



# Essays on the Implications of Accounting and Audit Regulations

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Joseph Akadeagre Agana

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Joseph Akadeagre Agana  
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## **List of studies**

This dissertation consists of the following three studies

1. Agana, J. A., Alon, A., and Zamore, S. Self-regulation and re-regulation: audit fees research. Revise and resubmit due May, 2021 in *Accounting and the Public Interest*.
2. Agana, J. A., Zori, G.S., and Alon, A. IFRS adoption approaches in Africa: Implications for accounting quality. Under second review in *The International Journal of Accounting*.
3. Agana, J. A. Use of experts in key audit matters.



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**Overview of the dissertation: Essays on the implications of  
accounting and audit regulations**

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## **1. Introduction**

Globally, the accounting and audit environment has witnessed a wave of significant changes particularly concerning the application of international financial reporting and auditing standards. These changes are largely driven by the rise of the multinational business enterprise alongside an increased demand by investors for comparable financial information (Chua & Taylor, 2008; Haller, 2002). For example, companies seeking listing in foreign markets and global accounting firms have facilitated the move by national regulatory bodies to pursue regulations aimed at harmonization of accounting and auditing standards (Canibano & Mora, 2000; Herman, 2020). Consequently, several countries around the globe have since abandoned their domestic accounting and auditing standards and embraced IFRS and International Standards on Auditing (ISAs) (Boolaky & Soobaroyen, 2017; Koning, Mertens, & Roosenboom, 2018). The IFRS are a set of high-quality principle-based accounting standards promulgated by the International Accounting Standards Board (IASB) aimed at creating a harmonized global financial reporting environment (De George, Li, & Shivakumar, 2016). Similarly, the International Standards on Auditing (ISAs) are regarded as high quality principles for the conduct of financial statement audits.

The adoption of international accounting and auditing standards in the form of the IFRS and ISAs represent a significant development in the global accounting and auditing environment (Daske, Hail, Leuz, & Verdi, 2008). Before the emergence of these international standards, various countries had developed and used their local Generally Accepted Accounting Principles (GAAP) and auditing standards (De George et al., 2016). For instance, companies operating within these countries were required to comply with local GAAP, thus multinational corporations with subsidiaries in several countries had series of reconciliations to do in preparing their consolidated financial statements (De George et al., 2016; Soderstrom & Sun, 2007). The development and application of international accounting and auditing standards was therefore great news at least to multinational corporations and global audit firms though challenging to some countries due to the changes that must be made with respect to the purpose and scope of financial reporting.

Moreover, significant regulatory, and technological changes alongside the global diffusion of IFRS and ISAs collectively impacted the audit of financial statements. For example, the changes in the regulation of the audit profession following the passage of the Sarbanes–Oxley Act of 2002 by the United States Congress introduced a period of state oversight in place of the previous self-regulation by the audit profession (Kinney, 2005). Further, the technological advancement in the 21<sup>st</sup> century brought about the digital age and the associated increased use of electronic business, thus significantly impacting business transactions and the auditing profession (Kotb & Roberts, 2011; Omoteso, Patel, & Scott, 2010). The above developments have varied implications for the auditing and accounting profession, yet many questions still exist about the impact of these changes in financial reporting and audit.

In this dissertation, some questions relating to the implications of these developments, particularly regarding audit pricing, accounting quality, and auditors' use of experts are examined. In the first essay, a bibliometric review of the literature is conducted to synthesize the academic research with a focus on insights about the impact of these regulatory and technological changes on audit fees. Given that audit fees is a function of audit effort, stakeholders including regulators, practitioners, and investors have been interested in understanding the impact of accounting and audit regulations on audit fees. Secondly, accounting quality is often cited as a major motivation for regulatory changes. The second study examines the impact of IFRS adoption approaches on accounting quality. Countries use different approaches to implement international accounting standards. Some adopt the standards without changes, others adopt with changes aimed at incorporating their local context into these standards. Although these two approaches are particularly common in Africa, questions about the impact of these approaches on accounting quality are yet to be empirically examined. The final study focuses on a recent development in the audit environment following the adoption of ISA 701: Communicating Key Audit Matters. This relatively new standard is a response to the longstanding criticism of the audit report. Users assert that the audit report is standardized and boilerplate thereby not providing client-specific information beyond the pass or fail opinion (Bédard, Coram, Espahbodi, & Mock, 2016; Mock et al., 2012). The associated increased transparency has provided a rare insight into the

internal working of audit firms, especially in relation to their use of experts in the most significant areas of the audit. Consequently, the study exploits this unique information to empirically examine the factors associated with auditors' use of experts in an audit.

