ResearchGate

See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/328391736

Corporate governance, ethics, internal controls and compliance with IFRS

Article *in* Journal of Financial Reporting and Accounting · October 2018

DOI: 10.1108/JFRA-08-2017-0064

CITATIONS
23

READS
895

3 authors:

Irene Nalukenge
Makerere University Business School
18 PUBLICATIONS 261 CITATIONS

SEE PROFILE

Nkundabanyanga Stephen
Makerere University Business School
10 PUBLICATIONS 95 CITATIONS

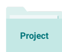
SEE PROFILE

Joseph M. Ntayi
Makerere University Business School
168 PUBLICATIONS 2,124 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:

Public Procurement Performance Expectations Gap in Works Contracts View project


PERFORMANCE EXPECTATIONS GAP IN PUBLIC WORKS CONTRACTS IN UGANDA'S DISTRICT LOCAL GOVERNMENTS View project

All content following this page was uploaded by Nkundabanyanga Stephen on 18 October 2021.

The user has requested enhancement of the downloaded file.

emeraldinsight

Journal of Financial Reporting and Accounting

Corporate governance, ethics, internal controls and compliance with IFRS

Irene Nalukenge, Stephen Korutaro Nkundabanyanga, Joseph Mpeera Ntayi,

Article information:

To cite this document:
Irene Nalukenge, Stephen Korutaro Nkundabanyanga, Joseph Mpeera Ntayi, (2018) "Corporate governance, ethics, internal controls and compliance with IFRS", Journal of Financial Reporting and Accounting, Vol. 16 Issue: 4, pp.764-786, https://doi.org/10.1108/JFRA-08-2017-0064
Permanent link to this document:
https://doi.org/10.1108/JFRA-08-2017-0064

Downloaded on: 10 December 2018, At: 05:33 (PT)
References: this document contains references to 97 other documents.
To copy this document: permissions@emeraldinsight.com
The fulltext of this document has been downloaded 55 times since 2018*

Users who downloaded this article also downloaded:

(2017),"Corporate governance and internal controls over financial reporting in Ugandan MFIs", Journal of Accounting in Emerging Economies, Vol. 7 Iss 3 pp. 294-317 https://doi.org/10.1108/JAEE-02-2016-0018

(2016),"Adoption of and compliance with IFRS in developing countries: A synthesis of theories and directions for future research", Journal of Accounting in Emerging Economies, Vol. 6 Iss 1 pp. 33-49 https://doi.org/10.1108/JAEE-02-2013-0011

Access to this document was granted through an Emerald subscription provided by Token:Eprints:t4VCT4mBglwe7C2ETrpH:

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

The current issue and full text archive of this journal is available on Emerald Insight at:
www.emeraldinsight.com/1985-2517.htm

Corporate governance, ethics, internal controls and compliance with IFRS

Irene Nalukenge and Stephen Korutaro Nkundabanyanga
Department of Accounting, Makerere University Business School, Makerere University, Kampala, Uganda, and
Joseph Mpeera Ntayi
Makerere University Business School, Makerere University, Kampala, Uganda

Received 2 August 2017
Revised 14 November 2017
Accepted 11 March 2018

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Abstract

Purpose – The purpose of this paper is to establish the relationship between corporate governance, ethical culture, Internal Controls over Financial Reporting (ICFR) and compliance with International Financial Reporting Standards (IFRS) by microfinance institutions (MFIs).

Design/methodology/approach – This is a cross-sectional survey based on a sample of 85 MFIs in Uganda. Hypotheses were tested using partial least squares (PLS) analysis technique. An unweighed IFRS compliance index to capture the level of compliance with IFRS was constructed. Yet to capture corporate governance, ethical culture and ICFR variables, the perceptions of top management of MFIs have been taken into consideration.

Findings – Corporate governance, ethical culture and ICFR, each makes a significant contribution to compliance with IFRS. Also both corporate governance and ethical culture are significantly associated with ICFR. However, compliance with IFRS by MFIs is better enhanced by corporate governance and ethical culture through ICFR.

Research limitations/implications – Results support the idea that in terms of agency and virtue ethics theories, the board should support ICFR to minimize egocentric managers and other employees and also inculcate an ethical culture to achieve better compliance with IFRS because corporate governance and ethical culture are associated with sound ICFR which in turn lead to compliance with IFRS.

Practical/implications – Boards of MFIs should encourage investments that improve ICFR. At the same time, regulators should ensure that boards are composed of members with financial expertise, with no conflict of interest and introduce mechanisms that encourage boards to perform their roles.

Originality/value – The study contributes towards a methodological position by showing that the behavioural perspective of corporate governance can be an alternative to the boards' structural variables in investigating compliance with IFRS. A direct association of ethical culture and compliance with IFRS and an indirect association through ICFR can be envisaged.

Keywords Corporate governance, MFIs, ethical culture, ICFR, IFRS compliance

Paper type Research paper

Introduction

The aim of this paper is to establish the relationship between corporate governance, ethical culture and Internal Controls over Financial Reporting (ICFR) and compliance with International Financial Reporting Standards (IFRS) by microfinance institutions (MFIs). Compliance with IFRS is crucial since MFIs are public-interest firms. Moreover, MFIs' access to capital has become critical as donor funding has started to wane, necessitating capital either through accessing clients' deposits or commercial loans (Ledgerwood and

Journal of Financial Reporting and Accounting
Vol. 16 No. 4, 2018
pp. 764-786
© Emerald Publishing Limited
1985-2517
DOI 10.1108/JFRA-08-2017-0064

White, 2006). As it becomes crucial for MFIs to seek external capital requirements, transparent financial reporting and accountability become inevitable (Ahmed and Khan, 2016). Indeed, the necessity for compliance with IFRS by MFIs is ingrained in the need to provide quality financial information as a result of increase in competition for scarce resources that call for international financial reporting practices (Kilic *et al.*, 2016). The emphasis on improving financial reporting by MFIs is aimed at safeguarding interests of local and foreign donors, borrowing members, credit providers, the entity itself and the overall microcredit industry (Quayes and Hasan, 2014). For example at an entity level, disclosure based on IFRS is associated with a low cost of capital (Souissi, and Khlif, 2012; Botosan, 1997). To other stakeholders, compliance with IFRS by firms reduces earnings management (Ebaid, 2016), IFRS are more value relevant (Iatridis, 2012) and improve information content (Landsman *et al.*, 2012; Turki *et al.*, 2016), thereby helping users make informed economic decisions (Epstein and Mirza, 2006).

Despite the advantages that would arise from the use of IFRS, compliance levels with IFRS are still low. For example the World Bank (2005) report indicates that the adoption of IFRS in Uganda was expected to promote reliable financial reporting but compliance has not been fully achieved. The World Bank report on the observance of standards and codes in Uganda of 2014 indicates that compliance with IFRSs was still low in some MFIs yet the auditors' reports indicated use of IFRS as the financial reporting framework. Use of IFRSs by MFIs enables them to engage in international reporting on platforms like the Micro Finance Information Exchange (MIX) market to find partners and investors. Additionally, the introduction of the Tier 4 Micro Finance Institutions and Money Lenders Act of 2016 requiring MFIs that have attained a certain level of capital and savings by members to be supervised by the Central Bank, suggests a need for MFIs to improve the quality of their financial reporting. The legislation implies that many big MFIs currently not supervised by the Central Bank have a greater need to comply with IFRS as the Central Bank scrutinizes financial reports filed for compliance with IFRS. Moreover, supervision by the Central Bank is associated with increased product lines and access to cheaper sources of finance like customer deposits resulting in the movement out of the heavily donor dependent arena of subsidized operations into one in which MFIs manage business sustainably.

Contempraneously, several studies have been conducted to investigate compliance with IFRS (Hodgdon *et al.*, 2009; Juhmani, 2012; Appiah *et al.*, 2016; Demir and Bahadir, 2014). Many of these studies explain the level of IFRS compliance using auditor type and/or firm size. Others such as Juhmani (2012) use corporate governance mechanisms such as board independence, audit committee independence, audit committee size, board size, ownership and the CEO being different from the Chairman to study level of compliance with IFRS. The problem with such structural variables is that they are created or reported as part of the incentive or disincentive regime (Sejjaaka, 2005) and they are sometimes driven by the desire to foster legitimacy and therefore may serve as mere symbols of effective oversight (Beasley *et al.*, 2009). As such ICFR and behavioural factors such as ethical culture have been ignored in the mainstream IFRS compliance studies. Yet financial information is generated from internal financial reporting systems (Cavelius, 2011) and accounting is not an exact science with many transactions requiring judgment thus the ethical position of preparers and management are important in generating financial reports (Kalbers, 2009).

