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Corporate governance, internal audit quality and financial reporting quality of financial institutions

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Abstract

Purpose – The purpose of this study is to establish the relationship between corporate governance attributes (board expertise, board independence and board role performance), internal audit quality and financial reporting quality using evidence from Uganda's financial institutions.

Design/methodology/approach – This study research design is cross sectional and correlational. The study used a questionnaire survey of Chief Finance Officers, Senior Accountants and Internal audit managers of financial institutions in Uganda. Data were analyzed with the help of Statistical Package for Social Sciences.

Findings – Results indicate that board expertise and board role performance are significantly associated with financial reporting quality. Also, internal audit quality is significantly associated with financial reporting quality. Board independence is not a significant predictor of financial reporting quality.

Originality/value – This paper provides insights of what matters for financial reporting quality in Uganda's financial reporting quality. It uses the qualitative characteristics of financial statements to measure financial reporting quality. This paper focuses mainly on the conceptual framework developed by the International Accounting Standards Board.

Keywords Corporate governance, Internal audit quality, Financial reporting quality, Uganda

Paper type Research paper

1. Introduction

The conceptual framework of 2018 clearly explains that the objective of financial reporting is to provide financial information that is useful to users in making decisions. For valid decisions, information in the financial reports ought to be faithfully represented, relevant, understandable, comparable, timely and verifiable. Financial reporting quality is helpful in making decisions regarding resource allocation in the organization (International Accounting Standards Board, IASB, 2013). It is highlighted that the ability of a firm to source funds

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externally and provide proper accountability is purely vested in the financial reporting quality (Chan-Jane *et al.*, 2015; Chen *et al.*, 2011). The financial information users make decisions on prospects for future net cash inflows to the entity and management's stewardship of the entity's economic resources (IFRS, 2020). As such, financial reporting quality is of concern globally to all stakeholders such as shareholders, lenders and suppliers among others.

Globally, financial misreporting practices are common. For example, Price Water house Coopers (PwC, 2018) Global Economic Crime and Fraud Survey indicates that 49% of financial reports presented by firms do not meet the quality standard. PwC itself was banned for two years in India for failure to detect inflated revenues by Satyam (Mundy, 2018). Similarly, SEC established that Miller Energy's financial reports inflated the value of its assets by over US$400 million while Hertz Global Holdings Inc. financials materially misstated pre-tax income worth US$235 million (SEC, 2017, 2019). In Uganda, cases of misreporting practices are common among financial institutions. Kaawaase *et al.* (2016) indicates that questionable financial reporting among commercial banks first came to light in 1999 with the closure of three commercial banks (International Credit Bank, Greenland Bank and Cooperative Bank) and have continued. For example, in 2016 the financial reports of Crane Bank were inappropriate to the extent that the value of non-performing loans presented were far below the actual (Bank of Uganda, 2017). Similarly, Bank of Uganda (2015) lamented that Imperial Bank financial reports did not express the true state of affairs. With all these scenarios, questions continue to abound about which mechanisms Financial institutions could use for promoting financial reporting quality.

The available literature does not clearly indicate whether factors such as corporate governance and internal audit quality have an effect on financial reporting quality. Yet, good corporate governance streamlines monitoring and control which enhances financial reporting quality (Nalukenge *et al.*, 2017). In terms of internal audit quality, Roussy and Brivot (2016) denote that the internal auditors through their oversight mandate of all processes and procedures determine financial reporting quality. The stakeholder theory suggests that firms must implement effective tools for monitoring and control of company activities such as corporate governance (Nalukenge *et al.*, 2017). Studies linking corporate governance attributes such as board expertise, board independence, board role performance and internal audit quality to financial reporting quality are scarce in developing countries. Most of such studies are in Europe, Asia and other nations outside Africa (see Johl *et al.*, 2013). In circumstances where such studies exist, scholars have narrowed down to a smaller scope. For instance, Nalukenge *et al.* (2017) linked corporate governance with internal controls over financial reporting focusing only at Tier IV Microfinance Institutions (MFIs). Similarly, Nalukenge *et al.* (2018) focused on the contribution of corporate governance, ethics and internal controls to compliance with International Financial Reporting Standards (IFRS) and found that corporate governance is significantly associated with compliance with IFRS.

To the authors' knowledge, there are minimal studies on financial reporting in Uganda except for Nkundabanyanga *et al.* (2013) whose conceptualization of financial reporting quality was limited to comparability, accuracy, reliability, relevance and understandability of financial information. Further, Nkundabanyanga *et al.* (2013) study was focused on one government ministry (case study) whose results' generalization may be problematic unlike this study whose focus is on financial institutions that are largely privately owned. According to Saunders *et al.* (2009), generalization of case study results is limited to those case study organizations as different organizations have different systems and background. Whereas Nalukenge *et al.* (2017) explain that corporate governance attributes in terms of board expertise, board independence and board role performance are critical for internal controls over financial reporting using evidence from Uganda, their

study is largely on the specific components of internal controls such as the control environment, control activities, monitoring activities, information technology and risk assessment. Other considerable research in Uganda's reporting practices has focused on accountability in the public sector (see Bananuka *et al.*, 2018; Bakalikwira *et al.*, 2017; Mukyala *et al.*, 2017), integrated reporting adoption (see Bananuka *et al.*, 2019a, b, c) and Internet financial reporting (see, Bananuka *et al.*, 2019a, b, c; Bananuka, 2020; Bananuka *et al.*, 2018). Others (see Kaawaase *et al.*, 2016; Kaawaase and Nkundabanyanga, 2017; Kaawaase *et al.*, 2020) have focused only on external audit quality element within the financial reporting chain. Scholars such as Bananuka *et al.* (2018) have argued that financial reporting is part of accountability and such studies pay more attention to accountability as a whole than financial reporting quality.

