

## Intellectual Capital in Developing Economies: Do all Dimensions Matter for Risk Disclosure Compliance with IFRS 7 Requirements by Financial Institutions in Uganda?

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### Abstract

*This paper examined the impact of Intellectual Capital (IC) and its components, namely, human capital, structural capital and relational capital, on the level of Risk Disclosure Compliance (RDC) with International Financial Reporting Standard (IFRS) 7 requirements (RDC\_IFRS7) among financial institutions (FIs) in Uganda. The study adopted a cross-sectional design where data were collected through a questionnaire survey and audited financial statements of 83 FIs. The authors employed partial least square structural equation modeling (SmartPLS32.7) to test hypotheses. The results indicated that the mean RDC\_IFRS7 level was low. The results further found that IC was a significant predictor of RDC\_IFRS7. Additionally, human capital and structural capital were significant predictors of RDC\_IFRS7. Nevertheless, relational capital was insignificantly related with RDC\_IFRS7. The study provided relevant insights for regulators and policy makers of FIs. The study also suggested that FIs should always maintain efficient IC mix that can add value to RDC\_IFRS7. Furthermore, the results suggested that FIs should build resilient human resource base and invest in a solid technology-knowledge infrastructure to enhance RDC\_IFRS7 levels. Besides, the study added theoretical foundations of IC to the RDC knowledge.*

**Keywords:** Intellectual Capital, Risk Disclosure Compliance, IFRS 7, Financial Institutions

### Introduction

RDC\_IFRS7 is a mandatory activity where companies are required to disclose risk information arising from the financial instruments. The concept of RDC\_IFRS7 comes from the second stream of IFRS 7 that deals with the nature and extent of risks arising from financial instruments (IASB, 2019). The importance of RDC\_IFRS7 is to strengthen the user's ability in assessing risks affecting company's future and economic performance (Agyei-Mensah, 2017a; Agyei-Mensah, 2017b). Empirical studies suggest that compliance with IFRS increases relevance of information, comparability and quality of financial reporting (Sarea *et al.*, 2015; Appiah *et al.*, 2016; Nalukenge *et al.*, 2018). Despite the benefits associated with IFRS implementation, compliance with IFRS disclosure requirements in Uganda is still low (Nalukenge *et al.*, 2018; Nalukenge, 2020). According to COSASE (2019) shows compliance with IFRS 7 risk disclosure requirements was low especially for the seven defunct banks. This report also reveals that non-compliance with regulatory capital adequacy requirements and poor liquidity as reasons behind their failure indicating non-compliance with IFRS 7 risk disclosure requirements. In addition, World Bank (2014) also shows that financial statements of Savings and Credit Cooperatives

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Societies did not comply with IFRS disclosure requirements. Furthermore, PWC (2016) reveals accounting misstatements and overstatement of fixed assets that contravened FI Act 2004 section 46. This insight stimulates this study to examine the relationship between IC and FIs RDC\_IFRS7.

Whilst prior studies have examined compliance with IFRS disclosure requirements and found various determinants like board size, gender diversity and multiple directorships (Alfraih, 2016), AC independence and accounting expertise (Sellami & Fendri, 2017), board independence and CEO duality (Juhmani, 2017), board size, independence, AC independence and accounting expertise (Mnif & Znazen, 2020). Vast majority have mainly examined relationship between corporate governance mechanisms and compliance with IFRS requirements. However, specific studies linking IC and RDC\_IFRS7 in developing economies are sparse (Tauringana & Chithambo, 2016; Agyei-Mensah, 2017a; Agyei-Mensah, 2017b). These studies only examined the impact of corporate governance mechanisms on RDC\_IFRS7 and reported low compliance levels. Additionally, Mnif & Znazen (2020) identified risk disclosures as an area of non-compliance and recommended for future studies to focus on IFRS 7 risk disclosure requirements.

Furthermore, in Uganda, some empirical studies on adoption of and compliance with IFRS disclosure requirements exist (Nalukenge, 2020; Bananuka *et al.*, 2019; Nalukenge *et al.*, 2018). These studies have not focused on RDC\_IFRS7 in particular. For instance, Nalukenge (2020) found that board role performance is a significant predictor of IFRS disclosure compliance. Similarly, Nalukenge *et al.* (2018) found that corporate governance, ethical culture and internal controls over financial reporting are predictors of IFRS disclosure compliance. While, Bananuka *et al.* (2019) found that IC, board effectiveness and managerial attitude are predictors of IFRS adoption. Nevertheless, these studies focus on corporate governance mechanisms and ignore fundamental aspects such as IC. IC described in terms of human capital, structural capital and relational capital (Bontis, 1998; Kamukama *et al.*, 2010; Kamukama *et al.*, 2011; Grimaldi *et al.*, 2013; Nkundabanyanga, 2016; Bananuka, 2019; Kaawaase *et al.*, 2020), is expected to impact RDC\_IFRS7. The available limited studies on IC in Uganda have been linked with firm performance (Kamukama *et al.*, 2010; Kamukama *et al.*, 2011; Nkundabanyanga, 2016; Kaawaase *et al.*, 2020), competitive advantage (Kamukama & Sulait, 2017) and internet financial reporting (Bananuka *et al.*, 2019). Nonetheless, acute scarcity of studies investigating the link between IC and RDC\_IFRS7 exist in developing economies (Tauringana & Chithambo, 2016; Agyei-Mensah, 2017a). This paper is motivated by the fact that prior studies on the relationship between IC and RDC\_IFRS7 are still limited both in developed and developing countries. Thus, examining how IC impact RDC\_IFRS7 in a country setting such as Uganda could provide further evidence to address this research gap. In addition, insights from Resource based view (Barney, 1991; Wernerfelt, 1984) and Institutional theory (DiMaggio & Powel, 1991) suggests that availability of efficient mixture of intangible resources that fulfill valuable, rare, inimitable and non-substitutable (VRIN) criteria fundamentally under isomorphic pressure would enhance RDC\_IFRS7 levels.

Besides, to the author's knowledge, no single study has examined the relationship between IC and RDC\_IFRS7 especially in Africa. Therefore, this current study fills the gap by establishing the relationship between IC and RDC\_IFRS7 in a developing economy. The study contributes to risk-disclosure literature by providing further empirical evidence that IC significantly affects RDC\_IFRS7. Moreover, the study reveals the most important IC components in enhancing RDC\_IFRS7. Further, the study also provides theoretical foundations to understand RDC\_IFRS7 better. Additionally, the study provides further implications for the practitioners on how to maintain efficient IC mix matters in enhancing RDC\_IFRS7.

### **Theoretical framework**

The study adopted the Resource Based View (RBV) theory and Institutional theory to explain FIs RDC\_IFRS7 in developing economies. The RBV theory assumes that there is resource heterogeneity across firms; and to achieve competitive advantage, a firm should possess valuable, rare, inimitable and non-substitutable (VRIN) resources (Barney, 1991; Wernerfelt, 1984). This theory proposes that resources which fulfill VRIN criteria are of highest relevance and underlying pillars for RDC\_IFRS7. Applying RBV theory provides FIs with clear priorities for RDC\_IFRS7. Particularly intangible resources such as human capital, structural capital and relational capital are subjected to VRIN criteria thereby be a source of competitive advantage (Barney, 2001). Accordingly, building a resilient human resource, strong structural base and strong social network base that fulfill VRIN criteria enhances RDC\_IFRS7. Therefore, the existence of resource heterogeneity explains the response of FIs towards RDC\_IFRS7.