We differ from prior corporate governance studies that have used structural variables and make use of perception-based measures which enable the capture of many aspects of governance (Nkundabanyanga *et al.*, 2015). Besides, to ensure that corporate governance, ethical culture and ICFR are studied in a single suite, we employ agency theory and virtue theory of ethics in this study. Agency theory recognizes separation of ownership from

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

management (Jensen and Meckling, 1976) and in this relationship the agent is assumed to be motivated by self-interest. Compliance with IFRS is one of the means known to limit self-interest, as managers are restricted on the accounting choices and are required to make detailed disclosures in the annual reports (Samaha and Khlif, 2016). Moreover, the main theme behind the use of IFRSs is to reduce information asymmetry between the agent and the principal through increased disclosure (Ashbaugh and Pincus, 2001). To further reduce information asymmetry, stakeholders employ corporate governance mechanisms such as boards as well as increasing the information to be disclosed in the annual report. Although agency theory has been used to predict compliance, considering ethics too as key in achieving compliance is a worthwhile endeavour and supports the idea that agency theory cannot predict compliance where compliance is determined by morals (Noreen, 1988). In a survey of Certified Public Accountants, D'Aquila (1998) established that ethics has a significant impact on financial reporting decisions. Firms that embraced ethical values were less likely to pressurize employees to alter financial results. Virtue-based theory holds that individuals and business organizations should possess certain characteristics called "virtues" to excel morally. Similar to Aristotelian discussion of how a good person should live, Chun (2005) suggests that organizations can have virtues and use virtue ethics to determine what kind of organization they should be. Virtues such as transparency and honesty enable the accounting professionals and the organization resolve conflicting duties and loyalties in a morally appropriate way since they provide inner strength to withstand pressures that might overwhelm and negatively influence professional judgment. Organizations thus characterized by strong ethical virtues maintain objectivity and they are less likely to engage in un-ethical practices like fraudulent financial reporting (Shafer and Simmons, 2011).

Using a cross-sectional survey on a sample of 85 MFIs in Uganda, we used partial least square to test the hypotheses. We established that corporate governance and ethical culture are associated with ICFR and also significantly relate to compliance with IFRS. This study too shows that corporate governance and ethical culture can be used to bring positive variations in ICFR, which in turn bring a positive variation in compliance with IFRS. In other words, compliance with IFRS by MFIs is better enhanced by corporate governance and ethical culture through ICFR.

These results have important implications and contribute to scarce literature on MFIs in three ways. First, except for Festus and Temitope (2016) who find that adherence to codes (ethical and corporate governance codes) and compliance with IFRS are important in preparation of quality financial reports, there is scarce literature on how ethics and corporate governance impact on compliance with IFRS in developing countries. The study by Festus and Temitope (2016) recommends regulatory authorities to reorganize their monitoring and auditing systems to ensure that ethical codes and corporate governance codes are enforced with the adoption of IFRS for the production of quality financial reports. Thus, this paper extends this stream of works to the MFI sector and explains compliance with IFRS (by examining financial statements) through corporate governance, ICFR and ethical culture. Whereas Festus and Temitope (2016) examined compliance with IFRS and quality of financial reports using perceptions, our study assessed the level of compliance using financial reports and too considered role of ICFR in achieving compliance. This paper is among the first to study compliance with IFRS among MFIs. Contrary to the thinking that IFRS may not be relevant to MFIs, this Ugandan case provides a fertile ground for studying compliance with IFRS among MFIs. IFRS in Uganda were adopted by Institute of Certified Public Accountants of Uganda (ICPAU) in 1998. The Accountants Act of 2013 (S 4a), empowers ICPAU to regulate the standard of Accountancy in Uganda and Section 12 of the

Accountants Act permits ICPAU to issue and adopt both private and public accounting standards in Uganda. According to the guidelines for implementation of the IFRS for SMEs, issued by ICPAU, MFIs are categorized as publicly accountable entities that are required to use full IFRS. Additionally, this paper makes a case for improving disclosure of financial information through compliance with IFRS by MFIs to achieve financial sustainability in the long term, which is one key primary goals of microfinance institutions (MFIs) (Mersland and Strom, 2009). This paper suggests that this is best done through an appropriate ethical culture and corporate governance that enhance ICFR and consequently compliance with IFRS. Lastly, this paper contributes toward a methodological position by showing that the behavioral perspective of corporate governance can be an alternative to the boards' structural variables in investigating compliance with IFRS. We can also envisage a direct association of ethical culture and compliance with IFRS and an indirect association through ICFR.

The rest of the paper proceeds as follows. The next section deals with literature review and hypotheses development. The third section is the methodology employed in the study. The penultimate section is results and discussion. The paper ends with a conclusion and implications.

Literature review and hypotheses development

Compliance with IFRS

Investors, both individual and corporate, would like to compare the financial performance of different firms internationally as well as nationally in making investment decisions. Much of the available literature suggests that appraising firms' performance is straighter when such firms are complying with IFRS. For example, compliance with IFRS has been found to be associated with a low cost of capital (Souissi and Khlif, 2012; Li, 2010; Lambert *et al.*, 2007; Botosan, 1997). These and related findings suggest that IFRS require greater financial disclosure hence lenders and shareholders are in position to evaluate true performance of the firm. The use of IFRS as argued by Landsman *et al.* (2012) and Festus and Temitope (2016) improves information content because of the disclosure requirements of IFRS. The increase in information content helps investors in global markets and other users to make rational economic decisions as there is less earnings management and timely recognition of losses (Barth *et al.*, 2008). Indeed, in the financial services sector, Gebhardt and Novonty-Farkas (2011) find that the restriction to recognise only incurred losses under International Accounting Standard 39 significantly reduces income smoothing.

Prior studies on compliance with IFRS have established that compliance is influenced by size, ownership structure, age, multi-national status and profitability (Owusu-Ansah, 1998), size and auditor (Appiah *et al.*, 2016), board independence, board size and fiduciary diligence (Chen and Rezaee, 2012) and the Chief Executive Officer being different from the Chairman (Juhmani, 2017). Scholars such as Cavelius (2011) established that internal reporting systems are crucial in explaining disclosure of financial information, while D'Aquila (1998) emphasizes the importance of an ethical environment when undertaking financial reporting decisions. As argued in the background to this paper, we focus on corporate governance, ethics and ICFR to explain IFRS compliance.

Hypothesis development

Davidson *et al.* (2005) argue that the key role of corporate governance is ensuring compliance with mandated financial reporting requirements and also ensuring that financial statements present fairly the financial affairs of the company. The governance factors that we examine in this paper are characteristics of the board of directors such as its

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

independence, financial expertise and the ability of the board to perform its roles. Prior literature has conceptualized board independence as having more non-executive directors on the board and findings have consistently indicated that greater proportion of outside directors is associated with better financial reporting practices such as disclosure (Lim *et al.*, 2007; Xiao and Yuan, 2007). In this study board independence is conceptualized as multidimensional being influenced by a number of factors (existence of related party transactions, tenure and appointment among others. Related literature by Gordon *et al.* (2004) shows that related party transactions such as loans to directors lead to conflict of interest and shareholders do not benefit from them while Vafeas (2003) established a long tenure is associated with favoring the CEO. The resulting effect of existence of related party transactions and long tenure is loss of the monitoring ability by directors detrimental to quality reporting. Similarly, prior studies have found that financial expertise of the board is positively associated with quality of financial reporting (Felo *et al.*, 2003). Harris and Raviv (2008) argue that financial experts on the board are able to monitor risks that are associated with specific financial transactions hence are in a better position to efficiently monitor senior management which improves compliance with IFRS. We thus hypothesize that:

H1. Corporate governance is positively associated with compliance with IFRS.

Financial reporting is not an exact science; the integrity of management is relevant in preparing high-quality financial reports (Kalbers, 2009). The nature of accounting allows for a wide berth for management decisions about financial reporting, it is therefore expected that firms with high ethical values will not engage in earnings management hence encourage compliance practices. Additionally, dimensions of ethical culture such as transparency involve being free of conflict of interest, not knowingly misrepresenting facts and not subordinating one's judgment to others (Mele, 2005) which enhance compliance practices. Bowen and Heath (2005) argue that organizations that want to be ethical make full disclosure of issues allowing decision options to be accurately evaluated. Rockness and Rockness (2005) reviewed major legislations in reaction to fraudulent financial reporting, but concluded that no legislation (including IFRSs) has effectively controlled fraudulent financial reporting without a combination of strong ethical corporate culture. Indeed, Festus and Temitope (2016) established that the ethical position of management strongly affected the quality of financial reports. Consequently, an ethical culture provides the best hope for obtaining ethical transparent financial reporting.

It is thus posited that:

H2. The ethical culture of an organization positively influences compliance with IFRS.

ICFR are important for the firms' stakeholders for a number of reasons. For instance, Ashbaugh-Skaife *et al.* (2008) argue that if a firm has weak internal controls, managers are not able to make reliable accrual estimates necessary to produce high quality earnings and other financial information. Doyle *et al.* (2007) assert that weak internal controls lead to low quality accounting accruals from intentional mis-statements and unintentional accounting errors. Weak ICFR undermine management's ability to make well informed decisions as well as damaging management's credibility with shareholders, regulators and the public. On the whole, ICFR is the first line of defense against misstatements in financial reporting (Bardhan *et al.*, 2015). On examining the control environment (which consists of management commitment to competence, management philosophy and operating style, organizational structure and assignment of authority and responsibility) and how it relates to compliance with IFRSs, Dang-Duc (2011) establishes that aspects in the control environment such as

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

management commitment to competence have a direct impact on compliance with IFRSs. Hence the following hypothesis is stated:

H3. ICFR is positively associated with compliance with IFRS.