The rest of this introductory chapter proceeds as follows. Section 2 provides an overview of key accounting and audit regulations. Section 3 presents the theoretical frameworks applied in the dissertation. Section 4 contains an overview of the research design, research context, and data sources as well as the methods used. Section 5 provides a summary of the studies contained in the dissertation highlighting the implications of the key findings.

## **2. Overview of accounting and audit regulation**

Many accounting and audit regulations are governments' response to stock market failures and financial reporting scandals (Kinney, 2005). For instance, the stock market crash of 1929 and the Great Depression of the 1930s were key events leading to the enactment of the US Securities and Exchange Act of 1934. The Act required public interest entities (PIEs) to file audited financial statements (Doron, 2016; Kinney, 2005; Stettler, 1994). Additionally, the 1997/98 Asian financial crisis prompted a global discussion about the quality of banking supervision, corporate governance, and financial reporting. This resulted in a recommendation by the Group of 7 most industrialized countries (G7) Financial Stability Forum (FSF) for countries to adopt international accounting and auditing standards (IFRS and ISA) (Humphrey, Loft, & Woods, 2009). Similarly, regulators in the US responded to the 2000-2002 accounting scandals at Enron, WorldCom, Global Crossing, Tyco, and the demise of Arthur Andersen by passing the Sarbanes-Oxley Act (SOX) in 2002. The outcome is the establishment of stringent accountability measures for auditors and corporate boards (Kinney, 2005). Although the US was the epicenter of the 2000-2002 accounting scandals, the European Commission implemented key reforms in corporate governance and audit similar to those contained in the US Sarbanes-Oxley Act (Lannoo & Khachaturyan, 2004).

More recently, regulators around the globe, particularly in the US and Europe, embarked on further reforms in response to the 2007/2008 financial crisis. These

regulations are aimed at increasing investor protection, corporate governance, and the quality of financial reporting and audit transparency (Kandemir, 2013; Kend & Basioudis, 2018; Lo, 2009; Posner & Véron, 2010). For example, the EU introduced Regulation 537/2014 and the amended Audit Directive (2014/56/EU) which required an expanded audit report (EAR), mandatory audit firm rotation, restrictions on the provision of non-audit services, and a fee capping on the provision of non-audit services (Horton, Tsipouridou, & Wood, 2018; Kend & Basioudis, 2018). The expanded audit report was aimed at increasing transparency around audit through a requirement for disclosures on client-specific information relating to key risks. This received global attention with the US Public Company Accounting Oversight Board (PCAOB) initiating similar requirements in the new audit report which now include a section for Critical Audit Matters (CAMs) and the International Auditing and Assurance Standards Board's (IAASB) new auditing standard on Key Audit Matters (KAMs) (Lawson, O'Hara, & Spencer, 2017). These new disclosures in the audit report are currently applied across several countries through the adoption of the International Standard on Auditing 701: Communicating Key Audit Matters in the auditors' report.

Several bodies including the EU have championed the harmonization of accounting and auditing rules around the globe through their endorsement of IFRS and ISAs. For example, the EU endorsed and adopted IFRS for listed companies in 2005 through Regulation 1606/2002 (Jermakowicz & Gornik-Tomaszewski, 2006). It also adopted the IAASB ISAs in 2006 through Audit Directive 2006/43/EC (EC, 2006a; Humphrey, Kausar, Loft, & Woods, 2011; Humphrey & Loft, 2013). Given the global influence and economic importance of the EU and its common market, its endorsement and requirement for companies within the EU market to apply IFRS and ISAs gave a significant boost to the legitimacy and global diffusion of IFRS and ISAs around the globe especially in African, Caribbean, and Asian countries (Chua & Taylor, 2008; Newman & Bach, 2014; Ramanna & Sletten, 2014).