Available studies have neglected perception based approaches that are quantitative in nature. Perception based quantitative studies provide the managerial motivations for improved financial reporting practices unlike the non-perception quantitative studies. To fill the existing gaps, we aim to establish the relationship between corporate governance, internal audit quality and financial reporting quality using evidence from Uganda's financial services firms. We achieve our aim through a questionnaire survey of 45 financial institutions. Results indicate that corporate governance attributes of board role performance and board expertise and board role performance are significantly associated with financial reporting quality unlike board independence. Also, internal audit quality is a significant predictor of financial reporting quality.

This study results are important in a number of ways. First, we contribute to existing literature using evidence from Uganda's financial institutions. Uganda is a developing country with a population estimated at 45 million and has been characterized by several bank takeovers and collapses. Such banks include, International Credit Bank, Greenland Bank and Cooperative Bank (Taken over and closed Bank of Uganda in 1999), Barclays bank (taken over by ABSA bank in 2019), Crane Bank (taken over by DFCU bank in 2017), Nile Bank (Taken over in 2005 by Barclays Bank), Global Trust Bank and National Bank of Commerce (taken over by Bank of Uganda in 2017 and later liquidated) among others. The link between corporate governance, internal audit quality and financial reporting quality has not been known quite for a long time. We therefore provide a first time evidence of such a link in a developing country perspective. Second, this study results are important for government and specific regulators of financial services firms. The regulators need to enhance their supervision and monitoring mechanisms especially at the time of selecting or appointing board members. It is important that the board members appointed to oversee a financial institution are largely independent from management and internal auditors are competent to handle their activities. Third, management need to be aware that fraudulent financial reporting practices mislead users of such financial information and this has negative effects on the going concern of such institutions. One of the indicators of poor management is the collapse of an institution they lead. Lastly, members of society need to distance themselves from fraud related activities given that it is from members of society that such board members are selected.

The rest of the paper is organized as follows. The next section is literature review. Under this section, the theoretical foundation is explained and hypotheses are developed. This section is followed by methodology. Section 4 which is results then follows and thereafter results are discussed. The last section is summary and conclusion.

2. Literature review

2.1 Theoretical foundation

Stakeholder theory argues that managers should make decisions so as to take account of the interests of all stakeholders in a firm including not only financial claimants, but also

employees, customers, communities, governmental officials (Freeman, 1984). From a stakeholder perspective, an organization should attempt to meet multiple goals of a wide range of stakeholders rather than merely those of shareholders. Freeman (1984) argues that business organizations should be more concerned about the interests of other stakeholders when taking strategic decisions. The stakeholder theory relates to the term "accountability" which is defined by Peasnell *et al.* (1998) as the responsibility of one party to another in a relationship where one party entrusts another with the performance of certain duties. Hence it can be argued that financial reporting quality could reduce information asymmetry between the organization and its stakeholders in a timelier manner and as a consequence improve the relationships between them. Quality financial information can be provided to the various stakeholders in the circumstance that the firm has good corporate governance practices and a quality internal audit function. Stakeholder theory (Peasnell *et al.*, 1998) requires managers to provide reliable information to the various stakeholders at all times. On the basis of stakeholder theory, firms with internal audit quality and board members who are independent of management, have expertise in financial related matters and can perform their roles are capable of meeting the various stakeholder needs.

2.2 Hypothesis development

2.2.1 Corporate governance and financial reporting quality. Studies that link corporate governance attributes of board independence, board role performance and expertise to financial reporting quality are uncommon in emerging economies especially Uganda. Nalukenge *et al.* (2017) found that board role performance and financial expertise of the board are significantly associated with internal controls over financial reporting while board independence was not. In another study, Nalukenge *et al.* (2018) found that corporate governance as measured by board financial expertise, board independence and board role performance is significantly associated with compliance with International Financial Reporting Standards. In their study, Mansor *et al.* (2013), confer to the fact that without corporate governance, the overall management including financial management, decision making and indeed reporting may not be realistically attained. Corporate governance has a strong influence on the basic and formal performance of any business, and in this discussion, the current study pays attention to the ways in which corporate governance relates with financial performance.

The study of Changezi and Saeed (2014) document that corporate governance is a key foundation of organizations to be more productive, governed and controlled, and as such different stakeholders contribute immensely to the function and process of financial reporting. In many companies, financial reports are based on the decisions of corporate governance actors although they go further to authenticate recorded information as provided by the financial reports. To this view, it may be ideal to note that corporate governance and financial reporting are related. However, the above authors did not specifically pay attention to the manufacturing sector, and hence their deductions may not entirely reflect the position in this sector. Prior research has consistently revealed significant associations between various corporate governance mechanisms and poor financial reporting quality, such as earnings management/manipulation and financial statement fraud (Beasley *et al.*, 2001). Bananuka *et al.* (2019a, b, c) document that board role performance is significantly associated with Internet reporting in Uganda. Further, Nalukenge (2020) found that board role performance is significantly associated with international financial reporting standards disclosure requirements in Uganda. In another study of adoption of international financial reporting standards, Bananuka *et al.* (2019a, b, c) found that board of directors' effectiveness where one of the measures was financial expertise is significantly associated with IFRS adoption in Uganda's MFIs.

From the foregoing discussion, it is evident that prior corporate governance mechanisms such as having an independent board with financial expertise that performs her roles effectively are capable of improving the quality of financial statements. We therefore hypothesize that:

H1. Board expertise is positively and significantly associated with financial reporting quality

H2. Board independence is positively and significantly associated with financial reporting quality

H3. Board role performance is positively and significantly associated with financial reporting quality

2.3 Internal audit quality and financial reporting quality

Roussy and Brivot (2016) undertook a study on how internal auditors, Institute of Internal Auditors (IIA), audit committee members and external auditors understand the notion of internal audit quality. From their study, external auditors mainly view internal audit quality from two angles; internal auditor competence and Internal Audit Function's level of independence while the IIA understands quality as conformance to norms and best practices promoted by the Institute. The internal auditors and audit committee members frame internal audit quality based on how useful management perceives the internal audit reports. All the above dimensions (competence, independence, compliance with professional standards) are included in this study as measures of internal audit quality in our study. Further, Bananuka *et al.* (2018) understands a functioning internal audit as that which evaluates the effectiveness of internal controls, participates in risk management and ensures compliance with the laws and regulations. This means that, once the internal audit gains the capacity to review the effectiveness of internal controls and participates in risk management, then it is competent. If internal audit staff are not competent, independent and do not comply with professional standards, then they cannot fulfill their roles and thus nonfunctioning.