Prior literature on how corporate governance influences internal control effectiveness shows that board attributes such as board independence and expertise are important in achieving sound internal controls (Hoitash *et al.*, 2009; Goh, 2009; Mitra *et al.*, 2012). Hoitash *et al.* (2009) show that board strength measured in terms of size, independence and average number of directorships is positively associated with internal control quality. Goh (2009) established that board independence is positively associated with timely remediation of internal control problems which leads to better internal controls. The theoretical premise is that independent members of the board are likely to monitor management which leads to better internal controls. Further, corporate government mechanisms such as financial expertise assist in identifying key audit bottlenecks to improve ICFR because board members with financial expertise can raise critical issues that management and the external auditors have to respond to. De-Zoort (1998) found that audit committee members with experience were more likely than audit committee members without such experience, to make control evaluations more in line with external auditors. At the same time, role performance of the board is associated with sound ICFR. For instance, one role of the board is recruitment of competent people in top management positions (Zahra and Pearce, 1989; Maassen, 1999). When this role is properly executed by the board, qualified and competent personnel are hired in top positions, who then establish sound internal controls. Moreover, in organizations where the board ensures that the audit function and committees are established and they are operating effectively, this improves the functioning of ICFR. The following hypothesis will be stated:

H4. Corporate governance is positively associated with ICFR.

Because corporate governance is positively associated with ICFR and ICFR are positively associated with compliance with IFRS, it is reasonable to expect a mediation effect of ICFR in the relationship between corporate governance and compliance with IFRS. Hence we hypothesize that:

H5. Internal controls mediate the relationship between corporate governance and compliance with IFRS.

Ethical culture has been noted to impact on the soundness of ICFR in an organization (Verschoor, 1999). Rae and Subramaniam (2008) note that employees in organizations with high standards of ethics are more likely to adopt and enforce internal controls. Furthermore, in ethical environments where virtues of sanctionability and supportability exist, there is likely to be organizational justice which creates an atmosphere of satisfaction among employees (Homans, 1982; Bies and Moag, 1986). This implies that if such virtues are non-existent in an organization, employees may engage in defiant behaviors to the detriment of internal controls. Dietz *et al.* (2003), argue that employees tend to view repeated instances of unfair treatment at work as being a sign of disrespect for the individuals, creating feelings of animosity which in turn could escalate into a shared sense of negativity toward the organization, leading to workplace deviance. Such defiant behaviors have a negative impact on the functioning of ICFR. This is further confirmed by Valentine *et al.* (2002) who found out that the corporate ethical environment was positively associated with commitment of employees (employees' attitudes and feelings of being connected with the company's

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

values and way of doing things). Thus, in a more ethical environment employees are more willing and committed to adhere to the set rules and regulations within an organization:

H6. Ethical culture is positively associated with sound internal controls over financial reporting.

Because ethical culture is positively associated with ICFR and ICFR are positively associated with compliance with IFRS, it is reasonable to expect a mediation effect of ICFR in the relationship between ethical culture and compliance with IFRS. The following hypothesis is stated:

H7. Internal controls mediates the relationship between ethical culture and compliance with IFRS.

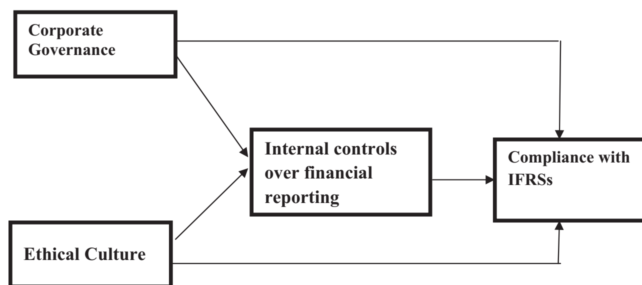
The above hypotheses are epitomized in Figure 1. Figure 1 shows the tentative conceptual and theoretical model that guided the study. In the model we make an assertion that there is a relationship between corporate governance and compliance (*H1*) and also assert that there is a relationship between ethical culture and compliance with IFRSs (*H2*). Similarly, we make an assertion that there is a relationship between ICFR and compliance with IFRS (*H3*). Moreover, we posit that there is a relationship between corporate governance and ICFR (*H4*) and that there is a relationship between ethical culture and ICFR (*H6*). ICFR mediate both the relationship between corporate governance and compliance with IFRSs (*H5*) and the association between Ethical culture and IFRS (*H7*).

Methodology

Study setting

As regards the MFI industry, Uganda has witnessed significant growth of the industry over the years. The first recognized MFIs in Uganda emerged in the 1980s and these were mainly non-governmental organizations (NGOs). With the increased interest in donors and NGOs realizing that micro finance can make a greater impact on reducing poverty, many specialized microfinance NGOs were established in the mid-1990s to provide incomes to the households. In 1996, the Association of Microfinance Institutions of Uganda (AMFIU) was formed to promote networking among local MFIs and international organizations as well as strengthen the effort of these MFIs in the area of government policy formulation.

Currently MFIs operate under a "tiered approach." Tier 1 and Tier 2 MFIs are regulated under the Financial Institutions Act of 2004 while Tier 3 MFIs (also known as Micro deposit-



Source: Reviewed theoretical and empirical literature

Figure 1.
Research model for compliance with IFRSs

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

taking institutions) are regulated under the Microfinance Deposit-Taking Institutions Act 2003. Tier 4 MFIs are regulated by the Tier 4 Micro Finance Institutions and money lenders Act of 2016 and the specific laws such as the Cooperatives Act of 1991, the Companies Act of 2012 and NGO Act of 2016 depending on the legal form of the MFI. The tiered approach recognizes that institutions are at varying degrees of development with different levels of capitalization and the development efforts need to be well coordinated to take advantage of the different structures.

Research design, population and sample

This study is cross-sectional. The population of interest is 136 MFIs with audited financial statements and whose audit reports suggested use of IFRS. The MFI is the unit of analysis, while the unit of inquiry consisted of finance managers and general managers of the MFIs or at least one of those for each MFI. Seventy-nine (79) finance managers and 62 general managers were studied. These respondents were targeted because they had key information regarding ethical culture, ICFR and corporate governance. Using ANOVA, there are no significant differences in the perceptions of the respondents regarding corporate governance, ICFR and ethical culture. A sample of 101 MFIs (54 AMFIU and 47 non-AMFIU members) was derived using Yamane's sample selection approach. Stratified random sampling was used to select an MFI from each strata thus reducing bias (Berger and Zhang, 2005). Responses from a total of 85 MFIs are analyzed in this study representing about 84 per cent response rate.

Measurement of variables

To capture corporate governance, ethical culture and ICFR variables, we employ the perceptions of top management of MFIs. Corporate governance is proxied by boards because the board is considered as the heart of corporate governance (Alfraih, 2016). Thus perceptions of board independence, board financial expertise and board role performance are used to measure corporate governance (Maassen, 1999; Babic *et al.*, 2011; Güner *et al.*, 2008). Board independence was measured using perceptions to capture a number of aspects that may affect the independence of board members such as tenure, appointment, existence of related party transactions among others (Gordon *et al.*, 2004; Vafeas, 2003). In doing this we followed precedents (Kaawaase, 2013) because a single measure of proportion of outside directors was deemed inadequate in measuring independence. As regards financial expertise, perceived financial expertise was the only plausible measure as many MFIs annual reports reviewed did not include this information.

Ethical culture is measured using seven virtues developed by Kaptein (2008) as clarity, congruency of management and supervisors, feasibility, supportability, transparency, discussability and sanctionability. The soundness of ICFR has been assessed basing on the five components of COSO framework which are control environment, control activities, monitoring, information and communication and risk assessment. The use of the COSO model is based on its popularity and acknowledgement of the framework as an acceptable guide in assessing the effectiveness of internal controls (Hurley and Boyd, 2007). Perceptions were used for ICFR since the regulatory requirements in Uganda (even for listed companies) do not provide for disclosing weaknesses in the internal control system in the annual report. Perceptions have been used in previous studies of Onumah *et al.* (2012) and Hermanson *et al.* (2012).

For the dependent variable, we examined the extent to which the MFIs' annual financial statements complied with the requirements of presentation of financial statements, statement of cash flows, accounting policies, changes in accounting estimates and errors,

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

events after the reporting period, income taxes, property, plant and equipment, accounting for leases, borrowing costs, related party disclosures, impairments of assets, provisions, contingent liabilities and contingent assets, investment property, non-current assets held for sale and discontinued operations and disclosures for financial instruments, revenue from contract with customers (IASs 1, 7, 8, 10, 12, 16,17, 23, 24, 36, 37, 40 and IFRSs 5, 9 and 15). We constructed an un-weighed IFRS compliance index to capture the level of compliance with IFRS/IASs consistent with prior IFRS compliance researches (Al-Shammari *et al.*, 2008; Aljifri, *et al.*, 2014; Sejjaaka, 2007; Alfraih, 2016). An item disclosed in the financial report was given a weight = 1, item not disclosed but should have been disclosed in accordance with the applicable standard = 0 and not applicable to a specific entity = "N/A" (Cooke, 1989; Al-Shammari *et al.*, 2008; Aljifri *et al.*, 2014). After scoring, a percentage level of compliance was computed, where number of items disclosed was divided by the total number of required disclosures specific to the sample (Sejjaaka, 2007). After obtaining the percentage level of compliance, the percentage was put on a Likert scale of 1 to 6 to match the scale of the predictor variables. In this case 0-16.7 per cent = 1; 16.8 per cent-33.4 per cent = 2; 33.5 per cent-50.1 per cent =3; 50.2 per cent-66.8 per cent = 4; 66.9 per cent-83.5 = 5 and 83.4 per cent-100 per cent = 6. This approach has been used by previous researchers like Nyahas *et al.* (2017) and Kamukama *et al.* (2011) where percentage performance was placed on a Likert scale of 1 to 5 to match the scale of predictor variables. Moreover, both the predictor variables and compliance being on the same scale is consistent with the recommendation by Sejjaaka (2005). The financial statements assessed for compliance with IFRS related to the financial year ended 31 December 2014 and these were accessed in 2015.