Besides, Samaha & Khelif (2016) call for future research to use Institutional theory to explain compliance with IFRS in developing economies. FIs are expected to comply with IFRS 7 risk disclosure requirements. The Institutional theory suggests that FIs have to respond to isomorphic pressures (DiMaggio & Powel, 1991). The theory shows how coercive, normative and mimetic pressures can shape FIs towards RDC\_IFRS7. First, coercive pressures suggest that regulators like Bank of Uganda (BOU), Insurance Regulatory Authority (IRAU) and Uganda Microfinance Regulatory Authority (UMRA) expect FIs to comply with IFRS alongside the local accounting standards. Second, normative pressures expect FIs to invest in education of their employees to shift towards RDC\_IFRS7. Third, mimetic pressures suggest that professional accounting association like Institute of Certified Public Accountants of Uganda (ICPAU) exert pressures towards compliance with IFRS. It is further argued that any shift in risk disclosure regulation exerts pressure for FIs comply with IFRS (Samaha *et al.*, 2016). Sarea (2015) also calls for strengthening professional education and training in IFRS application to increase compliance level with the standards. Therefore, the insights from RBV and Institutional theory could enrich the theoretical debate on RDC\_IFRS7. With efficient mixture of intangible resources that fulfill VRIN criteria fundamentally under isomorphic pressure enhances RDC\_IFRS7 levels.

### **IC and RDC\_IFRS7**

The study described IC as an intangible capital and resource in terms of human capital, structural capital and relational capital (Bontis, 1998; Kamukama *et al.*, 2010; Kamukama *et al.*, 2011; Grimaldi *et al.*, 2013; Nkundabanyanga, 2016; Bananuka, 2019; Kaawaase *et al.*, 2020). This concept of IC roots from RBV theory (Wernerfelt, 1984; Barney, 1991) which affirms that firms possess resources that meet VRIN criteria to achieve competitive advantage. The theory also argues that FIs should invest in their VRIN resources such as building a resilient human

resource, strong asset base and strong social networks as one way to enhance RDC\_IFRS7 levels. Additionally, the theory suggests that disparities existing in RDC\_IFRS7 levels across FIs are a result of differences in IC mix (Wernerfelt, 1984). Moreover, extant literature link IC to firm performance (Kamukama *et al.*, 2010; Kamukama *et al.*, 2011; Nkundabanyanga, 2016; Tiwari & Vidyarthi, 2018; Hamdan, 2018; Kaawaase *et al.*, 2020; Isola *et al.*, 2020; Ousama *et al.*, 2020;), competitive advantage (Kamukama & Sulait, 2017), internet financial reporting (Bananuka *et al.*, 2019) and bank diversification strategy (Duho & Onumah, 2019). However, to the author's knowledge, no studies have linked IC with RDC\_IFRS7. This therefore implies that there is dearth of literature on how IC links to RDC\_IFRS7. Additionally, prior literature also shows that positive association between IC and firm performance exists (Kamukama *et al.*, 2010; Kamukama *et al.*, 2011; Nkundabanyanga, 2016; Tiwari & Vidyarthi, 2018; Hamdan, 2018; Ousama *et al.*, 2020; Kaawaase *et al.*, 2020; Isola *et al.*, 2020).

Consequently, since IC has a link with different outcomes, the study assumes that IC could also have a link with RDC\_IFRS7. A study by Bananuka *et al.* (2019) on IC towards internet financial reporting found that IC significantly affects internet financial reporting, implying that; efficient IC usage enhances internet financial reporting. In addition to that, a few studies also link RDC to different outcomes like initial public offerings, initial returns (Wasiuzzaman *et al.*, 2018) and bank performance (Nahar *et al.*, 2016). Now that a link exists between IC and different outcomes as well as RDC with other outcomes, this study expands literature by establishing whether IC could lead to RDC\_IFRS7 by hypothesizing that:

*H<sub>1</sub>. IC is positively related to RDC\_IFRS7.*

### **Human capital and RDC\_IFRS7**

Human capital is described in terms of employee knowledge, skills, experiences and ability of people (Sveiby, 1997; Bontis, 1998; MERITUM, 2002; Kamukama *et al.*, 2010; Nkundabanyanga, 2016). Prior studies linking human capital to RDC\_IFRS7 are scarce (see Jia *et al.*, 2019; Said, Omar and Abdullah, 2013). For instance, Jia *et al.* (2019) found that human capital of the risk management committee significantly relates with management disclosure quality, while Said *et al.* (2013) found that human capital is positively associated with environmental disclosure.

Additionally, vast prior studies have linked human capital to firm performance (Kamukama *et al.*, 2010, Nkundabanyanga, 2016), accounting performance (Nawaz & Haniffa, 2017), corporate performance (Tiwari & Vidyarthi, 2018) and bank diversification strategy (Duho & Onumah, 2019). These studies have found positive significant findings. Nevertheless, Kaawaase *et al.* (2020) found that human capital insignificantly impacts firm performance. Now that human capital has a link with different outcomes, it is important that human capital significantly enhances RDC\_IFRS7. Further, based on the RBV, the study proposes that the differences in the level of human capital can explain variations in the RDC\_IFRS7 levels within the different financial institutions. For instance, in a study by Kawaase *et al.* (2020) argued that RBV provides an explanation informing the different levels of human capital in explaining differences in the firm performance of small and medium audit practices in Uganda. In regards to this current study, financial institutions possess skills and firm-specific knowledge that are irreplaceable and unique (Barney, 1991). In fact, the RBV posits that building solid human base

which fulfills the VRIN criteria in terms of having adequate motivated and qualified employees achieves higher levels of RDC\_IFRS7. Given that financial institutions are subjected to external pressures such as compliance with risk disclosure requirements available and the RBV has been criticized as too static (Williamson, 1999). This study therefore added the Institutional theory as an extension of RBV to focus on how financial institutions could adhere to the isomorphic pressures particularly RDC\_IFRS7 to enhance their competitive advantage (DiMaggio & Powel, 1991). As such, within the lenses of RBV and Institutional theory, financial institutions are expected to utilize their efficient human capital resources available to respond the isomorphic pressures so as to achieve higher RDC\_IFRS7 level. Therefore, this study maintains that efficient human capital enhances RDC\_IFRS7 and therefore expands literature by examining the impact of human capital on RDC\_IFRS7 by hypothesizing that:

*H<sub>1a</sub>. Human capital is positively related to RDC\_IFRS7.*

### **Structural capital and RDC\_IFRS7**

Structural capital is described as the knowledge that stays within the firm in terms of the organizational routines, systems, culture, databases, structures and management philosophy (Sveiby, 1997; Bontis, 1998; MERITUM, 2002; Kamukama *et al.*, 2010; Nkundabanyanga, 2016). The concept of structural capital comes from the RBV. This theory asserts that if a firm has the capacity to obtain valuable resources such as better organizational routines, systems, culture, databases, structures and management philosophy, it has a competitive advantage over its competitors. The theory further postulates that differences in the compliance levels across organizations can be explained by differences in their portfolio of resources and how these resources are articulated (Wernerfelt, 1984). Barney (1991) states that the RBV recognizes intangible assets as critical factors in generating superior competitive advantage. Financial institutions across the globe have witnessed a structural capital shift from being capital-intensive to knowledge-based. This shift has been shaped due to the isomorphic pressures that calls for compliance (DiMaggio & Powel, 1991). Therefore, upgrading processes, systems and databases are critical to measure the value of intangibles and also respond to isomorphic pressures so as to enhance their RDC\_IFRS7.