Studies that link internal audit quality to financial reporting quality of financial institutions are scarce in developing countries especially African countries. The available literature links internal audit quality to financial reporting quality using evidence from the developed world. For example, Prawitt *et al.* (2006) study utilizes 218 publicly listed US firms from the years 2000–2005 and finds that the IAF quality constrains earnings management. According to Johl *et al.* (2013), internal audit quality is significantly associated with abnormal accruals if the internal audit function outsources its activities. However, Johl *et al.* (2013) notes that, if internal audit does not outsource its activities and has no political connections, there is a negative relationship between internal audit quality and abnormal accruals. Johl *et al.* (2013) further note that internal audit organizational independence, financial focus audit activities and investment are associated with lower income increasing abnormal accruals. Further, Bananuka *et al.* (2018) found that internal audit function is significantly associated with accountability of Ugandan statutory corporations. These findings mean that a well undertaken internal audit is the baseline for financial reporting, although the extent to which it is being undertaken in financial institutions in Uganda has not been extensively been examined.

We argue that a well undertaken internal audit helps an organization accomplish its financial reporting objectives by bringing a systematic detail of what is done in the firm and how it should be. With internal audit acting as a watchdog for the firm's financial operations improves the financial reporting practices. We then hypothesize that:

H4. Internal audit quality improves financial reporting quality

3. Methodology

3.1 Research design, population and sample

This study employed a cross-sectional research design along with a quantitative research approach. This study population is 62 financial institutions in Uganda which are regulated by the central bank (Bank of Uganda) and Insurance Regulatory Authority (IRA). The financial institutions under study comprised of 24 commercial banks, 29 insurance firms, 5 micro deposit taking institutions and 4 credit institutions (Bank of Uganda, 2017; IRA, 2017). The financial institutions were studied majorly because they are publicly interested and highly regulated. However, foreign exchange bureaus were not included in this study given that there mode of operation is slightly different from the other financial institutions. The foreign exchange bureaus are highly affected by external shocks as compared to other financial services firms. The MFIs were also not included in this study given that they are categorized as Tier IV MFIs and are less regulated. It is until 2017 that the Microfinance Regulatory Authority was inaugurated (see Bananuka *et al.*, 2019a, b, c). Therefore, the MFIs until 2019 were not highly regulated and therefore not mandated to have an internal audit function in place. Data collection was done in March 2019 to August 2019.

In terms of the respondents' profile, questionnaires were received from 67 respondents who 55% of them were Chief Finance Officers (CFOs) and 45% were Internal Audit Managers (IAMs). In terms of gender, 46% were male while 54% were female meaning that there are more female CFOs and IAMs in the financial services firms under study. For education level, majority of the respondents have an undergraduate degree (37%) while 24% have attained a master's degree. Those who passed through the professional courses ladder such as joining the Association of Chartered Certified Accountants (ACCA) course after their high school national examinations were 30%. We also found that 43% of our respondents were aged between 18 and 30 years while 7% were aged above 50 years. Given that the unit of analysis was a financial institution, the responses were aggregated to firm level. After aggregation of the responses, we note that only 45 financial institutions participated in the study representing a response rate of 72%. Table 1 presents further details on the respondent characteristics.

3.1.1 Data collection instrument, validity, reliability and measurement of variables. This study used a structured questionnaire to collect data. This instrument contained only close-ended questions designed on a 6-Point Likert scale. The points on the scale were defined as: 1-Strongly disagree; 2-Somehow disagree; 3-Disagree; 4-Agree; 5-Somehow agree; and 6-Strongly agree. This scale was applied to ensure that respondents are specific and clearly indicate the extent to which they either agree or disagree with the items presented. More so,

Category	Scale	$n = 67(100\%)$
Position held by the respondent	Chief Finance Officers	37(55%)
	Internal audit managers	30(45%)
Gender	Male	53(46%)
	Female	62(54%)
Age of the respondent	18–30 years	49(43%)
	31–39 years	40(35%)
	40–50 years	18(16%)
	Above 50 years	8(7%)
Education	Diploma	10(9%)
	Bachelor's degree	43(37%)
	Master's degree	28(24%)
	Others	34(30%)

Source(s): Primary data

Table 1. Demographic profile of the respondents

close-ended questions are convenient and time saving for the respondents and the researcher (Sekaran, 2003).

The questionnaire was presented to academicians and practitioners (auditors, accountants and finance managers) to check the relevance of our questionnaire items. We then computed content validity index (CVI) after receiving the expert opinions on our questionnaire. We generated a CVI of 0.85. We obtained the CVI by dividing the number of relevant questions to the total questions. We then improved our questionnaire by incorporating views suggested by the experts (practitioners and academicians). According to Amin (2005) a CVI of 0.7 or better is considered acceptable. We also checked for reliability of our questionnaire using the Cronbach alpha coefficients. Cronbach's alpha coefficients were all above 0.7 and this is an indicator that our instrument was reliable. We also performed factor analysis to further ensure reliability and validity of the research instrument. The factor analysis results are presented in Appendices 1–3.

For measurement of variables, financial reporting quality was measured using the qualitative characteristics of financial statements such as faithful representation, relevance, understandability, timeliness, comparability and verifiability (Johl *et al.*, 2013; IFAC, 2010). Corporate governance was proxied by board independence, board role performance and board expertise (Beasley *et al.*, 2001; Nalukenge *et al.*, 2017, 2018; Nkundabanyanga and Ahiauzu, 2012). In addition, we operationalize internal audit quality in terms of staff competence, autonomy and compliance with standards and norms (Roussy and Brivot, 2016; Johl *et al.*, 2013). We also control for firm age and firm size since according to Bartov *et al.* (2000) failure to control for confounding factors may lead to falsely rejecting the study hypotheses. We provide details on the measurement of variables in Table 2.