Questionnaire design

We use a closed-answer format questionnaire relative to an open-ended questionnaire as Sudman and Bradburn (1982) point out that they are easier to analyze particularly in the statistical sense. There is also less likelihood of researcher bias in summarizing the responses. This approach was more appropriate in this study for establishing not only the direction of the responses, but also the degree of intensity with which the views were held. The indicator variables for ethical culture, corporate governance and internal controls were anchored on a six point Likert scale ranging from 1 (strongly disagree), 3 (somewhat disagree) and 6 (strongly agree). We pretested the instrument for reliability and the Cronbach's α values ranged from 0.85 to 0.93 indicating reliability of the instrument (De Vellis, 2003; Nunnally, 1978).

Controlling for common methods bias

To control for CMB, data for the predictor variables were collected from primary sources (from the MFIs), whereas the data on compliance with IFRSs were secondary data obtained from the financial reports. We avoided double-barreled questions, shortened very long questions and limited the used of negatively worded items. We ensured respondents' anonymity which enabled them to give responses that are not "edited." Harman's one-factor test was also used to test for CMB. Using factor analysis, many factors emerged for each variable suggesting absence of common methods variance.

Data management and analysis

Data management followed the recommendations by Field (2009). Data were analyzed using SPSS and XL STAT 2016 with partial least square modeling because of the small sample size. We used factor analysis to test for construct validity and identify factors to be used in partial least squares. Before factor analysis was carried out, suitability was assessed by

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

using Bartlett's test of sphericity and Kaiser–Meyer–Olkin (KMO). According to Pallant (2005) these two statistical measures help assess whether data can be factorized or not. All KMO values for individual items were well above the acceptable limit of 0.7 (Field, 2009) and the Bartlett test was significant. Additionally, all the variables had eigenvalues above 1 and in combination explained more than 70 per cent of the variance. The assumptions of parametric data were all met.

The measurement models indicated confirmatory factory analysis through item loadings, average variance extracted (AVE) and composite reliabilities. We interpreted the measurement model basing on the criterion established by Henseler *et al.* (2009). As indicated in Tables I and II, the AVE for the global variables and the constructs is above 0.5, indicating convergent validity. To test for discriminant validity, the Fornell and Larcker (1981) criterion is used. The AVE of each variable is greater than the latent variables' highest squared correlation as shown in Table II demonstrating discriminant validity.

Results and discussion

Descriptive statistics

To summarize of the observed data, we established means and standard deviations. Basing on guidelines by Field (2009), the means represent a summary of the data and the standard deviations indicate the extent to which the means represent the data. Table III shows the summary of means, standard deviations and variances. The mean scores for the main study variables fall between 3.353 and 5.46 on an anchor of a six-point Likert scale. In comparison to the mean, the standard deviations range from 0.379 to 0.65. Based on the works of Field (2009), small standard deviations relative to the mean values indicate that the data points are close to the means which is a manifestation that the mean represents the data observed.

Statistical results for the hypotheses

To test the hypotheses, partial least squares (PLS) was used. The results in Table IV show that corporate governance and compliance with IFRS are positively and significantly related to each other ($\beta = 0.337$, *t-values*= 3.265, $p < 0.01$), thus *H1* is supported. This implies that corporate governance is sufficient in causing significant variations in compliance with IFRS. The results for testing *H2*, which states that "The ethical culture of an organization positively influences compliance with IFRS," suggest that it is substantiated ($\beta = 0.427$, *t-values*= 4.302, $p < 0.01$) (see Table IV). This implies that ethical culture causes positive variations in compliance with IFRS. To establish the relationship between internal controls and compliance with IFRS, *H3* was put forward. Results in Table IV show a positive and significant relationship between ICFR and compliance with IFRS ($\beta = 0.472$, $t = 4.871$, $p < 0.01$). This means that sound ICFR are significantly associated with high compliance levels. This implies that control environment factors such as employment of qualified staff (i.e. management commitment to competence) and management philosophy enhance compliance with IFRS. Additionally, other indicators such as risk assessment, coupled with putting in place the right procedures to address the risks identified are important in achieving compliance with IFRS. Similarly, having the right information systems that can capture financial data accurately enhances compliance with IFRS.

To establish the relationship between corporate governance and ICFR, *H4* is tested. The results in Table IV show that corporate governance and ICFR are positively related, and the association is statistically significant ($\beta = 0.619$, *t-values*= 7.177, $p < 0.01$), thus the hypothesis was supported. This indicates that corporate governance is associated with positive changes in ICFR. To establish the relationship between ethical culture and ICFR, *H6* was put forward. The results in Table IV show that ethical culture and ICFR are

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Ethical culture	Item loadings	Cronbach's alpha	AVE
Clarity		0.820	0.659
This Institution makes it sufficiently clear to us how we should deal with confidential information responsibly	0.828		
This Institution makes it sufficiently clear to us how we should use working hours responsibly	0.871		
Our Institution makes it sufficiently clear to us how we should handle money responsibly	0.901		
Our top management would never authorize unethical conduct to meet business goals	0.616		
Discussability		0.807	0.641
Our supervisors would never authorize unethical or illegal conduct to meet business goals	0.622		
In our immediate working environment, there is adequate awareness of potential violations and incidents in the organization	0.865		
In our immediate working environment, we have opportunity to express our opinions	0.851		
In our immediate working environment, there is adequate scope to discuss personal moral dilemmas	0.839		
Feasibility		0.875	0.800
We have sufficient time at our disposal to carry out tasks responsibly	0.896		
We have sufficient information at our disposal to carry out our tasks responsibly	0.894		
We have adequate resources at our disposal to carry out our tasks responsibly	0.894		
Transparency		0.800	0.715
If a colleague does something which is not permitted, our managers will find out about it	0.849		
If a colleague does something which is not permitted, I or another colleague will find out about it	0.821		
If our managers do something which is not permitted, someone in this Institution will find out about it	0.865		
Congruency		0.621	0.695
Our supervisors set a good example in terms of ethical behavior	0.834		
If we reported unethical conduct to management, we believe those involved would be disciplined fairly regardless of their position	0.834		
Sanctionability		0.809	0.839
If necessary, our managers will be disciplined if they behave unethically	0.916		
In our immediate working environment, employees will be disciplined if they behave unethically	0.916		
Internal Controls over financial reporting	*Item Loadings*	*Cronbach's alpha*	*AVE*
Risk assessment		0.896	0.658
Management has identified those accounting standards where compliance is not easily achieved	0.797		
The accounting section has established processes to identify significant changes in accounting policies and accounting standards	0.818		

(*continued*)

Table I. Confirmatory factor analysis for ethical culture, internal controls over financial reporting and corporate governance

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Ethical culture	Item loadings	Cronbach's alpha	AVE
Management is aware of the objective of financial reporting	0.787		
There are measures put in place to report unusual transactions	0.818		
This Institution has a designated committee to deal with weaknesses raised by the external auditor	0.839		
Ineffective or unnecessary controls are identified and eliminated	0.808		
Monitoring		0.826	0.742
There is adequate supervision of finance staff while carrying out their duties	0.840		
Management gives appropriate and timely attention to material control weaknesses once identified	0.848		
There are regular checks to ensure compliance with the internal controls	0.896		
Information and communication		0.827	0.744
The accounting system in place is able to record and report all the transactions that take place in the institution	0.910		
The accounting system in place produces accurate financial data to enhance decision-making	0.843		
Management releases sufficient financial information to the relevant employees to be able perform their work	0.833		
Control activities		0.635	0.733
There is adequate supervision of finance staff while they are carrying out their duties	0.856		
Proper financial records are maintained in relation to the entity's operations	0.856		
Control environment			
Management is committed to employing qualified staff	0.901		
Our top management is willing to report the true financial position of this Institution to stakeholders	0.840		
Corporate governance	*Item Loadings*	*Cronbach's alpha*	*AVE*
Board financial expertise		0.912	0.851
Board members have expertise in financial services activities	0.910		
Some of our board members have accounting experience	0.946		
Some of our board members are experienced in the nature of our business	0.911		
Board independence		0.897	0.907
Board members have no conflict of interest	0.952		
The Managers of this institution do not influence board members to take decisions in their favor	0.930		
The majority of our board members are not involved in day to day operations of the MFI	0.920		
Board role performance		0.742	0.795
The Board monitors managers' activities to ensure that they are acting in the interest of owners	0.932		
The Board appoints the managing director/manager and can also dismiss	0.921		
Our Board monitors management performance	0.910		

Table I.

positively related and the association is statistically significant (β = 0.792, *t-values*= 11.815, $p < 0.01$), thus the hypothesis was supported. This indicates that ethical culture is associated with positive changes in ICFR. The results signify that virtues such as discussability, sanctionability, congruency among others enhance the functioning of internal controls. When employees are punished for violating internal control procedures, an environment where ethical dilemmas can be raised is created, managers set a good example to the employees they lead, this is associated with effective internal controls.