Furthermore, extant literature has also linked structural capital to different outcomes like accounting and market-based performance (Hamdan, 2018), firm performance (Tiwari & Vidyarthi, 2018; Kaawaase *et al.*, 2020; Kamukama *et al.*, 2010; Nkundabanyanga, 2016), and bank diversification strategy (Duhó & Onumah, 2019). These studies found positive significant findings. However, other studies found no association with performance (Nawaz & Haniffa, 2017; Ousama *et al.*, 2020; Isola *et al.*, 2020). Furthermore, no single study has linked structural capital to RDC\_IFRS7, thereby creating dearth of literature on this link. Given the mixed findings, the study expands literature by examining the impact of structural capital on RDC\_IFRS7 by hypothesizing that:

*H<sub>1b</sub>. Structural capital is positively related to RDC\_IFRS7.*

### **Relational capital and RDC\_IFRS7**

Relational capital is described as the resources linked to external relationships the firm has with clients, suppliers or regulators (Sveiby, 1997; Bontis, 1998; Kamukama *et al.*, 2010;

Nkundabanyanga, 2016). Extant literature has linked relational capital to firm performance (Kamukama *et al.*, 2010; Nkundabanyanga, 2016), and competitive advantage (Kamukama *et al.*, 2017). While, Kaawaase *et al.* (2020) found no significant impact on firm performance. Also, prior studies linking relational capital directly to RDC\_IFRS7 hardly exist and mixed findings continue to appear. Based on RBV, building networks with customers, suppliers and other firms contributes to sustained competitive advantage such as RDC\_IFRS7 by strengthening the networks that are firm specific with its clients, employees and other firms. In this study, adopting RBV will enable financial institutions build stronger relationships with its clients and other stakeholders as a way to achieve superior RDC\_IFRS7. Therefore, the study expands literature by examining the impact of relational capital to RDC\_IFRS7 by hypothesizing that:

*H<sub>1c</sub>. Relational capital is positively related to RDC\_IFRS7.*

### **Auditor type and RDC\_IFRS7**

This study expects that auditor type impacts on RDC\_IFRS7. Prior studies have found mixed findings. For instance, Appiah *et al.* (2016), Demir & Bahadir (2014) and Juhmani (2017) found a positive significant impact on compliance level with IFRS disclosure implying that, Big four auditors increase high disclosure. Additionally, Dawd (2018) found that audit firm size significantly impacts on the extent of disclosure. Nevertheless, Nalukenge *et al.* (2017) and Bananuka (2019) found that auditor type has no significant impact with internal controls over financial reporting and internet financial reporting respectively. Therefore, it is hypothesized that:

*H<sub>2</sub>. Auditor type is positively related to RDC\_IFRS7.*

### **Firm size and RDC\_IFRS7**

The study expects that large firms comply more with RDC\_IFRS7. Prior studies have also found positive significant impact of firm size with mandatory IFRS disclosure requirements (Buckby *et al.*, 2015; Tauringana & Chithambo, 2016; Appiah *et al.*, 2016; Grassaa *et al.*, 2020). Meanwhile, Malafrente *et al.* (2018) found a negative significant association of firm size with risk disclosure practices in the European insurance industry. Moreover, Agyei-Mensah (2017a), Juhmani (2017) and Agyei-Mensah & Buertey (2019) found no significant relationship between firm size and risk disclosure compliance with IFRS7. Given the inconclusive findings, this study expects that firm size would have a positive significant impact on RDC\_IFRS7 by hypothesizing that:

*H<sub>3</sub> firm size is positively related to RDC\_IFRS7.*

### **Industry type and RDC\_IFRS7**

FIs operate in highly regulated industry and are expected to comply with the available IFRS risk disclosure requirements. Prior studies have found positive significant link between industry type with compliance level with IFRS disclosure (Juhmani, 2017; Sarea, 2015), mandatory disclosure (Dawd, 2018) and quality of risk disclosures (Shivaani *et al.*, 2020). Nevertheless, Appiah *et al.* (2016) found no association with compliance with IFRS disclosures. In light of the mixed findings, it is therefore hypothesized that:

*H4. Industry type is positively related to RDC\_IFRS7.*

#### **Firm age and RDC\_IFRS7**

This study expects that older firms comply more with RDC\_IFRS7. Prior studies have found positive significant impact of firm age with mandatory IFRS disclosure requirements (Demir & Bahadir, 2014) and quality of risk disclosures (Shivaani *et al.*, 2020). While a negative significant association with IFRS disclosure (Appiah *et al.*, 2016), and no association with corporate compliance with IFRSs (Juhmani, 2012). Given the inconclusive findings, this study expects that firm age would have a positive significant impact on RDC\_IFRS7 by hypothesizing that:

*H5. Firm age is positively related to RDC\_IFRS7.*

### **Research methodology**

#### **Research design**

This study adopts as positivism philosophy in attempting to examine the impact of Intellectual Capital (IC) and its components, namely, human capital, structural capital and relational capital, on the level of Risk Disclosure Compliance (RDC) with International Financial Reporting Standard (IFRS) 7 requirements (RDC\_IFRS7) among financial institutions (FIs). The choice for the positivism is appropriate in the establishment of the causal relationship between Intellectual capital dimensions and RDC\_IFRS7 (Tronvoll *et al.*, 2011). In addition, positivism requires the use of quantitative methodology in which the nature of truth would be established by testing of the study hypotheses. Moreover, a structured questionnaire on a five level Likert scale guided the study.

#### **Population and sample**

The study was cross-sectional comprising of a population of 210 licensed FIs. A sample of 138 FIs was determined using Krejcie and Morgan (1970). The selection of 138 FIs was done through stratified random sampling technique. Using guidance of Field (2009), a minimum of three respondents was selected through purposive sampling method. The unit of inquiry was either risk director, finance director or executive director based on the premise that they had sufficient knowledge. Of the 138 FIs, final usable questionnaires were for 83 FIs (60 % response rate). Data were collected from audited financial statements and questionnaire survey. Table 1 shows that majority FIs were banking institutions (73.5 %), had been in existence for ten years and above (81.9 %) and hire Big 4 audit firms (80.7 %). Furthermore, majority respondents were male (56.6 %), aged between 35 and 45 years (60.2 %), with job experience ten years and above (61.4 %), hold bachelor's degree (51.8 %) and risk directors (59.0 %) (See Table 1). The findings indicate the nature of FIs and respondents in terms of experience and knowledge to interpret and respond to questionnaire items.