### **3. Theoretical framework**

#### **3.1 Institutional theory**

The adoption of international standards has been explained from the theoretical lens of institutional isomorphism. The institutional theory has its roots in sociology specifically in the works of Meyer and Rowan (1977), which was subsequently extended by several studies (DiMaggio & Powell, 1983; Scott, 2008). Central to the institutional theory is the concept of legitimacy in the form of general acceptability or conformity to institutionalized patterns/structures (Chen & Roberts, 2010). Organizations in their search for legitimacy choose structures and policies that have previously attained social acceptability (Meyer & Rowan, 1977). Institutional theory focuses more specifically on the pressures and constraints of the institutional environment including regulatory structures, governmental agencies, laws, courts, and professions (Scott, 2013).

The theory is founded on the premise that organizations have influence on and are also influenced by the institutions of society (economic, political, social, and cultural norms) within which they operate. Thus, prior institutional theorists such as Meyer and Rowan (1977) focused on how organizations are shaped by forces of the environment in the form of expectations from relevant institutions of society through established economic, political, social, and cultural norms. These institutions are often deemed acceptable and authoritative within the society, thus, compliance with them is critical to ensure existence. In other words, organizations obtained their legitimacy by acting in accordance with what is generally perceived to be acceptable within the socio-politico-economic environment (Kondra & Hinings, 1998).

DiMaggio and Powell (1983) first introduced the concept of institutional isomorphism in explaining the influence of the institutionalized environment on organizations. They initially identified competitive isomorphism and institutional isomorphism. Subsequently, Scott (2001) built upon the initial classification by re-classifying it into three dimensions of coercive isomorphism, normative isomorphism, and mimetic isomorphism. These three forms of isomorphism are briefly discussed below.

The coercive dimension of institutional isomorphism, also known as power isomorphism, emanates from rules and regulations, often imposed by institutions of society to ensure socially accepted corporate behavior (Meyer & Rowan, 1977). These rules and regulations can take the form of laws such as the Companies Act, Security and Exchange Commission Directives, accounting standards, among others, and are expected to be followed by relevant actors within the society (Scott, 2008).

The normative isomorphic pressure relates to the social norms often seen as best practices and professional norms defining ‘rules of the game’. This perceived professionalism and best practice becomes a source of attraction for other actors yielding a form of normative pressure.

Similarly, the mimetic pressure is described as the emulation of practices from organizations or countries perceived to be more successful or developed (Rodrigues & Craig, 2007).

Given the emphasis of institutional theory on the effects of institutionalized environment on structural conformity and isomorphism by organizations and countries, international accounting scholars have applied the theoretical lens of the institutional theory in examining the global diffusion of IFRS (e.g. Alon & Dwyer, 2014; Boolaky, Tawiah, & Soobaroyen, 2020; Wysocki, 2011; Zeghal & Mhedhbi, 2006). Generally, these studies have highlighted that the global diffusion of IFRS is driven by coercive, normative, and mimetic forces of institutional isomorphism. For instance, the spread of IFRS in developing countries has been attributed to coercive forces in the form of monetary and technical assistance by international bodies such as the World Bank (WB) and the International Monetary Fund (IMF) (Boolaky et al., 2020; Irvine, 2008; Zegha & Mhedhbi, 2006). As organizations are influenced by the institutional environment and norms of the countries within which they operate, the effects of IFRS could differ for companies due to differences in the quality of institutional mechanisms (Houqe, van Zijl, Dunstan, & Karim, 2012; Isidro & Raonic, 2012). Consequently, institutional mechanisms such as the efficiency of court systems and protection of minority interest shareholders could have implications for firm-level financial reporting outcomes like value relevance of accounting information, earnings management, and timely loss recognition.

