacting on the CAR and increased use of swaps for funding. It is imperative to note that, in the Bank of Uganda's submission to further progress the quality of the capital base, the bank reviewed the capital requirements by raising the statutory minimum from Uganda shillings 4 billion to

Uganda shillings 25 billion by 2013. While, Bank of Uganda's aim by these reforms was to ensure that banks hold considerable levels of capital that can absorb losses and enable them to remain resistant to shocks, the margin between the old and new threshold, seems unrealistic. In addition, all sectors except the agricultural sector had non-performing loans to total loans ratios below the industry average of 2.1 percent in 2010 (Bank of Uganda, 2010).

### **1.1.5 Financial Institutions in Uganda**

Financial institutions in Uganda have developed since 1906, when the National bank of India, later Grindlays bank, was established (Bategeka & Okumu, 2010). Uganda's financial system is composed of financial institutions like commercial banks, licensed credit institutions, MDIs, MFIs, development banks, investment and stock brokerage firms, insurance companies, SACCO, and licensed foreign exchange bureaus. Kyatusiimire (2015) asserted that the insurance sector in Uganda has been penetrating their business more and more from year to year though the sector's penetration ratio (insurance premium/GDP) has remained low compared to the average global performance. The global average penetration rate is 6.5 percent compared to that in Africa, 3.65 percent (though above the average of emerging markets of 2.65 percent). Uganda has penetrated on average between 0.66 percent (KPMG, 2014). Therefore there is a need to develop the insurance sector further particularly where experienced research practitioners are grappling with awareness and teaching the public about the benefits of insurance.

The Financial Institutions (Amendment) Act (2016) was passed to amend the FIA 2004, in addition to provide for: Islamic banking, bank assurance, agent banking, special

access to credit reference bureau by other permitted credit providers and service providers, reform the deposit protection fund and any other related purposes. In 2010, Bank of Uganda introduced a number of regulatory reforms in an attempt to embrace the reliability of financial institutions. In addition, a review of the MDI Act 2003 was started with the aim of consolidating regulations of tier 3 institutions and inspiring new microfinance institutions to come under the regulatory umbrella.

External environment in line with regulations of financial institutions in Uganda is seen in the Financial Institutions Act (2004) which clearly lays down the importance of corporate governance practices in financial institutions. The aim of the Act was to review and consolidate the law concerning financial institutions, to provide for regulation, mechanism and discipline of financial institutions by the Central Bank (Financial Institutions Act, 2004). However, despite nearly a century of concerted research and periodic financial crises, the connections between the governance of financial institutions, their individual performance, and the long-run stability of the financial system is not well understood (Mehran & Molineux, 2012).

## **1.2 Research Problem**

In Uganda, the transformations in the environment have been rapid and volatile, combined with economic variables that are complex in both form and influence of the practice of businesses and thus affecting firm performance (Nampewo, 2013). It is on this premise that the researcher needed to explore the intervening/mediating effect of firm characteristics and moderating effect of external environment on the relationship between corporate governance and performance of financial institutions in Uganda. This study is particularly pertinent to Uganda economy given the high degree of failure

of financial banks including, Sembule Bank and Teefe Bank, closed in 1996; International Credit Bank closed in 1998; Greenland Bank Ltd and Cooperative Bank closed in 1999; Gold Trust Bank was taken over in 2000; Uganda Commercial Bank was taken over in 2001; Allied Bank (U) Limited was taken over in 2006; Nile Bank was taken over in 2007 (Habyarimana, 2003; Matama, 2008) and recently, Global Trust Bank (U) Limited closed in 2014 (Bank of Uganda, 2014). Ten of these banks are domestic and only one is a foreign bank.

Additionally, Insurance Regulatory Authority, (IRA) communications officer, Mariam Nalunkuuma stated that the insurance corporations in Uganda have failed (Kyatusiimire, 2015). This could be attributed to Uganda's penetration ratio (gross value of insurance premium/GDP) of only 0.66 percent of the population, compared to its East African counterparts, Tanzania 2.3 percent, Rwanda 1 percent and Kenya with the leading penetration at 3.8 percent (KPMG, 2014). Also Kyatusiimire (2015) affirmed that there is very scanty information regarding insurance companies in Uganda, and yet the limited information that is out there is essentially not satisfactory to the sector.

Furthermore, there are notable variations in the performance of MFIs in Uganda. The MFIs in Uganda have failed to balance the two key factors of profits and social responsibility, given their goal of contributing to the growth of national economy as well as reduction of poverty. The MFIs are growing in size and operation but there is a great concern of lack of regulations. These may lead to weak governance and management as well as inappropriate reporting mechanisms which eventually affect

their performance (Association of Micro Finance Institutions in Uganda-AMFIU, 2013).

Broadly, first the knowledge about corporate governance, firm characteristics, external environment and performance of financial institutions in Uganda, is limited. Second, the factors that are responsible for poor financial institutions performance stem from lack of good and stable corporate governance structures (Wanyama et al., 2013), unpredictable external environment (Nampewo, 2013) as well as unsuitable firm characteristics (Wanyama et al., 2013). These are exhibited through lack of transparency, information disclosure, accountability, unsuitable firm characteristics and un-clear ownership structures. In addition, Matama (2008) pointed out that there is deficient disclosure supported by high level of off-balance sheet items, lack of financial transparency and ambiguous ownership structure of business firms in Uganda, which has resulted in gross mismanagement and dubious accounting actions as observed in many business firms. This, in turn affects the capital, assets and performance of the firms.

On the international scene, Erhardt, Werbel and Shrader (2003) tested the relationship between demographic diversity on boards of directors with firm financial performance. The relationship was evaluated using 1993 and 1998 financial performance data (ROA and ROI) and the percentage of women and minor ties on boards of directors for 127 large US companies. The findings revealed that board diversity is positively related to financial indicators of firm performance. In addition, Denis and Sarin (1997) reported that firms that substantially increased the proportion of independent directors had above average firm performance.

In another study that evaluated the investor's reaction to the appointment of additional director, discovered that financial performance increased by 0.2 percent on average, when companies selected additional outside directors (Rosenstein & Wyatt, 1990). To the contrary, Bhagat and Black (2002) found no relationship between proportion of independent directors and various indicators of firm performance. Bhagat and Bolton (2008) also found no evidence of a relationship between ownership structure and firm performance. However, Abor (2008) indicated that age of the firm, size of the firm, asset structure, profitability, risk and managerial ownership are important in influencing the performance of firms.

On the local scene, for example; Mwesigwa, Nasiima and Suubi (2014) determined the relevancy of corporate governance, accountability and managerial competences with the financial performance of commercial banks. The study was undertaken due to the fact that commercial banks in Uganda have had a poor performance despite the number of interventions put in place. Their study adopted a cross sectional and quantitative design, and revealed that corporate governance, accountability, managerial competences significantly relate to financial performance of commercial banks in Uganda. In addition, the study stated that corporate governance was observed to be the most significant predictor of financial performance. Nevertheless, their study did not consider the intervening effect of firm characteristics and moderating effect of external environment on the relationship between corporate governance and firm performance. Also, this study considered insurance companies and MFIs in addition to commercial banks.

Nkundabanyanga et al. (2013) established a model of effective board governance in Uganda's service sector firms. The findings revealed that a three dimension of effective board governance, that is control of meetings, board activity and effective communication are key factors that can improve board governance. Wanyama et al. (2013) conducted a cross-sectional study examining perceptions about the nature and role of corporate governance in Uganda, with the emphasis on accountability within a stakeholder framework. The finding revealed that issues relating to corruption and defacto legal framework mean that practice depart markedly from any reasonable understanding of best practices. Broadly, the studies that have been conducted in Uganda, have focussed on different sectors and used different methodologies, even those that studied the financial institutions have also focused on different variables. What then, is the relationship between corporate governance, firm characteristics, external environment and firm performance of financial institutions in Uganda?

### **1.3 Research Objectives**

The main objective of the study was to examine the relationship among corporate governance, firm characteristics, external environment and performance of financial institutions in Uganda. The specific objectives include:

- i. Determine the relationship between corporate governance and performance of financial institutions.
- ii. Examine the intervening/mediating effect of firm characteristics on the relationship between corporate governance and performance of financial institutions.
- iii. Determine the moderating effect of external environment on the relationship between corporate governance and performance of financial institutions

- iv. Evaluate the joint effect of corporate governance, firm characteristics and external environment on performance of financial institutions.

#### **1.4 Value of the Study**

The study examined the relationship among corporate governance practices, firm characteristics, external environment and performance of financial institutions in Uganda. Henceforth, the study was beneficial to different categories of groups like; the central bank, as a regulatory body; financial institutions that may possibly pick a leaf and therefore can benchmark; the public can make decisions regarding choices where to bank and borrow; the academia in terms of research; and the government in terms of planning, policy formulation and budgeting for the country. The study made significant contributions to theory building by affirming the theories under study. Further, the study shed more light on the nature of influence of various variables on firm performance clarifying the current framework. The results of this study supported, extended and formed a basis for future empirical investigation. The study made policy recommendations aimed at enhancing firm performance within the sector given the magnitude of corporate governance practices, firm characteristics and the external environment. The study provided a different perspective of understanding firm performance by combining, the agency theory, RDT, TCT and the stakeholder theory.

#### **1.5 Organization of the Thesis**

This thesis is organized into five chapters: introduction; literature review, research methodology, data analysis, presentation and interpretation, and discussions, conclusions and contributions. The treatment of each of these chapters is discussed below: Chapter one introduced the main concepts of the study including corporate governance, firm characteristics, external environment and firm performance of

financial institutions in Uganda. This forms the basis for presenting the research problem, the research questions and the research objectives as well as the value of the study to justify the research.

Chapter two provided a review of both theoretical and empirical literature that explains the interrelationships among the key variables of the study. The theories covered include the agency theory of Meckling (1976), the stakeholder theory of Freeman (1984), the transaction cost theory of Coase (1937), and the resource dependency theory of Pfeffer (1972). A summary of empirical studies has also been provided followed by a discussion of the conceptual framework and research hypotheses.

Chapter three presented the research methodology used in the study including a discussion of the research philosophy adopted, the research design, the study population, data collection methods, operationalization of the research variables, reliability and validity tests, and data analysis techniques.

Chapter four presented the Cronbach alpha values as realised in the pilot test, descriptive data analysis and presentation of the findings. Chapter five revealed the hypotheses testing, interpretation as well as the discussion of the findings. Chapter six showed summary, conclusion, recommendations and contributions of the study. The chapter also covered limitations of the study and future research directions.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section deliberates on the theoretical review on corporate governance and firm performance, which encompasses the agency theory, TCT, stakeholder theory and the RDT. In addition, it considers the relationship between corporate governance and firm performance, the effect of firm characteristics on the relationship between corporate governance and firm performance, the effect of external environment on the relationship between corporate governance and firm performance, as well as the joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions.

#### **2.2 Theoretical Foundation**

The discussion of the theoretical review on corporate governance, firm characteristics, external environment and firm performance considered a review of the agency theory, transaction cost theory, stakeholder theory and resource based theory. These theories are explained below.

##### **2.2.1 Agency Theory**

Agency theory was established by Jensen and Meckling in 1976. Strategic management and business applicability has been largely influenced by the agency theory (Donaldson & Davis, 1991). The agency theory states that in modern corporations in which share ownership is widely held, managerial actions depart from those required to maximise shareholders' returns (Noriza & Norzalina, 2007). Jensen and Meckling (1976) asserted

that the owners (principals) and managers (agents) exercise an agency loss which is the degree to which returns to the residual claimants (owners) fall below what they would be if the principals utilize direct control over the corporation. This is because managers of firms typically act as agents of the owners. The owners employ the managers and give them the mandate to manage the firm for the owners' advantage. However managers are mostly concerned with the accomplishment of their own targets which may contrast from the boosting of the firm value aiming at the maximization of the owners' benefit. They will perform in their own interests looking for higher salaries, perquisites, job security and in some cases even direct manipulation of the firm's cash flows. It is apparent that the interests of the manager not only differ but in many circumstances, even oppose to those of the owners. Thus, conflict of interests between the shareholders and the managers is inevitable.

However, (Eriotis et al., 2007) contend that managers have got the authority to oversee the firm. Thus, the owners may only try to discourage these value allocations through monitoring and control, such as supervision by independent directors. But monitoring and control actions presuppose costs, the so-called agency costs. Perfect control is however extremely costly and therefore, shareholders seek to rely on solutions that would not extract large amounts of value from the firm and would also monitor and control managers' operations.

Agency costs are taken as value loss to shareholders arising from divergences of interests between the shareholders and corporate managers. However, the agency problem seems persistent irrespective of the different modern styles of corporate governance. There is the impossibility of perfectly contracting an agent whose

decisions affect his own welfare and the welfare of the principal. Arising from this problem is how to induce the agent to act in the best interest of the principal. Furthermore, many of these studies that test the agency theory have been conducted in industrialized economies and very few in developing economies. The influence of agency theory is that managers attain the authority to manage the firm through supervision, control and monitoring using the independent directors. Agency theory therefore benefited this study through the relationship between corporate governance and firm performance.

### **2.2.2 Transaction Cost Theory**

The TCT was originally introduced by Coase (1937) who tried to explain the existence of firms. Williamson (1985) then developed the idea further and elaborated the dependency of firms on outside partners, leading to shortcomings due to transaction costs, opportunism, information asymmetry and uncertainty. The TCT is considered as the basic theoretical framework that analyses the relation between the service provider and the customer process, implying that the theory embeds and governs both sides of the process. Transaction costs as the costs of negotiating, monitoring, and enforcing the exchanges between parties to a transaction, measure the efficiency of a transaction (Bowen & Shores, 1995). In the process of identifying the costs of coordinating economic activities, TCT is based on two behavioural assumptions, that is, bounded rationality and opportunism. Therefore, in line with those two conditions, transaction costs actually evolve because assets, investment and other process features are transaction-specific. Thus, service provider and customer, as the transaction partners, become dependent on each other.

Nalukenge (2003) posits that the actors face bounded rationality because information is scarce and costly and the capacity for information processing is always limited. Bounded rationality is based on the fact that it is impossible to foresee all potential contingencies of a situation, especially those arising from opportunism, implying that there cannot be a complete contract prior to commitment that covers all contingencies. Opportunism is the reason that contracts exist and cannot be left incomplete. Therefore, the idea that unforeseen contingencies could be met out of cooperation and mutual consideration, does not match reality and takes no account of the occurrence of opportunism. As a matter of fact, TCT tries to bring service providers and customers together since it is a cost of negotiating, monitoring and enforcing exchanges between parties to the transaction, which will ultimately, affect firm performance. TCT promoted this study through the intervening effect of firm characteristics on the relationship between corporate governance and firm performance.

### **2.2.3 Stakeholder Theory**

Stakeholder theory was founded by Freeman (1984). The theory states that in a modern firm, managers are supposed to have an implicit affiliation with both shareholders and other stakeholders (Kock, Santalo & Diestre, 2012). De Villiers and Van Staden (2011a) clarified that the reporting of information by managers is therefore directed not only to shareholders but also to other stakeholders. What makes managers obliged to explain themselves to the stakeholders through disclosure is the necessity to have sustained access to critical resources that might be controlled by the latter (Hill & Jones, 1992). Stakeholders other than shareholders are given an authentic claim on a firm's allocation of resources because of the shared resource dependency (Kock et al., 2012). Therefore, within the stakeholder structure, the principal-agent affiliation is extended

to mean a relationship that exists between a manager and stakeholders (Kock et al., 2012).

The principal-agent relationship predicted in the stakeholder affiliation is weakened with a conflict of interest about how the firm's resources are allocated. Kock et al. (2012) argued that management and stakeholder interests may differ. Arguably, external environment could help support the interests of managers with those of other stakeholders. Kock et al. (2012) contended that government directive or leadership may possibly deliver a legitimate basis for other stakeholders to realize their wishes on management. More importantly for managerial decision-making, government direction potentially creates a decision-making dilemma. First, De Villiers and Van Staden (2011a) expounded that the accessibility of such guidance, or of various voluntary reporting regimes, delivers a compliance platform that signifies a firm's efforts. Second, Kock et al. (2012) reasoned that the presence of such reporting frameworks substantially increases the chances of managers being held personally answerable or liable for any misbehaviour if compliance is imposed. Support for regulation also rests on the premise that regulation of reporting bases on the generally accepted principles; leads to more consistent and comparable reporting; and thereby reduces information asymmetry (De Villiers & Van Staden, 2011b).

In this respect, there is growing evidence that faced with such situations, managers or firms strive to stay ahead of the game by disclosing information in advance when a regulation or a move towards compulsory regimes is signalled by the authorities. De Villiers and Van Staden (2011a) argued that government intervention through various types of legislation adds momentum to a firm's adoption of voluntary initiatives relating to good corporate governance practices. The stakeholder theory hence benefited this

study through the moderating effect of external environment on the relationship between corporate governance and firm performance.

#### **2.2.4 Resource Dependence Theory**

The RDT was initiated by Pfeffer (1972) who stated that boards enable firms to minimize dependence or gain resources. Pfeffer broadly explained how organizations reduce environmental interdependence and uncertainty. Kor and Misangyi (2008) contended that RDT is a more successful lens for understanding boards. Pfeffer (1972) used RDT to examine boards focusing on board size and composition (ownership structure) as indicators of the board's ability to provide critical resources to the firm. Pfeffer (1972) added that ownership structure relates to the firm's environmental needs and those with greater interdependence require a higher ratio of outside directors. He concluded that ownership structure and board size are not random or independent factors, but are, rather, rational organizational responses to the conditions of the external environment. Sanders and Carpenter (1998) also supported that ownership structure is related to a firm's environmental dependence.

The resource dependence approach emphasizes that external directors enhance the ability of a firm to protect itself against the external environment, reduce uncertainty, or co-opt resources that increase the firm's ability to raise funds or increase its status and recognition (Kor & Misangyi, 2008). High proportion of outside directors is believed to be associated with high leverage position. Other researchers find a significantly negative relationship between number of outside directors on the board and leverage. They argue that outside directors tend to monitor managers more actively, causing these managers to adopt lower leverage for getting improved performance

results. Also, firms with higher proportion of outside directors tend to pursue low financial leverage with a high market value of equity.

On the contrary, firms with higher leverage rather have relatively more outside directors, while firms with low percentage of outside directors experience lower leverage (Abor, 2008). Implication of RDT is that directors will bring benefits to organizations such as information in the form of advice and counsel, access to channels of information between the firm and environmental contingencies, preferential access to resources, and legitimacy. Significant empirical evidence supports these proposed benefits, both generally and specifically. For example, Provan (1980) found firms that are able to attract and co-opt powerful members of the community onto their boards are able to acquire critical resources from the environment. The RDT supported this study through the joint effect of corporate governance, firm characteristics and external environment on firm performance.

## **2.3 Empirical Literature Review**

This section spells out literature by the different scholars on corporate governance and firm performance, corporate governance, firm characteristics and firm performance, corporate governance, external environment and firm performance, as well as the joint effect of corporate governance, firm characteristics and external environment on firm performance.

### **2.3.1 Corporate Governance and Firm Performance**

Fitriya and Locke (2012) examined the relationship between corporate governance mechanisms, ownership structure and firm performance. The study yielded different

results due to the nature of the prevailing governance system for each country. The study confirmed the non-linear relationship between the variables. The study used a balanced panel of 79 New-Zealand listed firms and employed a Generalized Linear Model (GLM) for robustness. The results revealed that board of directors, board committees, and managerial ownership have a positive and significant effect on firm performance. On the other hand, non-executive directors, female directors on the board and block-holder ownership had no relationship on firm performance.

Noriza (2010) explored the compliance level among public listed companies with the application of corporate governance code of best practices and the relationship to the firm's capital structure. Corporate governance was looked at using ownership structure relationship with shareholders, financial transparency, information disclosure and Board of Directors (BoD) composition. Capital structure was measured using debt ratio, debt to equity and interest coverage. Methodologically, data was collected from annual reports and data streams for a sample of 126 companies over an eight year period that is, 1998 to 2006. Multiple regression analysis was performed and the findings revealed that most of the concerns conformed well to the code and that there was a significant association to the firm's capital structure.

Tsifora and Eleftheriadou (2007) studied corporate governance mechanisms and financial performance of Greek manufacturing sector. Findings revealed that companies that had an expanding board of directors had better internal control and therefore performed better than companies, with a limited number of members on the board of directors. Firms which belonged to an expanded group of shareholders performed better than those firms which belonged to a small group of shareholders or

are family owned. Firms that introduced corporate governance systems were characterized by high profitability.

Bodaghi and Ahmadpour (2010) focused on the relationship between corporate governance and capital structure of listed companies. Measures of corporate governance employed were board size, board composition, and CEO/chair duality. Impact of shareholding on financing decisions was examined by using institutional shareholding. Similarly effect of controlled variables like firm size and profitability on firms' financing mechanism was examined. Findings revealed that board size was significantly and negatively correlated with debt to equity ratio. However corporate financing behavior was not found significantly influenced by CEO/chair duality and the presence of non-executive directors on the board. However, control variables firm size and return on assets were found to have a significant effect on capital structure. Therefore results suggested that corporate governance variables like size and ownership structure played an important role in predicting the financial mix of the firms.

Abor (2007) conducted a study that analyzed the effect of corporate governance on financing decisions from the Ghanaian perspective. The paper examined the relationship between corporate governance and the capital structure decisions of listed firms in Ghana. The design/methodology/approach was multiple regression analysis that was used to estimate the relationship between the corporate governance characteristics and capital structure. The results revealed that the empirical results showed statistically significant and positive associations between capital structure and board size, board composition, and CEO duality. The results indicated that Ghanaian listed firms pursued high debt policy with larger board size, higher percentage of non-

executive directors, and CEO duality. The results also showed a negative (yet statistically insignificant) relationship between the tenure of the CEO and capital structure, suggesting that, entrenched CEOs employ lower debt in order to reduce the performance pressures associated with high debt capital.

Bhagat and Bolton (2008) looked at how corporate governance was measured and the relationship between corporate governance and performance. The paper shed light on these questions while taking into account the endogeneity of the relationships among corporate governance, corporate performance, corporate capital structure, and corporate ownership structure. The study made three additional contributions to the literature: First, the study found that better governance indices, stock ownership of board members, and CEO-chair separation was positively significant and correlated with better contemporaneous and subsequent operating performance. Second, none of the governance measures were correlated with future stock market performance. In several instances inferences regarding the (stock market) performance and governance relationship depended on whether or not one took into account the endogenous nature of the relationship between governance and (stock market) performance. Third, given poor firm performance, the probability of disciplinary management turnover was positively correlated with stock ownership of board members, and board independence. However, better governed firms were less likely to experience disciplinary management turnover in spite of their poor performance.

In another study, Arshad and Safdar (2009) observed the effect of ownership structure and corporate governance on capital structure. Research objectives included the effects of corporate governance and ownership structure on capital structure decisions, the

impact of shareholding on financing decisions and the influence of controlled variables like firm size and profitability on firms' financing mechanism. Findings revealed that corporate governance and ownership structure have important consequences on the financing decisions.