**Table 1. Demographic characteristics**

<b>Background information</b>	<b>Frequency (n=83)</b>	<b>Percentage</b>
Gender		
Male	47	56.6
Female	36	43.4
Age bracket		
Below 35 years	7	8.5
Between 35 and 45 years	50	60.2
Above 45 years	26	31.3
Education		
Bachelor's Degree	43	51.8
Master's Degree	37	44.6
PhD	3	3.6
Job experience		
Less than 10 years	32	38.6
10 years and above	51	61.4
Positions		
Risk directors	49	59.0
Finance directors	29	34.9
Executive directors	5	6.1
Industry type		
Banking institutions	61	73.5
Insurance institutions	22	26.5
Auditor type		
Big 4 audit firms	67	80.7
Other audit firms	16	19.3
Firm age (years)		
Less than 10 years	15	18.1
10 years and above	68	81.9

### Variable measurement

**RDC\_IFRS7 scale.** RDC\_IFRS7 was measured using a self-constructed disclosure checklist (Tauringana & Chithambo, 2016; Agyei-Mensah, 2017a) based on IFRS 7 risk disclosure requirements of credit risk (IFRS 7.33a, 7.33b, 7.33c, 7.34a, 7.34c, 7.36a, 7.36b, 7.36c, 7.37a, 7.37b, 7.37c, 7.38a and 7.38b), liquidity (IFRS 7.33a, 7.33b, 7.33c and 7.39a) and market risk (IFRS 7.33a, 7.33b, 7.33c, 7.34a, 7.40a, 7.40b and 7.34c) (Table 2). Insurance risk disclosures (IFRS 4.39a, 4.39cia, 4.39cii and 4.39ciii) were excluded. Data was obtained from audited financial statements of 83 FIs for the year 2016 (but accessed in 2017). Following prior studies (Tauringana & Chithambo, 2016; Agyei-Mensah, 2017a), a compliance index was computed using an unweight disclosure index (Juhmani, 2017). This disclosure index included risk disclosure items dichotomously coded as 1 if disclosed and 0 otherwise. Furthermore, mandatory risk disclosure items were coded as not applicable if not applicable to avoid penalizing the institution. The reliability of the disclosure index was done through random selection of ten financial statements that were scored by co-authors and independent practitioners. The results showed no significant differences in the scores between co-authors and practitioners. After scoring, a compliance index was computed by summing all risk items disclosed divided by maximum score of risk disclosures. This percentage level of compliance was converted onto a five-point Likert scale to match the scale for IC components. For instance, 1= "0.0-20.0 %", 2=

“20.0-40.0”, 3= “40.0-60.0”, 4= “60.0-80.0”, and 5= “80.0-100”. This approach is similar to the previous scholars (Kamukama *et al.*, 2011; Nalukenge *et al.*, 2018; Nalukenge, 2020).

**IC scale.** IC was operationalized in terms of human, structural and relational capital (Bontis, 1998; Kamukama *et al.*, 2010; Kamukama *et al.*, 2011; Grimaldi *et al.*, 2013; Nkundabanyanga, 2016; Bananuka, 2019) (Table 2). IC was derived from the RBV which considered IC as a sustainable strategic resource controlled by the firm, with specific characteristics which can determine the success or failure of a business which in turn leads to superior RDC\_IFRS7 (Barney, 1991; Wernerfelt, 1984). Such resources are embedded in the human capacity, systems and networks that firms possess. A questionnaire containing items anchored onto a five-point Likert scale from strongly disagree (1) to strongly agree (5) was administered to collect data on IC components. The questionnaire items were adopted and modified from previous studies (Kamukama *et al.*, 2010; Grimaldi *et al.*, 2013; Nkundabanyanga, 2016). For example human capital, respondents answered to items like “This institution has adequate numbers of staff to handle existing workload”, “This institution employs highly qualified staff”, “ In this institution, employees are knowledgeable about their work”, “In this institution, employees are always source of new ideas” and “In this institution, employees withstand pressure from work”. Moreover with structural capital, respondents responded to items like “this institution has a system of capturing tacit knowledge”, “In this institution, internal processes are clear to the users”, “In this institution, systems facilitate easy access of information and data”, “This institution promotes a culture of teamwork”, “This institution has an organization philosophy” and “In this institution, staff easily access technical information and data”. Besides, to relational capital, respondents answered to items like “This firm has many clear openings to its customers”, “This institution has good network systems with its customers”, “The institution takes more services nearer to our customers”, “In this institution, at times customers participate in deciding on the matters that affect them”, “In this institution, customers are in touch with us”, “The networks with customers have made this institution what it is” and “This institution collaborates well with other firms”.

**Control variables.** The control variables used in this study are auditor type, firm size, industry type and firm age (see Table 2). Previous studies have established that such variables have positive influence on RDC\_IFRS7 (Demir & Bahadir, 2014; Sarea, 2015; Buckby *et al.*, 2015; Appiah *et al.*, 2016; Tauringana & Chithambo, 2016; Juhmani, 2017).

**Table 2. Measurement of variables**

<b>Variables</b>	<b>Measurement</b>
<b>Dependent variable</b>	
Risk disclosure compliance with IFRS 7 (RDC_IFRS7)	Measured by aggregate percentage score on a 5-point Likert scale based on the percentage level of risk disclosure compliance with IFRS 7 requirements in terms of credit risk disclosure, liquidity risk disclosure and market risk disclosure.
<b>Independent variables</b>	
Intellectual capital (IC)	Measured by total average score of human capital, structural capital and relational capital anchored on a 5-point Likert scale.
Human capital (HC)	Measured by average score of items on a 5-point Likert scale of human capital.
Structural capital (SC)	Measured by average score of items on a 5-point Likert scale of structural capital.

Relational capital (RC)	Measured by average score of items on a 5-point Likert scale of relational capital.
<b>Control variables</b>	
Auditor type (AUDT)	Dummy variable that equals 1 for firms audited by Big 4 and 0 otherwise.
Firm Size (FSIZE)	The natural logarithms of total assets as at the end of 2016.
Industry type (ITYPE)	Dummy variable that equals 1 for firms in the banking category and 0 otherwise.
Firm age (FAGE)	Dummy variable that equals 1 for firms aged 10 years and above and 0 otherwise.

**Missing value analysis and common method variance**

The study performed missing value analysis and used MCAR and expectation maximization (EM) estimation. The results of MCAR test ( $\chi^2 = 309.29$ , sig. = 0.789) show that data was missing randomly and acceptable for replacement. The missing values were replaced through linear interpolation method (Field, 2009). Furthermore, the study assessed for common method variance (CMV) (Podsakoff *et al.*, 2003). First, the Harman’s (1976) one-factor test was done (Podsakoff *et al.*, 2003). Using SPSS Software, the extraction method of principal component with none rotation method was performed and only one factor emerged explaining 35.7 % less than 50 % of the variance suggesting absence of CMV bias. Second, scale formats, anchors, and scale values were retained. The responses were anchored onto a five-point Likert scale from 1-strongly disagree, 2- disagree, 3-not sure, 4-agree and 5-strongly agree to maintain consistency. Third, the retained questionnaire items were kept simple, precise, brief, and double barreled questions removed. Therefore, data were imported to Smart PLS 3.2.7 (Ringle *et al.*, 2015) for further analysis.