### **3.2 Signaling theory**

At the core of signaling theory is the fundamental objective of reducing information asymmetry between those with more information (e.g. sellers, management) and those with less information (e.g. buyers, investors) (Akerlof, 1970; Spence, 1973, 1974, 2002). The theory was developed within the context of the information asymmetry prevalent in the job market (Connelly, Certo, Ireland, & Reutzel, 2011). Spence (1973) used the job market setting to argue that job applicants signal their competence and ability to provide high utility to the employer through education and training. Notably, since employers cannot ascertain ex-ante a prospective employee's productive capability, employees tend to communicate their productive capabilities through signals such as education and training. Due to the cost associated with education and training (signaling cost), it is assumed that employees invest in these signals to enable them command a wage premium in the labor market (Spence, 1973). Conceptually, the theory has three main components: sender, receiver, and signal (Connelly et al., 2011; Morris, 1987; Spence, 1973). The sender is the party with more information (e.g. sellers, prospective employees, management) about the product or service while the receiver (e.g. buyers, prospective employers, investors) is the party with limited information. The sender is assumed to choose signals that will enable the receiver evaluate the underlying quality of the sender's work. In the case of the job market, individuals are assumed to select signals such as higher education, specialized training, etc., to communicate their capability to provide high utility to the prospective employer. Recent studies have generally applied the theory in the context of imperfect markets to understand the actions, behaviors or disclosures pursued by parties with more information (e.g. management) in resolving information asymmetry about the unobservable quality underlying their work (Connelly et al., 2011). In the auditing literature, researchers have employed signaling theory to provide insights on companies' choice of auditors (Abbott & Parker, 2000; Bewley, Chung, & McCracken, 2008; Kang, 2014). In these studies, the senders are typically the management of companies while the receivers are investors. The company uses the selection of a particular type of auditor as a signal of its underlying commitment to financial reporting quality. Notably, these studies report that firms choose perceived high-quality auditors

(Big N and industry specialist auditors) to demonstrate their commitment to financial reporting quality (Habib, Wu, Bhuiyan, & Sun, 2019). Although these auditors are associated with high reputation for audit quality, the unobservable nature of the audit process and the binary audit opinion (qualified vs unqualified) makes it difficult to discern how these firms deliver comparatively high-quality audit (Bergner, Marquardt, & Mohapatra, 2020). Moreover, the relationship between the auditor and users of the audit report is characterized by a huge information gap similar to the information asymmetry that exists between management and investors as the actual work, particularly the procedures performed by the auditor are not disclosed (Bédard et al., 2016). Therefore, the recent requirement (ISA 701) for disclosures on key audit matters (KAMs), where auditors are mandated to state the specific procedures they performed in addressing key audit matters, presents a natural setting to ascertain whether auditors engage in signaling. Specifically, as auditors are now required to disclose information about the key issues encountered in the audit and the procedures performed in addressing those issues, auditors might use this to signal the depth of work and diligence underlying their opinion.

## **4. Research design**

Generally, the research design is *“a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered, and there is some set of conclusions (answers) about these questions”* (Yin, 2017, p. 26). A critical issue underpinning the research design is the philosophical stance of the researcher due to its effect on the researcher’s view about *the nature of reality, the nature of knowledge and what can be known, and how an inquirer can go about finding knowledge* (Bisman, 2010).

### **4.1 Philosophical position**

Different schools of thought exist about the philosophy of science. Generally, three philosophical stances: positivism, critical realism, and constructivism, are dominant in business and management studies (Easterby-Smith, Thorpe, & Jackson, 2012). The positivist approach is characterized by key elements such as formal propositions, hypothesis testing, random sampling, aggregation, precision, and

quantifiable measures of variables (Stiles, 2003). The positivist philosophical stance contends that there is one truth (reality) independent of the observer while constructivists focus on understanding the phenomenon as far as human experiences are concerned (Bisman, 2010; Piekkari, Welch, & Paavilainen, 2009). Critical realists are within the continuum between positivists and constructivists (Bisman, 2010; Piekkari et al., 2009). Thus, the critical realist uses elements of both positivism and constructivism to provide new methods for developing knowledge. In that sense, they acknowledge the role of subjective knowledge of social actors in a given situation as well as the existence of independent structures (Baker, 2011). The above three main philosophical positions are commonly used in business and management, but most archival accounting and auditing research are typically dominated by the positivist philosophical stance due to the emphasis on the analysis of numbers and hypothesis testing (Baker, 2011; Bisman, 2010). Although the positivist paradigm has its limitations including its extreme emphasis on the absolute truth independent of the researcher, it is the most suitable and dominant perspective for archival studies aimed at explaining relationships between a given set of variables, hence, the position adopted in this dissertation.