### **2.3.2 Corporate Governance, Firm Characteristics and Firm Performance**

Adeyemi and Fagbemi (2010) exposed the major corporate collapses and associated frauds which happened in Nigeria and around the world, and raised reservations about the reliability of the functional and financial reporting practices of quoted companies in Nigeria. This stimulated a number of professional and regulatory organizations to support improvements that would improve transparency in financial reporting and thereby increase audit quality and corporate governance practices. Though evidence of corporate governance practices and audit quality existed from developed economies, very few studies had been conducted in Nigeria where corporate governance was just evolving. Their study delivered evidence on corporate governance, audit quality, and firm related attributes from a developing country. Logistic regression was used in examining the questions and findings from the study. The study presented that ownership by non-executive director had the possibility of increasing the quality of auditing. Another evidence that existed was size of the company and business leverage which were important factors in audit quality for companies quoted on the stock exchange. The study advocated that the composition of non-executive directors as members of the board should be sustained and value-adding, in order to augment audit quality.

Nandi and Ghosh (2012) studied corporate governance attributes, firm characteristics and the level of corporate disclosure: Evidence from Indian listed firms. The purpose

of the study was to explore the relationship between firm characteristics, corporate governance attributes and the level of corporate disclosure of listed firms. Methodology used was the standard and poor (2008) model for measuring the level of corporate disclosure and multiple regressions. Findings shown a positive relationship between board size, ratio of audit committee members to total board members, family control, CEO duality, firm size, profitability, liquidity and the magnitude of corporate disclosure. On the other hand, the degree of corporate disclosure is negatively related to board composition, leverage and age of the firm.

Aljifri, Alzarouni, Chew and Tahir (2013) provided empirical evidence of the effect of firm specific characteristics on corporate financial disclosures. A total of 153 public, joint-stock companies, listed and unlisted, were combined at the time of study. Both descriptive statistics and multiple regression analyses were used to test the correlation between the characteristics of firms and the extent of their financial disclosure. Eight hypotheses were documented to examine the relationship between a number of explanatory variables (type of industry, listing status, and return on equity, liquidity, market capitalization, foreign ownership, non-executive directors, and audit committee) and the extent of disclosure in corporate annual reports. The outcomes of the study unveiled that listing status, industry type, and size of firm were found to be significantly correlated to the level of disclosure. This finding not only provided support for previous studies, but was also of relevance to those in the firm which want to appreciate corporate disclosure and should also be of interest to user-groups. This is of great concern to policy makers and regulators who want to improve corporate financial disclosure in their countries.

Al-Shamaileh and Khanfar (2014) argued that the study aimed at identifying the financial leverage ratio and the rate of return of investment on profitability for sources of the funding in tourism companies which operated in Jordan. Their study used some companies related to the tourism sector from the firms that are listed on the Amman Stock Exchange. The study found out that there was a statistically significant impact for financial leverage and ROI of the tourism companies on the profitability (firm performance). The study concluded that the financial leverage and ROI explained 4.4 percentage of changes occurring in the Profitability.

Hartono, Subroto, Djumahir, and Irianto. (2013) found that the effect of firm characteristics with proxies of size, firm age, profitability, leverage and firm growth on the governance quality, and its impact on firm value. The study had two results, first, only firm size affected the governance quality, and firm age, profitability, leverage and firm growth affected corporate governance quality. The larger companies encouraged companies to implement better corporate governance, and better corporate governance quality increased shareholder value. Second, corporate governance quality had an influence on firm value.

### **2.3.3 Corporate Governance, External Environment and Firm Performance**

Jiangyong, Bin and Xiaohui (2009) observed the role of corporate governance and its role from both principal- agent and principal-principal perspectives. The study hypothesized that institutional environments moderated the effects of corporate governance on export behaviour. The examination of a sample of Chinese listed firms supported the argument that outside directors and CEO shareholding facilitated firms in making export decisions, while the influence of ownership concentration was not

single-handedly. The higher the sample of firms' export propensity, the better the institutional environments of their locations. This positive effect of institutional environments comes both directly and from the moderating of the effects of corporate governance.

Booth, Aivazian, Demirguc-Kent and Maksimovic (2002) examined whether regulation can be substitute for internal monitoring mechanisms (percentage of outside directors, officer and director common stock ownership, and CEO/chair duality) to control for agency conflicts in a firm. They established that the percentage of outside directors was negatively correlated to insider stock ownership, not affected by CEO/chair duality. CEO/chair duality was, however, less likely when insider stock ownership increased. Their study revealed that internal monitoring mechanisms was significantly less correlated with regulated firms (banks and utilities). Conclusion was that regulations reduced the influence of managerial decisions on shareholder wealth, and effective internal monitoring of managers were less significant in controlling agency conflicts.

Zehir, Muceldili, Akyuz, and Celep (2010) studied the relationship between IT investment level, IT usage, and IT perception, IT at decision making process, future orientation, technology orientation and firm performance in the comprehensive competitive environment. According to this aim, the authors related literature and after developing a research model and hypotheses, they made numerous analyses. The data of the study was obtained from a sample of different national and multinational companies in Turkey. 158 firms were given the questionnaire which traded on Istanbul Stock Exchange (ISE) and 94 were answered and returned but narrowed the sample to 81 firms which were really answered correctly and carefully. In accordance with

literature, the findings of this study showed that IT investments are vital component of firm performance. If firms managed IT investments successfully, they would enhance firm performance. The study also enlightened not only the practitioners but also the academicians for the future researches.

The study by Dragnic (2014) aimed at broadening the understanding of Small and Medium Businesses (SMBs) as a significant driver of economic development, and particularly related to their market performance, as well as the impact of the internal and external environment on it. However, the scientific and practical contribution of the research transcended national borders, as there were not many similar studies carried out in transitional or small countries or those in the field of fast-growing businesses. The paper provided a more realistic picture of the variability of environmental factors, as well as of the variability of SMBs performance/effectiveness. The study further embraced the period of economic crisis, jeopardizing not only the performance, but also the very survival of businesses in general. This study confirmed that business entity size, life cycle stages, technology and product innovation, organizational autonomy, centralization and formalization, market roles, and type/importance of goals and analyzed external factors like general state of the economy, sector, and type of customers, depended on the period life cycle stage and general state of the economy, exercised more or less significant impact on the performance/effectiveness (sales growth and achievement of goals) of SMBs.

Liang, Jun-Jer and Chih-Chung (2010) contended that the purpose of the study was to aggregate previous research that adopted the Resource-Based View (RBV) to evaluate whether IT and organizational resources have significant effect on firm performance.

The methodology/approach was a framework that included direct and indirect-effect models. A meta-analysis was directed on 42 published empirical studies that inspected how different factors in the RBV affected firm performance. The results discovered that the mediated model that included organizational capabilities as mediators between organizational resources and firm performance explained the value of IT than the direct-effect model without organizational capabilities. Second, technology resources can increase efficiency performance but may not enhance financial performance directly. Additionally, the study established that technology resources increased internal and external capabilities, which in turn influenced firm performance. Organization resources positively affected organizational efficiency through its effect on internal capabilities. The results of this study provided direction for investing and managing organizational IT resources that enhanced their performance. Managers can contribute to enhancing firm performance through transferring IT resources to firm's capabilities.

#### **2.3.4 Corporate Governance, Firm Characteristics, External Environment and Firm Performance**

Ajanthan (2013) said that corporate governance issues have been a growing area of management research especially among large and listed firms. Good corporate governance practices are regarded as important in reducing risk for investors, attracting investment capital and improving the performance of companies. Companies need financial resources and better earnings to promote their objectives. Therefore, factors that affect the capital structure and profitability of companies should be considered carefully. The purpose of the study was to investigate whether there is any relationship among some specific characters of corporate governance, capital structure and profitability of listed hotels and restaurant companies in Colombo stock exchange

(CSE). Eighteen companies were selected from those which were listed in CSE during the 2007 to 2012. The Board Composition (BC), Board Size (BS) and CEO Duality (CEOD) were considered as independent variables, whereas, Debt Ratio (DR), Debt-to-Equity Ratio (DER), Returns on Equity (ROE) and ROA as dependent variables. The results indicated a positive relationship between BS, BC, CEOD, ROE, ROA and DER whereas negative relationship between BS and DR. In addition CEOD had a positive relationship with DR. Furthermore, none of the variables had a significant relationship with capital structure and profitability.

Montabon, Sroufe, Narasimhan, and Wang (2002) studied environmental practices and firm performance from 45 "environmentally conscious" firms which gathered information from their corporate annual reports. Content analysis and set correlation analysis were performed to explore the relationships between a set of environmental practices and a set of performance measures. Results indicated environmental practices have significant impacts on firm performance.

#### **2.4 Summary of Previous Studies**

The studies reviewed in sections 2.3.1 to 2.3.4 present mixed findings of corporate governance, firm characteristics and external environment on firm performance, arising from different methodologies used, definition of variables or contextual factors. The empirical analysis of relationship between corporate governance, firm characteristics, external environment and firm performance has yet to provide a substantial causal link among their effects. Good corporate governance practices are regarded as important in reducing risk for investors, attracting investment capital and improving the performance of financial institutions.

A number of conceptual, methodological and contextual research gaps arise from the analysis of the issues examined in this chapter. The contextual gap arises from the fact that perhaps the most important factor blamed for the corporate failure consequences from the economics and corporate crises arises from the weakness of corporate governance. This study has provided more evidence especially in the context of Uganda. The introduction of a moderating and an intervening variable, explained conclusively the relationship between corporate governance and firm performance of financial institutions.

The conceptual gap is that most studies on the performance of financial institutions have not controlled for any intervening or moderating variable. If variables such as firm characteristics and external environment are introduced, then the relationship between corporate governance and firm performance may be different. This study introduces firm characteristics as an intervening variable and external environment as a moderating variable in an effort to clarify further the relationship between corporate governance and firm performance of financial institutions. In addition, none of the studies has considered the four variables studied together. This study has tested the joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions in Uganda.

The methodological gap arises because performance of financial institutions has been expressed in terms of ROA, ROE, ROI, profitability and non-financial measures. This study however, evaluated the performance of financial institutions using the CAMEL model, which measures the performance of financial institutions from each of the

important parameters of capital adequacy, assets quality, management efficiency, earning quality and liquidity.

Table 2.1: Summary of Empirical Literature Review

Author(s)	Study	Objectives	Methodology	Findings	Knowledge Gap	How Current Study Addresses the Gap
Wanyama et al. (2013)	Stakeholder accountability and evidence from Uganda	<ul style="list-style-type: none"> <li>i) How is corporate governance understood in the Ugandan context?</li> <li>ii) What do stakeholders perceive the current state of corporate governance and accountability in Uganda to be?</li> <li>iii) What factors influence the day-to-day practice of corporate governance?</li> <li>iv) To what extent (in both theory and practice) does the Ugandan legal system protect the rights of shareholders and other stakeholders?</li> </ul>	The study employed interviews and questionnaires to gauge the views of key players in Uganda.	<ul style="list-style-type: none"> <li>i) Corporate governance concept with recognition of a wide range of stakeholders was evident.</li> <li>ii) Issues relating to corruption and de-facto legal framework mean that practices depart markedly from any reasonable understanding of what might represent best practice.</li> </ul>	<ul style="list-style-type: none"> <li>i) Though the study was conducted in Uganda and covered governance practices, it did not focus on ownership structure, information disclosure and financial transparency as measures of governance practices.</li> <li>ii) The study did not also look at financial performance as one of its variables.</li> </ul>	<ul style="list-style-type: none"> <li>i) This study looked at ownership structure, information disclosure and financial transparency</li> <li>ii) This study looked at financial performance</li> </ul>
Nkundabanyanga et al. (2013)	A model for effective board governance in Uganda's service sector firms	<p>The study based on the following objectives:</p> <ul style="list-style-type: none"> <li>i) Evaluate the effectiveness of board governance</li> <li>ii) Assess the conduct and meetings in the organization.</li> <li>iii) Determine board governance evaluation and their roles</li> <li>iv) Examine the effectiveness of communication and leadership</li> </ul>	This study was cross-sectional conducted using analysis of moment structures software on a sample of 128 service firms in Uganda. Perceived effective board governance in Uganda was measured by perceptions of 128 respondents who were managers or directors in each of those service firms	<ul style="list-style-type: none"> <li>i) Revealed that a three dimension of effective board governance that is control of and meetings of organization, board activity and effective communication are key factors that improve board governance in Uganda's service sector firms.</li> </ul>	<ul style="list-style-type: none"> <li>i) The study only focused on the service sector. Results may be otherwise, if other sectors in Uganda are considered.</li> <li>ii) The study did not focus on ownership structure, information disclosure and financial transparency as its measures of governance practices.</li> </ul>	<ul style="list-style-type: none"> <li>i) This study focused on financial institutions in Uganda</li> <li>ii) This study focused on ownership structure, information disclosure and financial transparency as measures of corporate governance practices</li> </ul>
Okoye and Eze (2013)	Effect of bank lending rate on the performance	<ul style="list-style-type: none"> <li>i) Determine the effects of lending rate and monetary policy</li> </ul>	The study utilized secondary data	The results confirmed that:	<ul style="list-style-type: none"> <li>i) Although study used secondary data, time</li> </ul>	<ul style="list-style-type: none"> <li>i) This study related regulations (firm</li> </ul>

	of Nigerian deposit money banks	rate on the performance of Nigerian deposit money banks ii) Analyse how bank lending rate policy affects the performance of the banks.	econometrics in a regression, where time-series and quantitative design were combined and estimated	i) The lending rate and monetary policy rate has significant and positive effects on the performance of Nigerian deposit money banks	series and quantitative design, the study did not focus on influence of regulation on financial performance ii) Study did not relate to corporate governance practices and firm characteristics	characteristics) to financial performance ii) This study focused on corporate governance practices and firm characteristics
Adeyemi and Fagbemi (2010)	Audit quality, corporate governance and firm characteristic in Nigeria	The purpose of the study resulted because of major corporate collapses and related frauds (mis-managed financial performance) which occurred in Nigeria and around the world that raised doubts about the credibility of the operating and financial reporting practices of quoted companies in Nigeria	Logistic regression was used.	i) Findings from the study show that ownership by non-executive director has the possibility of increasing the quality of auditing. ii) Evidence also exist that size of the company and business leverage are important factors in audit quality for companies	i) Although the study focused on ownership structure as a measure of corporate governance, it did not look at information disclosure and financial transparency as other measures of corporate governance practices ii) Although size and leverage have been studied, they left out age of firm as measure that influences financial performance	i) This study focused on information disclosure and financial transparency as other measures of corporate governance practices ii) This study considered age of the firm as a measure firm characteristics
Bodaghi and Ahmadpour (2010)	The effect of corporate governance and ownership structure on capital structure of Iranian listed firms	Study looked at effect of corporate governance and ownership structure on capital structure of Iranian listed companies Specific objectives were: i) Relationship between corporate governance and capital structure ii) Impact of shareholding on financing decisions influence of controlled variables like firm size	Secondary data, correlation and regression analysis were used	Corporate governance and ownership have important implications on financing decisions.	i) The study did not relate the variables to financial performance.	This study related corporate governance practices indicators to financial performance

		and profitability on firms' financing mechanism.				
Tsifora and Eleftheriadou (2007)	Corporate governance mechanisms and financial performance: Evidence from Greece manufacturing sector	Study was guided by following objectives: i) Companies that have an expanding BoD have better internal control and perform better than companies, with a limited number of members on BoD ii) Firms, which belong to an expanded group of shareholders, perform better than those firms, which belong to a small group of shareholders or are family owned.	Correlation and regression analysis were applied	Firms that introduced corporate governance systems are characterized by high profitability.	i) The study did not take into account information disclosure and financial transparency as measures of corporate governance practices. ii) The study did not focus on firm characteristics and external environment.	i) The study took into account information disclosure and financial transparency as measures of corporate governance practices ii) The study focused on firm characteristics and external environment
Booth et al. (2002)	Capital structures in developing	General objective was to: i) Examine whether regulation can be used to substitute for internal monitoring mechanisms (percentage of outside directors, officer and director common stock ownership, and CEO/chair duality) to control for agency conflicts in a firm.	Empirical hypotheses were developed using a cross section of data of firms obtained from Fortune's website custom ranking feature. OLS and probit regression were applied	i) Found that, percent of outside directors was negatively related to insider stock ownership, but was not affected by CEO/chair duality. ii) CEO/chair duality was however, less likely when insider stock ownership increased. iii) Revealed that internal monitoring mechanisms are significantly less related with regulated firms	i) The study did not address other firm characteristics like interest rates ii) The study did not relate regulations to financial performance iii) The study did not focus on information disclosure and financial transparency as indicators of corporate governance practices	i) This study focused on interest rates as an indicator of firm characteristics ii) This study related regulations (external environment) to financial performance iii) This study focused on information disclosure and financial transparency as measures of corporate governance practices
Bharadwaj (2000)	A resource based perceptive in information technology capacity and firm performance: An empirical investigation	The study developed the concept of IT as an organizational capability and empirically examined the association between IT capability and firm performance	Matched sample comparison group methodology was employed to assess relationship between superior IT capability and firm performance	Results indicated that firms with high IT capability tended to outperform a control sample of firms on a variety of profit and cost-based performance measures	Though the study compared IT capability with firm performance, and did not look at other factors of external environment like	This study focused on regulations and interest rates as other factors of external environment affecting financial performance

					regulations and interest rates	
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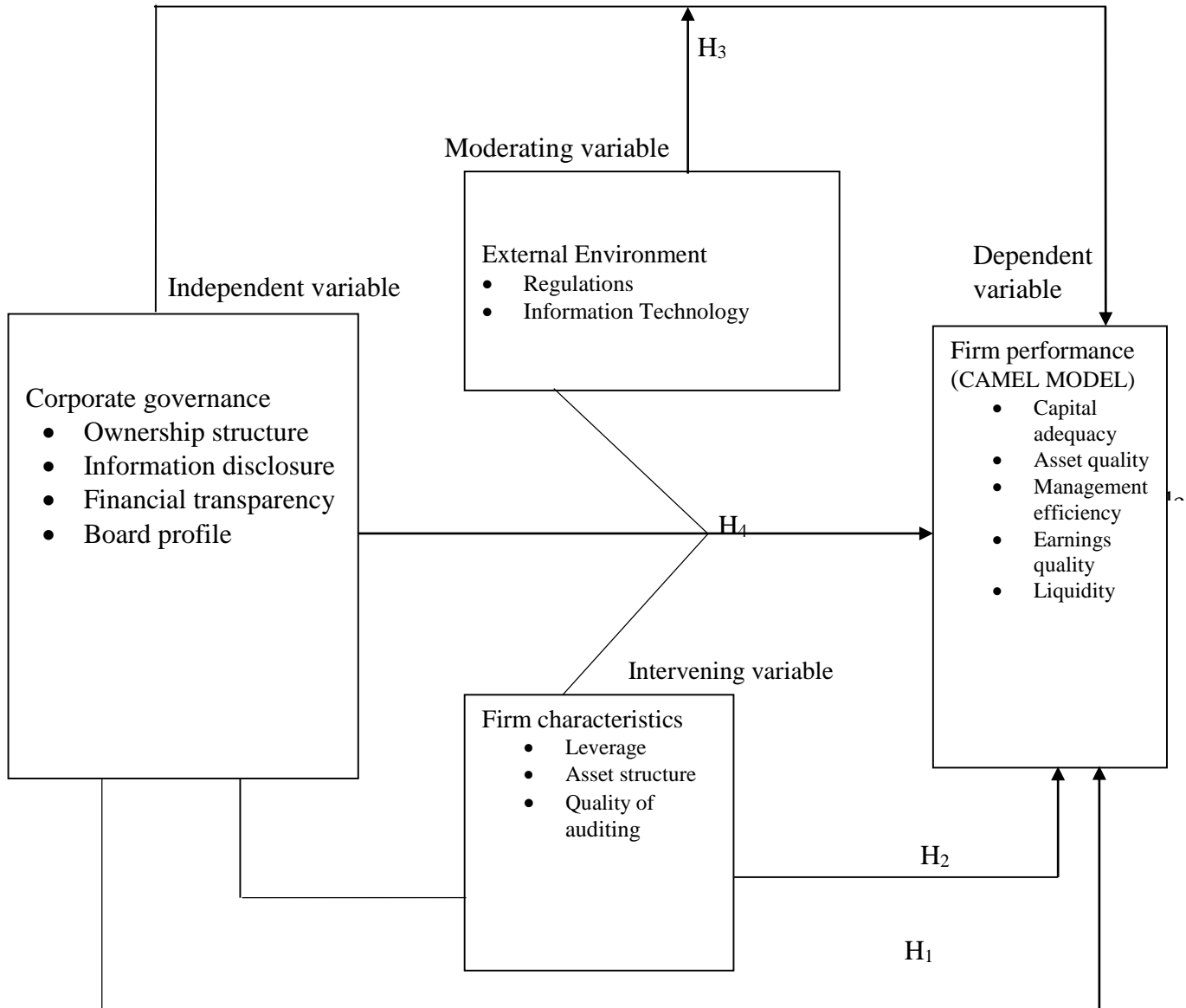
## **2.5 Conceptual Framework**

The knowledge gaps highlighted in section 2.3 led to the development of the conceptual model below which was adopted to guide empirical research in filling the gaps identified from the review of conceptual and empirical literature. From the model, corporate governance is the independent variable while firm performance is the dependent variable. The external environment is the moderating variable while firm characteristics is the intervening/mediating variable. Corporate governance was measured using ownership structure, information disclosure, financial transparency and board profile. La-Porta et al (1999) and Claessens et al., (2000) ushered in the conception of ultimate controller; they define firm ownership as voting rights, unearthing that many controlling shareholders predominate firms by means of pyramid structure and cross holding, which could result in central agency problem. Financial transparency was defined as the extent to which investors have timely, meaningful, reliable and ready access to any required financial information about a company (Akhtaruddin, 2005; Nurwati & Nordin, 2009; Wanyama et al., 2013). Board profile was considered using gender, board composition and CEO duality.

Firm characteristics are attributes that have been analysed as an intervening/mediating variable of the relationship between corporate governance and firm performance. Firm characteristics was measured using leverage, asset structure and quality of auditing (Abor, 2008). Galbraith et al. (2008) viewed external business environment as the totality of factors outside an organisation that are taken into consideration by an organisation in its decision making. These factors depend largely on the complexity and dynamism of the environment (Dess & Beard, 1984). External environment was measured using regulations and information technology.

Firm performance is how well a firm can use its assets as a primary mode of business to generate revenues and profits (Deger & Adem, 2011; Samina & Ayub, 2013). Firm performance was measured using CAMEL model. However, studies have provided conflicting results and therefore other variables that intervene and moderate the relationships have been suggested. It is explicit from the review of literature that the variables have been investigated individually and the relationships established. The relationship between corporate governance and firm performance has been established by scholars. The model supports this direct relationship between corporate governance and firm performance. The model further proposed that the relationship between corporate governance and firm performance is intervened by firm characteristics and moderated by the external environment. These are the relationships that have not been established which this study seeks to investigate.