**Data analysis**

The study analyzed data using SPSS (version 23) and Partial Least Squares Structural Equation Modeling (PLS-SEM) (SmartPLS3.2.7). The choice for the PLS-SEM was based on its suitability to estimate parameters of small sample size (Chin, 1998; Hair *et al.*, 2019) and secondary data (Hair *et al.*, 2019).

**Measurement model**

The study began by assessing goodness of model fit before evaluating measurement and structural models (Henseler *et al.*, 2016). To assess goodness of model fit, the standardized root mean square residual (SRMR), geodesic discrepancy ( $d_G$ ) and unweight least squares discrepancy ( $d_{ULS}$ ) (Dijkstra & Henseler, 2015; Henseler *et al.*, 2016) were evaluated. According to Hair *et al.* (2014), SRMR value (0.062) less than 0.08 show a good model fit. Table 3 shows that all values met conditions of a good model fit (Henseler *et al.*, 2016).

**Table 3. Goodness of model fit**

Fit criteria	Value	HI95
SRMR	0.062	0.071
$d_{ULS}$	1.941	3.124
$d_G$	1.987	3.163

**Notes:** Model fit criteria: SRMR<95 percent of bootstrap quantile (HI95 of SRMR),  $d_{ULS}$ <95 per cent of bootstrap quantile (HI95 of  $d_{ULS}$ ), and  $d_G$ <95 per cent of bootstrap quantile (HI95 of  $d_G$ ); HI95 = 95 percent of bootstrap quantile.

Additionally, the study evaluated reliability of constructs using outer loadings. The indicator loadings should be above 0.708 (Hair *et al.*, 2011; Hair *et al.*, 2019). Table 4 shows that all outer loadings values exceeded 0.708 except HUMC4 (0.670). However, Barclay *et al.* (1995) argue that loadings of 0.50 or 0.60 are considered acceptable. Therefore, item HUMC4 was upheld. Moreover, internal consistency was evaluated using composite reliability (Hair *et al.*, 2019). Table 4 shows that all composite reliability values varied between 0.839 and 0.887 exceeding 0.7 cut-off value, satisfying pre-requisite of constructs reliability (Hair *et al.*, 2019). Besides, convergent validity was evaluated using Average Variance Expected (AVE). Table 4 shows that all variables achieved convergent validity, with all AVE values (varied between 0.567 and 0.634) exceeding 0.50 cut-off value (Hair *et al.*, 2014; Hair *et al.*, 2019).

**Table 4. Measurement model convergent validity and reliability**

Variable <sup>a</sup>	Items	Outer loadings	$\alpha$	CR	AVE
HC			0.748	0.839	0.567
HUMC2	This institution has adequate numbers of staff to handle existing workload	0.813***			
HUMC5	This institution employs qualified staff	0.758***			
HUMC3	In this institution, employees are knowledgeable about their work	0.763***			
HUMC4	In this institution, employees with stand pressure from work	0.670***			
SC			0.841	0.887	0.611
STRUC2	This institution has a system of capturing tacit knowledge	0.755***			
STRUC3	This institution has an organization philosophy	0.819***			
STRUC4	In this institution, systems facilitate easy access of information and data	0.774***			
STRUC5	In this institution, staff easily access technical information and data	0.859***			
STRUC7	This institution promotes a culture of teamwork	0.780***			
RC			0.820	0.874	0.634
RELC1	This institution takes more services nearer to its customers	0.852***			
RELC2	This institution collaborates well with other institutions	0.834***			
RELC4	The networks with customers have made this institution what it is	0.731***			
RELC7	In this institution, customers are in touch with us	0.762***			

**Notes:** <sup>a</sup> Variable definitions are shown in Table 2; Critical t-values for outer loadings: \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001;  $\alpha$ , Cronbach’s alpha; CR, Composite reliability; AVE, average variance extracted.

Furthermore, discriminant validity was evaluated using heterotrait-monotrait ratio of correlations (HTMT) (Henseler *et al.*, 2015; Hair *et al.*, 2019). This was so because; Henseler *et al.* (2015) argue that Fornell-Larcker criterion and cross-loadings were no longer sufficient methods. Table 5 shows that all variables attained discriminant validity, with HTMT values below 0.85 and upper confidence limits below 1.00.

**Table 5. Measurement model discriminant validity using HTMT**

Variables <sup>a</sup>	1	2	3	4	5
1. HC					
2. SC	0.583 CI <sub>90</sub> : 0.49–0.67				
3. RC	0.451 CI <sub>90</sub> : 0.36–0.58	0.366 CI <sub>90</sub> : 0.22–0.53			
4. IC	0.678 CI <sub>90</sub> : 0.52–0.76	0.683 CI <sub>90</sub> : 0.53–0.74	0.399 CI <sub>90</sub> : 0.23–0.48		
5. RDC_IFRS7	0.342 CI <sub>90</sub> : 0.25–0.47	0.230 CI <sub>90</sub> : 0.13–0.41	0.132 CI <sub>90</sub> : 0.10–0.32	0.325 CI <sub>90</sub> : 0.22–0.54	

**Notes:** <sup>a</sup> Variable definitions are shown in Table 2; HTMT, Heterotrait–Monotrait of correlations; HC, Human capital; SC, Structural capital; RC, Relational capital; IC, Intellectual capital; RDC\_IFRS7, Risk disclosure compliance with IFRS 7; CI, Confidence interval.

Moreover, formative measurement was evaluated using variance inflation factors (VIF) and significance of outer weights (Hair *et al.*, 2011; Hair *et al.*, 2019). Table 6 shows that the highest VIF (2.462) which was below acceptable threshold of 3 indicating absence of multicollinearity and all formative items were significant except RELC4. However, Hair *et al.* (2019) argue that deleting formative items was not only based on their significance but also on their outer loadings and significance levels. Therefore, since its outer loading was significant, so RELC4 was retained as a formative item.