## **4.2 Context and data sources**

Studies in this dissertation are based on data from different jurisdictions. The first study which is a bibliometric citation analysis of audit fees research is largely dominated by empirical studies that used data from North America. This is attributable to the early availability of archival data on audit fees in North America. The data (articles) are retrieved from accounting and auditing journals indexed in the Web of Science database due to its reputation for indexing only journals of high quality. The second study is based on archival panel data (3946 firm-year observations) from six (6) African countries adopting IFRS. The African continent is the second most populous IFRS continent yet questions about the diffusion and effects of IFRS in the region are largely unexplored (BooLaky et al., 2020). It provides an interesting setting to explore questions relating to IFRS. Secondly, it presents a suitable context to examine questions about different IFRS adoption approaches due to the differences in IFRS diffusion

across the continent. This enables an empirical investigation of the longstanding IFRS question of whether countries should adopt IFRS with or without modifications. The data are retrieved from various sources including DataStream, WorldScope, and the World Bank. The final study is based on Norwegian listed companies and focuses on ISA 701: Communicating Key Audit Matters. The requirement for auditors to disclose KAMs in the audit report became effective in December 2016. The Norwegian accounting and audit environment is characterized by strict adherence to accounting and auditing rules (Brown, Preiato, & Tarca, 2014) and is similar to the EU and EEA audit environment (Sormunen, Jeppesen, Sundgren, & Svanström, 2013). The archival data (414 firm-year observations) used in this paper are manually collected from annual reports of companies listed on the Oslo Stock Exchange while some control variables are retrieved from Thomson Reuters Eikon database. The study period spanned from 2016 to 2018.

### **4.3 Analytical approaches**

The first study employs the bibliometric citation analysis technique in evaluating the impact of regulatory developments on audit fees research. This technique enables researchers to scientifically identify the patterns and intellectual structure within a field (Locke & Perera, 2001). Previous studies in accounting have applied this technique to examine the intellectual structure of international accounting (Locke & Perera, 2001) and business ethics research in accounting (Uysal, 2010). The second and third studies are based on panel data estimation techniques such as random effects regression models, random effects logistic regression, and Poisson regression. Regarding the use of panel data estimation techniques, Nikolaev and Van Lent (2005) argue that such techniques are suitable for accounting research since it enables researchers to mitigate endogeneity bias. Moreover, the panel data techniques can control for unit heterogeneity, unobserved fixed effects (omitted variable bias), and gives more variability, degrees of freedom, minimizes problems of multicollinearity while enhancing efficiency (Baltagi, 2013; Wooldridge, 2010).

## 5. Summary of studies and conclusion

The dissertation consists of three related studies examining the implications of accounting and audit regulations. The accounting and audit environment has witnessed significant changes following the adoption of international accounting and audit standards and the 2007/2008 financial crisis. However, questions relating to the impact of these developments on audit fees, accounting quality, and auditors' resource utilization, though important, are underexplored. Consequently, the overall aim of this dissertation is to contribute to our understanding of the impact of accounting and audit regulations on audit fees, accounting quality, and auditors' use of experts. These studies have benefited from comments and contributions from international academic conferences including the European Accounting Association Annual Congress, the European Financial Reporting Workshop (EUFIN), and the International Accounting Section conference of the American Accounting Association. The first two studies have benefited from peer-review comments from the *Accounting and the Public Interest* (API) and *The International Journal of Accounting* (TIJA) respectively.

The first study adopts a bibliometric citation technique in exploring academic insights relating to the impact of regulatory, professional, and technological changes on audit fees. Notably, regulatory changes such as the Sarbanes–Oxley Act of 2002 significantly impacted the audit profession and reintroduced state oversight. Although regulatory changes are always motivated by a desire to improve audit quality, unintended consequences exist around audit cost. Consequently, the cost of these regulations is borne by auditees and passed along to shareholders. The review covers academic literature examining various aspects of regulatory changes on audit fees from 1980-2019, a total of 453 articles are analyzed. The review highlights a significant shift in the factors underlying audit pricing from auditor to client attributes, such as governance and the structure of engagements. Research gaps and regulatory trends that have implications for the audit market, audit practices, and public interest are also identified.

The second study examines accounting quality which is one of the main motivations for accounting regulation. The global diffusion of IFRS is anchored on its promise of delivering high-quality accounting numbers, nonetheless, its effects on

accounting quality remain ambiguous particularly for countries with underdeveloped capital markets. Additionally, although countries adopt international accounting rules differently, questions about the implications of different adoption approaches are important but largely unexplored. These two issues are examined by focusing on Africa, the continent that has received little empirical attention in the literature yet represents the second most populated region where IFRS standards are adopted. Generally, the results indicate that IFRS adoption was not associated with reduced earnings management, timeliness of loss recognition, and value relevance of accounting numbers. This notwithstanding, firms applying an unmodified version of IFRS experienced a relatively lower decline in earnings management and an increase in timely loss recognition but recorded a reduction in value relevance than those that applied a modified version of IFRS. Overall, these results provide insight into longstanding questions related to the implications of local IFRS modifications for accounting quality.