Figure 2.1: Conceptual Model



(Source: Author, 2016)

## **2.6 Conceptual Hypotheses**

The null hypotheses that were tested included:

- H<sub>1</sub>: There is no significant relationship between corporate governance and firm performance of financial institutions in Uganda.
- H<sub>2</sub>: There is no significant intervening effect of firm characteristics on the relationship between corporate governance and firm performance of financial institutions in Uganda.
- H<sub>3</sub>: There is no significant moderating effect of external environment on the relationship between corporate governance and firm performance of financial institutions in Uganda.
- H<sub>4</sub>: There is no significant joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions in Uganda.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter looked into the research philosophy, research design, population and sample size of the study, sampling techniques, data collection, reliability and validity tests, operationalization of variables, data analysis, as well as ethical issues.

#### **3.2 Research Philosophy**

Research philosophy or paradigm is the foundation of knowledge and the nature of that knowledge which contains important assumptions about the ways in which researchers view the world (Taurigana & Chithambo, 2014). Research philosophy also involves the underlying assumptions upon which research and development in the field of inquiry is based. The dominant philosophical orientation in social sciences is phenomenology and positivism. Positivism or empiricism was first embraced in the 19<sup>th</sup> century by Auguste Comte who emphasized the importance of scientific rigour in quest for knowledge. Cooper and Schindler (2006) posit that positivism is based on real facts, objectivity, neutrality, measurement and validity of results. Positivism emphasizes that knowledge should be based on facts and not abstractions and therefore knowledge is demonstrated through observations and experiments based on existing theory. The researcher followed a pattern of deductive reasoning beginning with a linear approach of formulating hypotheses and operational definition about the characteristics of phenomena being observed based on agency theory, TCT, stakeholder theory and RDT, testing hypotheses based on statistical methods, and consequently leading to either rejecting or failing to reject the hypotheses.

On the other hand, phenomenological paradigm involves qualitative approach of research. Phenomenology speculates that knowledge is subjective, is based on experiences, and depends on personal knowledge and interpretation of the individual. The approach also emphasises that the world as experienced by a person and not the world or reality as something separate from the person (Saunders, Lewis, & Thornhill, 2007). Critics of positivism research identified its inadequacy and inappropriateness in explaining social matters, which surround human activity. The phenomenology orientation alleges to gain understanding of social context of an organization/firm by attempting to appreciate social processes of an organisation and how employees of the organisation perceive them (Kempster & Parry, 2011; Yeung, 1997).

Critical realism is appreciated as a middle way between positivism and phenomenology. Under critical realism, researchers are required to adopt both positivistic and phenomenology approaches to social investigation for data enrichment. In this regard, critical realism simultaneously confronts the objectivist and subjectivist dimensions of social research which constitute the theoretical formulations of knowledge (Kempster & Parry, 2011; Yeung, 1997). This emphasizes that the world exists independently of what we think and that observable events are being causally generated from complex interactions of mechanisms, therefore providing information on the existence of the unobservable entities. The purpose of critical realism is to provide a framework for the discovery of observable and non-observable social realities. Therefore, critical realism rejects the dichotomy between positivism and phenomenology and advocates for a triangulation between the two paradigms. However, this study focused on the positivism approach.

### **3.3 Research Design**

Sekaran (1992) pointed that research design involves the way a study is planned, conducted, the procedures and techniques employed to answer the research questions. The study adopted descriptive cross-sectional survey design. The cross-sectional survey design was believed to be appropriate for this study because it augments uniform data collection and comparison across many respondents at one point in time. It also offers the researcher the opportunity to capture population characteristics and test hypotheses both quantitatively and qualitatively.

Cross sectional studies have been found to be robust in relationships studies given their ability to capture the population characteristics in their free and natural occurrence (O'Sullivan & Abela, 2007). A cross sectional approach enhances the credence of results by providing conclusions on data at a given point in time. Other researchers like (Nkundabanyanga et al., 2013; Tutar, Altinoz, & Cakiroglun, 2011) used similar research design for similar studies.

### **3.4 Population and Sample**

The population of the study encompassed financial institutions in Uganda. These consisted of commercial banks (25), insurance companies (21) and Micro-Finance Institutions (78), (Bank of Uganda, 2014). Given the small population to the study, a census study was performed with data collected from 103 financial institutions (commercial banks, 11; MFIs, 71 and insurance companies, 21) representing 97.2 percent as presented in table 3.1. These financial institutions were chosen because they dominate the financial sector in Uganda and also there is an increasing recognition that financial sector development is a top priority to sustain economic growth in developing countries, particularly among the more successful reformers, such as Uganda.

Table 3.1: Population and Sample Size

Financial Institution	Population	Actual Response
Commercial Banks	25	11
Insurance Companies	21	21
Micro Finance Institutions	78	71
Total	106	103

Source: Author, 2016

### 3.5 Data Collection

Both primary and secondary data was collected. Primary data was obtained through a semi-structured questionnaire (Appendix I) that consisted of four sections namely; general information, corporate governance practices, firm characteristics and external environment. Data was collected from respondents on a five point likert – type scale where 1 was for strongly disagree and 5 for strongly agree. Shabarati et al. (2010), Cabrita and Bontis (2008) are some of the scholars who have utilized the likert type of scale. The questionnaire were administered by trained research assistants and employed the drop and pick method. An introductory letter from University of Nairobi (UON) explaining the purpose of the study accompanied the questionnaires. Additionally, secondary data (Appendix II) was obtained from the financial institutions’ annual financial statements and other filings covering a period of 3 years from 2012 to 2014. Secondary data generally has a pre-established degree of validity and reliability which need not be re-examined by the researcher who is re-using such data (Church, 2001). In addition, this data is considered essential since it is impossible to conduct a new survey that can adequately capture past change and/or developments. Mwalati, Maniagi, Ondiek, Musiege, and Maokomba (2013), and Nampewo (2013) also used study periods that were more than one year.

### **3.6 Reliability and Validity Tests**

Sekaran (1992) posited that reliability involves the extent to which a measuring instrument contains variable errors that is, errors that appear inconsistently from observation to observation during any measurement attempt or that vary each time a given unit is measured by the same instrument. The reliability of data collection instruments was estimated using the cronbach alpha coefficient which assessed the internal consistency or homogeneity among the research instrument items. The alpha coefficient ranges from 0 to 1 with a high coefficient implying that the items correlate highly among themselves. Nunnaly (1978) recommended that only constructs with a cut-off of 0.7 and more will be considered for further analysis in the study. In addition, Cronbach and Shavelson (2004) contend that the Alpha can take any value from zero (no internal consistency) to one (complete internal consistency) where 0.7 was the acceptable limit. The regression models were also subjected to specification tests of normality, linearity, multi-collinearity homogeneity and structural equation modelling to determine how well the regression assumptions were held. Shabarati, Jawad and Bontis (2010) include some of the scholars who used reliability test in their studies. Furthermore, a pre-test of the questionnaires was done before data collection.

Cabrita and Bontis (2008) contend that validity is concerned with the statement whether the researcher is measuring what is intended to be measured. They add that validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. Validity can be measured in three forms; face, content and construct validity. Face validity is the extent to which the instrument is subjectively viewed as covering the concept it purports to measure. Content validity, sometimes called logical or rational validity, is the estimate of how much a measure represents every single element of a construct. Construct validity refers to the extent to which operationalizations of a construct do actually measure what the theory says they do (Leedy & Ormrod, 2005).

Additionally, in the line with validity, Common Methods Variance (CMV) approach was adopted in order to check the strength of the instrument. Common method variance is attributable to the measurement method rather than to the constructs the measures represent (Podsakoff, Mac-Kenzie, Lee, & Podsakoff, 2003). CMV creates a false internal consistency creating correlation among variables generated by their common source. CMV is strongest when both the dependent and focal explanatory variables are perceptual measures derived from the same respondent. Podsakoff et al. (2003) further posited that CMV is a problem because it is one of the main sources of measurement error which impends the validity of the conclusions about the relationships between the measures.

### **3.7 Operationalization of Research Variables**

Shabarati et al. (2010) contend that operationalization of variables is the measurement procedure bridging the conceptual-theoretical level with the empirical observation level. It is the procedure in which a researcher assigns numerals or numbers and other symbols to the study variables. Corporate governance was divided into four sub-variables namely, ownership structure, information disclosure, financial transparency and board profile; Firm characteristics was divided into three sub-variables: leverage (considered from 2012 to 2014), asset structure and quality of auditing; External environment was divided into two sub-variables: regulations and information technology; and firm performance deliberated on capital adequacy, asset quality, management efficiency, earnings quality and liquidity. These indicators were tested for three years, 2012 to 2014.

### **3.8 Data Analysis**

The data collected was used to establish the relationships between variables and also tested hypotheses. The data was therefore classified and tabulated before analysis. The analysis was based on the information obtained from the financial institutions' annual financial statements and other filings as well as the questionnaires. The data was then edited for accuracy, consistency and completeness. Descriptive statistics like frequency distributions, graphs, mean scores, standard deviations and coefficient of variation were used to describe the basic features of the data. Diagnostic tests were performed, a Pearson product moment correlation ( $r$ ) analysis was made to determine the direction of association among the variables and in addition, hierarchical linear relationship (regression) was used whereby an outcome variable was predicted as a function of a linear combination of one or more variables. Mediation and moderation effects were tested using statistical measures as well as graphical measures, that is, the med-graph and mod-graph respectively (Jose, 2013). Factor analysis and the partial least square modelling were also employed. Statistical Package for Social Sciences (SPSS) was considered for analysis.

Table 3.2: Operationalisation of Research Variables

Variable	Variable Name	Indicator	Measurement	Data Type	Level of Measurement
Independent variable	Corporate governance	Ownership structure Information disclosure Financial transparency Board profile	1=strongly .....disagree 5= strongly agree  (Section II, No. 1-20)	Likert-scale	Interval
Intervening variable	Firm characteristics	Leverage	Total debt/total assets	Real value	Ratio
		Asset structure	1=strongly .....disagree 5= strongly agree	Likert-scale	Interval
		Quality of auditing	1=strongly disagree 5= strongly agree (Section III)	Likert-scale	Interval
Moderating variable	External environment	Regulations IT	1=strongly..... disagree 5= strongly agree (Section IV)	Likert scale	Interval
Dependent variable	Firm performance	Capital adequacy	D/E ratio and Adv/Ast	Real value	Ratio
		Asset quality	NNPAs/TA, NNPAs/NA and change in NPA	Real value	Ratio
		Management efficiency	TA/TD, PAT/ANW and PAT/No. of employees	Real value	Ratio
		Earning quality	PAT growth, ROA= $\frac{EBIT}{TA}$	Real value	Ratio
		Liquidity	LA/TA and LA/TD	Real value	Ratio

Source: Author, 2016

Table 3.3: Analytical Interpretation of Data

Objective	Hypothesis	Analytical Model	Analysis Techniques	Interpretation
Examine the relationship between corporate governance and firm performance of financial institutions in Uganda	H <sub>1</sub> : There is no significant relationship between corporate governance and firm performance	H <sub>1</sub> : $FP = \beta_0 + \beta_1 CG + \epsilon$ where FP= Firm performance CG = Corporate governance, $\beta_0$ = Intercept, $\beta_1$ = coefficients and $\epsilon$ = error term	Correlation, regression, factor analysis and goodness of fit tests	Relationship exists if $\beta_1$ is significant
Investigate the intervening effect of firm characteristics on the relationship between corporate governance and firm performance of financial institutions in Uganda	H <sub>2</sub> : There is no significant intervening effect of firm characteristics on the relationship between corporate governance and firm performance	H <sub>2</sub> : $FP = \beta_0 + \beta_1 CG + \epsilon$ $FC = \beta_0 + \beta_1 CG + \epsilon$ $FP = \beta_0 + \beta_1 FC + \epsilon$ $FP = \beta_0 + \beta_1 CG + \beta_2 FC + \epsilon$ where FC= Firm characteristics	Correlation, regression, factor analysis and goodness of fit tests	Relationship exists if $\beta_1$ , $\beta_3$ and $\beta_5$ are significant
Examine moderating effect of external environment on the relationship between corporate governance and firm performance of financial institutions in Uganda	H <sub>3</sub> : There is no significant moderating effect of external environment on the relationship between corporate governance and firm performance	H <sub>3</sub> : $FP = \beta_0 + \beta_1 CG + \beta_2 EE + \beta_3 CGP*EE + \epsilon$ where, EE= External environment	Correlation, regression, factor analysis and goodness of fit tests	$\beta_3$ should be significant for EE to qualify as a moderating factor
Examine the joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions in Uganda	H <sub>4</sub> : There is no significant joint effect of corporate governance, firm characteristics and external environment on firm performance	H <sub>4</sub> : $FP = \beta_0 + \beta_1 CG + \beta_2 FC + \beta_3 EE + \epsilon$	Correlation, regression, factor analysis and goodness of fit tests	Relationship exists if at least one of $\beta_1$ . $\beta_3$ is significant

Source: Author, 2016

### 3.9 Ethical Issues

Nachmias and Nachmias (2009) assert that ethical issues are related to research participants' rights and welfare and researcher's obligations as key issues in the social sciences. Conducting research that may violate the rights and welfare of research participants is neither the intent nor the major interest of social scientists. The sole objective of research is to contribute to the development of systematic and verifiable knowledge. In this regard, the information was kept private, anonymous and confidential.

## **CHAPTER FOUR**

### **DESCRIPTIVE DATA ANALYSIS AND PRESENTATION OF FINDINGS**

#### **4.1 Introduction**

This chapter presents results on data analysis, interpretation and discussion, specifically on the reliability and validity tests. In addition, tests of normality, multicollinearity, and homoscedasticity, relationships between and among study variables, regressions, factor analysis as well as partial least square modelling were done.

#### **4.2 Reliability and Validity Tests**

A pilot study revealed that the questionnaire used was effective in collecting the relevant data. An earlier form of the questionnaire was first discussed with the supervisors before pre-testing. The aim was to improve the reliability and validity of the data that would be used in the study. The questionnaires were presented to 15 financial managers of selected financial institutions in Uganda with the aim of improving and dropping the un-necessary statements from the questionnaire. Reliability of the data was equally tested using Cronbach's alpha for all Likert scale questions of the questionnaire. Nunnally (1978) recommended that only constructs with a cut-off of 0.7 and more can be considered for further analysis in the study. In addition, Cronbach and Shavelson (2004) contend that the alpha can take any value from zero (no internal consistency) to one (complete internal consistency) nonetheless 0.7 is preferred as the acceptable limit. Cronbach's alpha values for corporate governance, firm characteristics and external environment were 0.78, 0.89 and 0.81, respectively for the pilot study as shown in Table 4.1 below. This therefore qualified the variables for further analysis since all the scores were above 0.7.

Table 4.1 Composite Reliability

Latent variable	Dimensions	Standardized Cronbach's Alpha
Corporate Governance	4	0.78
Firm Characteristics	3	0.89
External Environment	2	0.81

Source: Author, 2016

In addition, validity, if not properly done can endanger the meaning of data collected. For the purpose of this study, the questionnaire was pre-tested with 15 respondents/managers from the sample of the study who were asked to respond to the questions in the research instrument with the purpose of pre-testing it, in order to improve the data collection instrument (Sekaran, 1992). In addition, methodological separation was considered, that is, while the independent/predictor variable was all in “agree”, “disagree” Likert type of questions, the dependent/criterion variable, was a quantitative variable using financial ratios.

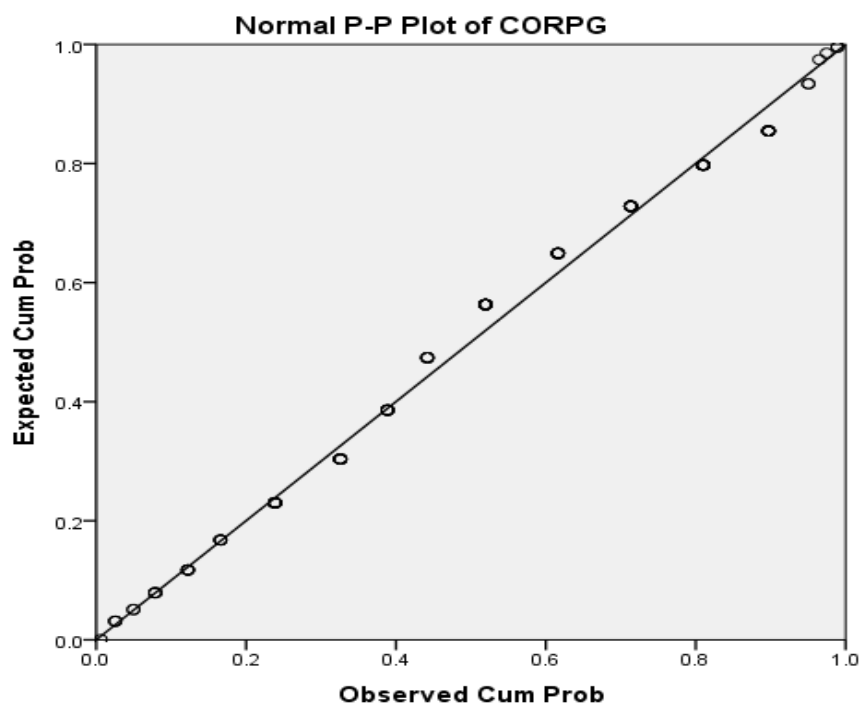
#### **4.3 Tests for Normality, Multicollinearity and Homoscedasticity**

In order to use the parametric tests or tools of analysis, the study variables were subjected to diagnostic tests on the assumptions of Ordinary Least Square (OLS). These included normality, multicollinearity and homogeneity. Statistical analysis, which uses linear regression assumes that the data is linear. Correlation, regression, F-tests, and ANOVA analyses among others are used based on the assumption that data is normally distributed, that there is no multicollinearity and that data is homoscedastic. Normality tests allow for inferences about the population, lack of multicollinearity ensures stability of results whereas homogeneity certifies that standard errors are not over or under- estimated.

Normality is used to describe a symmetrical, bell-shaped curve, which has the greatest frequency of scores in the middle with smaller frequencies towards the extremes (Pallant, 2005) - this was tested statistically and graphically. Normality can be tested by the use of descriptive statistics with skewness, kurtosis, histograms, Probability-Probability (P-P) plots and Quantile-Quantile (Q-Q) plots as well as Sharpiro-Wilk statistics to check if there were variations in the data under study. For this study, P-P plots, histograms as well as Sharpiro–Wilk statistics were employed.

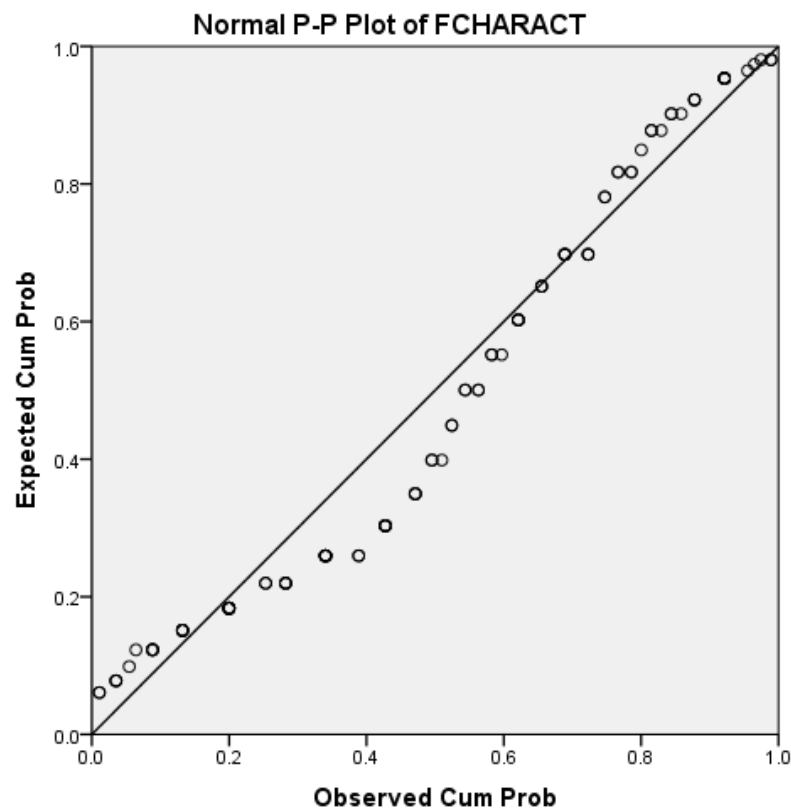
The P-P plots were used to evaluate skewness of the distribution. All the P-P plots of the study variables corporate governance, firm characteristics, external environment and firm performance points, fell on and very close to the straight lines, an indication that the variables were normally distributed as shown in Figures 4.1 to 4.4 below

Figure 4.1: Probability-Probability Plot on Corporate Governance



The greater the deviation, the more non-normally distributed the residuals. The straight line represents a normal distribution and the points represent the observed residuals of corporate governance. Therefore, in a perfectly normally distributed data set, all points will lie on the 45 degrees line. The P-P plot, in Figure 4.1, on corporate governance indicated that the plots were near the line, an indication that corporate governance was normally distributed.

Figure 4.2: Probability-Probability Plot on Firm Characteristics



The P-P plot in Figure 4.2 above, on firm characteristics indicated that most of the plots were close to the 45 degrees line, an indication that firm characteristics was normally distributed. In addition, the P-P plot in Figure 4.3 below, on external environment showed that the plots was on the 45 degrees line, an indication that external environment was normally distributed and the P-P plot in Figure 4.4 below, on firm performance indicated that the plots were along the 45 degrees line, an indication that firm performance was normally distributed.