Results in Table VI show that *H5* which states that "Internal controls mediate the relationship between corporate governance and compliance with IFRS" is substantiated. In testing for this mediation, the bootstrap method developed by Preacher and Hayes (2004) is used. The main feature of this test is that it doesn't rely on the assumption of normality and thus fit for smaller size samples (Hair *et al.*, 2014). In this approach, boot strapping is used twice, first without a mediator and secondly with the presence of a mediator. If the direct path is not significant there is no mediation effect (Hair *et al.*, 2014). If the direct path is significant, we then include the mediating variable and use the boot strapping procedure again. If the indirect path is not significant after bootstrapping, there is no mediation, if it is significant, we calculate the variance accounted for (VAF). According to Hair *et al.* (2014), a VAF of greater than 80 per cent is full mediation, a value between 20 per cent and 80 per cent is partial mediation and value less than 20 per cent is no mediation. To start with, the path model was estimated via bootstrapping, without the interaction of the mediator. As

Table II.
Discriminant and convergent validity

Items	CG	EC	ICFR	COMP
Corporate governance (CG)	1			
Ethical culture (EC)	0.336	1		
Internal controls (ICFR)	0.365	0.624	1	
Compliance (COMP)	0.090	0.174	0.201	1
AVE	*0.503*	*0.535*	*0.673*	

Table III.
Descriptive statistics

Variable	Min	Max	Mean	SE	SD
Ethical culture	4.36	6.00	5.20	0.04	0.41
Clarity	3.67	6.00	5.58	0.06	0.54
Discussability	1.50	6.00	5.34	0.08	0.69
Feasibility	1.00	6.00	4.16	0.05	0.6
Transparency	3.67	6.00	5.49	0.07	0.62
Sanctionability	1.00	6.00	5.36	0.07	0.68
Congruency	3.00	6.00	5.27	0.07	0.66
Internal controls	4.17	6.00	5.46	0.04	0.40
Environment	4.50	6.00	5.43	0.04	0.33
Risk assessment	3.13	6.00	5.31	0.07	0.62
Control activities	4.22	6.00	5.55	0.05	0.46
Information and communication	3.83	6.00	5.53	0.05	0.49
Monitoring	3.86	6.00	5.47	0.06	0.55
Corporate governance	3.00	6.00	5.09	0.08	0.76
Financial expertise	2.00	6.00	5.28	0.09	0.86
Board independence	1.00	6.00	4.72	0.07	0.59
Board role performance	2.50	6.00	5.27	0.07	0.66
Compliance with IFRSs	2.00	4.00	3.35	0.06	0.57

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

	Model 1 R^2 (Internal controls over financial reporting/1):	Model 2 R^2 (compliance/1):	Model 3 R^2 (Compliance with IFRS/1):	Model 4 R^2 (Internal controls over financial reporting/1):	Model 5 R^2 (Compliance with IFRS/1):
Corporate governance	0.619**	0.337**			
Internal control over financial reporting			0.472**		
Ethical culture				0.792**	0.427**
R^2	0.383	0.114	0.222	0.627	0.182
Adjusted R^2	0.383	0.114	0.222	0.627	0.182
F	51.507	10.657	23.731	139.604	18.508
t-Value	7.177	3.265	4.871	11.815	4.302
CR	10.661	3.630	6.390	20.243	5.29

Notes: $^{**}p < 0.01$

Table IV. Path coefficients

shown in Table VI, the direct path was significant ($\beta = 0.337$, *t-values*= 3.428, $p < 0.01$); therefore, the inclusion of the mediator is meaningful. We then included the mediator (internal controls) and the indirect path was still significant ($t = 2.738$, $P < 0.01$). This indirect path being significant signifies that there is mediation. Lastly, we ascertained whether it is full or partial mediation by computing the VAF. The VAF is 80.19 per cent more than 80 per cent. Based on this we concluded that there is full mediation between corporate governance and compliance with IFRS by internal controls over financial reporting.

Results in Table VI show that *H7* which states that "Internal controls mediates the relationship between ethical culture and compliance with IFRS" is substantiated. As shown in Table VI, the direct path was significant ($\beta = 0.419$, *t-values* = 5.196, $p < 0.01$) therefore the inclusion of the mediator is meaningful. We then included the mediator (internal controls) and the indirect path was still significant ($t = 2.216$, $p < 0.01$). This indirect path being significant signifies that there is mediation. Lastly, we ascertained whether it is full or partial mediation by computing the VAF. The VAF is 82 per cent more than 80 per cent, therefore it is full mediation.

Taking all things together suggests that ICFR is a full mediator in the relationship between corporate governance and compliance with IFRS as well as the relationship between ethical culture and compliance with IFRS. This is epitomized in the model shown in Figure 2 as well as Table V predicting up 20 per cent of the variance in IFRS.

Discussion

The overarching theme arising out of this research is that compliance with IFRS by MFIs in Uganda is better enhanced by corporate governance and ethical culture through internal controls over financial reporting. This implicates agency theory as suitable to explain the internal control structure since many principle–agency relationships can be identified among internal stakeholders of a firm. Empirical studies preceding our study have shown evidence of this possibility: Hoitash *et al.* (2009) found that board attributes such as accounting expertise and board strength are important in enhancing internal control quality; Mitra *et al.* (2012) established that corporate governance mechanisms like board independence are positively associated with judicious remediation of internal control problems which leads to better internal controls; Goh (2009) also documented that board

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

	Inner model Value	Contribution	t- Value	CR		Outer model Value	Contribution	t-Value	CR
Corporate governance	0.226*	21%	2.870	2.617	Internal Controls	0.447**	100%	4.55	5.653
Ethical culture	0.660**	79%	8.534	8.534	R^2	0.20			
R^2	0.658				Adjusted R^2	0.20			
Adjusted R^2	0.654				*F*	20.749			
F	79.019				*Pr* > *F*	0.000			
Pr > *F*	0.000				*CR*	2.841			
CR	12.660								

Notes: $^{**}p < 0.01$; $^{*}p < 0.05$

Table V.
Model assessment

independence is associated with timely remediation of internal control weaknesses as independent board members are more vigilant in responding to issues raised by auditors. In this study, board independence included behavioral factors and our results show that non-involvement of directors in activities that create conflict of interest is associated with sound ICFR. This is because such directors are not biased and are not selective when making recommendations to improve systems. However, our results contradict the findings of Bardhan *et al.* (2015) who established no significant relationship between board independence and ICFR disclosures in the annual reports. The insignificancy of the relationship could be attributed to the unique characteristics of family firms such as existence of informal controls (Daily and Dollinger, 1992; Mustakallio *et al.*, 2002). Similarly, according to Defond *et al.* (2005), a financially knowledgeable board contributes to a sound ICFR by empowering audit functions and establishing sound policies. In the context of MFIs, board members with financial expertise are more likely to understand their statutory role of putting in place internal controls as required by the different regulations. Second such board members often understand the intensity of risks MFIs are exposed to without sound ICFR and hence are vigilant in influencing the board toward having such policies. The results of this study suggest that corporate governance is positively associated with compliance with IFRS. This confirms previous studies of Chen and Rezaee (2012), Verriest *et al.* (2013) and Juhmani (2017) who established that governance mechanisms such as board independence are important in achieving compliance. This implies that MFIs with strong governance mechanisms are more likely to comply with IFRS. This could be explained by

Effects	Path	Path coeff.	Indirect effect	Total effect	VAF	*t*-Values	*p*-Value
Direct effect without mediator	Corporate governance-compliance	0.337				3.428	0.001
Indirect with mediator	Corporate governance -compliance	0.0605				2.738	0.006
	Corporate governance - internal controls	0.605					
	Internal controls -compliance	0.405	0.245	0.305	80.19%		
Direct effect without mediator	Ethical culture -compliance	0419				5.196	0.000
Indirect with mediator	Ethical culture -compliance	0.07				2.216	0.027
	Ethical culture - internal controls	0.792					
	Internal controls -compliance	0.405	0.320	0.390	82%		