The final study addresses an aspect of recent auditing reforms which required auditors to disclose in the audit report those matters in the audit that they considered to be most significant. Specifically, given that the audit processes are opaque to investors, auditors may use the new disclosure requirements to signal that they do sufficient work including consultation with experts in key areas of the audit. Consequently, this paper examines areas and factors associated with auditors' use of experts in key audit matters (KAMs). Auditor and engagement attributes including auditor's industry specialization, number of KAMs, and audit fees are predicted to be associated with the use of experts in KAMs. Archival data from companies listed on the Oslo Stock Exchange were hand-collected and analyzed using panel data techniques. The results show that auditors seek expert assistance in audit areas typically associated with high risk and estimation uncertainty (impairment and valuation). Consistent with the predictions, auditor industry specialization, number of KAMs, and audit fees are significantly associated with a greater likelihood of using experts in key areas of the audit. Generally, these results suggest that due to the unobservable nature of audit processes and quality, industry specialist auditors, auditors confronted with more risks, and those charging higher fees employ experts to signal that sufficient work was performed. As there is a



lack of archival data on auditors' use of experts, these findings provide insights relevant for regulators, practitioners, standard setters, and academics interested in audit processes. Theoretically, the study contributes to the signaling theory by demonstrating that auditors' judgments and procedures can be explained from the theoretical perspective of signaling.

Overall, the findings in this dissertation demonstrate that recent developments in the accounting and audit environment have implications for audit fees, auditors' use of experts, and accounting quality. Regarding audit fees, these changes have resulted in an increased emphasis on client attributes and engagement structure in the audit pricing model. Empirically, the findings on auditors' use of experts corroborate this trend in the literature by highlighting the dominance of clients' risk and complexity in auditors' resource utilization. Moreover, given that accounting quality is primarily a major motivation for changes in accounting regulations, especially for countries adopting international standards in place of local rules, the lack of improvement in accounting quality post-IFRS adoption in Africa raises critical questions about the suitability of international standards for countries that do not have the underlying institutional structures to support these changes. The relatively higher accounting quality in terms of timely loss recognition and earnings management for companies listed in countries adopting IFRS without changes suggest adoption without modification might be suitable for countries without institutional capacity to develop and implement their own local accounting rules. On the other hand, the recorded higher value relevant accounting information for those applying a modified version of IFRS implies that a more nuanced approach is needed in adopting international standards.

## References

- Abbott, L. J., & Parker, S. (2000). Auditor selection and audit committee characteristics. *Auditing: A Journal of Practice & Theory*, 19(2), 47-66.
- Akerlof, G. (1970). A., 1970, The market for 'lemons': Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488-500.
- Alon, A., & Dwyer, P. D. (2014). Early adoption of IFRS as a strategic response to transnational and local influences. *The International Journal of Accounting*, 49(3), 348-370.
- Baker, C. R. (2011). A genealogical history of positivist and critical accounting research. *Accounting History*, 16(2), 207-221.
- Baltagi, B. (2013). *Econometric Analysis of Panel Data* (5th ed.). Chichester, England: John Wiley & Sons.
- Bédard, J., Coram, P., Espahbodi, R., & Mock, T. J. (2016). Does recent academic research support changes to audit reporting standards? *Accounting Horizons*, 30(2), 255-275.
- Bergner, J., Marquardt, B. B., & Mohapatra, P. (2020). The auditor reputation cycle: A synthesis of the literature. *International Journal of Auditing*.
- Bewley, K., Chung, J., & McCracken, S. (2008). An examination of auditor choice using evidence from Andersen's demise. *International Journal of Auditing*, 12(2), 89-110.
- Bisman, J. (2010). Postpositivism and accounting research: A (personal) primer on critical realism. *Australasian Accounting, Business and Finance Journal*, 4(4), 3-25.
- BooLaky, P. K., & Soobaroyen, T. (2017). Adoption of International Standards on Auditing (ISA): Do institutional factors matter? *International Journal of Auditing*, 21(1), 59-81.