Figure 4.3: Probability-Probability Plot on External Environment

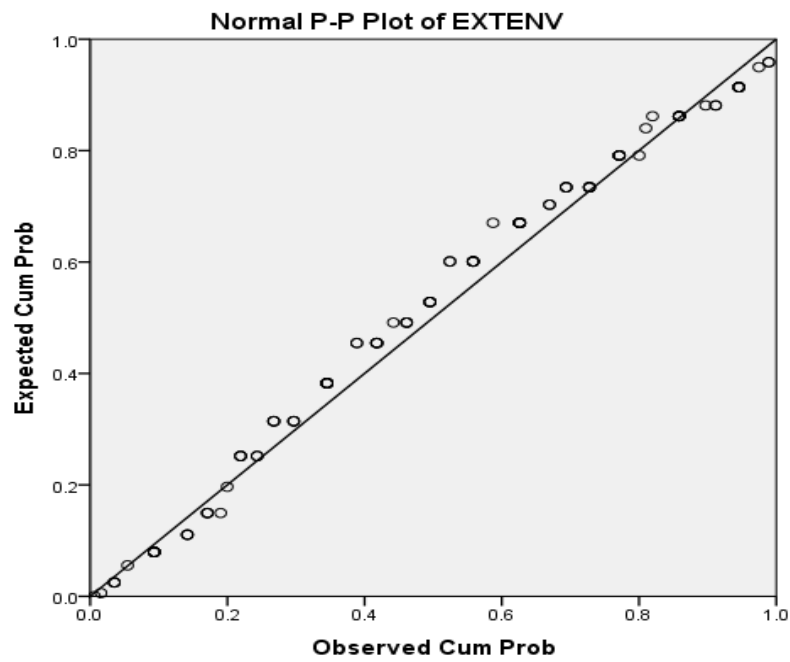
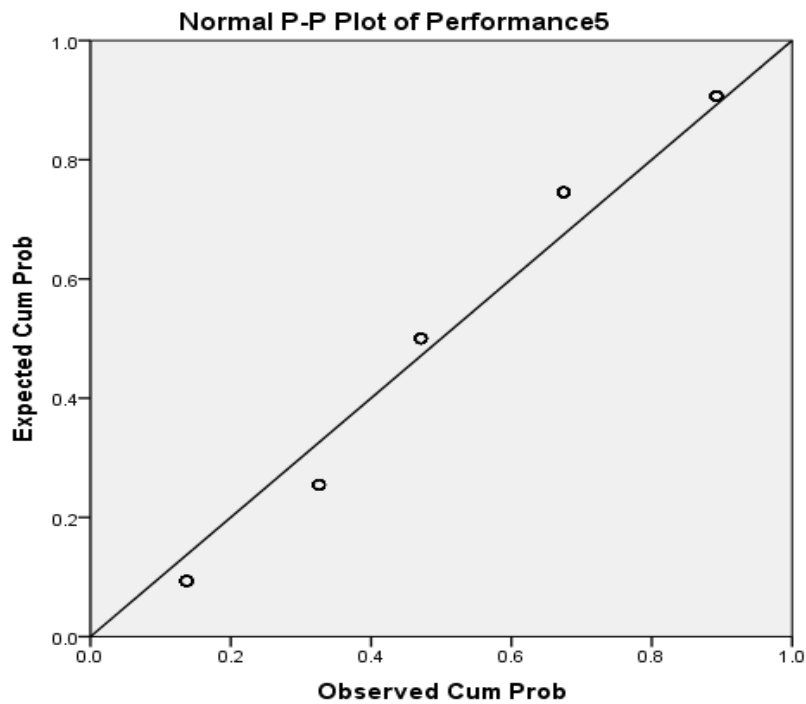


Figure 4.4: Probability-Probability Plot on Firm Performance



A histogram is a symmetrical, bell-shaped curve, which has the greatest frequency of scores in the middle with smaller frequencies towards the extremes (Pallant, 2005). All the histogram for the study variables namely Figure 4.5 to 4.8 below exhibit normally distributed patterns of the study variables.

Figure 4.5: Histogram on Firm Characteristics

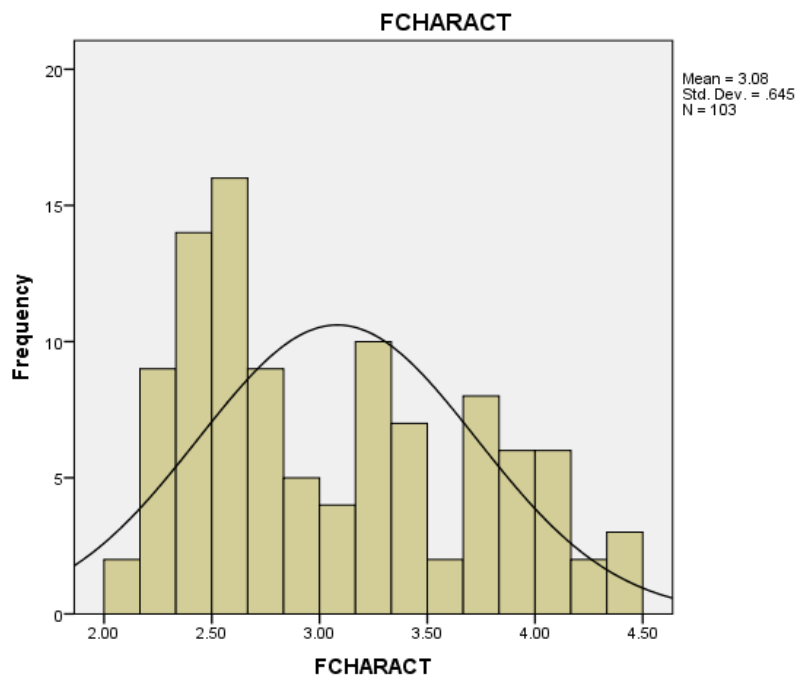


Figure 4.5 above displays the superimposed curve showing that firm characteristics was normally distributed since most of the data values was under the bell shaped curve. In addition, the Figure 4.5 displays the greatest frequency of scores was in the middle with smaller frequencies towards the extremes implying that firm characteristics was normally distributed.

Figure 4.6 below presents the superimposed curve with almost all of the data lying below the bell-shaped curve and also, shows that the greatest frequency of scores was in the middle with smaller frequencies towards the extremes implying that corporate governance was normally distributed.

Figure 4.6: Histogram on Corporate Governance

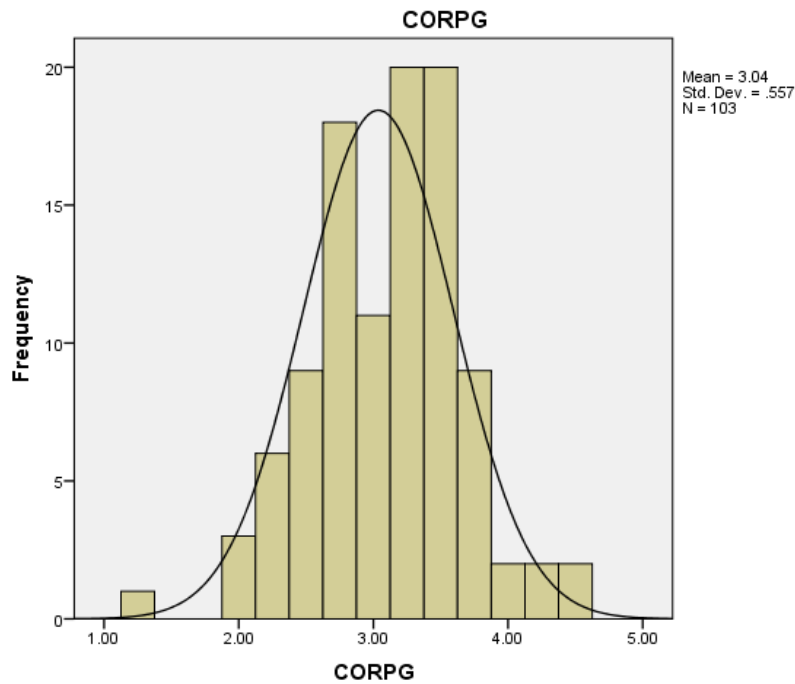


Figure 4.7: Histogram on External Environment

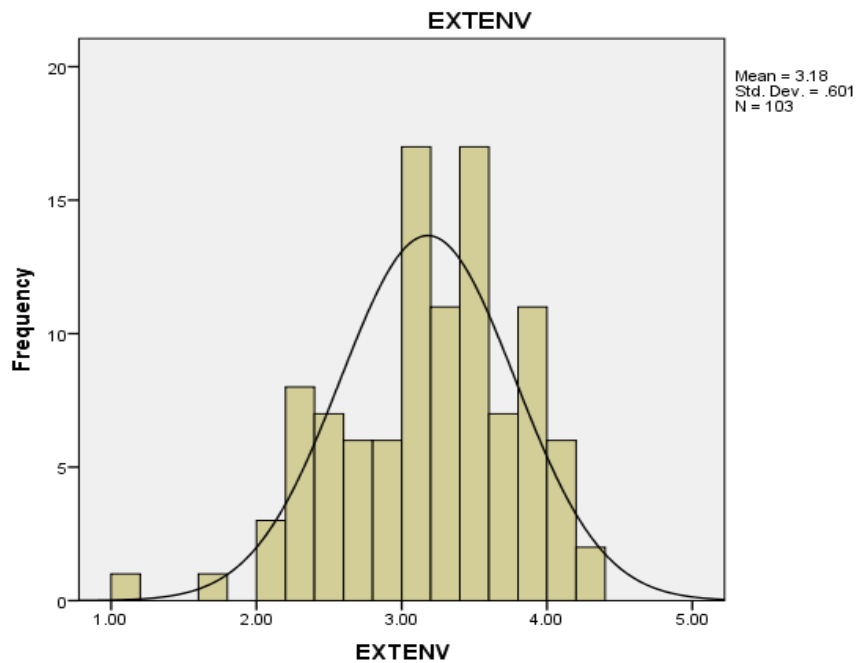
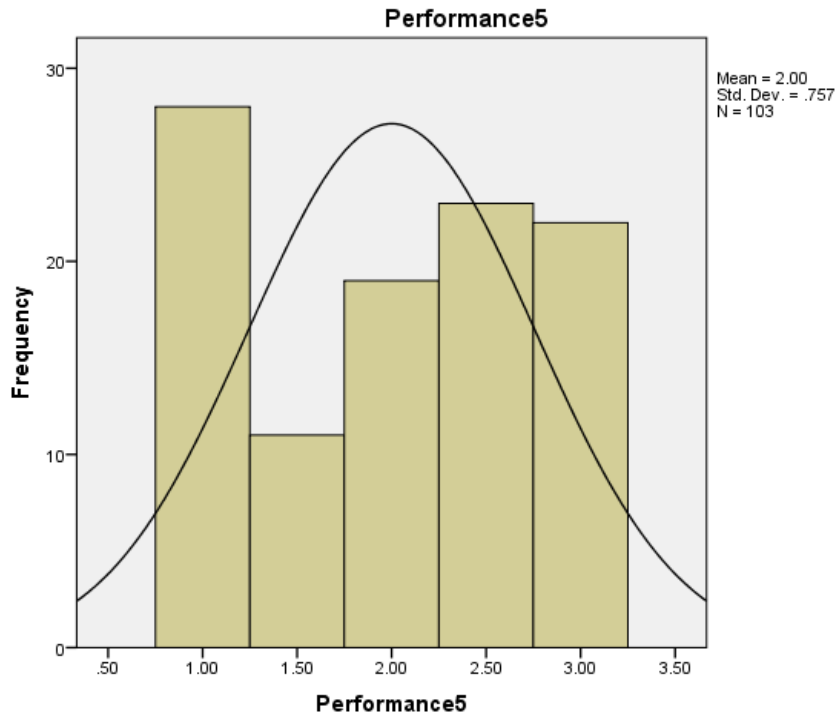


Figure 4.7 above demonstrates the superimposed curve with most the data falling under the bell-shaped curve. Correspondingly, the Figure 4.7 displays the greatest frequency of scores in the middle with smaller frequencies towards the extremes implying that external environment was normally distributed.

Figure 4.8 below exhibits the superimposed curve with most of the data lying below the curve. This showed that firm performance was normally distributed. In addition, Figure 4.8 displays the greatest frequency of scores in the middle with no frequencies towards the extremes implying that firm performance was normally distributed.

Figure 4.8: Histogram on Firm Performance



Furthermore, the assumption of normality was tested using the Shapiro- Wilk test as demonstrated in Table 4.2 below. The Shapiro-Wilk statistic (1965) is the ratio of the best estimator of the variance to the usual corrected sum of squares estimator of the variance to test for normality of a distribution. The statistic is positive and less than or equal to one, an indication of normality. On the other side, if the p-value is greater than the chosen alpha level (0.05), then that indicates that the data came from a normally distributed population. From the results showed in Table 4.2 below, indicates that all values were greater than 0.05 (criterion decision), an indication that the study variables were normally distributed.

Table 4.2: Tests of Normality of the Study Variables Using Shapiro-Wilk

	Shapiro-Wilk		
	Statistic	df	Sig.
Corporate Governance	.980	103	.115
Firm Characteristics	.934	103	.200
External Environment	.965	103	.108
Performance	.859	103	.300

Source: Author, 2016

Multicollinearity occurs when there is a strong correlation between two or more independent variables in a regression model. Multicollinearity is a problem especially in situations where there is multiple linear regression. Low levels of collinearity pose little danger to the regression model.

Table 4.3: Multicollinearity on Corporate Governance on Firm Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.214	.302		4.026	.000		
Corporate Governance	.615	.098	.531	6.298	.000	.888	1.126
R-square= 0.282, Adjusted R – square 0.275, F = 39.661, Sig = .000							

Source: Author, 2016

There is a positive and significance relationship between corporate governance and firm performance ( $F= 39.661$ ,  $Sig = 0.000$ ) as shown in the Table 4.3 above. Variance Inflation Factor (VIF) quantifies the severity of multicollinearity in an OLS regression analysis. The VIF is an index that measures how much the variance (the square of the estimate's standard deviation) of an estimated regression coefficient is increased because of collinearity (Field, 2009). Broadly, it is a way to measure the effect of multicollinearity among the independent variables/predictors. A high level of multicollinearity increases the risk of a theoretically sound predictor to be rejected from the regression model as a non-significant variable. Dawes (2000) suggested that an average VIF value over 10 should raise concerns. In this study, VIF for corporate

governance was 1.126, which is below 10, as recommended by Dawes (2000), and tolerance value of 0.888 (less than 1) implying that there was no multicollinearity between these variables (Field, 2009).

Table 4.4: Regression of Corporate Governance and Firm Characteristics on Firm Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.517	.367		-1.408	.162		
Firm Characteristics	.487	.112	.415	4.334	.000	.624	1.603
Corporate Governance	.334	.130	.246	2.566	.012	.708	1.413
R-square= 0.341, Adjusted R – square 0.328, F = 25.895, Sig = .000							

Source: Author, 2016

The VIF for corporate governance and firm characteristics was 1.413 and 1.603, respectively (less than 10) Dawes (2000) as demonstrated in Table 4.4 above. The tolerance value was 0.708 and 0.624 (less than 1), respectively for corporate governance and firm characteristics, implying that there was no multicollinearity between these variables (Field. 2009).

Table 4.5: Regression of Corporate Governance and External Environment on Firm Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-1.455	.488		-2.981	.004		
External Environment	.364	.116	.310	3.132	.002	.622	1.607
Corporate Governance	.322	.131	.237	2.469	.015	.661	1.513
R-square 0.348, Adjusted R-square= 0.321, F= 15.862, Sig = 0.000							

Source: Author, 2016

There was a positive and significant relationship between corporate governance and external environment on performance (F= 15.862, Sig = 0.000) as shown in the Table

4.5 above. The VIF for corporate governance and external environment was 1.513 and 1.607, respectively. The tolerance value was 0.661 and 0.622 (less than 1) for corporate governance and external environment, respectively which implied that there was no multicollinearity between these variables (Field. 2009).

Table 4.6: Regression of the Product of Corporate Governance, Firm Characteristics and External Environment on Firm Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.095	.459		-.207	.837		
Product CEF	.026	.005	.464	5.135	.000	.773	1.293
R-square= 0.375, Adjusted R – square = 0.356, F = 26.373, Sig = .000							

Source: Author, 2016

There was a positive and significance relationship between the product of corporate governance, firm characteristics, external environment on performance (F= 26.373, Sig = 0.000) as shown in the Table 4.6 above. This means that corporate governance, firm characteristics and external environment can be used as a product for further analysis, on firm performance. The VIF for the product was 1.293 (<10, Dawes, 2000) and tolerance value of 0.773 (less than 1), which implied that there was no multicollinearity (Field. 2009).

Another assumption of OLS regression is that the variance of the residuals is homogeneous across levels of the predicted values, also known as homoscedasticity, should be determined. Levene's test is an inferential statistic used to assess the equality of variances for a variable (corporate governance, firm characteristics, external environment and firm performance) calculated for two or more groups (banks, MFIs, and insurance companies). Levene's test assesses some common statistical procedures which assume that variances of the populations from which different samples are drawn, are equal. If the resulting p-value of Levene's test is less than the significance

level (typically 0.05), the obtained differences in sample variances are unlikely to have occurred based on random sampling from a population with equal variances. Thus, the proposition of equal variances is rejected and it is concluded that there is a difference between the variances in the population (heteroscedasticity) (Levene, 1960; Lix, Keselman, & Keselman, 1996). Thus, the data from the study variables is homogeneous since all the significance values are greater than 0.05 as shown in the Table 4.7 below.

Table 4.7: Test of Homogeneity of Variances of the Study Variables

	Levene Statistic	df1	df2	Sig.
Firm Characteristics	1.725	1	101	.192
Corporate Governance	.060	1	101	.807
External Environment	.944	1	101	.334
Firm Performance	2.269	1	101	.135

Source: Author, 2016

Another way to check homoscedasticity is by use of a scatter plot (also called a scatter graph, scatter chart, scatter-gram, or scatter diagram). One of the most important aspects is its ability to show variance of the residuals, homogeneity across levels. The pattern of the data points between corporate governance and firm performance was concentrated together with no pattern to the residuals plotted against the fitted values, for the scatter plot as shown in Figure 4.9. This implied that the variance of the residuals is constant and therefore inferring that the variance of the residuals is homogeneous across levels of the corporate governance and firm performance. In addition, the residuals exhibited most of the scores concentrated in the center. The pattern formed a pattern-less cloud of dots implying that the homoscedasticity assumption was met in corporate governance and firm performance (Field, 2009).

Figure 4.9: Scatter Plot for Corporate Governance and Firm Performance

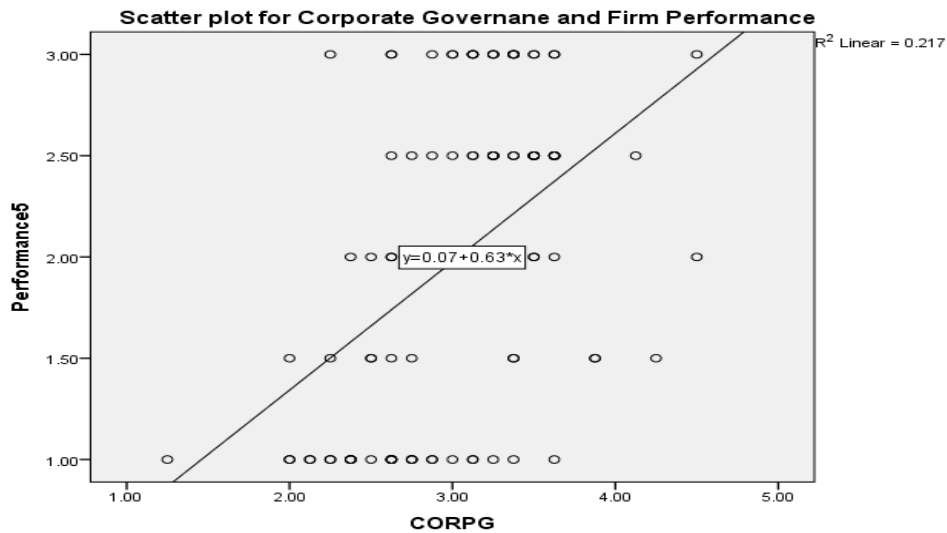
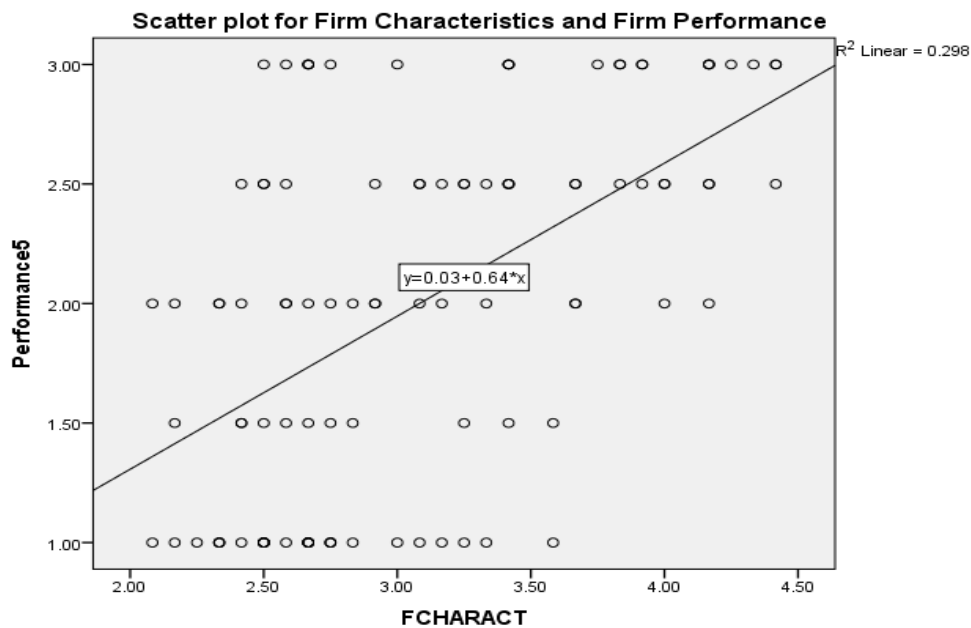


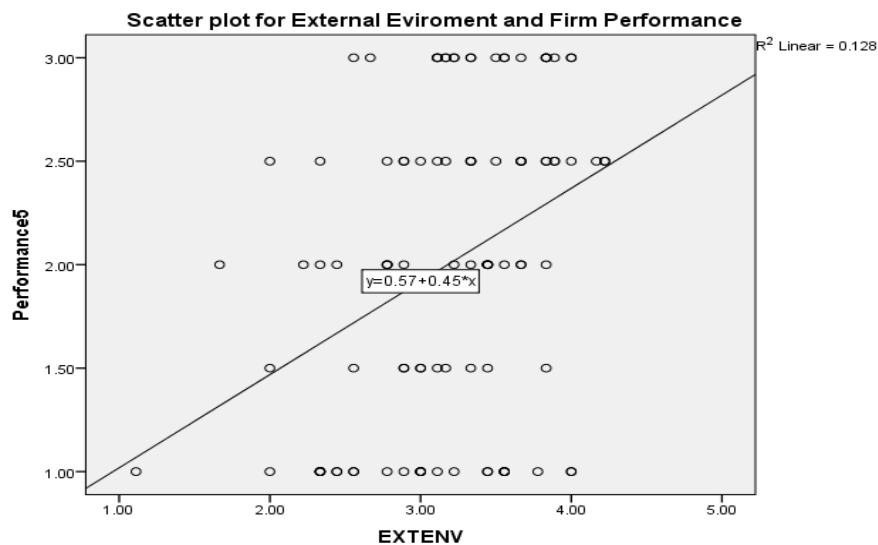
Figure 4.10: Scatter Plot for Firm Characteristics and Firm Performance



From Figure 4.10 above, the pattern of the data points is concentrated together with no pattern to the residuals plotted against the fitted values. This implied that the variance of the residuals is constant and therefore inferring that the variance of the residuals is homogeneous across levels of the firm characteristics and firm performance. In addition, the residuals exhibited most of the scores concentrated in the center. The pattern formed a pattern-less cloud of dots implying that the homoscedasticity assumption was met in firm characteristics and firm performance (Field, 2009).