**Table 6. Formative measurement model**

Formative constructs	Formative items	Outer weights	t-Values (Outer weights)	Outer loadings	t-Values (Outer loadings)	VIF values
HC	HUMC2	0.359***	9.293	0.813***	11.419	2.140
	HUMC5	0.277***	7.826	0.758***	8.893	2.038
	HUMC3	0.285***	8.573	0.763***	11.334	1.569
	HUMC4	0.417***	5.047	0.670***	11.201	1.153
SC	STRUC2	0.260***	7.745	0.755***	14.872	1.696
	STRUC3	0.246***	12.554	0.819***	11.289	2.224
	STRUC4	0.203***	8.747	0.774***	11.404	2.088
	STRUC5	0.290***	8.186	0.859***	22.715	2.462
RC	STRUC7	0.251***	11.274	0.780***	9.165	1.854
	RELC1	0.401***	5.745	0.852***	17.021	1.778
	RELC2	0.425***	4.096	0.834***	10.810	1.586
	RELC4	<b>0.133</b>	<b>1.049</b>	0.731***	6.789	1.844
	RELC7	0.271***	3.135	0.762***	10.122	1.761

**Empirical results and additional analysis**

**Descriptive characteristics**

The results in Table 7 reveals that mean overall RDC\_IFRS7 value is 56.2 % (Mean = 3.820,  $\sigma$  = 0.813). The result indicates a low RDC\_IFRS7 level which is comparable with Sarea *et al.* (2015) and Hewaidy & Al Mutawaa (2010), where compliance levels that ranged between 40 and 60 percent were considered low. These results are similar with that of Nalukenge (2020),

Dawd (2018), Agyei-Mensah (2017a) and Tauringana & Chithambo (2016). Furthermore, the results also show that the standard deviations (ranged between 0.475 and 0.564) relative to the means (ranged between 3.898 and 3.983) are small. This indicates that computed means highly represented the observed data (Field, 2009; Nalukenge *et al.*, 2018; Bananuka *et al.*, 2019).

**Table 7. Descriptive statistics**

Variables <sup>a</sup>	N	Min.	Max.	Mean	Std. Dev.
AUDT	83	0.00	1.00	0.807	0.397
FSIZE	83	20.91	29.15	25.261	1.812
FAGE	83	0.00	1.00	0.819	0.387
ITYPE	83	0.00	1.00	0.735	0.444
HC	83	2.00	5.00	3.898	0.564
SC	83	2.00	5.00	3.914	0.524
RC	83	2.00	5.00	3.983	0.475
IC	83	2.00	5.00	3.907	0.512
RDC_IFRS7	83	2.00	5.00	3.820	0.813

Notes: <sup>a</sup> Variable definitions are shown in Table 2

**Correlation analysis results**

The study examined the degree to which study variables were highly correlated (Hair *et al.*, 2014). Table 8 shows that no pair-wise was above  $\pm 0.8$ , suggesting absence of multicollinearity (Pallant, 2013). Further analysis show a positive significant association between IC and RDC\_IFRS7 ( $r = 0.325^{**}$ ,  $p < 0.01$ ). Furthermore, the results show that RDC\_IFRS7 is positively and significantly associated with human capital ( $r = 0.342^{**}$ ,  $p < 0.01$ ) and structural capital ( $r = 0.230^{**}$ ,  $p < 0.01$ ) but insignificantly associated with relational capital ( $r = 0.132$ ,  $p > 0.01$ ). Besides, the results also show that RDC\_IFRS7 is positively correlated with auditor type ( $r = 0.190^*$ ,  $p < 0.05$ ) and firm size ( $r = 0.242^{**}$ ,  $p < 0.01$ ), negatively correlated with firm age ( $r = -0.227^*$ ,  $p < 0.05$ ) but insignificantly correlated with industry type ( $r = 0.101$ ,  $p > 0.01$ ). Therefore, the results provide preliminary evidence that variables are associated with RDC\_IFRS7.

**Table 8. Bivariate correlation matrix**

Variables <sup>a</sup>	1	2	3	4	5	6	7	8	9
1. AUDT	1.000		0.170	0.281 <sup>**</sup>	0.004	0.004	0.027	0.005	0.209 <sup>*</sup>
2. FSIZE	-0.018	1.000	-0.020	0.013	0.203 <sup>*</sup>	0.219 <sup>**</sup>	0.090	0.301 <sup>**</sup>	0.231 <sup>**</sup>
3. FAGE	0.110	-0.024	1.000	0.014	-0.102	-0.130	0.021	0.063	-0.239 <sup>*</sup>
4. ITYPE	0.264 <sup>*</sup>	0.019	0.030	1.000	-0.100	-0.060	0.120	0.041	0.102
5. HC	-0.006	0.215 <sup>**</sup>	-0.120	-0.065	1.000	0.514 <sup>**</sup>	0.526 <sup>**</sup>	0.677 <sup>**</sup>	0.272 <sup>*</sup>
6. SC	-0.034	0.227 <sup>**</sup>	-0.100	-0.072	0.583 <sup>**</sup>	1.000	0.427 <sup>**</sup>	0.601 <sup>**</sup>	0.217 <sup>*</sup>
7. RC	-0.031	0.102 <sup>*</sup>	-0.106	0.102	0.451 <sup>**</sup>	0.366 <sup>**</sup>	1.000	0.443 <sup>**</sup>	0.158
8. IC	-0.050	0.347 <sup>**</sup>	0.052	0.039	0.678 <sup>**</sup>	0.683 <sup>**</sup>	0.399 <sup>**</sup>	1.000	0.282 <sup>**</sup>
9. RDC_IFRS7	0.190 <sup>*</sup>	0.242 <sup>**</sup>	-0.227 <sup>*</sup>	0.101	0.342 <sup>**</sup>	0.230 <sup>**</sup>	0.132	0.325 <sup>**</sup>	1.000

Notes: <sup>a</sup> Variable definitions are shown in Table 2. <sup>\*\*</sup> and <sup>\*</sup> denote correlations is significant at the 1% and 5% level respectively. The bottom left half of the table presents Pearson’s parametric correlation coefficients while the upper right half of the table presents Spearman’s non-parametric correlation coefficients.

**Structural model results**

The study employed Smart PLS 3.2.7 with a bootstrap resampling procedure of 5000 resamples (Hair *et al.*, 2014; Hair *et al.*, 2019) to test the developed hypotheses. First, the study evaluated model’s in-sample predictive power (Hair *et al.*, 2019). Table 9 shows that model predictive ability, with R<sup>2</sup> values of IC (0.696) and RDC\_IFRS7 (0.217) exceeding threshold of 0.10 (Falk & Miller, 1992). Nevertheless, model’s out-of-sample predictive power was not examined (Shmueli *et al.*, 2016) due to the small sample size (Hair *et al.*, 2019). Second, the study evaluated model’s predictive accuracy using Stone–Geisser’s Q<sup>2</sup> (Geisser, 1974; Stone, 1974) and used blindfolding procedure (Sarstedt *et al.*, 2014; Hair *et al.*, 2019). Table 9 shows that model predictive relevance, with Q<sup>2</sup> values of IC (0.623) and RDC\_IFRS7 (0.168) being greater than zero (Fornell *et al.*, 1994; Sarstedt *et al.*, 2014).