- BooLaky, P. K., Tawiah, V., & Soobaroyen, T. (2020). Why do African countries adopt IFRS? An institutional perspective. *The International Journal of Accounting*, 2050005.
- Brown, P., Preiato, J., & Tarca, A. (2014). Measuring country differences in enforcement of accounting standards: An audit and enforcement proxy. *Journal of Business Finance & Accounting*, 41(1-2), 1-52.
- Canibano, L., & Mora, A. (2000). Evaluating the statistical significance of de facto accounting harmonization: a study of European global players. *European Accounting Review*, 9(3), 349-369.
- Chen, J. C., & Roberts, R. W. (2010). Toward a more coherent understanding of the organization–society relationship: A theoretical consideration for social and environmental accounting research. *Journal of Business Ethics*, 97(4), 651-665.
- Chua, W. F., & Taylor, S. L. (2008). The rise and rise of IFRS: An examination of IFRS diffusion. *Journal of Accounting and Public Policy*, 27(6), 462-473.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39-67.
- Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research*, 46(5), 1085-1142.
- De George, E. T., Li, X., & Shivakumar, L. (2016). A review of the IFRS adoption literature. *Review of Accounting Studies*, 21(3), 898-1004.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 147-160.
- Doron, M. E. (2016). The Securities Acts and public accounting: Financial statement audits as symbolic reform. *Accounting History*, 21(2-3), 329-343.

- Easterby-Smith, M., Thorpe, R., & Jackson, P. R. (2012). *Management research*: Sage.
- Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC, 49 C.F.R. (2006a).
- Habib, A., Wu, J., Bhuiyan, M. B. U., & Sun, X. (2019). Determinants of auditor choice: Review of the empirical literature. *International Journal of Auditing*, 23(2), 308-335.
- Haller, A. (2002). Financial accounting developments in the European Union: past events and future prospects. *European Accounting Review*, 11(1), 153-190.
- Herman, L. (2020). Neither takers nor makers: The Big-4 auditing firms as regulatory intermediaries. *Accounting History*, 25(3), 349-374.
- Horton, J., Tsipouridou, M., & Wood, A. (2018). European market reaction to audit reforms. *European Accounting Review*, 27(5), 991-1023.
- Houqe, M. N., van Zijl, T., Dunstan, K., & Karim, A. W. (2012). The effect of IFRS adoption and investor protection on earnings quality around the world. *The International Journal of Accounting*, 47(3), 333-355.
- Humphrey, C., Kausar, A., Loft, A., & Woods, M. (2011). Regulating audit beyond the crisis: A critical discussion of the EU Green Paper. *European Accounting Review*, 20(3), 431-457.
- Humphrey, C., & Loft, A. (2013). Contemporary audit regulation—going global! *Handbook of Key global financial markets, institutions, and infrastructure* (pp. 333-343): Elsevier.
- Humphrey, C., Loft, A., & Woods, M. (2009). The global audit profession and the international financial architecture: Understanding regulatory relationships at a

- time of financial crisis. *Accounting, Organizations and Society*, 34(6-7), 810-825.
- Irvine, H. (2008). The global institutionalization of financial reporting: The case of the United Arab Emirates. *Accounting Forum*, 32(2), 125-142.
- Isidro, H., & Raonic, I. (2012). Firm incentives, institutional complexity and the quality of “harmonized” accounting numbers. *The International Journal of Accounting*, 47(4), 407-436.
- Jermakowicz, E. K., & Gornik-Tomaszewski, S. (2006). Implementing IFRS from the perspective of EU publicly traded companies. *Journal of International Accounting, Auditing and Taxation*, 15(2), 170-196.
- Kandemir, H. K. (2013). The EU law on auditing and the role of auditors in the global financial crisis of 2008. *International Journal of Disclosure and Governance*, 10(3), 213-233.
- Kang, F. (2014). Founding family ownership and the selection of industry specialist auditors. *Accounting Horizons*, 28(2), 261-276.
- Kend, M., & Basioudis, I. (2018). Reforms to the market for audit and assurance services in the period after the global financial crisis: Evidence from the UK. *Australian Accounting Review*, 28(4), 589-597.
- Kinney, W. R. J. (2005). Twenty-five years of audit deregulation and re-regulation: What does it mean for 2005 and beyond? *Auditing: A Journal of Practice & Theory*, 24(s-1), 89-109.
- Kondra, A. Z., & Hinings, C. R. (1998). Organizational diversity and change in institutional theory. *Organization Studies*, 19(5), 743-767.
- Koning, M., Mertens, G., & Roosenboom, P. (2018). Drivers of institutional change around the world: The case of IFRS. *Journal of International Business Studies*, 49(3), 249-271.