4. Results

4.1 Descriptive statistics

In Table 3, we present a summary of descriptive statistics. The means and standard deviations are reported as well as the skewness and kurtosis. The mean for financial

Variable	Acronym	Variable description
Dependent variable		
Financial Reporting Quality	FRQ	Measured by average rating on a 6 point Likert scale of questions on faithful representation, relevance, understandability, timeliness, comparability and verifiability
Predictor variable		
Board expertise	BEX	Measured by average score of questions on a 6 point Likert scale on Board expertise
Board independence	BIND	Measured by average score of questions on a 6 point Likert scale on board independence
Board role performance	BODR	Measured by average score of questions on a 6 point Likert scale on board role performance
Internal audit quality	IAQ	Measured by average score of questions on a 6 point Likert scale on staff competence, autonomy and compliance with professional standards
Firm age	AGE	A dummy variable coded as 0 if the firm is 5 years and below, 1 if the firm is 6–10 years, 2 if the firm is 11 years–20 years and 3 if the firm is above 20 years
Firm size	SIZE	A dummy variable coded as 0 if the firm has less than 10 branches, 1 if the firm has 10 to 20 branches, 2 if the firm has 21 to 30 branches 3 if the firm has 31 to 50 branches and 4 if the firm has more than 50 branches
	β_0	Constant
	εj	Error term

Table 2.
Measurement of variables

	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Financial reporting quality	2.00	5.97	4.40	0.81	−0.05	0.23	−0.37	0.45
Faithful representation	2.00	6.00	4.26	0.90	−0.24	0.23	0.13	0.45
Relevance	1.33	6.00	4.41	1.01	−0.25	0.23	−0.17	0.45
Comparability	2.00	6.00	4.44	0.98	−0.04	0.23	−0.75	0.45
Understandability	2.00	6.00	4.45	1.08	−0.22	0.23	−0.72	0.45
Comparability	2.00	6.00	4.49	1.15	−0.33	0.23	−0.85	0.45
Timeliness	2.00	6.00	4.27	0.90	−0.15	0.23	−0.32	0.45
Verifiability	2.00	6.00	4.50	1.11	−0.26	0.23	−0.79	0.45
Internal audit quality	1.86	5.71	3.74	0.82	−0.19	0.23	−0.25	0.45
Staff competence	2.00	6.00	4.19	1.21	−0.20	0.23	−0.90	0.45
Autonomy	1.00	6.00	3.25	1.37	0.26	0.23	−0.59	0.45
Compliance with standards	1.00	6.00	3.56	1.35	0.11	0.23	−0.95	0.45
Board expertise	2.00	6.00	4.30	1.17	−0.22	0.23	−0.68	0.45
Board independence	1.40	5.40	3.56	1.00	−0.30	0.23	−0.55	0.45
Board role performance	1.86	6.00	4.25	1.09	0.01	0.23	−0.84	0.45
Firm age	1.00	3.00	2.75	0.51	−1.93	0.23	2.95	0.45
Firm size	1.00	4.00	2.99	0.97	−0.39	0.23	−1.09	0.45

Source(s): Primary data

Table 3.
Descriptive statistics

reporting quality is 4.4 while its maximum and minimum score is 5.97 and 2. This means that there are a number of financial institutions in Uganda whose financial reporting quality is low. Remember, this study's questionnaire was given to Chief Finance Officers and Senior Accountants in the Finance departments and to the Internal Audit manager. So, by having a minimum score of 2 is an indicator that, there are still issues of financial reporting quality in Uganda that need to be addressed. For corporate governance which was largely proxied by board expertise, board independence and board role performance, their means are 4.3, 3.5 and 4.2. This means that there are institutions whose boards are seen to lack the financial expertise, independence and do not performance their roles. This can then explain why the financial reporting quality is lacking in Uganda. The mean for internal audit quality is 3.7 which is low as well. The internal audit quality is not rated as good enough in terms of staff competence, compliance with professional standards and independence.

We also present skewness and kurtosis values to confirm normality of the data. All the skweness and kurtosis values fall within the range of −3 to 3 and this is in line with the recommendations of Field (2009).

4.2 Correlation analysis

We present correlation analysis results in Table 4. Results indicate a significant and positive relationship between board role performance and financial reporting quality ($r = 0.603$, $p < 0.01$) as well as a significant and positive relationship between board expertise and financial reporting quality ($r = 0.656$, $p < 0.01$). However, board independence is not significantly associated with financial reporting quality ($r = 0.126$, $p > 0.01$). The results

Table 4.
Correlation analysis results

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Financial reporting quality (1)	1															
Faithful representation (2)	0.727**	1														
Relevance (3)	0.764**	0.601**	1													
Understandability (4)	0.817**	0.469**	0.561**	1												
Comparability (5)	0.774**	0.410**	0.431**	0.584**	1											
Timeliness (6)	0.786**	0.475**	0.468**	0.614**	0.559**	1										
Verifiability (7)	0.834**	0.541**	0.558**	0.589**	0.586**	0.623**	1									
Internal audit quality (8)	0.502**	0.400**	0.428**	0.421**	0.386**	0.291**	0.426**	1								
Staff competence (9)	0.591**	0.461**	0.401**	0.534**	0.474**	0.430**	0.478**	0.763**	1							
Autonomy (10)	−0.063	0.055	−0.005	−0.093	−0.051	−0.139	−0.059	0.479**	0.023	1						
Compliance with standards (11)	0.337**	0.175	0.378**	0.272**	0.235*	0.182	0.325**	0.616**	0.254**	−0.028	1					
Board expertise (12)	0.656**	0.456**	0.564**	0.601**	0.530**	0.429**	0.491**	0.440**	0.545**	−0.119	0.323**	1				
Board independence (13)	0.126	0.141	0.204*	0.047	0.021	0.095	0.107	0.246**	0.170	0.165	0.127	0.116	1			
Board role performance (14)	0.603**	0.426**	0.508**	0.527**	0.511**	0.374**	0.472**	0.511**	0.560**	−0.027	0.361**	0.713**	0.105	1		
Firm age (15)	0.092	0.101	0.014	0.140	0.069	0.116	0.003	0.158	0.100	0.102	0.097	0.094	−0.015	0.178	1	
Firm size (16)	0.128	0.087	0.174	0.088	−0.016	0.151	0.139	−0.110	−0.046	−0.137	−0.033	0.039	0.097	−0.171	0.084	1