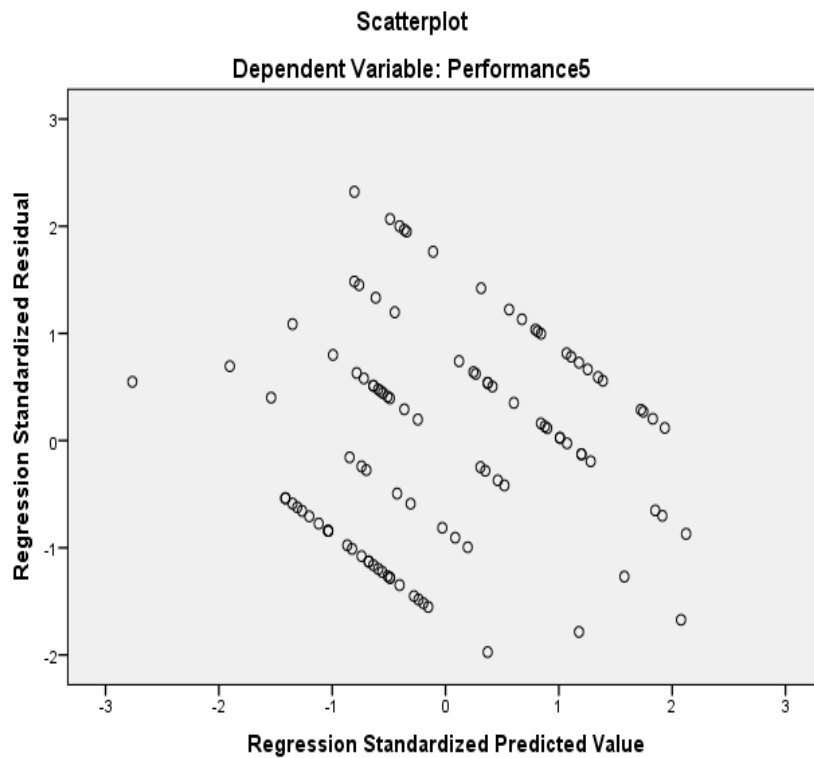
As shown in Figure 4.11 below, the pattern of the data points is concentrated together with no pattern to the residuals plotted against the fitted values. This implied that the variance of the residuals was constant and therefore inferring that the variance of the residuals was homogeneous across levels of external environment and firm performance. In addition, the residuals exhibited most of the scores concentrated in the center. The pattern formed a pattern-less cloud of dots implying that the homoscedasticity assumption was met in external environment and firm performance (Field, 2009).

Figure 4.11: Scatter Plot for External Environment and Firm Performance



As Figure 4.12 below shows, the pattern of the data points is concentrated together with no pattern to the residuals plotted against the fitted values. This implied that the variance of the residuals was constant and therefore inferring that the variance of the residuals was homogeneous across levels of the predicted values. In addition, the residuals exhibited most of the scores concentrated in the center, around zero. The pattern formed a pattern-less cloud of dots implying that the homoscedasticity assumption was met in firm performance (Field, 2009).

Figure 4.12: Scatter Plot for Firm Performance



#### 4.4 Exploratory Factor Analysis

Factor analysis aims at explaining the variance in the observed variables in terms of underlying latent factors (Habing 2003). Factor analysis also intends to pick out those factors that measure the ability and traits relating to the construct that is intended to be measured (Field, 2009). Thus, factor analysis offers not only the possibility of gaining a clear view of the data, but also the possibility of using the output in subsequent analyses (Field 2000; Rietveld & Van-Hout, 1993). Factor analysis was used to determine the inter-correlations between the studied variables (corporate governance, firm characteristics, external environment and firm performance). The dimensionality of the matrix was used by looking for variables that correlate highly with a group of other variables, but correlate low with variables outside of that group (Field 2009).

#### 4.4.1 Corporate Governance

The communality coefficients shown in Table 4.8 below were good and above 0.5 with determinant of 0.045 which was greater than 0.000, an indication that all items in Table 4.8 related well in measuring corporate governance which is an indication that the items were converging on corporate governance. Four factors namely ownership structure, information disclosure, financial transparency and board profile were extracted explaining 62.960 percent of corporate governance with determinant = .045 as indicated in the Table 4.9 below.

Table 4.8: Communalities on Corporate Governance

Statements	Initial	Extraction
The institution is clearly defined in terms of lines of authority and responsibility	1.000	.657
The number of executive directors is more than the independent directors	1.000	.754
The number of independent directors is more than the executive directors	1.000	.646
The Chief Executive Officer (CEO) is only responsible for that post	1.000	.526
CEO is supported by counsel from the BoD	1.000	.697
CEO's performance is monitored and appraised satisfactorily	1.000	.570
Ownership structure of the firm has mechanisms that entails processes and structures which facilitate the creation of shareholder value	1.000	.692
The firm has a clearly defined and publically accessible disclosure policy which defines principles, rules and procedures of reporting to shareholders, relevant authorities, public, and other interested parties.	1.000	.558
The firm publishes its annual reports and information concerning its business operations	1.000	.647
The firm publishes its business reports including the report of the external auditor in compliance with the laws, by-laws, and financial regulations	1.000	.613
Updated data on the firm's insiders is publically accessible	1.000	.716
Information that has been disclosed is only mandatory	1.000	.580
Governance structure of the firm promotes better management and prudent allocation of firms' resources	1.000	.657

Source: Author, 2016      Extraction Method: Principal Component Analysis.

Table 4.9: Rotated Component Matrix on Corporate Governance

Statements	Component			
	Board Profile	Financial Transparency	Information Disclosure	Ownership Structure
The number of independent directors is more than the executive directors	.784			
The CEO is supported by counsel from the Board of Directors (BoD)	.655			
CEO's performance is monitored and appraised satisfactorily	.629			
The institution is clearly defined in terms of lines of authority and responsibility	.587			
The Chief Executive Officer (CEO) is only responsible for that post	.421			
Updated financial facts on the firm's insiders is publically accessible		.815		
Firm publishes its business reports including the report of the external auditor in compliance with the laws, by-laws, and financial regulations		.711		
Information that has been disclosed is only mandatory			.710	
Firm has a clearly defined and publically accessible disclosure policy which defines principles, rules and procedures of reporting to shareholders, relevant authorities, public, and other interested parties			.666	
Firm publishes its annual reports and information concerning its business operations			.539	
Ownership structure of the firm has mechanisms that entails processes and structures which facilitate the creation of shareholder value				.793
Governance structure of the firm promotes better management and prudent allocation of firms' resources				.707
Eigen value	2.242	2.013	1.668	1.632
% of variance	18.683	16.777	13.903	13.598
Cumulative % of variance	18.683	35.460	49.363	62.960

Source: Author, 2016

Determinant = 0.045

From the Table 4.9 above, the following item were used to explain ownership structure ownership structure of the firm has mechanisms that entail processes and structures which facilitate the creation of value; the governance structure of the firm promotes

better management and prudent allocation of resources. Information disclosure was explained by the following items information that has been disclosed is only mandatory; the firm has a clearly defined and publically accessible disclosure policy which defines principles, rules and procedures of reporting to shareholders, relevant authorities, public, and other interested parties and; the firm publishes its annual reports and information concerning its business operations.

Financial transparency was explained by such statements as updated financial facts on the firm's insiders is publically accessible; the firm publishes its business reports including the report of the external auditor in compliance with the laws, by-laws, and financial regulations. Board profile was clarified by statements like the number of independent directors is more than the executive directors; CEO is supported by counsel from BoD; CEO's performance is monitored and appraised satisfactorily; and the institution is clearly defined in terms of lines of authority and responsibility.

Furthermore, exploratory factor analysis was conducted through the Keiser-Meyer-Olkin (KMO) test. The suitability of the data (corporate governance) for factor analysis was based on sample size adequacy, the KMO and Bartlett tests. The KMO and Bartlett's (1954) test of sampling adequacy was computed to ensure that factor analysis yielded distinct and reliable factors (Kaiser, 1974). The standards used to assess and describe the sampling adequacy (Kaiser, 1974) were 0.90 marvelous, 0.80 meritorious, 0.70 middling, 0.60 mediocre, 0.50 miserable and below 0.50 unacceptable. Corporate governance KMO was 0.631, implying that corporate governance was suitable for factor analysis.

Bartlett's test of sphericity measure tests the hypothesis that the original correlation matrix is an identity matrix. From Table 4.10 below, the p – value of corporate governance was 0.000 and since this was less than the level of significance,  $\alpha = 0.05$ , then Bartlett's test of sphericity for corporate governance indicate that its variables share a common factor.

Table 4.10: Kaiser-Meyer-Olkin and Bartlett's Tests on Corporate Governance

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.631
	Approx. Chi-Square	301.155
Bartlett's Test of Sphericity	Df	66
	Sig.	.000

Source: Author, 2016

#### 4.4.2 Firm Characteristics

The communality coefficient for firm characteristics are good and above 0.5 which is greater than 0.000. This is an indication that all items related well in measuring firm characteristics and an indication that the items collectively converged to measure firm characteristics as displayed in Table 4.11 below.

Table 4.11: Communalities of Firm Characteristics

Factors	Initial	Extraction
Board reviews and approves appointment of chief audit executive (CAE)	1.000	.802
Board agrees to strategies/plans of the internal audit services	1.000	.823
Reporting lines of CAE supports independence with functional reporting to board	1.000	.621
Institution's asset structure has been helpful in bankruptcy risks	1.000	.707
Institution's asset structure has made shareholders and management content	1.000	.690
Institution's asset structure has been helpful in firm's leverage condition	1.000	.513

Source: Author, 2016 Extraction Method: Principal Component Analysis.

Two factors namely asset structure and quality of auditing were extracted explaining 69.3 percent of firm characteristics with determinant was 0.122, as shown in rotated component matrix Table 4.12 below. The sampling adequacy and communalities was equally adequate.

Table 4.12: Rotated Component Matrix on Firm Characteristics

Factors	Component	
	Quality of Audit	Asset Structure
Board agrees to the strategies/plans of internal audit services	.901	
Board reviews and approves the appointment of CAE	.895	
Reporting lines of CAE supports independence with functional reporting to the board	.778	
Institution's asset structure has been helpful in bankruptcy risks		.830
Institution's asset structure has made shareholders and management content		.809
Institution's asset structure has been helpful in the firm's leverage condition		.594
Eigen value	2.429	1.727
% of variance	40.282	28.782
Cumulative % of variance	40.482	69.264

Source: Author 2016

Determinant = 0.122

The following factors enlightened firm characteristics through quality of audit and asset structure. Quality of audit was described through the board approves the strategies/plans of the internal audit services; the board reviews and approves the appointment of CAE and reporting lines of CAE support independence with functional reporting to the board. Asset structure was also defined through institution's asset structure has been helpful in bankruptcy risks; institution's asset structure has made shareholders and management satisfied and; institution's asset structure has been helpful in the firm's financing conditions.

Leverage (used secondary data) being the ratio of the firm's debts to its assets made managers generate and pay out cash, simply because interest disbursements are obligatory. Therefore, leverage in form of a loan or other borrowings like debt should be re-invested with the aim of earning a bigger rate of return than the cost of interest. Jensen and Meckling (1976) observes that growing leverage encourages managers to be observant since it might lead to indebtedness of the firm.

In addition, firm characteristics were explored by use of the KMO test. The suitability of the data (firm characteristics) for factor analysis was based on sample size adequacy, KMO and Bartlett tests. The KMO and Bartlett's (1954) test of sampling adequacy was computed to ensure that factor analysis yielded distinct and reliable factors (Kaiser, 1974). The standards used to assess and describe the sampling adequacy (Kaiser, 1974) were: 0.90 marvelous, 0.80 meritorious, 0.70 middling, 0.60 mediocre, 0.50 miserable and below 0.50 unacceptable. Firm characteristics KMO was 0.689, implying that it was good enough.

Bartlett's test of sphericity for firm characteristics was significant ( $p < 0.05$ ) demonstrating that firm characteristics were factorable. From Table 4.13 below, the p-value was 0.000 and since this was less than the level of significance,  $\alpha = 0.05$ , then Bartlett's test of sphericity for firm characteristics indicated that there were variables that shared a common factor.

Table 4.13: Kaiser-Meyer-Olkin and Bartlett's Test on Firm Characteristics

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.689
	Approx. Chi-Square	208.323
Bartlett's Test of Sphericity	Df	15
	Sig.	.000

Source: Author, 2016

#### 4.4.3 External Environment

The communality coefficient were good and above 0.5 and this was greater than 0.000, an indication that all items in Table 4.14 below were related well in measuring external environment. This was an indication that the items are collectively converged to measure external environment. Two factors namely regulations and use of information technology were extracted explaining 62.82 percent of external environment with determinant was 0.146, as shown in rotated component matrix in Table 4.15 below.

Table 4.14: Communalities on External Environment

Statements	Initial	Extraction
Our customers normally respond to the on-line information about the institution	1.000	.604
Financial regulations by the institution are intended to realise shareholder value using IT	1.000	.662
Credible management disclosures have been enhanced by regulators, standard setters and auditors by means of IT	1.000	.628
Our customers are happy about the financial regulations of the institution through the firm's web	1.000	.510
BoD introduces and or revises financial policies and procedures of the institution	1.000	.673
Management has established policies for developing and modifying accounting systems and control systems	1.000	.699
Firm's regulations are in line with the Financial Institutions Act of 2004	1.000	.621

Source: Author, 2016      Extraction Method: Principal Component Analysis.

Table 4.15: Rotated Component Matrix on External Environment

Statements	Component	
	Information Technology	Regulation
Financial regulation by the institution are intended to realise shareholder value through IT	.810	
Our customers normally respond to on-line information about the institution	.760	
Credible management disclosures have been enhanced by regulators, standard setters and auditors by means of IT	.749	
Our customers are happy about the financial information of the institution through their correspondences on the firm's web	.607	
Management has adhered to policies for developing and modifying accounting and control systems according to the regulatory authorities		.836
Firm's regulations are in line with the Financial Institutions Act of 2004		.786
The BoD assesses and or revises financial policies and procedures to the institution as stipulated by the regulatory authority		.774
Eigen value	2.240	2.157
% of variance	31.996	30.819
Cumulative % of variance	31.996	62.815

Source: Author, 2016

Determinant = 0.146

External environment was illustrated through regulations and use of IT and was represented by such statements as through IT, information to the institution is intended to realise shareholder value; our customers normally respond to the on-line information about the institution; credible management disclosures have been enhanced by regulators, standard setters and auditors by means of IT; and our customers are happy about the financial information regarding the institution through their correspondences on the firm's web. Similarly, regulation was recorded by statements like; management has established policies for developing and modifying accounting and control systems;

the firm's regulations are in line with the Financial Institutions Act of 2004; and the BoD introduces and or revises financial policies and procedures of the institution.

In addition, the suitability of the data (external environment) for factor analysis was based on sample size adequacy, KMO and Bartlett tests. The KMO and Bartlett's (1954) test of sampling adequacy was computed to ensure that factor analysis yields distinct and reliable factors (Kaiser, 1974). The standards used to assess and describe the sampling adequacy (Kaiser, 1974) were: 0.90 marvelous, 0.80 meritorious, 0.70 middling, 0.60 mediocre, 0.50 miserable and below 0.50 unacceptable. External environment KMO was 0.734, implying that it was very good. The results indicated that Bartlett's test had a p- value of 0.000 and since this is less than the level of significance,  $\alpha = 0.05$ , then Bartlett's test of sphericity specified that there were variables that shared a common factor (See Table 4.16 below).

Table 4.16: KMO and Bartlett's Test on External Environment

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.734
	Approx. Chi-Square	190.006
Bartlett's Test of Sphericity	df	21
	Sig.	.000

Source: Author, 2016

#### 4.5 Demographics of Financial Institutions

The study considered the frequency values and ANOVA regarding the type and nature of financial institutions. The type and nature of financial institutions is shown in Table 4.17 below indicating that MFIs were the majority financial institutions with 69 percent (all local), followed by insurance companies with 20.4 (local 5.83, and foreign 14.57) percent and commercial banks with 11(local 5.84, and foreign 4.86) percent. This implied that the study obtained responses from different types of financial institutions,

with the majority of the respondents coming from MFIs. In addition, this also implied that both local and foreign financial institutions were included in this study.

Table 4.17: Type and Nature of Financial Institutions

Type and Nature of Financial Institution	Frequency	Nature of Financial Institution (Percent)	Overall (Percent)
Commercial Banks	11		10.7
Local	6	5.84	
Foreign	5	4.86	
MFI	71		68.9
Local	71	68.9	
Foreign	0	0	
Insurance Companies	21		20.4
Local	6	5.83	
Foreign	15	14.57	
Total		100	100

Source: Author, 2016

Table 4.18 below shows the descriptive statistics in respect to corporate governance (ownership structure, information disclosure, financial transparency and board profile). Information disclosure had the highest mean (3.53), followed by financial transparency (3.26), then ownership structure (2.84) and lastly, board profile (2.51). Nonetheless, there were more variations in information disclosure, then ownership structure, financial transparency and then board profile. Coefficient of variation showed that ownership structure was most risky, followed by information disclosure, financial transparency and board profile.

Table 4.18: Descriptive Statistics for Corporate Governance

Study Variables	Sample Size	Mean	Standard Deviation	Coefficient of Variation (Percent)
		Statistic	Statistic	Statistic
Ownership structure	103	2.8398	.97068	34.18128
Information disclosure	103	3.5340	1.09200	30.89983
Financial transparency	103	3.2573	.96219	29.5395
Board profile	103	2.5146	.71214	28.32021
Corporate governance	103	3.0364	.93425	30.76844

Source: Author, 2016

Table 4.19 below shows the descriptive statistics in respect to firm characteristics (quality of audit, asset structure and leverage). Quality of audit had the highest mean (3.36), followed by leverage (3.00), then asset structure (2.97). Equally, there were more variations in quality of audit, followed by leverage and then asset structure. Coefficient of variation showed that leverage was the most risky, followed by quality of audit and then asset structure.

Table 4.19: Descriptive Statistics for Firm Characteristics

Study Variables	Sample Size	Mean	Standard Deviation	Coefficient of Variation (Percent)
		Statistic	Statistic	Statistic
Quality of audit	103	3.3560	1.07887	32.15
Asset structure	103	2.9741	.91429	30.74
Leverage	103	3.00	1.407	46.9
Firm characteristics	103	3.11	1.133	36.4

Source: Author, 2016

Table 4.20 below shows the descriptive statistics in respect to external environment (regulations and use of IT). Regulations had the highest mean (3.47) followed by use of IT (2.93). Equally, there were more variations in regulations than it was in use of IT. Correspondingly, coefficient of variation showed that regulations was more risky compared to use of IT.

Table 4.20: Descriptive Statistics for External Environment

Study Variables	Sample Size	Mean	Standard Deviation	Coefficient of Variation (Percent)
		Statistic	Statistic	Statistic
Information technology	103	2.9320	.73410	25.04
Regulations	103	3.4725	.98521	28.37
External environment	103	3.1796	.60094	26.86

Source: Author, 2016

Table 4.21 below shows the descriptive statistics in respect to firm performance (capital adequacy, asset quality, management efficiency, earnings quality and liquidity). Capital adequacy, asset quality, management efficiency and earnings quality, all had a mean of 2, compared to liquidity with a mean of 1.9. However, there were more variations in liquidity than it was in capital adequacy, asset quality, management efficiency and earnings quality. Coefficient of variation showed that liquidity was the most risky compared to capital adequacy, asset quality, management efficiency, earnings quality.

Table 4.21: Descriptive Statistics for Firm Performance

Study Variables	Sample Size	Mean	Standard Deviation	Coefficient of Variation (Percent)
		Statistic	Statistic	Statistic
Capital adequacy	103	2	0.816	40.8
Asset quality	103	2	0.816	40.8
Management efficiency	103	2	0.816	40.8
Earnings quality	103	2	0.816	40.8
Liquidity	103	1.9	0.875	46.9
Firm performance	103	2	0.828	41.4

Source: Author, 2016

The ANOVA of the study variables according to nature of financial institutions was performed and there were no significant differences among the local and foreign financial institutions in regard to firm characteristics ( $F= 0.040$ ,  $Sig = 0.843$ ), corporate governance ( $F= 3.361$ ,  $Sig = 0.070$ ), external environment ( $F= 1.622$ ,  $Sig = 0.206$ ) and firm performance ( $F= 2.887$ ,  $Sig = 0.092$ ) as shown in Table 4.22 below. This implied that there was no statistically significant difference between local and foreign financial institutions in terms of their corporate governance, firm characteristics, external environment and firm performance. However, ANOVA according the nature of

financial institutions as regard to firm characteristics (quality of audit, asset structure and leverage) showed that foreign financial institutions had a higher mean value (3.15) than the local financial institutions (3.08). Also, there was more variation among the local financial institutions as compared to the foreign financial institutions (0.65 verses 0.49, respectively). Coefficient of variation for the local financial institutions was 21.2 percent compared to 15.7 percent for the foreign financial institutions, which indicated that local financial institutions were more risky as far as firm characteristics were concerned.

The ANOVA according the nature of financial institutions as regard to corporate governance (ownership structure, information disclosure, financial transparency and board profile) showed that foreign financial institutions had a higher mean value (3.53) than the local financial institutions (3.02). Equally, there was more variation among the foreign financial (0.68) as compared to the local financial institutions (0.55). The foreign financial institutions were more risky (19.2 percent) compared to the local financial institutions (18.1 percent) as far as corporate governance was concerned see Table 4.22 below.

With respect to the nature of financial institutions as regard to external environment (regulations and use of IT), the ANOVA, as shown in Table 4.13 below, local financial institutions had a higher mean value (3.19) than the foreign financial institutions (2.81). Equally, there was more variation among the local financial (0.61) as compared to the foreign financial institutions (0.36). As well, the local financial institutions were more risky (18.9 percent) compared to the foreign financial institutions (12.7 percent) as far as external environment was concerned. In addition, from Table 4.22 below the nature of financial institutions as regard to firm performance (capital adequacy, asset quality, management efficiency, earnings quality and liquidity), the ANOVA showed that

foreign financial institutions had a higher mean value (2.63) than the local financial institutions (1.98). However, there was more variation among the local financial (0.76) as compared to the foreign financial institutions (0.48). The local financial institutions emerged more risky (38.3 percent) compared to the foreign financial institutions (18.2 percent) as far as firm performance was concerned.

Table 4.22: Descriptive on the Nature of Financial Institutions

		Sample Size	Mean	Standard Deviation	Coefficient of Variation (Percent)	P	Sig
Firm characteristics	Local	83	3.0800	.65269	21.2	.040	.843
	Foreign	20	3.1458	.49242	15.7		
	Total	103	3.0825	.64544	18.5		
Corporate governance	Local	83	3.0164	.54622	18.1	3.361	.070
	Foreign	20	3.5313	.67988	19.2		
	Total	103	3.0364	.55699	18.7		
External environment	Local	83	3.1947	.60502	18.9	1.622	.206
	Foreign	20	2.8056	.35573	12.7		
	Total	103	3.1796	.60094	15.8		
Firm performance	Local	83	1.9747	.75719	38.3	2.887	.092
	Foreign	20	2.6250	.47871	18.2		
	Total	103	2.0000	.75732	28.3		

Source: Author, 2016

The ANOVA of the study variables according to type of financial institutions showed that there were significant differences among the commercial banks, MFIs and insurance companies in regard to firm characteristics ( $F= 18.867$ ,  $Sig = 0.000$ ), corporate governance ( $F= 5.295$ ,  $Sig = 0.007$ ), external environment ( $F= 13.764$ ,  $Sig = 0.000$ ) and firm performance ( $F= 9.565$ ,  $Sig = 0.000$ ) as shown in Table 4.23 below.

As Table 4.23 shows, ANOVA regarding firm characteristics according to type of financial institutions displayed that MFIs had the highest mean (3.71), followed by commercial banks (3.23) and then insurance companies (2.87). Equally, there was more variation among the MFIs (0.58) compared to commercial banks (0.55) and

insurance companies (0.48). The MFIs emerged to be the most risky (20.1 percent) compared to commercial banks (17 percent) and insurance companies (12.8 percent) as far as firm characteristics are concerned.