Moreover, the structural results in Table 9 show that IC has a significant and positive relationship with RDC\_IFRS7 ( $\beta=0.274$ ,  $t=2.886$ ,  $p<0.001$ ). This result supports  $H_1$ . Therefore, this implies that improved IC enhances higher RDC\_IFRS7 levels. In addition, the results also show that human capital has a significant and positive relationship with RDC\_IFRS7 ( $\beta=0.082$ ,  $t=2.430$ ,  $p<0.001$ ). This thus supports  $H_{1a}$  and implies that building a solid human base boosts higher RDC\_IFRS7 levels. Furthermore, the results also show that structural capital has a significant and positive relationship with RDC\_IFRS7 ( $\beta=0.149$ ,  $t=2.220$ ,  $p<0.001$ ) and it supports  $H_{1b}$ . This implies that improved structural capital enhances higher RDC\_IFRS7 levels. Moreover, Table 9 indicates that relational capital has no significant positive relationship with RDC\_IFRS7 ( $\beta=0.029$ ,  $t=1.828$ ,  $p<0.001$ ). This result rejects  $H_{1c}$  which implies that improvement in relational capital does not enhance RDC\_IFRS7 levels.

Besides, the results in Table 9 also show that the auditor type has a significant and positive relationship with RDC\_IFRS7 ( $\beta=0.216$ ,  $t=1.988$ ,  $p<0.001$ ) which is in support of  $H_2$ . Thus implies that FIs which hire B4 audit services comply more with RDC\_IFRS7. In addition, the results show that firm size has a significant and positive relationship with RDC\_IFRS7 ( $\beta=0.231$ ,  $t=2.513$ ,  $p<0.001$ ) which supports  $H_3$ . This means that large FIs in terms of total assets comply more with RDC\_IFRS7. Moreover, the results also indicate that industry type has no significant positive relationship with RDC\_IFRS7 ( $\beta=0.110$ ,  $t=1.280$ ,  $p<0.001$ ). This result rejects  $H_4$ . This suggests that the sector of FIs has no impact on RDC\_IFRS7. Further analysis also show that firm age has a significant and negative relationship with RDC\_IFRS7 ( $\beta=-0.233$ ,  $t=2.526$ ,  $p<0.001$ ). This result rejects  $H_3$ . The result suggests that younger FIs comply more with RDC\_IFRS7. Overall, Table 9 indicates that the model explains only 21.7 % of the variance with RDC\_IFRS7. Finally, Table 9 shows that absence of multicollinearity, with highest VIF value (1.189) below acceptable threshold of 3 (Hair *et al.*, 2019).

**Table 9. Hypothesis testing**

Hypotheses (H)	R <sup>2</sup>	Q <sup>2</sup>	VIF	$\beta$ - Values	Std. Erro r	t- Value	Bias	BCa 2.5%	BCa 97.5%
IC → RDC_IFRS7 (H <sub>1</sub> )			1.189	0.274**	0.095	2.886	-0.001	0.083	0.468
HC → RDC_IFRS7 (H <sub>1a</sub> )				0.082**	0.034	2.430	0.001	0.021	0.151

SC → RDC_IFRS7 (H <sub>1b</sub> )	0.149**	0.067	2.220	-0.001	0.045	0.309	
RC → RDC_IFRS7 (H <sub>1c</sub> )	0.029	0.016	1.828	0.004	0.006	0.066	
AUDT → RDC_IFRS7 (H <sub>2</sub> )	1.092	0.216**	0.109	1.988	-0.003	0.007	0.403
FSIZE → RDC_IFRS7 (H <sub>3</sub> )	1.817	0.231**	0.013	2.513	-0.001	0.005	0.436
ITYPE → RDC_IFRS7 (H <sub>4</sub> )	1.101	0.110	0.086	1.280	0.002	-0.091	0.258
FAGE → RDC_IFRS7 (H <sub>5</sub> )	1.018	-0.233**	0.092	2.526	0.003	-0.415	-0.056
IC	0.696	0.623					
RDC_IFRS7	0.217	0.168					

**Notes:** IC, Intellectual capital; RDC\_IFRS7, Risk disclosure compliance with IFRS 7; HC, Human capital; SC, Structural capital; RC, Relational capital; AUDT, Auditor type; FSIZE, Firm size; ITYPE, Industry type; FAGE, Firm age; R<sup>2</sup>, Co-efficient of Determination; Q<sup>2</sup>, Predictive relevance; VIF, the inner variance inflation factors; β, path coefficient; BCa, Bias corrected confidence intervals.

## Discussion

This study examined the impact of intellectual capital (IC) and its components, namely, human capital, structural capital and relational capital, on the level of risk disclosure compliance (RDC) with international financial reporting standard (IFRS) 7 requirements (RDC\_IFRS7) among financial institutions (FIs) in Uganda. To our knowledge the link between intellectual capital and RDC\_IFRS7 has not been tested in the context of Ugandan FIs.

The results indicated that RDC\_IFRS7 level is low. The finding suggests that this low level is due to existing enforcement regimes (Dawd, 2018). For example, banking institutions like MFIs for long Ministry of Trade has been their regulator until of recent when new UMRA was operationalized. But this regulator was not penalizing non-compliance cases instead would just caution. This argument is similar to Owusu-Ansah & Yeoh (2005) who stated that “companies comply more with mandatory disclosure requirements only if enforcement and sanction mechanisms are adequate for non-compliance”. The results are consistent with Tauringana & Chithambo (2016) and Agyei-Mensah (2017a) that found low RDC\_IFRS7 levels, and, Nalukenge (2020) who found low compliance level with IFRS disclosure. This study complements to the growing stream of literature that found low compliance with IFRS in developing economies (Tauringana *et al.*, 2016; Agyei-Mensah, 2017a; Nalukenge, 2020). While Mnif & Znazen (2020) found an intermediate compliance level with IFRS 7, this provides evidence that compliance with IFRS 7 in developed economies is higher than developing economies. Therefore, these findings are not consistent with Institutional theory which claims that FIs face more isomorphic forces in developed economies than developing economies. As a result, more attention is paid towards higher RDC\_IFRS7 levels.

Moreover, the results indicated that IC significantly impacts RDC\_IFRS7. The finding suggests that IC is an important stimulus on FIs motivations to enhance RDC\_IFRS7. This implies that FIs need to build solid human base, strong structural base and better social networks. This calls for management of FIs in developing economies to refocus on building a resilient human resource base, improving process technologies and reengineering business processes (Nkurunziza *et al.*, 2019; Kaawaase *et al.*, 2020). The findings are consistent with Bananuka *et al.* (2019), who found that IC increases internet financial reporting adoption, and, Kaawaase *et al.* (2020), Kamukama *et al.* (2010) and Nkundabanyanga (2016), who found that IC improves firm performance. Similarly, Kamukama & Sulait (2017) and Isola *et al.* (2020) also found that IC increases competitive advantage and bank performance respectively. While, Duho & Onumah (2019) found that IC enhances bank asset diversify decisions. Furthermore, the study expands current RDC\_IFRS7 literature (Tauringana *et al.*, 2016; Agyei-Mensah, 2017a; Agyei-Mensah, 2017b) by providing evidence that IC significantly affects RDC\_IFRS7 in developing economies. Moreover, the findings are also consistent with RBV theory which suggests that competitive FIs that optimally utilize their IC have more incentives to distinguish themselves from less competitive ones by achieving higher RDC\_IFRS7 levels.