Note(s): **. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed)

Source(s): Primary data

reveal that improvement in financial reporting quality is as a result of corporate governance attributes facilitated by board role performance and board expertise while board independence does not translate into financial reporting quality. A significant positive relationship between internal audit quality and financial reporting quality ($r = 0.503$, $p < 0.01$) exists. The result mean that enhanced internal audit quality is enhances financial reporting quality. On further scrutiny of the constructs for internal audit quality, results indicate that a significant positive relationship between staff competence and financial reporting quality ($r = 0.591$, $p < 0.01$) exists. Furthermore, there is a significant positive relationship between compliance with professional standards and financial reporting quality ($r = 0.337$, $p < 0.01$). On the other hand, there is a non-significant negative relationship between autonomy and financial reporting quality ($r = -0.063$, $p > 0.01$).

4.3 Regression analysis

Previous scholars such as Bananuka *et al.* (2019a, b, c) argue that correlation analysis results provide preliminary evidence on whether hypotheses are supported or not. Following from that, we run further analyses to confirm our hypotheses. We run a hierarchical regression analysis which is one of the multivariate analysis tools. We enter our variables in a hierarchy. We present our hierarchical regression analysis results in Table 5. Model I is our baseline model and has only control variables. These variables include firm age and firm size. The standardized β coefficients for firm age ($\beta = 0.082$, $p > 0.01$ and firm size ($\beta = 0.121$, $p > 0.01$) show that the two variables included in Model 1 are not significant which means that the noise in our model is removed at this stage. In Model 2, we enter board expertise, board independence and board role performance. The standardized β coefficients of board expertise ($\beta = 0.400$, $p < 0.01$), board independence ($\beta = 0.027$, $p > 0.01$) and board role performance ($\beta = 0.348$, $p < 0.01$). This result means that only board independence is not significant among the corporate governance attributes. We find that board expertise and board role performance are significant at 0.01 level. Our final model is model 3 where we enter internal audit quality in addition to board expertise, board independence and board role performance. We find that the standardized β coefficient of internal audit quality is ($\beta = 0.241$, $p < 0.01$) and significant. This result means that only board independence is not significant among the corporate governance attributes. Our final model results are such that board expertise, board role performance and internal audit quality are significant predictors to financial reporting quality thus providing support for H1, H3 and H4. Overall, our final

Item	Model 1	Model 2	Model 3	Tolerance	VIF
Constant	3.739	1.706	1.383	na	na
Board expertise		0.400**	0.359**	0.453	2.208
Board independence		0.027	−0.022	0.919	1.088
Board role performance		0.348**	0.267**	0.405	2.472
Internal audit quality			0.241**	0.680	1.472
Control variables					
Firm age	0.082	−0.022	−0.044	0.936	1.068
Firm size	0.121	0.172	0.192	0.882	1.134
Model *F*	1.324	21.435**	20.745**	na	na
R square	0.023	0.496	0.535	na	na
Adjusted *R* square	0.006	0.473	0.510	na	na
Durbin Watson			2.104	na	na

Note(s): **Significant at the 0.01 level
Source(s): Primary data

Table 5.
Hierarchical regression analysis

model predicts 51% of the variance in financial reporting quality (*Adjusted* $R^2 = 0.510$, $F = 20.745$, $p < 0.01$). This study uses the standardized β coefficients because they are all measured in standard deviation units and so are directly comparable which means that they provide a better insight into the importance of a predictor in the model (Field, 2009).

We also tested for multicolinearity and we found that there was no multicolinearity. We tested this using tolerance values and Variance Inflation Factors (VIF). Field (2009) recommended tolerance values to be below 0.2 while VIF values not to exceed 10. All our tolerance values and VIF values fall within acceptable ranges.

5. Discussion

The present study results indicate that, of the corporate governance attributes conceptualized in this study, only board expertise and board role performance are significant predictors of financial reporting quality. Also, internal audit quality is found to predict financial reporting quality. These results are in agreement with stakeholder theory which requires that institutions manage stakeholder expectations especially in provision of financial information. In managing stakeholder expectations, institutions must be able to provide financial information that is faithfully represented, relevant and above all, such information should be capable of being verified, provided timely, comparable and understandable. To be able to achieve quality financial reporting practices, financial institutions need to have an internal audit quality in terms of staff competence and such staff should be able to comply with professional standards and norms such as the code of ethics for professional accountants. Also, the board should have relevant expertise such as financial expertise and knowledge of the business operations. The financial institutions board need to perform their roles as enshrined in the Financial Institutions Act and the Insurance Act. The board should be in position to perform other roles as found in existing literature (see Nkundabanyanga and Ahiauzu, 2012; Nalukenge *et al.*, 2018; Bananuka *et al.*, 2019a, b, c).

The finding that board expertise and financial reporting quality are significantly associated is in agreement with the findings of Nalukenge *et al.* (2017) who found that board expertise is significantly associated with internal controls over financial reporting. Also, the finding that board independence is not significantly associated with financial reporting quality is in agreement with Nalukenge *et al.* (2017) who found that board independence is not significantly associated with internal controls over financial reporting. For the significant relationship between board role performance and financial reporting quality, this study results are in line with those of Nalukenge *et al.* (2017), Nalukenge (2020) and Bananuka *et al.* (2019a, b, c) whose finds were that board role performance is significantly associated with internal controls over financial reporting, compliance with IFRS disclosure requirements and Internet financial reporting respectively. Taken as whole, this study re-affirms that corporate governance significantly improve financial reporting quality and this is in agreement with Nalukenge *et al.* (2018).