As ANOVA in Table 4.23 below shows, corporate governance according to type of financial institutions displayed that commercial banks had the highest mean (3.35), followed by insurance companies (3.26) and then MFIs (2.92). Equally, there was more variation among the commercial banks (0.98) compared to MFIs (0.48) and insurance companies (0.37). The MFIs emerged to be the most risky (20.1 percent) compared to commercial banks (17 percent) and insurance companies (12.8 percent) as far as corporate governance is concerned.

With respect to external environment according to type of financial institutions, ANOVA exhibited that insurance companies had the highest mean (3.64), followed by MFIs (3.13) and then commercial banks (2.64), as shown in Table 4.13 below. Nonetheless, there was more variation among the commercial banks (0.67) compared to MFIs (0.57) and insurance companies (0.31). Commercial banks emerged to be the most risky (25.4 percent) compared to MFIs (18.1 percent) and insurance companies (8.6 percent) as far as external environment is concerned.

The ANOVA regarding firm performance according to type of financial institutions revealed that insurance companies had the highest mean (2.60) followed by commercial banks (1.91) and then MFIs (1.84). Likewise, there was more variation among the insurance companies (0.97) compared to MFIs (0.75) and commercial banks (0.70). MFIs appeared to be the most risky (41.1 percent) compared to insurance companies

(37.2 percent) and commercial banks (36.7 percent) as far as firm performance is concerned.

Table 4.23: Descriptive Statistics on the Type of Financial Institution

		Sample Size	Mean	Standard Deviation	Coefficient of Variance (Percent)	F	Sig
Firm Characteristics	Commercial banks	11	3.2348	.54876	17.0	18.867	.000
	MFI	71	2.8732	.57715	20.1		
	Insurance company	21	3.7103	.47553	12.8		
	Total	103	3.0825	.64544	16.6		
Corporate Governance	Commercial banks	11	3.3523	.98078	29.3	5.295	.000
	MFI	71	2.9225	.48244	16.5		
	Insurance company	21	3.2560	.36759	11.3		
	Total	103	3.0364	.93425	19.7		
External Environment	Commercial banks	11	2.6364	.66868	25.4	13.764	.000
	MFI	71	3.1268	.56634	18.1		
	Insurance company	21	3.6429	.31307	8.6		
	Total	103	3.1796	.60094	17.3		
Firm Performance	Commercial banks	11	1.9091	.70065	36.7	9.565	.000
	MFI	71	1.8380	.75486	41.1		
	Insurance company	21	2.5952	.9654	37.2		
	Total	103	2.0000	.75732	38.3		

Source: Author, 2016

#### 4.6 Correlation Between Corporate Governance, Firm Characteristics, External Environment and Firm Performance

Correlation analysis on the relationship between study variables was employed using Pearson correlation coefficient (r) to determine the relationship between corporate governance and firm performance, among corporate governance, firm characteristics and firm performance, among corporate governance, external environment and firm performance, and the joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions in Uganda. Interval

or ratio scales are the appropriate levels of measurement if the Pearson's correlation is used (Sekaran, 1992). This study also employed interval and ratio scales.

#### **4.6.1 Relationship Between Corporate Governance and Firm Performance**

There was a significant positive relationship between corporate governance and firm performance ( $r = .466, p < .01$ ). Firm performance had significant positive relationships with constructs of corporate governance, ownership structure ( $r = .290, p < 0.01$ ), information disclosure ( $r = .406, p < 0.01$ ), financial transparency ( $r = .252, p < 0.01$ ), however not significant with board profile ( $r = .100, p > 0.05$ ) as shown in Table 4.24 below. This implied that corporate governance enhanced the performance of financial institutions through ownership structure, information disclosure and financial transparency.

Table 4.24: Correlation between Corporate Governance and Firm Performance

Variables	Ownership structure (1)	Information Disclosure (2)	Financial transparency (3)	Board profile (4)	Corporate governance(5)	Firm performance (6)
1	1					
2	.149	1				
3	.136	.092	1			
4	.152	.147	.141	1		
5	.616**	.642**	.581**	.519**	1	
6	.290**	.406**	.252*	.100	.466**	1
*. Correlation is significant at the 0.05 level (2-tailed).						
** Correlation is significant at the 0.01 level (2 –tailed).						

Source: Author, 2016

#### 4.6.2 Relationship Between Corporate Governance and Firm Characteristics

The relationship between corporate governance and firm characteristics was done to fulfil the Baron and Kenny’s test for the mediation effect, since they asserted that before testing for mediation, three effects of independent variable (corporate governance) with the dependent variable (firm performance); the independent variable with the intervener (firm characteristics), and the intervener with the dependent variable must have a significant relationship. Otherwise, this relationship was not part of the objectives of the study. There was a significant positive relationship between corporate governance and firm characteristics ( $r = .531, p < 0.01$ ) and its constructs, quality of audit ( $r = 0.625, p < 0.01$ ), asset structure ( $r = 0.358, p < 0.01$ ) and leverage ( $r = .230, p < 0.05$ ). Also, constructs of corporate governance was significantly and positively associated with firm characteristics, that is, ownership structure ( $r = .213, p < 0.05$ ), information disclosure ( $r = .495, p < 0.01$ ), financial transparency ( $r = .276, p < 0.01$ ) and board profile ( $r = .239, p < 0.05$ ). This implied that corporate governance practices enhanced firm characteristics of financial institutions through ownership structure, information disclosure, financial transparency and board profile as shown in Table 4.25 below.

Table: 4.25: Correlations for the Relationship Between Corporate Governance and Firm Characteristics

	Ownership structure (1)	Financial transparency (2)	Information disclosure (3)	Board profile (4)	Corporate governance (5)	Quality of audit (6)	Asset structure (7)	Leverage (8)	Firm characteristics (9)
1	1								
2	.136	1							
3	.149	.092	1						
4	.152	.141	.147	1					
5	.616**	.581**	.642**	.519**	1				
6	.370**	.275**	.551**	.234*	.625**	1			
7	.154	.199*	.281**	.211*	.358**	.248*	1		
8	.014	.264**	.230*	-.010	.230*	.174	-.038	1	
9	.213*	.276**	.495**	.239*	.531**	.702**	.497**	.459**	1

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

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

Source: Author, 2016

#### 4.6.3 Relationship Between Firm Characteristics and Firm Performance

There was a significant positive relationship between firm characteristics and firm performance ( $r = .546, p < .01$ ). Firm performance had significant positive relationships with constructs of firm characteristics, leverage ( $r = .456, p < 0.01$ ), quality of audit ( $r = .590, p < 0.01$ ), however not significant with asset structure ( $r = .158, p > 0.05$ ). Also, constructs of firm characteristics significantly and positively associated with firm performance, that is, quality of audit ( $r = .590, p < 0.01$ ), leverage ( $r = .456, p < 0.01$ ), however not significant with asset structure ( $r = .158, p > 0.05$ ). This implied that firm characteristics enhanced the performance of financial institutions through leverage and quality of audit as shown in Table 4.26 below.

Table 4.26: Correlation for the Relationship Between Firm Characteristics and Firm Performance

Study Variables	Quality of audit	Asset structure	Leverage	Firm characteristics	Firm performance
Quality of audit	1				
Asset structure	.248*	1			
Leverage	.174	-.038	1		
Firm characteristics	.702**	.497**	.459**	1	
Firm performance	.590**	.158	.456**	.546**	1

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

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

Source: Author, 2016

#### 4.6.4 Relationship Between External Environment and Firm Performance

There was a significant positive relationship between external environment and firm performance ( $r = .357, p < .01$ ). Firm performance had significant positive relationships with constructs of external environment, regulations ( $r = .359, p < 0.01$ ) and use of IT ( $r = .276, p < 0.01$ ). This implied that regulations and use of IT enhanced firm performance of financial institutions as illustrated in Table 4.27 below.

Table 4.27: Correlation Between External Environment and Firm Performance

Variables	Information Technology	Regulations	External Environment	Firm Performance
Information Technology	1			
Regulations	.204*	1		
External Environment	.539**	.535**	1	
Firm Performance	.276**	.359**	.357**	1

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

Source: Author, 2016

Since there were positive and significant relationships between corporate governance (independent variable) and firm performance (dependent variable), corporate governance and firm characteristics (intervening/mediating variable), and firm characteristics and firm performance, as seen in Table 4.28 below, then the mediation effect of firm characteristics on the relationship corporate governance and firm performance can be further conducted (Baron & Kenny, 1986).

Table 4.28: Correlation Between Corporate Governance, Firm Characteristics, External Environment and Firm Performance

	Corporate Governance	Firm Characteristics	External Environment	Firm Performance
Corporate Governance	1			
Firm Characteristics	.531**	1		
External Environment	.328**	.375**	1	
Firm Performance	.466**	.546**	.357**	1

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

Source: Author, 2016

## **CHAPTER FIVE**

### **HYPOTHESES TESTING, INTERPRETATION AND DISCUSSION OF FINDINGS**

#### **5.1 Relationship Between Corporate Governance and Firm Performance**

Hierarchical linear regression analysis was used to determine the relationship between corporate governance and firm performance, the intervening effect of firm characteristics on the relationship between corporate governance and firm performance, the moderating effect of external environment on the relationship between corporate governance and firm performance, and the joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions in Uganda. The study further used the tool of hierarchical regression since it is useful for evaluating the contributions of predictors above and beyond previously entered predictors, as a means of statistical control, and for examining incremental validity (Aiken & West, 1991).

The discussion below included relationship between corporate governance and firm performance, intervening effect of firm characteristics on the relationship between corporate governance and firm performance, moderating effect of external environment on the relationship between corporate governance and firm performance, as well as the joint effect of corporate governance, firm characteristics and external environment on firm performance.

There was a significant positive relationship between corporate governance and firm performance. Corporate governance significantly predicted 21 percent of firm performance ( $F = 28.061$ ,  $Sig = .000$ ) as shown in Table 5.1 below. This implied that

21 percent of the change in firm performance was explained by corporate governance. The linear regression analysis model of  $FP = \beta_0 + \beta_1CG + \varepsilon$  was therefore presented as  $P = .075 + 0.634CG$ . If corporate governance is enhanced by one unit, firm performance will increase by 0.634 units. This indicated that hypothesis (H<sub>1</sub>), which was that there is no significant relationship between corporate governance and firm performance was rejected.

Table 5.1: Regression of Corporate Governance on Firm Performance

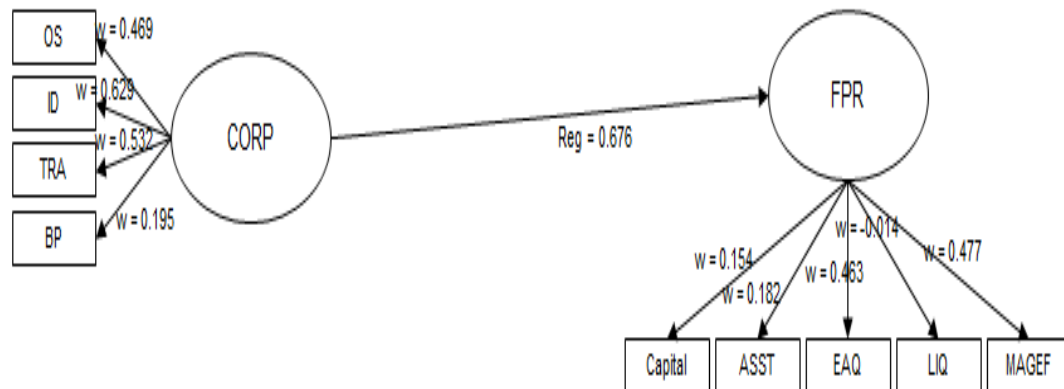
Variable	B	Beta
Constant	.075	
Corporate governance	.634**	.466**
R <sup>2</sup>		.217
Adj R <sup>2</sup>		.210
F		28.061
Sig		.000

Source: Author, 2016

\*\* P< 0.01, \*P<0.05

The above findings are further strengthened by the structural equation modelling through partial least square modelling to show both the path coefficients and the structural model, as displayed in figure 5.1 below. It is clarified that corporate governance is statistically, positively significant and predict firm performance (reg = 0.676, p<.05). Accordingly the different constructs of corporate governance also show that ownership structure (w= 0.469), information disclosure (w= 0.629), financial transparency (w= 0.532) and board profile (w= 0.195) predict firm performance. Information disclosure displayed the highest weight, followed by financial transparency, then ownership structure and lastly, board profile. Equally, firm performance demonstrate that capital adequacy (w= 0.154), asset quality (w= 0.182), earnings quality (w= 0.463), management efficiency (w= 0.477), and liquidity (w= 0.014) are key dimensions of firm performance in their revealed respective weights.

Figure 5.1: Relationship between Corporate Governance and Firm Performance using PLSM



From the findings, there was a significant positive relationship between corporate governance and firm performance. Firm performance had significant positive relationships with constructs of corporate governance, ownership structure, information disclosure, financial transparency and board profile (since results from structural equation modelling, outweighs regression results). This implied that corporate governance enhanced the performance of financial institutions through ownership structure, information disclosure, financial transparency and board profile.

This indicated that clear ownership structure, suitable information disclosure and appropriate financial transparency improved firm performance in terms of capital adequacy, asset quality, management efficiency, earnings quality and liquidity of financial institutions in Uganda. Accordingly, it implied that, ownership structure of the firms with mechanisms that entails processes and structures facilitated the creation of shareholder value. Similarly, the governance structure and management of the firm with prudent allocation of its resources improved firm performance of financial institutions in Uganda.

In addition, financial institutions disclosed both mandatory and voluntary information as well as having clearly defined and publically accessible disclosure policies, which defined principles, rules and procedures of reporting to shareholders, relevant authorities, public, plus other interested parties. Publication of firms' annual financial reports as well as information concerning their business operations was properly disclosed and this enhanced firm performance of financial institutions in Uganda. Likewise, financial transparency in terms of updated financial facts about the firm was publically accessed by the shareholders and interested parties, in addition to the firms publishing their business reports including the reports of the external auditor in compliance with the laws, by-laws, and financial regulations. This enriched firm performance of financial institutions in Uganda.

Equally, the board profile of the financial institutions is clearly defined in terms of clear lines of authority and responsibility, more independent directors compared to executive directors, CEO's performance monitored and appraised satisfactorily and as well as his support by counsel from the Board of Directors (BoD). This gives management of financial institutions better decision making mechanisms.

In line with the findings above, Bhagat and Bolton (2008) indicated that ownership of board members, and CEO-chair separation is significantly and positively correlated with firm performance. Corporate boards have the power to make, or at least approve all important decisions including decisions about investment policy, and corporate governance itself. It is credible that board members with appropriate stock ownership will have the incentive to provide effective monitoring and oversight of important corporate decisions. Besides, their findings indicated that board independence was negatively correlated with firm performance.

Fitriya and Locke (2012) investigated the role of board structure and the effect of ownership structures on firm performance in New Zealand's listed firms. The results revealed that BoD, board committees, and managerial ownership had a positive and significant impact on firm performance. On the other hand, Fitriya and Locke added that non-executive directors, female directors on the board and block-holder ownership did not have any significant relationship on firm performance.

Similarly, Tsifora and Eleftheriadou (2007) revealed that companies that had an expanding BoD had better internal control and therefore performed better than companies with a limited number of members on BoD. Firms, which belonged to an expanded group of shareholders performed better than those firms which belonged to a small group of shareholders or are family owned. They added that firms that introduced corporate governance systems were characterized by high profitability.

In addition, Bodaghi and Ahmadpour (2010) also found that corporate governance variables like ownership structure played an important role in the determination of financial mix of the firms (financial performance). However, Demsetz and Villalonga (2001) found no significant relationship between ownership structure and firm performance. They suggested that ownership structures differ across firms because of differences in the circumstances facing firms, particularly in regard to scale of economies, regulations and the environment stability in which these firms operate. This reason similarly affects Uganda's financial institutions given the fact that three different types of financial institutions were considered and yet manned by different monitoring authorities. Also, Pineda (2004) analyzed corporate governance standards impact on firm performance from Canadian businesses. The relationship between firm

performance, as measured by Tobin's Q, and the corporate governance index, for a sample of Canadian firms over a three-year period running from 2002 to 2004, revealed that few measures of governance variables were important and that the effects depended to some degree of firm ownership. In general, Pineda found no evidence that a comprehensive measure of governance affected firm performance. Besides, Dharwadkar, George and Brandes (2000), and Judgea, Naoumovab and Koutzevol (2003) demonstrated that effective and sound corporate governance practices were not only important issues in developed countries but were more critical in emerging and transitioning economies. Nonetheless, Omran, (2009) and Sharif and Lai (2015) further added that developing economies lack the experience and strong financial infrastructure to encounter with issues of corporate governance.

The relationship between corporate governance and firm performance can further be explained using the agency theory. Agency theory was established by Jensen and Meckling (1976). Strategic management and business applicability has been largely influenced by the agency theory. The agency theory states that in modern corporations in which share ownership is widely held, managerial actions depart from those required to maximise shareholders' returns. Findings of the relationship between corporate governance and firm performance, indicate that the mechanisms of financial institutions in Uganda have the processes and structures that first, facilitate the creation of shareholder value, and second, governance structures of the firms promote management to exercise prudent allocation of firms' resources. This therefore implies that managers of firms have typically acted as agents of the owners. The owners hire the managers and give them the authority to manage the firms for the owners' benefit. Nonetheless, the owners, should continue monitoring and controlling their firms through supervision

by independent directors, management, publishing business reports including reports from external auditors in compliance with the laws and financial regulations and above all, monitoring by the regulatory authorities. This finding therefore support the agency theory.

## 5.2 Relationship Between Corporate Governance, Firm Characteristics and Firm Performance

The intervening effect is designed to estimate the role of causal mechanisms that transmit the effect of a treatment (intervening) variable on an outcome (Tingley & Hicks, 2011). In this study, mediation of firm characteristics on the relationship between corporate governance and firm performance was approached in two ways, first, statistically and second graphically. Before the intervening effect of firm characteristics on the relationship between corporate governance and firm performance (Baron & Kenny, 1986) tests of mediation were applied. First, a relationship should exist between the independent variable (corporate governance) and dependent variable (firm performance) - For details, see hypothesis 1, above. Second, a relationship should exist between the independent variable (corporate governance) and the intervening variable (firm characteristics) which is expressed as:  $FC = \beta_0 + \beta_1 CG + \varepsilon$ . This was demonstrated in the Table 5.2 below.

Table 5.2: Regression of Corporate Governance on Firm Characteristics

Variable	B	Beta
Constant	1.214	
Corporate governance	.615**	.531**
R <sup>2</sup>		.282
Adj R <sup>2</sup>		.275
F		39.661
Sig		.000

Source: Author, 2016

\*\* P< 0.01, \*P<0.05

There was a significant positive relationship between corporate governance and firm characteristics. Corporate governance significantly predicted 27.5 percent of firm characteristics ( $F = 39.661$ ,  $Sig = .000$ ) as shown in Table 5.2 above. The linear regression analysis model of  $FC = \beta_0 + \beta_1 CG + \varepsilon$  was therefore presented as  $FC = 1.214 + 0.615CG$  implying that, if corporate governance is enhanced by one unit, firm characteristics will increase by 0.615 units.

Third, a relationship should also exist between the intervening variable (firm characteristics) and the dependent variable (firm performance),  $FP = \beta_0 + \beta_1 FC + \varepsilon$  - this was presented in Table 5.3 below.

Table 5.3: Regression of Firm Characteristics on Firm Performance

Variable	B	Beta
Constant	.026	
Firm characteristics	.640**	.546**
$R^2$		.298
Adj $R^2$		.291
F		42.835
Sig		.000

Source: Author, 2016

\*\*  $P < 0.01$ , \* $P < 0.05$

There was a significant positive relationship between firm characteristics and firm performance. Firm characteristics significantly predicted 29.1 percent of firm performance ( $F = 42.835$ ,  $Sig = .000$ ) as shown in Table 5.3 above. The linear regression analysis model of  $FP = \beta_0 + \beta_1 FC + \varepsilon$  was therefore presented as  $FP = 0.026 + 0.640FC$ . If firm characteristics are enhanced by one unit, firm performance will increase by 0.640 units. Since, the above three tests as recommended by Kenny and Baron (1986) have been fulfilled, then, the intervening effect of firm characteristics on the relationship between corporate governance and firm performance can therefore be performed  $FP = \beta_0 + \beta_1 CG + \beta_2 FC + \varepsilon$ .

Table 5.4: Hierarchical Linear Relationship Corporate Governance and Firm Characteristics on Firm Performance

Variable	Model 1		Model 2	
	B	Beta	B	Beta
Constant	-1.106*		-1.455*	
Firm characteristics	.509**	.434**	.364**	.310**
Corporate governance			.322*	.237*
R <sup>2</sup>	.365		.402	
Adj R <sup>2</sup>	.346		.378	
R <sup>2</sup> change	.157		.037	
F	18.991		16.501	
F change	24.505		6.096	
Sig F change	.000		.015	
Sig	.000		.000	

Source: Author, 2016

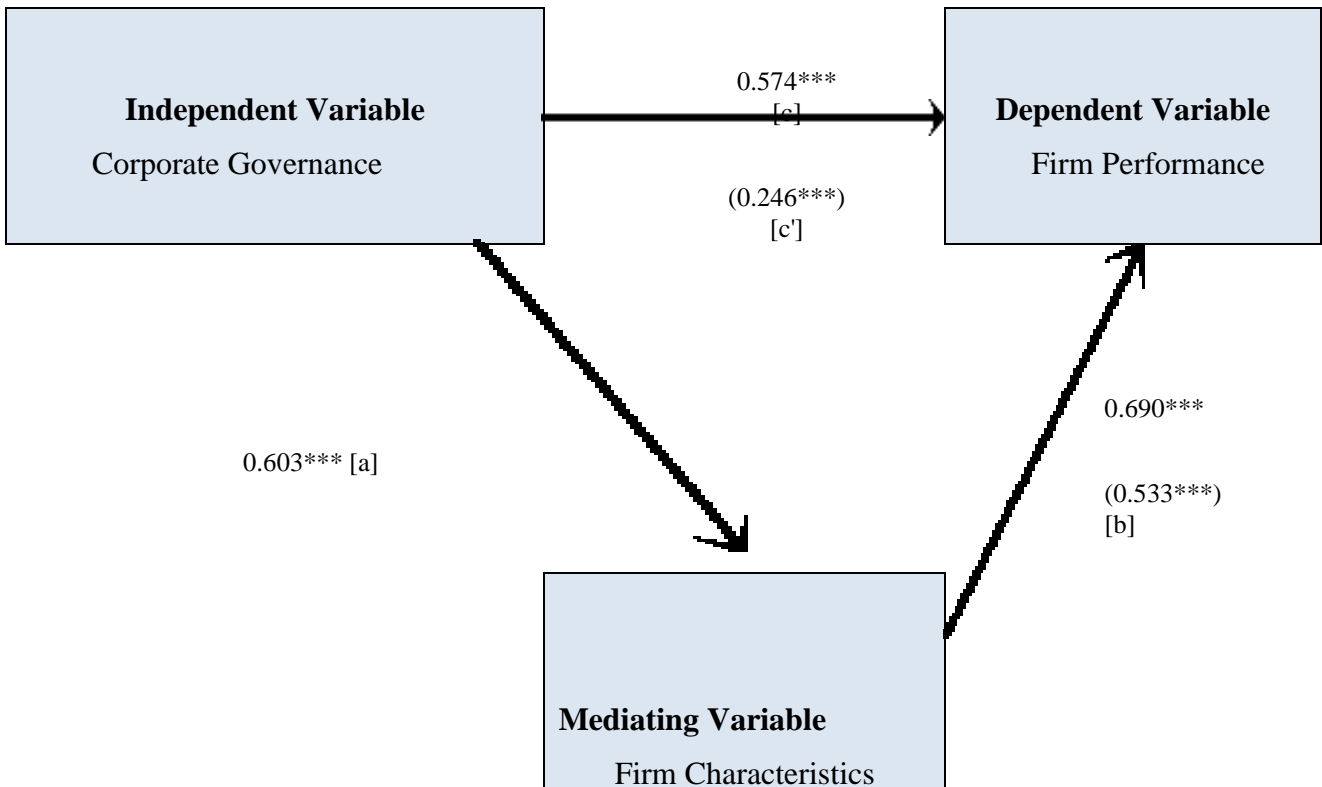
\*\* P< 0.01, \*P<0.05

Corporate governance and firm characteristics positively and significantly predicted 37.8 percent of firm performance ( $F= 16.501$ ,  $Sig= .000$ ) as shown Table 5.4 above under model 2 ( $FP = -1.455 + 0.322CG + 0.364 FC$ ). If firm characteristics increased by one unit, firm performance will increase by 0.364 units; while if corporate governance increased by one unit, firm performance will increase by 0.322 units. Firm characteristics contributed 15.7 percent and corporate governance 3.7 percent of firm performance as displayed in Table 5.4 above. This implied that firm characteristics was a strong predictor of firm performance compared to corporate governance. Broadly, corporate governance and firm characteristics are significant predictors of firm performance. Hypothesis ( $H_2$ ), which states that there is no intervening effect of firm characteristics on the relationship between corporate governance and firm performance, is rejected. This, therefore makes firm characteristics to partially mediate between these relationships.