Table VI.
Mediation effects

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

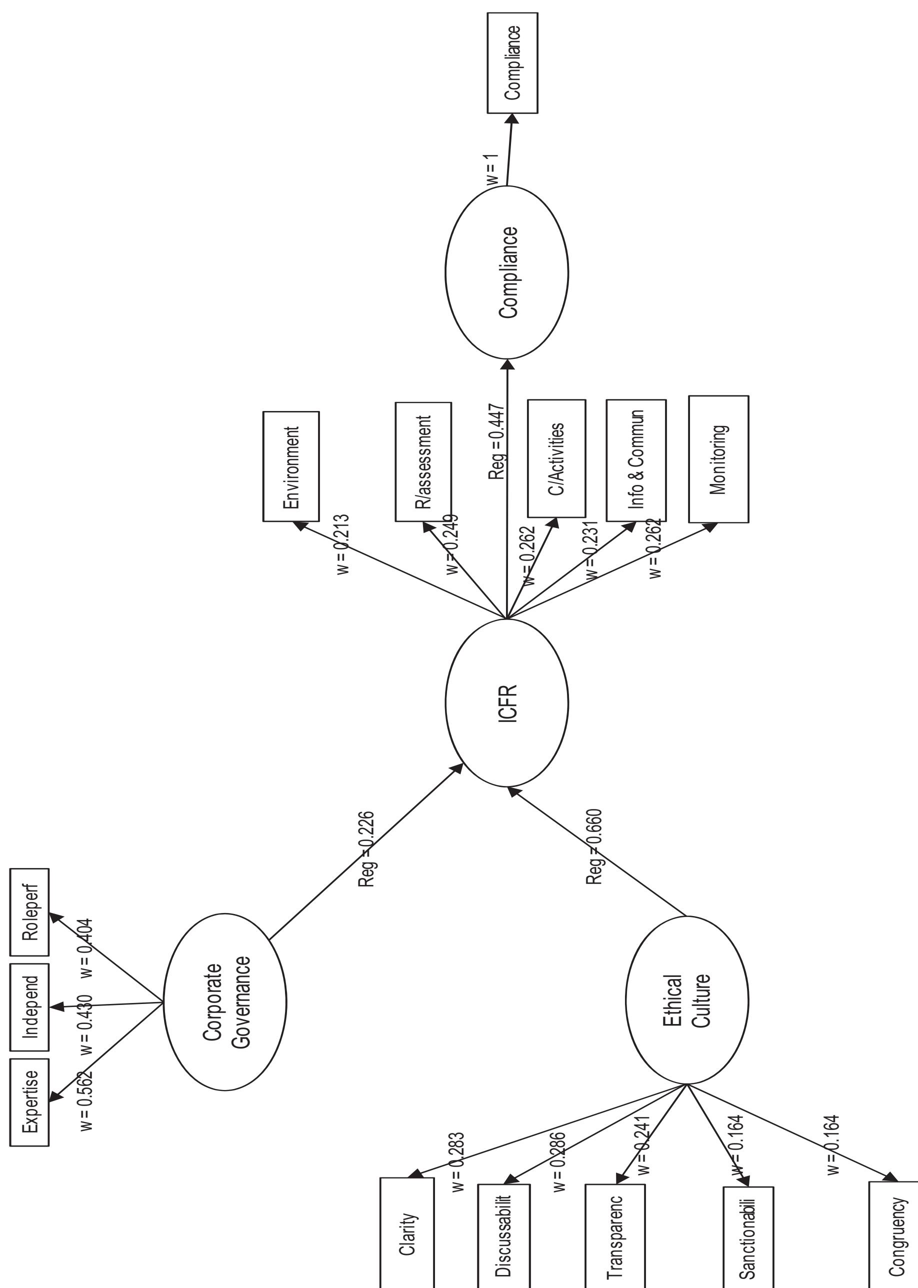


Figure 2.
Final model for corporate governance, ethical culture, ICFR and compliance

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

fact that governance mechanisms such as independence and financial expertise increase the monitoring ability and due diligence of the board. At the same time, when an MFI improves the ICFR, and then it exhibits an improved level of compliance with IFRS. Indeed, Cavelius (2011) notes that information disclosed in the financial statements comes from the internal reporting systems and hence to ensure quality disclosure in external reports, the quality of the internal reporting systems cannot be ignored.

Furthermore, the results reported in this paper suggest that, in an MFI where ethical virtues are promoted, the internal controls function effectively. This confirms accounting literature that emphasizes the importance of an organization's integrity and ethical values in maintaining an effective internal control system (Verschoor, 1999). Traditional control procedures like segregation of duties, direct supervision and approval of transactions are not feasible when the ethical culture is weak. Ethical culture within an MFI provides support to communication, commitment and competence which are drivers of effective internal controls according to Pfister (2009). Virtues of ethical culture such as discussability, sanctionability, congruency and clarity are important in ensuring internal control effectiveness. When employees are free to express their opinions and are also given opportunity to discuss moral dilemmas, internal control procedures that are ineffective are easily identified. Further, with such a "free" environment, risk assessment is not problematic. Critical risks are easily identified and employees contribute to how such risks can be managed because of the "free" environment. In terms of ensuring compliance with IFRS, the current results too indicate ethical culture of an MFI to be crucial. This vindicates studies done in other disciplines concerning compliance. For example, the findings of Ntayi *et al.* (2012) indicate that social value orientation significantly influenced regulatory compliance in Ugandan public procurement.

This paper's evidence on the explanation of MFIs compliance with IFRS via corporate governance and ethical culture suggests that assessing the role of a third variable was critical as other researchers have shown (Nkundabanyanga *et al.*, 2014). As such we are able to explain more of the outcome (Bennet, 2000) in this case compliance with IFRS. Therefore, the results of testing for the mediation of ICFR on relationships between corporate governance, ethical culture and compliance with IFRS in MFIs clarify the initial direct relationships between corporate governance and compliance with IFRS and the relationship between Ethical culture and compliance. In particular, the significant mediation effects of internal controls over financial reporting explain how the inputs of corporate governance and ethical culture translate into outputs, i.e. compliance with IFRS.

Conclusion and implications

The objective of this paper was to establish the relationship between corporate governance, ethical culture, ICFR and compliance with IFRS by MFIs in Uganda. The present study surveyed and analyzed data from 85 MFIs. We find that corporate governance, ethical culture and ICFR each make a significant contribution to compliance with IFRS. We also find that both corporate governance and ethical culture significantly predict sound ICFR. However, compliance with IFRS by MFIs in Uganda is better enhanced by corporate governance and ethical culture through ICFR.

The current results have important implications: first, the study contributes towards a methodological position by showing that the behavioral perspective of corporate governance can be an alternative to the boards' structural variables in investigating compliance with IFRS. Second, our study results support the idea that in terms of agency theory, the board should support the effective functioning of ICFR to achieve better compliance with IFRS because corporate governance is associated with sound ICFR which

in turn lead to compliance with IFRSs. Results also showed that ICFR significantly influences compliance with IFRS further lending support to agency theory. In terms of the virtue theory of ethics for organizations to comply with IFRS, MFIs should possess certain virtues such as sanctionability, clarity, congruency of management, discussability to enhance the functioning of ICFR which in turn influences compliance with IFRSs. This suggests that agency theory alone may not provide a relevant framework for understanding compliance with IFRS without an appropriate ethical culture in the organization; and this culture should be one based on virtue ethics. That way, we can envisage a direct association of ethical culture and compliance with IFRSs and an indirect association through ICFR. The current results support the idea that a research design involving at least two independent variables should consider more than simply the main effects of each of the independent variables (Friedrich, 1982). Lastly, as this study identifies ICFR as a significant driver of compliance with IFRSs, the boards of MFIs should encourage investments geared to improving internal controls over financial reporting. Regulators together with other stakeholders such as AMFIU, should intensify deliberate policies that enhance internal controls for instance training of finance and internal audit staff, providing support when MFIs are acquiring or upgrading computerized accounting systems etc. With the new authority yet to be in place to regulate MFIs in Tier 4 (The Uganda Microfinance Regulatory Authority), composition of the board should be taken seriously, with prospective board members vetted as done by the Central Bank. The Authority in conjunction with the Institute of Corporate Governance (ICGU) should engage in training of board members on issues of independence and role performance. To the professional bodies (ACCA and ICPAU) Continuous Professional Development should focus on issues of ethics, internal controls and governance if compliance with IFRS is to be achieved. As with any study, this too has a limitation. Literature is full of studies on corporate governance and ICFR but structural variables have been used hence when we cannot directly compare our findings with previous studies that did not employ behavioral measures. For instance, many studies that investigated ICFR have analyzed the disclosures made in the annual report about the weaknesses in the internal control system. In Uganda, disclosures about weaknesses in the internal control system are not made in the annual report. Nevertheless, policymakers of Uganda and perhaps other developing nations dealing with MFIs, academicians, directors, donors and even general readers interested in the field of compliance with IFRS might find this study useful.

References

Ahmed, K. and Khan, R. (2016), "Disclosure practices and governance quality: evidence from micro finance institutions", *Journal of Accounting and Organizational Change*, Vol. 12 No. 3, pp. 325-350.

Alfraih, M.M. (2016), "The effectiveness of board of directors' characteristics in mandatory disclosure compliance", *Journal of Financial Regulation and Compliance*, Vol. 24 No. 2, pp. 154-176.

Aljifri, K., Alzarouni, A., Ng, C. and Tahir, M.I. (2014), "The association between firm characteristics and corporate financial disclosures: evidence from UAE companies", *The International Journal of Business and Finance Research*, Vol. 8 No. 2, pp. 101-123.

Al-Shammari, B., Brown, P. and Tarca, A. (2008), "An investigation of compliance with international accounting standards by listed companies in the Gulf co-operation council member states", *The International Journal of Accounting*, Vol. 43 No. 4, pp. 425-447.

Appiah, K.O., Awunyo-Vitor, D., Mireku, K. and Ahiagbah, C. (2016), "Compliance with international financial reporting standards: the case of listed firms in Ghana", *Journal of Financial Reporting and Accounting*, Vol. 14 No. 1, pp. 131-156.

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Ashbaugh, H. and Pincus, M. (2001), "Domestic accounting standards, international accounting standards, and the predictability of earnings", *Journal of Accounting Research*, Vol. 39 No. 3, pp. 417-434.