The significant relationship between internal audit quality and financial reporting quality was expected except that internal audit independence (autonomy) was found not to be significant. Whereas this was a surprising result, it was not the main focus of the study. Our correlation analysis results on the non-significance of autonomy is in agreement with the arguments put across in Roussy and Brivot (2016) works that internal auditors should keep a close relationship with management. Roussy and Brivot (2016) argument on the close relationship of internal audit with management is based on the fact that, internal auditors should constantly advise management on how to improve operations. Such close relationships may at times impair the independence of internal audit. Contrary, the finding that internal audit independence is not significantly associated with financial reporting quality contradict findings by Johl *et al.* (2013) that internal audit independence is

significantly associated with lower income increasing abnormal accruals. In the Ugandan setting, internal audit report to the audit committee functionally and to management administratively. However, the independence of internal auditors in Uganda's financial institution does not significantly contribute toward the improvement of financial reporting practices. All in all, the finding that internal audit quality and financial reporting quality is in agreement with the works of Johl *et al.* (2013) who found that internal audit quality is significantly associated with financial reporting quality (abnormal accruals) when the internal audit function activities are not outsourced. This study finding on the association between internal audit quality and financial reporting quality is in line with the findings of Bananuka *et al.* (2018) that internal audit function is significantly associated with accountability of statutory corporations.

The exact mechanism through which financial reporting quality can be improved in Uganda is such that: First, corporate governance mechanisms of board expertise and board role performance need to be given particular attention. This may be achieved when an institution attracts those individuals with knowledge in the financial statements analysis and who are already chairing board committees elsewhere. Also, financial reporting quality may be improved if the board members can monitor performance of management at all intervals by critically analyzing their performance reports. The board must always ratify major decisions, organize and attend meetings, advise management on the way forward for the pertinent issues and where necessary delegate authority to management. Secondly, the internal audit quality of any financial institution should have performed accounting work elsewhere (experience), have accounting professional qualifications and have attended continuous development programs. Lastly, management need to ensure that, in the preparation of financial statements, focus is put on ensuring that the information disclosed in such financial statements is relevant, faithfully represented, timely, comparable and verifiable.

6. Summary and conclusion

This study aimed to establish the relationship between corporate governance, internal audit quality and financial reporting quality based on evidence from Uganda. This objective was achieved through a questionnaire survey of 45 financial institutions where the Chief Finance Officers, Senior Accountants and Internal Audit managers were the unit of inquiry. Results indicate that board expertise and board role performance are significantly associated with financial reporting quality unlike board independence. Also, results indicate that internal audit quality is significantly associated with financial reporting quality.

This study results have implications to the academia, practice and the general society. Only board expertise and board role performance have a significant impact on financial reporting quality unlike previously when on would believe that board independence also has a significant effect. This study results imply that financial institutions and their regulators can now focus on ensuring that the boards of their financial institutions have the financial expertise. This financial expertise is gained through board members have served previously as accountants and auditors. Bank of Uganda and Insurance Regulatory Authority are the main regulators of Uganda's financial institutions. These two regulators need to ensure that all staff in internal audit of financial institutions are members of a recognized professional body and above all, are members of the Institute of Certified Public Accountants of Uganda. Management may also use this study results to enhance governance of their institutions by ensuring that their boards and leadership is characterized by performance and expertise. Management need to be aware that fraudulent financial reporting practices mislead users of such financial information and this has negative effects on the going concern of such institutions. One of the indicators of poor management is the collapse of an institution they

lead. Members of society need to distance themselves from fraud related activities given that it is from members of society that such board members are selected.

Like any other study, this study has limitations which we discuss alongside areas for further research. This study predicts only 40% and this means that future studies may focus on other variables that explain financial reporting quality. Variables suggested for further studies may include audit committee effectiveness, external audit quality and firm characteristics. However, further studies may not be limited to only the variables mentioned above. This study employs stakeholder theory and ignores the institutional theory and yet these work together. This points out the need for examining institutional pressures in future studies. On the methodological stance, this study only uses the quantitative approach where a questionnaire survey is utilized and ignores the qualitative approach. Future studies may also take this advantage. Taken as a whole, this study results are important to Uganda's financial services firms / institutions and may be applicable to other settings with similar environment as such for Uganda.

References

Amin, M. (2005), *Social Science Research concepts:Methodology and AnalysisKampala: Uganda*, Makerere University Printery, Makerere University, Kampala.

Bakalikwira, L., Bananuka, J., Kaawaase Kigongo, T., Musimenta, D. and Mukyala, V. (2017), "Accountability in the public health care systems: a developing economy perspective", *Cogent Business and Management*, Vol. 4 No. 1, pp. 1-14.

Bananuka, J., Nkundabanyanga, S.K., Nalukenge, I. and Kaawaase, T.K. (2018), "Internal audit Function, audit committee effectiveness and accountability in the Ugandan statutory corporations", *Journal of Financial Reporting and Accounting*, Vol. 16 No. 1, pp. 138-157.

Bananuka, J., Night, S., Ngoma, M. and Najjemba, G.M. (2019a), "Internet financial reporting adoption: exploring the influence of board role performance and isomorphic forces", *Journal of Economics, Finance and Administrative Science*, Vol. 24 No. 48, pp. 266-287.

Bananuka, J., Tumwebaze, Z. and Orobia, L. (2019b), "The adoption of integrated reporting: a developing country perspective", *Journal of Financial Reporting and Accounting*, Vol. 17 No. 1, pp. 2-23.