Graphically, Jose (2013) med-graph was used, a programme to graphically depict mediation among three variables. The graph exhibited a significant positive and partial mediation/intervening effect of firm characteristics on the relationship between corporate governance and firm performance (Sobel Z-value = 7.724632,  $p < 0.000001$ ) as shown in Figure 5.2 below. The figure further indicates that firm characteristics partially but significantly mediates between corporate governance and firm performance. This is because the beta between corporate governance and firm performance was 0.246 from 0.574 (reduced due to the introduction of the mediation effect of firm characteristics), while beta between firm characteristics and firm performance was 0.533 from 0.690 (reduced due to the introduction of the mediation effect of firm characteristics). Figure 5.2 further shows that the total effect is 0.57, the direct effect is 0.25 and the indirect effect is 0.32, while the indirect to total ratio is 0.56. This means that the introduction of the mediating variable (firm characteristics) resulted in a power of 56 percent, while 44 percent is the power by the direct effect implying that firm characteristics partially mediates the relationship between corporate governance and firm performance.

Figure 5.2: Mediation Effect of Firm Characteristics

<b>Type of mediation</b>	Significant	
<b>Sobel z-value</b>	7.724632	$p = <0.000001$
<b>95% Symmetrical Confidence interval</b>		
Lower	<b>0.42225</b>	
Higher	<b>0.70938</b>	
<b>Unstandardized indirect effect</b>		
a*b	<b>0.56582</b>	
se	<b>0.07325</b>	
<b>Effective Size measures</b>		
<u>Standardised Coefficients</u>		
Total:	<b>0.574</b>	<u>R<sup>2</sup> Measures (Variance)</u>
Direct:	<b>0.246</b>	<b>0.31</b>
Indirect:	<b>0.321</b>	<b>0.08</b>
Indirect to Total ratio	<b>0.559</b>	<b>0.23</b>
		<b>0.80</b>



Furthermore, the structural equation modelling through partial least square modelling was tested to ascertain the path coefficient as well as the structural model that result from the intervening effect of firm characteristics, as demonstrated in Figure 5.3 below.

Fig 5.3: Intervening Effect of Firm Characteristics on the Relationship Between Corporate Governance and Firm Performance

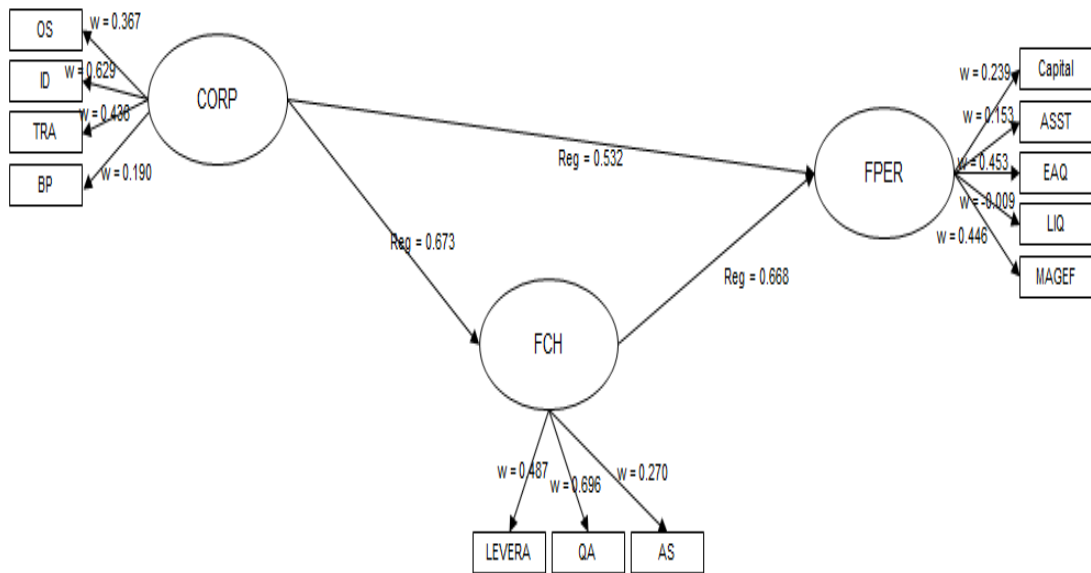


Figure 5.3 from the partial least square modelling, displays that the relationship between corporate governance and firm performance is positive and significant (reg = 0.532  $p < .05$ ), corporate governance and firm characteristics is positive and significant (reg = 0.673  $p < .05$ ), as well as firm characteristics and firm performance (reg = 0.668  $p < .05$ ). Therefore, this means that there is a partial mediation effect of firm characteristics on the relationship between corporate governance and firm performance. This specifies that corporate governance alone cannot stimulate firm performance, but only could together through firm characteristics. Thus, appropriate leverage ratios, proper asset structure and pertinent quality of auditing partially but significantly affect the relationship between corporate governance and firm performance.

The intervening effect of firm characteristics on the relationship between corporate governance and firm performance has been supported by Nandi and Ghosh (2012) who studied constructs of corporate governance attributes, firm characteristics and the level of corporate disclosure. The results revealed a positive relationship between board size, ratio of audit committee members to total board members, family control, CEO duality, firm size, profitability, liquidity and the extent of corporate disclosure.

Maina, Bwisa and Kihoro (2012) studied the influence of firm characteristics on the effect of mobile phone services on firm performance. The study observed an exploratory design with a two-stage, stratified and random sampling techniques. The findings revealed that firm characteristics had no significant influence on the effect of mobile phone services on firm performance. Although previous studies have looked at the main relationship between corporate governance and firm performance (Bhagat & Bolton, 2008; Bodaghi & Ahmadpour, 2010; Tsifora & Eleftheriadou 2007), none has considered the fact that the relationship may not be direct but may be partially mediated by firm characteristics which in turn influences firm performance. This may explain why the conclusion from previous studies on the nature of the relationship between corporate governance and firm performance of financial institutions has been inconsistent.

The intervening effect of firm characteristics on the relationship between corporate governance and firm performance is explained using TCT. The TCT first originated from Coase's (1937) work and later developed by Williamson (1985) who declared that the purpose of governance is to recognize, clarify and mitigate all forms of contractual threats. The main purpose of governance according to TCT is to clarify the carrying out

of economic transactions by the efficiency of the chosen governance structures that have been adapted to carry out the transactions at hand. The TCT emphasizes effectiveness and efficient performance of transactions through the adoption of suitable corporate governance practices and rules for better firm performance.

Findings reveal a partial intervening effect of firm characteristics on the relationship between corporate governance and firm performance. This confirms the importance of firm characteristics (leverage, asset quality and quality of auditing) in financial institutions. The practice by financial institutions can help regulators and the accounting profession to formulate policy based on empirical evidence rather than dependency on prior assumptions. Broadly, quality of auditing through proper strategies and plans of the internal audit services, board reviews and approvals of the appointment of CAE and the reporting lines that support the independence of CAE. In addition, functional reporting to the board make the service providers and customers, as the transaction partners, dependent on each other. Therefore, in line with the intervening effect of firm characteristics on the relationship between corporate governance and firm performance, transaction costs evolve because assets, investment and other process features are transaction-specific: TCT support this finding.

### **5.3 Moderation Effect of External Environment on the Relationship Between Corporate Governance and Firm Performance**

Moderation of external environment on the relationship between corporate governance and firm performance was approached in two ways, first, statistically and second graphically. There was no significant moderation effect of external environment on the relationship between corporate governance and firm performance as shown in Table 5.5 below and Figure 5.4 below. The regression model,  $FP = \beta_0 + \beta_1 CG + \beta_2 EE + \beta_3 CGP^*$

EE +  $\varepsilon$ , was therefore presented as  $FP = 0.038 + 0.389 CG + 0.149 EE + 0.103 CG*EE$ . All the regression coefficients for corporate governance ( $B= 0.286$ ,  $p > 0.05$ ), external environment ( $B= 0.118$ ,  $p > 0.05$ ) and the product of corporate governance and external environment ( $B= 0.192$ ,  $p > 0.05$ ) are insignificant, an indication that there was no moderation effect of external environment on the relationship between corporate governance and firm performance. This implied that hypothesis ( $H_3$ ) is not rejected.

Table 5. 5: Hierarchical Linear Relationship of the Product of Corporate Governance and External Environment on Firm Performance

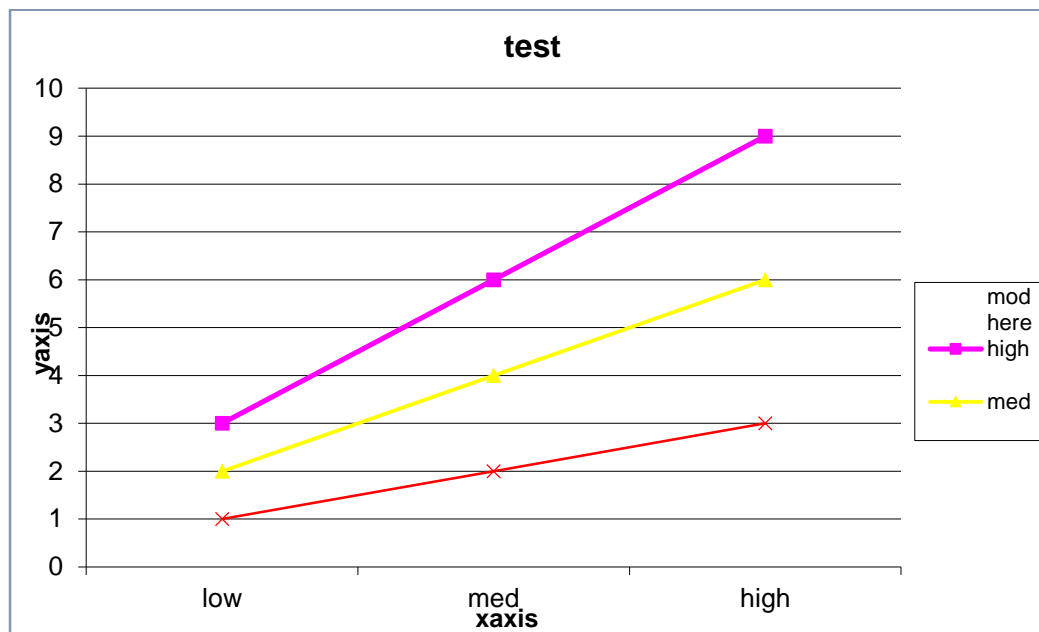
Variable	Model 1		Model 2		Model 3	
	B	Beta	B	Beta	B	Beta
Constant	.075		-.532		.038	
Corporate governance	.634**	.466**	.532**	.391**	.389	.286
External environment			.288	.229	.149	.118
Product of corporate governance and external environment					.103	.192
R <sup>2</sup>	.217		.264		.270	
Adj R <sup>2</sup>	.210		.249		.248	
R <sup>2</sup> change	.217		.248		.006	
F	28.061		17.948		12.220	
Sig	.000		.000		.000	
F change	28.061		6.349		.825	
Sig F change	.000		.013		.366	

Source: Author, 2016

\*\* P< 0.01, \*P<0.05

Graphically, Jose (2013) mod-graph was employed, a computer program to graphically display moderation. The graph presented no significant moderation effect of external environment on the relationship between corporate governance and firm performance as the high, medium and low lines are almost parallel and not intersecting as presented in Figure 5.4 below. This implied that hypothesis ( $H_3$ ), which stated that there is no significant moderation effect on the relationship between corporate governance and firm performance is not rejected.

Figure 5.4: Moderation Effect of External Environment



There is no moderation effect of external environment on the relationship between corporate governance and firm performance. This means that the effect of corporate governance on firm performance does not vary with the level of external environment (regulations and use of information technology). The findings could be attributed to the rapid and unpredictable external environment, coupled with economic variables that are complex in both form and impact of the practice of businesses in Uganda (Nampewo, 2013). In addition, corporate governance regulations in Uganda, were influenced by the Basel committee on financial institutions' supervision, which is based on the international settlement and answerable for formulating global standards for regulations and governance (Tumusiime, 2012). Tumusiime added that statutory financial institution regulations and supervision by a public agency cannot be expected, on its own, to guarantee their sound management. And to the contrary, the failure of banks in the 1990s prompted Bank of Uganda and the government to strengthen banking regulations. Nonetheless, IFAC (2014) global small-medium sized practices survey indicated that in Uganda one of the most prominent factors expected to have an impact in the next five years is IT developments.

Norzalita and Norjaya (2010) examined the marketing practices and the marketing orientation-business performance relationship among SMEs in agri-food sector in Malaysia. The study revealed that customer-competitor orientation and information dissemination were positively related to business performance. However, the role of external environment, did not moderate the relationship between market orientation and business performance. Liang et al. (2010) instituted that technology resources (a construct of external environment) can improve efficiency performance but may not enhance financial performance directly. It can only be done through the mediation effect. Also, the study found that technology resources raise internal and external capabilities, which in turn affect firm performance. Therefore, external environment can be used as an intervening variable between corporate governance and firm performance for further research.

The moderating effect of external environment on the relationship between corporate governance and firm performance can be grounded on the RDT. The RDT was initiated by Pfeffer (1972) who stated that boards enable firms to minimize dependence or gain resources. Fundamentally, RDT projected that corporate boards are a mechanism for managing external dependencies (Pfeffer & Salancik, 1987), reducing environmental uncertainty (Pfeffer, 1972) and reducing the transaction costs associated with environmental interdependency (Williamson, 1984). The RDT is seen as a more successful lens for understanding and examining boards through board profile and creating indicators of the board's ability to provide critical resources to the firm. Therefore, management should explicitly show how the financial institutions through BoD have reduced the firms' uncertainty arising from the unpredictable environment, and hence boosting firm performance.

Broadly, resource dependence approach emphasizes that external directors enhance the ability of a firm to protect itself against the external environment, reduce uncertainty, or co-opt resources that increase the firm's ability to raise funds or increase its status and recognition. The social influence literature suggests that interpersonal behavior of the independent directors is especially likely to influence recommendations for hiring or promotion when the criteria for appointment are relatively subjective (Liden & Mitchell, 1988; Pfeffer, 1981). Nonetheless, RDT does not hold any value for the moderation effect of external environment on the relationship between corporate governance and firm performance.

#### **5.4 Relationship of the Joint Effect of Corporate Governance, Firm Characteristics and External Environment on Firm Performance**

The joint effect of corporate governance, firm characteristics and external environment on firm performance was positive and significant ( $F= 19.778$ ,  $Sig = .000$ ) predicting 35.6 percent of firm performance. This implied that 35.6 percent of firm performance was explained by the joint effect of corporate governance, firm characteristics and external environment. The linear regression analysis model of  $FP = \beta_0 + \beta_1 CG + \beta_2 FC + \beta_3 EE + \varepsilon$  was therefore presented as  $FP = -1.442 + 0.495CG + 0.364 FC + 0.109 EE$  as indicated by Table 5.6 below. Jointly as the product of corporate governance, firm characteristics and external environment, led to  $FP = 0 -.095 + 0.026 CEF$ . Therefore, if the joint effect of corporate governance, firm characteristics and external environment is enhanced by one unit, firm performance will increase by 0.026 units. This indicates that hypothesis four ( $H_4$ ) which states that there is no significant relationship between corporate governance, firm characteristics and external environment on firm performance is rejected.

Table 5.6: Hierarchical Linear Relationship of the Joint of Effect Corporate Governance, Firm Characteristics and External Environment on Firm Performance

Variable	Model 1		Model 2		Model 3		Model 4	
	B	Beta	B	Beta	B	Beta	B	Beta
Constant	-.412		-.878**		-1.442*		-.095	
Firm characteristics	.332**	.483**	.509**	.434**	.364**	.310**		
External environment			.266*	.211*	.109	.086		
Corporate governance					.495**	.364**		
Product of CEF							.026**	.464**
R <sup>2</sup>		.208		.242		.348		.375
Adj R <sup>2</sup>		.192		.219		.321		.356
R <sup>2</sup> change		.208		.034		.106		.027
F		13.145		10.546		13.062		19.778
F change		13.145		4.442		15.862		26.373
Sig F change		.000		.038		.000		.000
Sig		.000		.000		.000		.000

Source: Author, 2016

\*\* P < 0.01, \*P < 0.05

Similarly, the structural equation modelling was conducted, particularly using partial least square modelling, as demonstrated by the joint effect as shown in Figure 5.5 below.

Figure: 5.5: Joint Effect of Corporate Governance, Firm Characteristics and External Environment on Firm Performance.

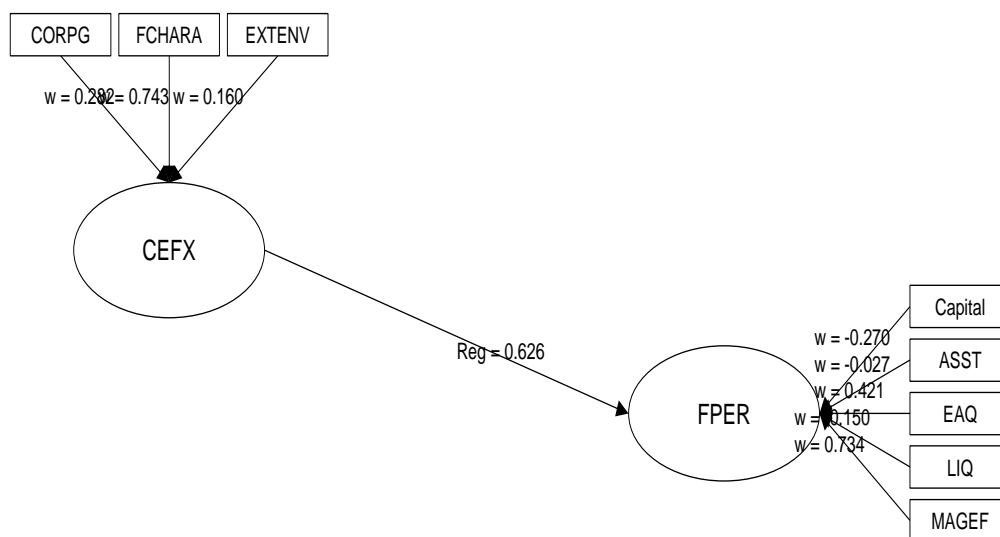


Figure 5.5 above displayed the joint effect of corporate governance, firm characteristics and external environment on firm performance. The joint effect demonstrated that firm

characteristics ( $w = 0.734$ ) highly contributed to firm performance compared to corporate governance ( $w = 0.282$ ) and external environment ( $w = 0.160$ ). Correspondingly, capital adequacy, asset quality, earnings quality, liquidity and management efficiency also projected firm performance. Management efficiency ( $w = 0.734$ ) generated the highest contribution to firm performance compared to capital adequacy ( $w = 0.270$ ), asset quality ( $w = 0.027$ ), earnings quality ( $w = 0.421$ ) and liquidity ( $w = 0.150$ ). Overall, the joint effect positively and significantly influenced firm performance ( $\text{reg} = 0.626, p < 0.01$ ).

The joint effect of corporate governance, firm characteristics and external environment on firm performance was positive and significant. This implied that ownership structure, information disclosure and financial transparency with appropriate leverage, asset structure and quality of auditing in addition to better regulations and proper use of information technology improved firm performance in terms of capital adequacy, asset quality, management efficiency, earnings quality and liquidity of financial institutions in Uganda.

Hartono et al. (2013) examined the effect of firm characteristics that proxies by size, firm age, profitability, leverage and firm growth on the governance quality, and its impact on firm value. Findings revealed that first, only firm size that affected the governance quality, and firm age, profitability, leverage and firm growth did not affect the corporate governance quality. The larger companies implemented better corporate governance, and better corporate governance quality which also increased shareholder value. Second, corporate governance quality had an influence on firm value.

Ajanthan (2013) indicated a positive relationship between board size, board composition, CEO/duality, ROE, ROA and debt-equity whereas negative relationship

between board size and debt ratio. In addition, executive officer duality, had a positive relationship with debt ratio. But, none of the variables had a significant relationship with capital structure and profitability.

The joint effect among corporate governance, firm characteristics and external environment on firm performance can further be expounded using stakeholder theory. Stakeholder theory was founded by Freeman (1984) and explained that managers' reporting of information is thus targeted not only at shareholders but also at other stakeholders. Therefore, within the stakeholder framework, the principal-agent relationship is extended to mean a relationship that exists between a manager and stakeholders. The finding indicates that there was a joint effect among corporate governance, firm characteristics and external environment on firm performance. This indicates that proper corporate governance practices (ownership structure information disclosure and financial transparency) together with appropriate firm characteristics through leverage, asset structure and quality of auditing and suitable external environment (regulations and use of IT), improve firm performance in respect to capital adequacy, asset quality, management efficiency, earnings quality and liquidity of financial institutions in Uganda.

What makes managers duty-bound to explain themselves to these stakeholders through disclosure and financial transparency, is the need to have continued access to critical resources that might be controlled by the latter in order to improve firm performance. Hence, within the stakeholder framework and the adoption of appropriate governance structures and rules, the principal-agent relationship brings forward effective and efficient transactions which subsequently enhance firm performance.