Additionally, the results showed that human capital significantly impacts RDC\_IFRS7. The finding implies that FIs should have adequate motivated and qualified employees to handle current workload as well as knowledgeable employees about their work. This finding is consistent with Jia *et al.* (2019), who established that human capital of the committee enhances risk management disclosure quality, while, Said *et al.* (2013) found that human capital characteristics are vital to the extent of disclosure. In other studies by Kamukama *et al.* (2010), Nkundabanyanga (2016), Nawaz & Haniffa (2017) and Tiwari & Vidyarthi (2018), they found that human capital improves firm performance. Likewise, Duho and Onumah (2019) also found that efficient human capital determines the choice of bank asset diversify decisions. Further analysis also showed that risk directors were majority and they require minimum level of supervision in application of IFRS 7 risk disclosure requirements. This finding is also consistent with RBV theory which calls for building solid human base that fulfills the VRIN criteria in terms of having adequate motivated and qualified employees to achieve higher RDC\_IFRS7.

Besides, the results also indicated that structural capital significantly impacts RDC\_IFRS7. The finding implies that FIs should have their technical information and data easily accessed by its employees, have better organization thinking and better teamwork spirit. This finding aligns well with Nkurunziza *et al.* (2019) who reported that financial and workflow processes were the most reengineered processes in MFIs. Interestingly, they highlight the importance of continuous reengineering of business processes such as process technologies, financial processes and organizational philosophy. These findings are consistent with Duho & Onumah (2019) who found that the value relevance of strong internal controls, policies, organizational culture, processes and procedures and technology base in enhancing the choice of asset diversity decisions. Further, other studies by Hamdan (2018), Tiwari & Vidyarthi (2018), Kaawaase *et al.* (2020), Kamukama *et al.* (2010) and Nkundabanyanga (2016), also found that structural capital increase firm performance. However, the findings are not consistent with Nawaz & Haniffa (2017), Ousama *et al.* (2020) and Isola *et al.* (2020) who found that structural capital has no influence on performance.

Furthermore, the results also indicated that relational capital insignificantly impacts RDC\_IFRS7. The finding ought to explain that FIs which collaborate well with other firms and take more services closer to their customers may not impact on RDC\_IFRS7. This is so because RDC\_IFRS7 is more of human resource and structural tailored than external networks with clients. These findings are not consistent with Kamukama *et al.* (2010), Nkundabanyanga (2016) and Kamukama *et al.* (2017) but consistent with Kaawaase *et al.* (2020) who established that collaborating well with other firms and affiliating with other organizations does not influence firm performance.

Still, the results showed that auditor type significantly impacts RDC\_IFRS7. The finding suggests that FIs audited by Big 4 audit firms have higher RDC\_IFRS7 levels than other firms. This is presumed that Big 4 audit firms have enough resources and their audit performance is continually under scrutiny by worldwide regulators. These findings are consistent with Appiah *et al.* (2016), Demir *et al.* (2014) and Juhmani (2017) who found that firms which hire Big four audit services sustain higher compliance level with IFRS disclosure, while, Dawd (2018) established that audit firm size increases the extent of disclosure. However, these findings are not consistent with Nalukenge *et al.* (2017) and Bananuka (2019) who provided evidence that auditor type has no influence on internal controls over financial reporting and internet financial reporting respectively.

Additionally, the results showed that firm size significantly impacts RDC\_IFRS7. The finding suggests that large financial institutions have higher RDC\_IFRS7 levels compared to small financial institutions. These findings are consistent with Buckby *et al.* (2015), Tauringana & Chithambo (2016), Appiah *et al.* (2016) and Grassaa *et al.* (2020) but inconsistent with that of Malafrente *et al.* (2018) who found that large firms disclosure comply less with risk disclosure practices in the European insurance industry while Agyei-Mensah (2017a), Juhmani (2017) and Agyei-Mensah & Buertey (2019) found no link between firm size and risk disclosure compliance with IFRS7. Moreover, the results indicated that industry type insignificantly impacts RDC\_IFRS7. The finding implies that FIs operating in highly regulated industry are subjected to similar IFRS 7 risk disclosure requirements. These findings are not consistent with Shivaani *et al.*, (2020) who found that industry type enhances the quality of risk disclosures, Juhmani (2017) and Sarea (2015) who found that the compliance level with IFRS disclosure is more in financial companies than non-financial companies; and Dawd (2018) who found that service firms have higher mandatory disclosure. However, there are consistent with Appiah *et al.* (2016) who established that industry type effects are irrelevant to compliance level with IFRS disclosures.

Finally, the results showed that firm age has significant negative relationship with RDC\_IFRS7. The finding suggests that younger FIs have high RDC\_IFRS7. This finding also demonstrates that younger FIs are under a lot of isomorphic forces especially coercive and mimetic forces to comply more with RDC\_IFRS7 than older FIs whose legitimacy is no longer questionable. These findings are consistent with Appiah *et al.* (2016) who found that younger firms comply more with IFRS disclosure. However, there are not consistent with Demir *et al.* (2014) and Shivaani *et al.* (2020) who established respectively that firm age has a positive influence on IFRS compliance and quality of risk disclosures.

## Conclusion

The study aimed at examining the impact of IC and its components on RDC\_IFRS7. Based on a sample of 83 Ugandan FIs, we performed PLS-SEM models to examine whether the level of RDC\_IFRS7 is associated with IC and its components. The study shows that FIs in Uganda are complying with 56.2 % of RDC\_IFRS7. The study also finds that IC is significant predictor of RDC\_IFRS7. Further, the study finds that RDC\_IFRS7 is positively related with human capital and structural capital and not significantly related with relational capital. This finding is similar with Duho *et al.* (2019) who found that level of asset diversity decisions was determined by human capital and structural capital. Further analysis finds that RDC\_IFRS7 is positively influenced by auditor type, negatively influenced by firm age and insignificantly related with industry type.

## Implications

The study has implications for academics, practical and policy makers. For the academicians, the study complements to the previous studies (Tauringana & Chithambo, 2016; Agyei-Mensah, 2017a; Agyei-Mensah, 2017b) by expanding on the RDC existing literature. It is now evident that IC has a significant impact on RDC\_IFRS7. This study also enlightens that the most important IC components in enhancing RDC\_IFRS7 are human and structural capital. The study further adds theoretical foundations of IC to the risk disclosure knowledge. For the practitioners, the study is vital in development of risk disclosure policies affecting FIs. For instance, the study has already revealed that to enhance their RDC\_IFRS7, FIs needs to focus on their structure by building a resilient human resource base and also invest more in a solid technology-knowledge infrastructure. Additionally, the regulators in place like BOU, UMRA and IRAU, the issue of low RDC\_IFRS7 should be paid attention to with ensuring that standard operating procedures are developed to guide FIs as they build their human resource and structural bases in place. For the policy makers, now that IC is antecedent for improved RDC\_IFRS7, management in FIs should focus at maintaining an efficient IC mix that creates value addition. Also, policy makers should ensure that FIs have adequate motivated and qualified employees to handle current workload and also make easy access to technical information by employees so important. Finally, policymakers should encourage FIs collaborate more with other firms and also take more services closer to its clients as a way to improve their RDC\_IFRS7.

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