Bananuka, J., Tumwebaze, Z., Musimenta, D. and Nuwagaba, P. (2019c), "Determinants of adoption of international financial reporting standards in Ugandan micro finance institutions", *African Journal of Economic and Management Studies*, Vol. 10 No. 3, pp. 336-355.

Bananuka, J. (2020), "Intellectual capital, isomorphic forces and internet financial reporting: evidence from Uganda's financial services firms", *Journal of Economic and Administrative Sciences*, Vol. 36 No. 2, pp. 110-133.

Bank of Uganda (2015), "Imperial Bank Uganda limited", available at: https://www.bou.or.ug/bou/media/from_the_bank/Imperial_Bank.html (accessed 14 February 2019).

Bank of Uganda (2017), *Annual Supervision Report*, December, 2017, Kampala, available at: https://islamicmarkets.com/. . ./bank-of-uganda-annual-supervision-report-2017 (accessed 21 February 2019).

Bartov, E., Gul, F.A. and Tsui, J.S.L. (2000), "Discretionary-accruals models and audit qualifications", *Journal of Accounting and Economics*, Vol. 30 No. 3, pp. 421-452.

Beasley, M. and Petroni, K. (2001), "Board independence and audit firm type", *Auditing: A Journal of Practice and Theory*, Vol. 20 No. 1, pp. 97-114.

Changezi, N.I. and Saeed, A. (2014), "Impact of corporate governance framework on the organizational performance", *IOSR Journal of Business and Management (IOSR-JBM)*, Vol. 16 No. 1, pp. 73-78.

Chan-Jane, L., Tawei, W. and Chae-Jung, P. (2015), "Financial reporting quality and investment decisions for family firms", *Asia Pacific Journal of Management*, Vol. 3 No. 4, pp. 1-34.

Chen, F., Li, Q. and Wang, Z. (2011), "Financial reporting quality and investment efficiency of private firms in emerging markets", *The Accounting Review*, Vol. 86 No. 4, pp. 1255-1288.

Field, A.P. (2009), *Discovering Statistics Using SPSS: (And Sex and Drugs and Rock "n" Roll)*, SAGE Publications, Los Angeles, Thousand Oaks, CA.

Freeman, R.E. (1984), *Strategic Management: A Stakeholder Approach*, Pitman, Boston, MA.

IFRS (2020), "Conceptual framework for financial reporting", available at: https://www.ifrs.org/-/media/project/conceptual-framework/fact-sheet-project-summary-and-feedback-statement/conceptual-framework-project-summary.pdf (accessed 20 June 2020).

International Accounting Standards Board, IASB (2013), "Prospects of application of international standards in financial reporting by small and medium-size businesses in Georgia", *International Journal of Business Administration*, Vol. 9 No. 2, pp. 3-22.

International Federation of Accountants, IFAC (2010), *IFAC Comment Letter: Transparency of Firms that Audit Public Companies*, Consultation report.

IRA (2017), "List of licensed insurance companies for the year 2018", available at: https://ira.go.ug (accessed 31 December 2017).

Johl, K.S., Subramaniam, N. and Cooper, B. (2013), "Internal audit function, board quality and financial reporting quality: evidence from Malaysia", *Managerial Auditing Journal*, Vol. 28 No. 9, pp. 780-814.

Kaawaase, T.K. and Nkundabanyanga, S.K. (2017), "Perceived auditor Independence factors in Uganda", *Makerere Business Journal*, Vol. 13 No. 2, pp. 128-153.

Kaawaase, T.K., Assad, M.J., Kitindi, E.G. and Nkundabanyanga, S.K. (2016), "Audit quality differences amongst audit firms in a developing economy: the case of Uganda", *Journal of Accounting in Emerging Economies*, Vol. 6 No. 3, pp. 269-290.

Kaawaase, T.K., Bananuka, J., Kwizina, T.P. and Nabaweesi, J. (2020), "Intellectual capital and performance of small and medium audit practices: the interactive effects of professionalism", *Journal of Accounting in Emerging Economies*, Vol. 10 No. 2, pp. 165-189.

Mansor, N., Che-Ahmad, A., Ahmad-Zaluki, N.A. and Osman, A.H. (2013), "Corporate governance and earnings management: a study on the Malaysian family and non-family owned PLCs", *Procedia Economics and Finance*, Vol. 7, pp. 221-229.

Mukyala, V., Bananuka, J., Basuuta, M., Tumwebaze, Z. and Bakalikwira, L. (2017), "Accountability of local government authorities: a developing economy perspective", *African Journal of Business Management*, Vol. 11 No. 12, pp. 266-274.

Mundy, S. (2018), *Financial Advisory Update*, Financial Times, available at: www.ft.com/content/c1231f40-f695-11e7-88f7-5465a6ce1a00 (accessed 11 January 2018).

Nalukenge, I., Tauringana, V. and Ntayi, J.M. (2017), "Corporate governance and internal controls over financial reporting in Ugandan MFIs", *Journal of Accounting in Emerging Economies*, Vol. 7 No. 3, pp. 294-317.

Nalukenge, I., Nkundabanyanga, S.K. and Ntayi, J.M. (2018), "Corporate governance, ethics, internal controls and compliance with IFRS", *Journal of Financial Reporting and Accounting*, Vol. 16 No. 4, pp. 764-786.

Nalukenge, I. (2020), "Board role performance and compliance with IFRS disclosure requirements among microfinance institutions in Uganda", *International Journal of Law and Management*, Vol. 62 No. 1, pp. 47-66.

Nkundabanyanga, S.K. and Ahiauzu, A. (2012), "Board role performance in Uganda's services sector firms", *Journal of Public Administration and Policy Research*, Vol. 4 No. 5, pp. 115-124.

Nkundabanyanga, S.K., Tauringana, V., Balunywa, W. and Emitu, S.N. (2013), "The association between accounting standards, legal framework and the quality of financial reporting by a government ministry in Uganda", *Journal of Accounting in Emerging Economies*, Vol. 3 No. 1, pp. 65-81.