Stakeholder theory is expressed in two core statements (Freeman 1994) first, by managers fulfilling the purpose of the firm by emphasizing and encouraging themselves, express their collective perception of the value they want to create, and bringing stakeholders together. This boosts the firm onwards and allows it to create outstanding performance, determined both in terms of its purpose and financial metrics. Second, stakeholder theory tasks management to be accountable (corporate governance practices) to the stakeholders by expressing their ideas (firm characteristics and external environment) and how they want to do business in terms of the kinds of relationships as well as delivery. Stakeholder theory does a better job of clarifying and directing managerial behavior and claims the decisive aim of the firm (Freeman, Wicks & Parmar, 2004). Therefore, management and owners must take into account the legitimate interests of the stakeholders (Donaldson & Preston 1995, Freeman 1994). This therefore proves the theory's popularity, ably matching with those activities related to profits (firm performance, firm characteristics and external environment) and those in line with ethics (corporate governance). It is quite usual to suggest that the very idea of value creation (firm performance) is intimately connected to the idea of creating value for stakeholders through corporate governance, firm characteristics and external environment. In this regard, the stakeholder theory was beneficial to this study.

Broadly, from the above analyses, hypotheses H<sub>1</sub>, H<sub>2</sub> and H<sub>4</sub> were rejected whereas H<sub>3</sub> was not. From the findings of this study there is significant and positive relationship between corporate governance and firm performance of financial institutions in Uganda, there is significant mediating effect of firm characteristics on the relationship between corporate governance and firm performance of financial institutions in Uganda and there is significant and positive joint effect of corporate governance, firm

characteristics and external environment on firm performance of financial institutions in Uganda. However, there is no evidence to suggest that there is significant moderating effect of external environment on the relationship between corporate governance and firm performance of financial institutions in Uganda. In this regard, the objectives, hypotheses and the findings are summarized as shown in Table 5.7 below.

Table 5.7: Objective, Hypothesis and Decision

Objectives	Hypothesis	Decision
Determine the relationship between corporate governance and firm performance of financial institutions in Uganda	H <sub>1</sub> : There is no significant relationship between corporate governance and firm performance of financial institutions in Uganda.	Failed to Reject
Examine the intervening effect of firm characteristics on the relationship between corporate governance and firm performance of financial institutions in Uganda	H <sub>2</sub> : There is no significant mediating effect of firm characteristics on the relationship between corporate governance and firm performance of financial institutions in Uganda.	Failed to Reject
Determine the moderating effect of external environment on the relationship between corporate governance and firm performance of financial institutions in Uganda	H <sub>3</sub> : There is no significant moderating effect of external environment on the relationship between corporate governance and firm performance of financial institutions in Uganda.	Rejected
Evaluate the joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions in Uganda	H <sub>4</sub> : There is no significant joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions in Uganda.	Failed to Reject

Source: Author, 2016

## **CHAPTER SIX**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS TO THE FINDINGS**

#### **6.1 Introduction**

This chapter presents the summary, conclusion and recommendations of results of the four hypotheses of this study. This study set out to examine the relationship among corporate governance, firm characteristics, external environment and firm performance of financial institutions in Uganda. The chapter also identifies the limitations of the study and future research directions

#### **6.2 Summary to the Findings**

The study used four hypotheses namely: the relationship between corporate governance and firm performance; the intervening effect of firm characteristics on the relationship between corporate governance and firm performance; the moderating effect of external environment on the relationship between corporate governance and firm performance; and the joint effect of corporate governance, firm characteristics and external environment on firm performance. In this regard, four hypotheses were developed including: there is no significant relationship between corporate governance and firm performance of financial institutions; there is no significant intervening effect of firm characteristics on the relationship between corporate governance and firm performance of financial institutions; there is no significant moderating effect of external environment on the relationship between corporate governance and firm performance of financial institutions; and there is no significant joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions.

Methodologically, a population of one hundred and three (103) financial institutions (commercial banks, MFIs and insurance companies) both local and foreign were investigated. A positivistic research philosophy and correlation descriptive research designs were adopted in the study. Preliminary statistical tests were undertaken among which were: Cronbach alpha, descriptive statistics such as the mean, standard deviation, coefficient of variation and correlation analysis. Hierarchical multiple regression analysis was then used to test the hypotheses and furthermore, the structural equation modelling specifically the partial least square modelling to determine the path coefficients and structural model. In addition, firm performance was tested using the CAMEL model.

Hypothesis one ( $H_1$ ) explored the relationship between corporate governance and performance of financial institutions in Uganda. Results of hierarchical multiple linear regression showed that there was a positive significant relationship ( $F= 28.061, p<0.05$ ) between corporate governance and firm performance. It can therefore be concluded that there was a significant relationship between corporate governance and firm performance resulting in the rejection of the hypothesis.

The second hypothesis, ( $H_2$ ) explored the intervening effect of firm characteristics on the relationship between corporate governance and firm performance of financial institutions in Uganda. Results of this study revealed that there was a partial intervening effect (Sobel  $Z$ -value= 7.724632,  $p< 0.000001$ ) of firm characteristics on the relationship between corporate governance and firm performance, resulting in the rejection of the hypothesis.

Hypothesis three (H<sub>3</sub>) looked into the moderating effect of external environment on the relationship between corporate governance and firm performance of financial institutions in Uganda. Results of hierarchical multiple linear regression analysis revealed that there was no moderation effect of external environment on the relationship between corporate governance and firm performance, leading to fail to reject the hypothesis.

The last hypothesis was (H<sub>4</sub>), which evaluated the joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions in Uganda. The findings of this study indicated that the joint effect was statistically significant implying that corporate governance, firm characteristics and external environment had a joint effect on firm performance, an indication that the hypothesis was rejected.

### **6.3 Conclusion to the Findings**

The study set out to determine the relationship between corporate governance and firm performance; the intervening effect of firm characteristics on the relationship between corporate governance and firm performance; the moderating effect of external environment on the relationship between corporate governance and firm performance; and the joint effect of corporate governance, firm characteristics and external environment on firm performance of financial institutions in Uganda. The study was anchored on agency theory, TCT, stakeholder theory and RDT. The study was also attached to the positivistic philosophy in testing the four quantitative hypotheses. Both primary and secondary data was collected from financial institutions namely commercial banks, insurance companies and MFIs with a response rate of 97.2 percent. The rejection of the hypothesis H<sub>1</sub> implies that there was a significant relationship between corporate governance and firm performance of financial institutions in

Uganda. Since the relationship between corporate governance and firm performance was significant and positive implies that the better the corporate governance practices, the better the performance of financial institutions. Therefore, it can be concluded that the better the ownership structure, information disclosure, financial transparency and board profile, the better the performance of financial institutions.

The rejection of hypothesis H<sub>2</sub> indicates that there is a partial intervening effect of firm characteristics on the relationship between corporate governance and performance of financial institutions in Uganda. This can be concluded that improved quality of audit, better leverage and appropriate asset structure will enhance firm performance of financial institutions in Uganda. This implies that financial institution managers should profoundly consider firm characteristics to evidently understand the relationship between corporate governance and performance.

The failure to reject hypothesis H<sub>3</sub> implies that there is no moderation effect of external environment on the relationship between corporate governance and performance of financial institutions in Uganda. Regulations and use of IT does not bring any variation in firm performance.

Hypothesis H<sub>4</sub> was also rejected implying that there was a joint significant relationship of corporate governance, firm characteristics and external environment on performance of financial institutions in Uganda. This indicates that better corporate governance practices, suitable firm characteristics and appropriate external environment, will jointly enhance firm performance.

#### **6.4 Recommendations to the Findings**

Policy makers, government authorities and management of financial institutions should consider corporate governance in form of ownership structure, information disclosure, financial transparency and board profile as key predictors of performance of financial institutions given their good predicting power of 0.676. Equally, a joint treatment of corporate governance practices, firm characteristics and external environment should also be considered since it showed a strong positive predicting power to firm performance.

Management as well as the owners of the financial institutions should strengthen firm characteristics (leverage, quality of audit and asset structure) since these have been seen as the conduits that enhance the relationship between corporate governance and firm performance. This was clearly observed through the indirect to total ratio power (56 percent) using the Sobel test.

Though external environment did not have any variation on the relationship between corporate governance and firm performance, management of financial institutions should try to elevate observance to regulations and use of IT (external environment). This is because IT has been seen as a unique resource and a key driver of many technological and organizational advancement. Furthermore, Bank of Uganda should provide a linkage (a partnership) between the established and reputable financial institutions and those that are not. The Central Bank should seriously continue to do the supervision function of the financial sector since it is charged with both regulation and supervision.

## **6.5 Contributions of the Study**

The findings from this study contribute to the body of knowledge in the area of corporate governance, firm characteristics, external environment and firm performance. This section further highlights the study findings contribution to knowledge and benefits to financial institutions practice and policy.

The results of this study add to existing knowledge in the area of corporate governance, firm characteristics, external environment and firm performance. This has been expressed in four main ways. The first major contribution is the determination of the relevant factors that are important in defining corporate governance in Uganda. The study adopted ownership structure, information disclosure, financial transparency and board profile as the constructs of corporate governance required for financial institutions.

First, the study also displayed that information disclosure greatly projected corporate governance, followed by financial transparency, then ownership structure and lastly, board profile. This therefore means that information disclosure of more detailed information would provide a better understanding of corporate disclosure policies and practices to clients which ultimately enable them make better investment decisions. Similarly, transparent and good financial disclosure would reduce information asymmetry between management and stakeholders, therefore promoting shareholders' wealth. Also, information disclosure is often regarded as a good control and monitoring role of the governance process.

Second, leverage, asset structure and quality of auditing have been accepted as the constructs of firm characteristics. The study further showed that quality of auditing had the most impact on firm characteristics compared to leverage and asset structure. Therefore, management through BoD should agree on the strategies/plans of internal audit services, review and approval of the appointment of CAE, the reporting lines of CAE with functional reporting to the board. In addition, management should be particular about the quality of audit and financial leverage of a company since it involves the company's methods of financing and/or to measure its ability to meet financial obligations.

Third, regulations and use of IT have been accepted as the constructs of external environment. The study also displayed that regulations greatly predictable external environment compared to use of IT. This, therefore means that management adopted policies and guidelines set by the regulators, standard setters and external auditors. The BoD introduces, and revises the financial policies and procedures according to the financial institutions act.

Fourth, capital adequacy, asset quality, earnings quality, management efficiency and liquidity were taken up as the major constructs of firm performance. The study revealed that earnings quality, management efficiency and capital adequacy played the most role in firm performance compared to asset quality and liquidity. Therefore, BoD should constantly be involved in, first the subjective analysis to measure the efficiency and effectiveness of management, second the efficiency and ability of the financial institution's management in converting the deposits available with the financial institution excluding other funds like equity capital, into high earning advances and third, highly concentrate on the firm's measures of profitability.

The methodological contribution arises from the fact that performance of financial institutions has mostly been expressed in terms of ROA, ROE, ROI, profitability and non-financial measures. This study, however evaluated the performance of financial institutions using CAMEL model, which measures the performance of financial institutions from each of the important parameters of capital adequacy, assets quality, management efficiency, earning quality and liquidity. The study also employed a combination of both primary and secondary data which acknowledges high quality research output. This combination also controls for biasness that may exist given the fact that secondary data can ably back up the primary data.

The financial institutions (corporate governance) regulations, 2005 in Uganda, focuses on four themes that include fiduciary responsibility of BoDs, importance of independent over-sight, priority attached to risk and need for independent audit function. Parallel to the above themes, financial institutions in Uganda should also consider the financing decisions especially through asset structure and leverage ratios. In regard to capital adequacy, management of the financial institutions should work hard to maintain the depositors' confidence through improvement and the aggressiveness to use the deposits appropriately, and also prevent the institution from running bankrupt. Management should be particular on the effectiveness of converting the deposits available into high earning advances through efficient and operative supervision. Management should also have the ability to lead the institution, earn consistently, since this explains its profitability and sustainability.

## **6.6 Limitations of the Study**

The study ought to have handled the types of financial institutions individually since they gave significant differences when analysis of variables was done. This may be a

major reason why the asset quality and liquidity had less contribution in the CAMEL model. The study did not look into the (S) element of sensitivity to market risks since majority of financial institutions are not listed on Uganda Securities Exchange. Even though cross-sectional design is effective in getting the insight about the dynamics of firm performance at a point in time, corporate governance practices, firm characteristics and external environment, change over time in a way that longitudinal studies may perhaps result in better and different perceptions.

Though the agency theory backed up the direct relationship between corporate governance and firm performance, agency theory is productive with large firms, majority of firms in Uganda being MSMEs (contribute 90 percent private sector production); agency theory may just increase agency costs.

The study considered financial institutions as a whole. The study ought to categorically deal with each financial institution individually since commercial banks, MFIs and insurance companies have different capital bases, asset quality, management efficiency, earnings quality as well as liquidity.

### **6.7 Areas for Further Research**

External environment may be tested as an intervening variable in the model since it was not found to be significant in moderating the relationship between corporate governance and firm performance. Variables in this study may be measured differently by different scholars given the importance of the situation at hand. For instance external environment can be measured using other socio-cultural, legal, political, economic, technological and infrastructural factors separate from those considered in this study.

Corporate governance can take up different constructs like board composition, audit committee, board size, and corporate social responsibility. Equally, firm performance can take up other measures, such as accounting measures, market-based measures and value-added measures. A comparative study could be done relating both developing and developed economies.

A qualitative type of approach using the same variables could be considered since qualitative data provides/ gives valuable data for use in the design of a product including data about user needs, behavior patterns, and use cases. Additionally, qualitative research studies can provide you with details about human behavior, emotion, and personality characteristics that quantitative studies cannot match. Furthermore, a triangulation study could also be considered.

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## APPENDICES

### Appendix I: Questionnaire

Dear respondent,

This questionnaire is designed to collect data from financial institutions in Uganda to establish **the relationship among corporate governance practices, firm characteristics, external environment and firm performance**. The data shall be used for academic purposes only, and will be treated with strict confidence. Your participation in facilitating the study is highly appreciated. All information in this questionnaire will remain absolutely confidential and will be seen only by academic researchers involved in this study. The questionnaire has four main sections.

#### SECTION 1: GENERAL INFORMATION

##### 1.1 Information concerning the firm

- a) Name of the firm  
.....(Optional)
- b) Year of establishment.....
- c) Select the type of financial institution where your firm belongs

Commercial Bank	Micro-Finance Institution (MFI)	Insurance company

- d) Please **tick** the nature of financial institution: i) Local (ii) Foreign

## SECTION II: CORPORATE GOVERNANCE PRACTICES

2.1 Indicate the extent to which you agree or disagree with each of the following statements regarding corporate governance in your institution (Ownership structure, Information disclosure, financial transparency and Board profile)

Rate the statements using: 1= strongly disagree, 2 = disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree

No.	Corporate governance practices	1	2	3	4	5
1	The institution is clearly defined in terms of lines of authority and responsibility					
2	The number of executive directors is more than the independent directors					
3	The number of independent directors is more than the executive directors					
4	The Chief Executive Officer (CEO) is only responsible for that post					
5	The CEO acts as both the CEO and the Board chair					
6	CEO is supported by counsel from the BoD					
7	CEO's performance is monitored and appraised satisfactorily					
8	The CEO's job description is well defined					
9	The number of females on the board is appropriate					
10	The board composition of the firm is well defined					
11	Ownership structure of the firm has mechanisms that entails processes and structures which facilitate the creation of shareholder value					
12	The firm publishes adopted decisions and minutes of the meetings within a prescribed deadline					
13	The firm has a clearly defined and publically accessible disclosure policy which defines principles, rules and procedures of reporting to shareholders, relevant authorities, public, and other interested parties.					

14	The firm publishes its annual reports and information concerning its business operations					
15	The firm publishes its business reports including the report of the external auditor in compliance with the laws, by-laws, and financial regulations					
16	Updated data on the firm's insiders is publically accessible					
17	Information that has been disclosed is only mandatory					
18	Information that has been disclosed is both mandatory and voluntary					
19	The firm has adopted a transparent and publicly available remunerations policy for the board members					
20	The firm has clearly defined its dividend policy, the procedures and deadlines for its distribution					
21	Governance structure of the firm promotes better management and prudent allocation of firms' resources					

### SECTION III: INTERVENING EFFECT OF FIRM CHARACTERISTICS

**3.1 Indicate the extent to which you agree or disagree with each of the following statements regarding firm characteristics in your institution (Asset structure and Quality of auditing)**

**Rate the statements using: 1= strongly disagree, 2 = disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree**

No.	Firm characteristic	1	2	3	4	5
1	The board reviews and approves the appointment of the chief audit executive (CAE)					
2	The board agrees to the strategies/plans of the internal audit services					
3	Reporting lines of the CAE supports independence with functional reporting to the board					
4	The board is routinely up-dated with internal audit status					
5	Internal auditor uses a standard document to ensure that evidence and findings are adequately documented					
6	Quality assurance procedures are defined and cover all aspects of internal activities					
7	Institution's asset structure has ultimately increased firm value					
8	Asset structure has generated more cash-flows to the institution					
9	Institution's asset structure has been helpful in bankruptcy risks					
10	Institution's asset structure has made shareholders and management satisfied					
11	Institution's asset structure has been helpful in the firm's leverage condition					

## SECTION IV: MODERATING EFFECT OF EXTERNAL ENVIRONMENT

4.1 Indicate the extent to which you agree or disagree with each of the following statements regarding the external environment in your institution (Information Technology and Regulations)

Rate the statements using: 1= strongly disagree, 2 = disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree

No.	External environment	1	2	3	4	5
1	Our customers easily send instant messages about their concerns					
2	Our customers normally use information technology for any communication to the institution					
3	Customers make use of the institution's website					
4	Our customers normally respond to the information displayed through electronic whiteboards					
5	Our customers normally respond to the on-line information about the institution					
6	Financial regulations by the institution are intended to realise shareholder value					
7	Credible management disclosures have been enhanced by regulators, standard setters and auditors					
8	Our customers are happy about the financial regulations of the institution					
9	The BoD introduces and or revises financial policies and procedures of the institution					
10	Management has established policies for developing and modifying accounting systems and control systems					
11	The firm's regulations are in line with the Financial Institutions Act of 2004					

**Thank you for your participation.**

## Appendix II: Secondary Data Collection Sheet

Please indicate the following values form your institution's final accounts

(All amounts should be in Uganda shillings)

Item /Years	Amount	Amount	Amount
	2012	2013	2014
Earnings before interest and tax (EBIT)			
Profit after tax			
Total assets			
Value of ordinary shares			
Market value of the firm			
Total debt			
Total equity			
Amounts advanced to customers			
Net non-performing assets			
Number of employees of the institution			
Total deposits by customers			
Total of liquid assets			

**Thank you for your participation**

### **Appendix III: List of Financial Institutions**

#### **1. List of Commercial Banks**

ABC Capital Bank Limited  
Bank of Africa (U) Limited  
Bank of Baroda (U) Limited  
Bank of India (U) Limited  
Barclays Bank (U) Limited  
Cairo International Bank Limited  
Centenary Rural Development Bank Limited  
Citibank (U) Limited  
Commercial Bank of Africa (U) Limited  
Crane Bank Limited  
DFCU Bank Limited  
Diamond Trust Bank (U) Limited  
Ecobank (U) Limited  
Equity Bank (U) Limited  
Finance Trust Bank Limited  
Guaranty Trust Bank (U) Limited  
Housing Finance Bank Limited  
Imperial Bank (U) Limited  
KCB Bank (U) Limited  
NC Bank (U) Limited  
Orient Bank Limited  
Stanbic Bank Limited  
Standard Chartered Bank (U) Limited  
Tropical Bank Limited  
United Bank for Africa (U) Limited

#### **2. List of Insurance Companies**

AIG Uganda Limited  
Alliance Africa General Insurance Limited  
APA Insurance (Uganda) Limited  
Britam Insurance Uganda Limited<sup>1</sup>  
CIC General Insurance Uganda Limited  
East African Underwriters Limited  
Excel Insurance Company Limited  
First Insurance Company Limited  
GoldStar Life Assurance Company Limited  
ICEA General Insurance Company Uganda Limited  
Lion Assurance Company Limited  
NIC General Insurance Company Limited  
NIKO Insurance Uganda Limited  
Nova Insurance Company Uganda Limited  
Pax Insurance Company Limited  
Phoenix Assurance Limited  
Rio Insurance Company Limited  
Statewide Insurance Company Limited  
The Jubilee Insurance Company of Uganda  
TransAfrica Assurance Limited  
UAP Insurance Uganda Limited

3. **List of Micro Finance Institutions**

Acfode, Kampala  
Acord, Kampala  
Action On Disability  
Adjumani Youth Association  
Kasaala Savings & Credit Society Limited.  
All Nations, Lira  
Bale Community Based Organisation  
Bakebezi Growers Cooperative  
Bamunanika Cooperative Society  
Bigaijuka Cooperative Society  
BRAC Uganda  
Buddo Growers Cooperative  
Bufumbira Island Development Association  
Bukedea Women's Strugglers Association  
Buruto, Fort Portal  
Busiro South Development Association  
Buso Foundation, Kampala  
Busoga Development Agency  
Buwekula Women's Development Association  
Catholic Relief Services  
Christian Charity Center  
Demobilised Women Civil Servants  
Ecumenical Church Loan Fund  
Feed The Children Uganda  
Foundation For Credit  
FOCCAS, Mbale  
Frontpage Microfinance  
Goli Church of Uganda Microfinance  
HOFOKAM (Hoima Fort Portal Kasese Catholic Diocese Microfinance)  
Hoima-Kibaale Integrated Development  
Hoima Rural Development Organisation  
INFOCIN Uganda Limited.  
Kabale Networking Organisation (KABNETO)  
Kabwangasi Cooperative Society  
Kameke Growers Cooperative  
Kampala Social & Economic Development  
Kasodo Growers Cooperative  
Kassada Development Association  
Kidea Enterprises Limited  
Kigezi Diocese Rugarama  
Kiwafu Cooperative Society Limited.  
Kole Development Apac  
Kolping Mityana Women's Project  
Kutesa Development Task-force  
LIDDA Lira  
Lubaga Development Agency  
Micro Credit Development Trust  
Micro Projects Programme  
Mityana Livestock Cooperative

Morukokume Growers Cooperative  
Mpiigi Women Development Trust  
Muhabura Diocese Cooperative  
Naddangira Cooperative Society  
Naggalama Growers Cooperative  
Namirali Cooperative Society  
NAWOU, Kampala  
Nebbi Community Cooperative  
Opwateta Growers Cooperative  
OCBO, Kyotera  
Orungo Development Society, Soroti  
PACT, Masindi  
Pearl Microfinance Limited  
Ringa Finance Limited  
Rub Systems Uganda  
Rukungiri Development Association  
RUMECS, Iganga  
Save Mothers & Children Association  
SETCA Womens Link, Jinja  
Tororo Manufactured Association Credit  
Uganda Association for Social-Economic Progress  
UCSCU, Kawempe  
Uganda Foster Parents  
Uganda Small Scale Industries  
Uganda Womens Finance Trust  
Uganda Womens Foundation Fund  
URDT, Kampala  
USSIA Wobulenzi, Luwero  
UWESO, Kampala