Ashbaugh-Skaife, H., Collins, D.W., Kinney, W.R. and LaFond, R. (2008), "The effect of SOX internal control deficiencies and their remediation on accrual quality", *The Accounting Review*, Vol. 83 No. 1, pp. 217-250.

Babic, M.V., Nikolić, D.J. and Erić, M.J. (2011), "Rethinking board role performance: towards integrative model", *Economic Annals*, Vol. LVI No. 190, pp. 140-162.

Bardhan, I., Lin, S. and Wu, S. (2015), "The quality of internal control over financial reporting in family firms", *Accounting Horizons*, Vol. 29 No. 1, pp. 41-60.

Barth, M.E., Landsman, W. and Lang, M.H. (2008), "International accounting standards and accounting quality", *Journal of Accounting Research*, Vol. 46 No. 3, pp. 467-497.

Beasley, M.S., Carcello, J.V., Hermanson, D.R. and Neal, T.L. (2009), "The audit committee oversight process", *Contemporary Accounting Research*, Vol. 26 No. 1, pp. 65-122.

Bennet, J.A. (2000), "Focus on research methods mediator and moderator variables", *Nursing Research: Conceptual and Statistical Differences, School of Nursing*, San Diego State University, San Diego, CA.

Berger, V.W. and Zhang, J. (2005), *Simple Random Sampling. Encyclopedia of Statistics in Behavioral Science*.

Bies, R.J. and Moag, J.F. (1986), "Interactional justice: communication criteria of fairness", in Lewicki, R.J., Sheppard, B.H. and Bazerman, M.H. (Eds), *Research on Negotiation in Organizations*, JAI Press, Greenwich, CT.

Botosan, C.A. (1997), "Disclosure level and the cost of equity capital", *The Accounting Review*, Vol. 72 No. 3, pp. 323-349.

Bowen, S.A. and Heath, R.L. (2005), "Issues management, systems, and rhetoric: exploring the distinction between ethical and legal guidelines at Enron", *Journal of Public Affairs*, Vol. 5 No. 2, pp. 84-98.

Cavelius, F. (2011), "Opening the 'black box': how internal reporting systems contribute to the quality, of financial disclosure", *Journal of Applied Accounting Research*, Vol. 12 No. 3, pp. 187-211.

Chen, Y. and Rezaee, Z. (2012), "The role of corporate governance in convergence with IFRS: evidence from China", *International Journal of Accounting and Information Management*, Vol. 20 No. 2, pp. 171-188.

Chun, R. (2005), "Ethical character and virtue of organizations: an empirical assessment and strategic implications", *Journal of Business Ethics*, Vol. 57 No. 3, pp. 269-284.

Cooke, T.E. (1989), "Voluntary corporate disclosure by Swedish companies", *Journal of International Financial Management and Accounting*, Vol. 1 No. 2, pp. 171-195.

D'Aquila, J.M. (1998), "Is the control environment related to financial reporting decisions?", *Managerial Auditing Journal*, Vol. 13 No. 8, pp. 472-478.

Daily, C. and Dollinger, M. (1992), "An empirical examination of ownership structure in family and professionally managed firms", *Family Business Review*, Vol. 5 No. 2, pp. 117-136.

Dang-Duc, S. (2011), "Compliance with accounting standards by SMEs in transitional economies: evidence from Vietnam", *Journal of Applied Accounting Research*, Vol. 12 No. 2, pp. 96-107.

Davidson, R., Goodwin-Stewart, J. and Kent, P. (2005), "Internal governance structures and earnings management", *Accounting and Finance*, Vol. 45 No. 2, pp. 241-267.

De Vellis, R.F. (2003), *Scale Development: Theory and Applications*, (2nd Edition), Sage Publications, Thousand Oaks, CA.

Defond, M.L., Hann, R.N. and Hu, X. (2005), "Does the market value financial expertise on audit committees of boards of directors?", *Journal of Accounting Research*, Vol. 43 No. 2, pp. 153-193.

Demir, V. and Bahadir, O. (2014), "An investigation of compliance with international financial reporting standards by listed companies in Turkey", *Accounting and Management Information Systems*, Vol. 13 No. 1, pp, pp. 4-34.

De-Zoort, F.T. (1998), "An analysis of experience effects on audit committee members' oversight judgments", *Accounting, Organizations and Society*, Vol. 23 No. 1, pp. 1-21.

Dietz, J., Robinson, S.L., Folger, R., Baron, R.A. and Schultz, M. (2003), "The impact of community violence and an organization's procedural climate on workplace aggression", *Academy of Management Journal*, Vol. 46 No. 3, pp. 317-326.

Doyle, J., Ge, W. and McVay, S. (2007), "Determinants of weaknesses in internal control over financial reporting", *Journal of Accounting and Economics*, Vol. 44 Nos. 1/2, pp. 193-223.

Ebaid, I.E. (2016), "International accounting standards and accounting quality in code-law countries: the case of Egypt", *Journal of Financial Regulation and Compliance*, Vol. 24 No. 1, pp. 41-59.

Epstein, B.J. and Mirza, A.A. (2006), *IFRS. Interpretation and Application of International Financial Reporting Standards*, John Wiley and Sons.

Felo, A.J., Krishnamurthy, S. and Solieri, S.A. (2003), "Audit committee characteristics and the perceived quality of financial reporting: an empirical analysis", available at: http://dx.doi.org/10.2139/ssrn.401240 (accessed on 2/4/2016).

Festus, F.A. and Temitope, E.F. (2016), "Ethics, corporate governance and financial reportingin the Nigerian banking industry: global role of international financial reportingstandards", *Accounting and Finance Research*, Vol. 5 No. 1, pp. 50-63.

Field, A. (2009), *Discovering Statistics Using SPSS for Windows*, Third edition, Sage Publications, London.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.

Friedrich, R.J. (1982), "In defense of multiplicative terms in multiple regression equations", *American Journal of Political Science*, Vol. 26 No. 4, pp. 797-383.

Gebhardt, G. and Novonty-Farkas, Z. (2011), "Mandatory IFRS adoption and accounting quality of European banks", *Journal of Business Finance and Accounting*, Vol. 38 Nos. 3/4, pp. 289-333.

Goh, B.W. (2009), "Audit committees, boards of directors, and remediation of material weaknesses in internal control", *Contemporary Accounting Research*, Vol. 26 No. 2, pp. 549-579.

Gordon, E.A., Henry, E. and Palia, D. (2004), "Related party transactions and corporate governance", in Hirschey, M., John, K. and Makhija, A.K. (Eds), *Corporate Governance*, Advances in Financial Economics, Vol 9, pp. 1-27.

Güner, A.B., Malmendier, U. and Tate, G. (2008), "Financial expertise of directors", *Journal of Financial Economics*, Vol. 88 No. 2, pp. 323-354.

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2014), *A Primer on Partial Least Squares Structural Equation Modeling*, Sage, Thousand Oaks.

Harris, M. and Raviv, A. (2008), "A theory of board control and size", *Review of Financial Studies*, Vol. 21 No. 4, pp. 1797-1832.

Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009), "The use of partial least squares path modeling in international marketing", in: Sinkovics, R.R., Ghauri, P.N. (Eds), *Advances in International Marketing*, Emerald, Bingley. pp. 277-320.

Hermanson, D.R., Smith, J.L. and Stephens, N.M. (2012), "How effective are organizations' internal controls? Insights into specific internal control elements", *Current Issues in Auditing*, Vol. 6 No. 1, pp. A30-A50.

Hodgdon, C., Tondkar, R.H., Adhikari, A. and Harless, D.W. (2009), "Compliance with international financial reporting standards and auditor choice: new evidence on the importance of the statutory audit", *The International Journal of Accounting*, Vol. 44 No. 1, pp. 33-55.

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Hoitash, U., Hoitash, R. and Bedard, J.C. (2009), "Corporate governance and internal control over financial reporting: a comparison of regulatory regimes", *The Accounting Review*, Vol. 84 No. 3, pp. 839-867.

Homans, G.C. (1982), In J. Greenberg and RL. Cohen (Eds), *Equity and Justice in Social Behavior*, Academic Press, New York, NY.

Hurley, D.A. and Boyd, D. (2007), "Sarbanes-Oxley act section 404: effective internal controls or overriding internal controls?", *Forensic Examiner*, Vol. 16 No. 2, pp. 19-21.

Iatridis, G.E. (2012), "Voluntary IFRS disclosures: evidence from the transition from UK GAAP to IFRSs", *Managerial Auditing Journal*, Vol. 2. No. 6, pp. 573-597.

Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.

Juhmani, O. (2017), "Corporate governance and the level of Bahraini corporate compliance with IFRS disclosure", *Journal of Applied Accounting Research*, Vol. 18 No. 1, pp. 22-41.

Juhmani, O.I.H. (2012), "Factors influencing the extent of corporate compliance with IFRSs: evidence from companies listed in Bahrain stock exchange", *Journal of International Business and Economics*, Vol. 12 No. 2, pp. 67-79.

Kaawaase, T.K.M. (2013), "Auditor monitoring and audit quality: a perspective of board members and top executives in the financial services sector in Uganda", PhD thesis, University of Dar es Salaam.