Peasnell, V., Pope, F. and Young, S. (1998), "A new model board", *Accountancy*, Vol. 122 No. 1259, p. 91.

Prawitt, D., Smith, J. and Wood, D. (2006), *Internal Audit Function Characteristics and Earnings Management*, Working paper, Brigham Young University (July).

PwC (2018), "Pulling fraud out of the shadows: global economic Crime and fraud survey 2018", available at: https://www.pwc.com/gx/en/services/advisory/forensics/economic-crime-survey.html#cta-1 (accessed 14 February 2019).

Roussy, M. and Brivot, M. (2016), "Internal audit quality: a polysemous notion?", *Accounting, Auditing and Accountability Journal*, Vol. 29 No. 5, pp. 714-738.

Saunders, M., Lewis, P. and Thornhill, A. (2009), *Research Methods for Business Students*, 5th ed., Pearson education.

SEC (2017), *SEC Charges KPMG with Audit Failures*, Press Release, available at: https://www.sec.gov/news/press-release/2017-142 (accessed 14 February 2019).

SEC (2019), "SEC charges Hertz with inaccurate financial reporting and other failures", available at: https://www.sec.gov/enforce/33-10601-s (accessed 14 February 2019).

Sekaran, U. (2003), *Research Methods for Business*, John Milley and Sons, New York, NY.

Appendix 1.
Rotated component matrix for financial reporting quality

Item	Component					
	Comparability	Understandability	Relevance	Faithful representation	Timeliness	Verifiability
Our financial statements are presented in a format similar to the industry	0.723					
All books of accounts are comparable across previous periods	0.609					
Our source documents format are comparable with those of other firms in the same industry	0.602					
Our annual report format does not change over periods	0.598					
Information in our source documents can easily be compared	0.595					
Our financial report figures can be compared to assets/ activities done	0.572					
Semi-annual reports are ready after first half of the accounting period like with other firms in the same industry	0.531					
Recommended language and procedures in reporting is used consistently	0.512					
Our financial statements contain the necessary detail		0.768				
Figures in the financial statements are clear and precise		0.710				
Financial report figures are clear and concise		0.681				
Our financial reports are easy to interpret and comprehend		0.678				
Users can understand our financial reports easily		0.545				
Information in our financial statements is free from errors		0.539				

(*continued*)

Item	Component					
	Comparability	Understandability	Relevance	Faithful representation	Timeliness	Verifiability
Information in our financial reports is made available in time		0.529				
Information presented in our financial statement is significant for decision making			0.688			
Information in our financial statements is complete in all respects and can be predicted			0.670			
Our financial statements have confirmatory values			0.596			
Figures in the final accounts can be traced back to the ledgers				0.673		
The information provided in our financial statements is accurate				0.658		
There is a backup of working notes to authenticate our reports				0.647		
The information provided in our financial statements is reliable				0.630		
Financial reports are prepared at departmental level in time					0.641	
Our financial statements are ready by the year end					0.638	
When information delays, financial reporting process is put on halt					0.625	
Our source documents are clearly linked to our books of accounts						0.750
Information in our source documents can easily be verified						0.537
Eigenvalues	3.808	3.713	2.436	2.264	1.863	1.501
Percentage of variance	14.105	13.753	9.022	8.387	6.901	5.558
Cumulative percentage	14.105	27.858	36.880	45.267	52.167	57.725

Kaiser–Meyer–Olkin measure of sampling adequacy = 0.836; Approx. Chi square = 1219.942; df = 351; Sig =0.000
Extraction method: principal component analysis
Rotation method: varimax with Kaiser normalization

Source(s): Primary data

Appendix 2.
Factor structure for corporate governance

Item	Component Board role performance	Board independence	Board expertise
Our board ratifies major decisions	0.749		
The board regularly calls for annual general meeting every year to discuss the institution's performance	0.740		
Our board monitors management performance	0.694		
Board members advise senior management on way forward on pertinent issues	0.689		
Board members delegate authority to management	0.671		
The board represents the institution's interests in the community	0.653		
The board sets resources for special projects and goals of the institution	0.575		
Board members have conflict of interest		0.760	
Managers influence the board in decision making		0.719	
Politics interferes with the appointment of our board		0.687	
Unconditional loan approvals are used to reward our board members		0.616	
Most of our board members have knowledge in financial statements analysis			0.763
Our board is balanced in terms of skills that are relevant for interpretation of accounting terms			0.676
Our board committees have chaired such committees elsewhere			0.674
Total variance	3.576	2.091	1.999
Percentage of variance explained	25.542	14.937	14.277
Cumulative percentage	25.542	40.479	54.756

Kaiser–Meyer–Olkin measure of sampling adequacy = 0.784; Approx. Chi square = 1390.386; df = 435; Sig = 0.000
Extraction method: principal component analysis. a. Rotation converged in 5 iterations
Rotation method: varimax with Kaiser normalization

Source(s): Primary Data

Appendix 3.
Factor structure for internal audit quality

Item	Component		
	Staff competence	Autonomy	Compliance with standards
Our internal audit staff have performed accountancy work in other organizations before joining this institution	0.841		
Internal audit staff have accounting professional qualifications such as ACCA	0.766		
Internal audit staff get regular training and refresher courses through Continuous Professional Development programs	0.762		
Our internal audit staff are not always under pressure by management to make adjustments in their findings		0.865	
Our internal audit staff's decision can be altered by management		0.848	
The function of Internal Auditing is done every quarter and for all departments			0.892
We always refer to the IFRS and International Standards on Auditing for our activities			0.804
Total variance	1.950	1.587	1.497
Percentage of Variance explained	27.860	22.673	21.386
Cumulative percentage	27.860	50.533	71.919

Kaiser–Meyer–Olkin measure of sampling adequacy = 0.815; Approx. Chi square = 1475.068; df = 435; Sig = 0.000
Extraction method: principal component analysis. a. Rotation converged in 4 iterations
Rotation method: varimax with Kaiser normalization

Source(s): Primary Data

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