Kalbers, L.P. (2009), "Fraudulent financial reporting, corporate governance and ethics: 1987-2007", *Review of Accounting and Finance*, Vol. 8 No. 2, pp. 187-209.

Kamukama, N., Ahiauzu, A. and Ntayi, J.M. (2011), "Competitive advantage: mediator of intellectual capital and performance", *Journal of Intellectual Capital*, Vol. 12 No. 1, pp. 152-164.

Kaptein, M. (2008), "Developing and testing a measure for the ethical culture of organizations: the corporate ethical virtues model", *Journal of Organizational Behavior*, Vol. 29 No. 7, pp. 923-947.

Kilic, M., Uyar, A. and Ataman, B. (2016), "Preparedness of the entities for the IFRS for SMEs: an emerging country case", *Journal of Accounting in Emerging Economies*, Vol. 6 No. 2, pp. 156-178.

Lambert, R., Leuz, C. and Verrecchia, R.E. (2007), "Accounting information, disclosure and the cost of capital", *Journal of Accounting Research*, Vol. 45 No. 2, pp. 385-418.

Landsman, W.R., Maydew, E.L. and Thornock, J.R. (2012), "The information content of annual earnings announcements and mandatory adoption of IFRS", *Journal of Accounting and Economics*, Vol. 53 Nos. 1/2, pp. 34-54.

Ledgerwood, J. and White, V. (2006), *Transforming Micro Finance Institutions, Providing Full Services to the Poo*, The International Bank for Reconstruction and Development/The World Bank.

Li, S. (2010), "Does mandatory adoption of IFRSs in the European union reduce the cost of equity capital?", *The Accounting Review*, Vol. 85 No. 2, pp. 607-636.

Lim, S., Matolcsy, Z. and Chow, D. (2007), "The association between board composition and different types of voluntary disclosure", *European Accounting Review*, Vol. 16 No. 3, pp. 555-583.

Maassen, G.F. (1999), "An international comparison of firm governance models", *A Study on the Formal Independence and Convergence of One-Tier and Two-Tier Corporate Boards of Directors in the United States of America*, the United Kingdom and the Netherlands. Spencer Stuart Gabriel Metsustraat 91071 DZ Amsterdam, The Netherlands.

Mele, D. (2005), "Ethical education in accounting: integrating rules, values and virtues", *Journal of Business Ethics*, Vol. 57 No. 1, pp. 97-109.

Mersland, R. and Strom, O. (2009), "Performance and corporate governance in microfinance institutions", *Journal of Banking and Finance*, Vol. 33 No. 4, pp. 662-669.

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Mitra, S., Hossain, M. and Marks, B.R. (2012), "Corporate ownership characteristics and timeliness of remediation of internal control weaknesses", *Managerial Auditing Journal*, Vol. 27 No. 9, pp. 846-877.

Mustakallio, M.A., Autio, E. and Zahra, S.A. (2002), "Relational and contractual governance in family firms: effects on strategic decision making", *Family Business Review*, Vol. 15 No. 3, pp. 205-222.

Nkundabanyanga, K.S., Ntayi, M.J., Ahiauzu, A. and Sejjaaka, S. (2014), "Intellectual capital in Ugandan service firms as mediator of board governance and firm performance", *African Journal of Economic and Management Studies*, Vol. 5 No. 3, pp. 300-340.

Nkundabanyanga, S.K., Tauringana, V. and Muhwezi, M. (2015), "Governing boards and perceived performance of secondary schools", *International Journal of Public Sector Management*, Vol. 28 No. 3, pp. 221-239.

Noreen, E. (1988), "The economics of ethics. A new perspective of agency theory", *Accounting, Organisations and Society*, Vol. 13 No. 4, pp. 359-369.

Ntayi, M.J., Ngoboka, P., Mutebi, H. and Sitenda, G. (2012), "Social value orientation and regulatory compliance in Ugandan public procurement", *International Journal of Social Economics*, Vol. 39 No. 11, pp. 900-920.

Nunnally, J.C. (1978), *Psychometric Theory*, (2nd ed.), McGraw-Hill, New York, NY.

Nyahas, S.I., Munene, J.C., Orobia, L. and Kaawaase, T.K. (2017), "Isomorphic influences and voluntary disclosure: the mediating role of organizational culture", *Cogent Business and Management*, Vol. 4, pp. 1-18.

Onumah, J.M., Kuipo, R. and Obeng, A.V. (2012), "Effectiveness of internal control systems of listed firms in Ghana", in Venancio Tauringana, and Musa Mangena (eds) *Accounting in Africa (Research in Accounting in Emerging Economies*, Emerald Group Publishing Limited, Vol 12 Part A, pp. 31-49.

Owusu-Ansah, S. (1998), "The impact of corporate attributes on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe", *The International Journal of Accounting*, Vol. 33 No. 5, pp. 605-631.

Pallant, J. (2005), *SPSS Survival Guide: A Step by Step Guide to Data Analysis Using SPSS for Windows*, 3rd Edition, Open University Press, New York, NY.

Pfister, J. (2009), *Managing Organizational Culture for Effective Internal Control: From Practice to Theory*, Verlag, Berlin, Heidelberg.

Preacher, K.J. and Hayes, A.F. (2004), "Asymptotic and re-sampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behaviour Research Methods*, Vol. 40 No. 3, pp. 879-891.

Quayes, S. and Hasan, T. (2014), "Financial disclosure and performance of microfinance institutions", *Journal of Accounting and Organizational Change*, Vol. 10 No. 3, pp. 314-337.

Rae, K. and Subramaniam, N. (2008), "Quality of internal control procedures: antecedents and moderating effect of organizational justice and employee fraud", *Managerial Auditing Journal*, Vol. 23 No. 2, pp. 104-124.

Rockness, H. and Rockness, J. (2005), "Legislated ethics: from Enron to Sarbanes-Oxley, the impact on corporate America", *Journal of Business Ethics*, Vol. 57 No. 1, pp. 31-54.

Samaha, K. and Khlif, H. (2016), "Adoption of and compliance with IFRS in developing countries: a synthesis of theories and directions for future research", *Journal of Accounting in Emerging Economies*, Vol. 6 No. 1, pp. 33-49.

Sejjaaka, S. (2007), "Corporate mandatory disclosure by financial institutions in Uganda; accounting, banking and corporate financial management in emerging economies", *Research in Accounting in Emerging Economies*, Vol. 7, pp. 119-143.

Sejjaaka, S.K. (2005), "Corporate Mandatory disclosure among financial institutions in Uganda", PhD thesis, Makerere University.

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Downloaded by Professor Stephen Nkundabanyanga Korutaro At 05:33 10 December 2018 (PT)

Shafer, W.E. and Simmons, R.S. (2011), "Effects of organizational ethical culture on the ethical decisions of tax practitioners in mainland China", *Accounting, Auditing and Accountability Journal*, Vol. 24 No. 5, pp. 647-668.

Souissi, M. and Khlif, H. (2012), "Meta-analytic review of disclosure level and cost of equity capital", *International Journal of Accounting and Information Management*, Vol. 20 No. 1, pp. 49 -62.

Sudman, S. and Bradburn, N.M. (1982), *Asking Questions: A Practical Guide to Questionnaire Design*, 3rd ed., Allyn and Bacon, San Francisco, CA.

Turki, H., Wali, S., Boujelbene, Y. and Ntim, C.G. (2016), "The effect of IFRS mandatory adoption on the information asymmetry", *Journal Cogent Business and Management*, Vol. 3 No. 1, pp. 1-19.

Vafeas, N. (2003), "Length of board tenure and outside director independence", *Journal of Business Finance and Accounting*, Vol. 30 No. 7-8, pp. 1043-1064.

Valentine, S., Godkin, L. and Lucero, M. (2002), "Ethical context, organizational commitment, and person-organization fit", *Journal of Business Ethics*, Vol. 41 No. 4, pp. 349-361.

Verriest, A., Gaeremynck, A. and Thornton, D.B. (2013), "The impact of corporate governance on IFRS adoption choices", *European Accounting Review*, Vol. 22 No. 1, pp. 39-77.

Verschoor, C. (1999), "Corporate performance is closely linked to a strong ethical commitment", *Business and Society Review*, Vol. 104 No. 4, pp. 407-415.

World Bank (2005), "Report on the observance of standards and codes (ROSC), republic of Uganda", available at http://documents.worldbank.org/curated/en/808581468346736856/Uganda-Report-on-the-observance-of-standards-and-codes-ROSC-accounting-and-auditing

Xiao, H. and Yuan, J. (2007), "Ownership structure, board composition and corporate voluntary disclosure: evidence from listed companies in China", *Managerial Auditing Journal*, Vol. 22 No. 6, pp. 604-619.

Zahra, S.A. and Pearce, J.A. (1989), "Board of directors and corporate financial performance: a review and integrative model", *Journal of Financial Management*, Vol. 15 No. 2, pp. 291-334.

Further reading

World Bank (2014), "Uganda – report on the observance of standards and codes (ROSC)", available at http://documents.worldbank.org/curated/en/504811468103780186/Uganda-Report-on-the-Observance-of-Standards-and-Codes-ROSC-accounting-and-auditing

Corresponding author

Irene Nalukenge can be contacted at: inalukenge@mubs.ac.ug

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: **permissions@emeraldinsight.com**

View publication stats