- Kotb, A., & Roberts, C. (2011). The impact of e-business on the audit process: An investigation of the factors leading to change. *International Journal of Auditing*, 15(2), 150-175.
- Lannoo, K., & Khachaturyan, A. (2004). Reform of Corporate Governance in the EU. *European Business Organization Law Review*, 5(1), 37-60.
- Lawson, B. P., O'Hara, V., & Spencer, A. W. (2017). Updates and comparisons regarding changes to the audit reporting model in the United States, United Kingdom, and European Union. *Journal of Corporate Accounting & Finance*, 28(5), 9-22.
- Lo, A. W. (2009). Regulatory reform in the wake of the financial crisis of 2007-2008. *Journal of Financial Economic Policy*.
- Locke, J., & Perera, H. (2001). The intellectual structure of international accounting in the early 1990s. *The International Journal of Accounting*, 36(2), 223-249.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83(2), 340-363.
- Mock, T. J., Bédard, J., Coram, P. J., Davis, S. M., Espahbodi, R., & Warne, R. C. (2012). The audit reporting model: Current research synthesis and implications. *Auditing: A Journal of Practice & Theory*, 32(sp1), 323-351.
- Morris, R. D. (1987). Signalling, agency theory and accounting policy choice. *Accounting and Business Research*, 18(69), 47-56.
- Newman, A., & Bach, D. (2014). The European Union as hardening agent: soft law and the diffusion of global financial regulation. *Journal of European Public Policy*, 21(3), 430-452.
- Nikolaev, V., & Van Lent, L. (2005). The endogeneity bias in the relation between cost-of-debt capital and corporate disclosure policy. *European Accounting Review*, 14(4), 677-724.

- Omoteso, K., Patel, A., & Scott, P. (2010). Information and communications technology and auditing: current implications and future directions. *International Journal of Auditing*, 14(2), 147-162.
- Piekkari, R., Welch, C., & Paavilainen, E. (2009). The case study as disciplinary convention: Evidence from international business journals. *Organizational Research Methods*, 12(3), 567-589.
- Posner, E., & Véron, N. (2010). The EU and financial regulation: power without purpose? *Journal of European Public Policy*, 17(3), 400-415.
- Ramanna, K., & Sletten, E. (2014). Network effects in countries' adoption of IFRS. *The Accounting Review*, 89(4), 1517-1543.
- Rodrigues, L. L., & Craig, R. (2007). Assessing international accounting harmonization using Hegelian dialectic, isomorphism and Foucault. *Critical Perspectives on Accounting*, 18(6), 739-757.
- Scott, W. R. (2008). Approaching adulthood: the maturing of institutional theory. *Theory and Society*, 37(5), 427.
- Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*: Sage publications.
- Soderstrom, N. S., & Sun, K. J. (2007). IFRS adoption and accounting quality: a review. *European Accounting Review*, 16(4), 675-702.
- Sormunen, N., Jeppesen, K. K., Sundgren, S., & Svanström, T. (2013). Harmonisation of audit practice: Empirical evidence from going-concern reporting in the Nordic Countries. *International Journal of Auditing*, 17(3), 308-326.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355-374.
- Spence, M. (1974). Competitive and optimal responses to signals: An analysis of efficiency and distribution. *Journal of Economic Theory*, 7(3), 296-332.

- Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *American Economic Review*, 92(3), 434-459.
- Stettler, H. (1994). Accounting and auditing history: Major developments in England and the United States from ancient roots through the mid-twentieth century.
- Stiles, J. (2003). A philosophical justification for a realist approach to strategic alliance research. *Qualitative Market Research: An International Journal*.
- Uysal, Ö. Ö. (2010). Business ethics research with an accounting focus: A bibliometric analysis from 1988 to 2007. *Journal of Business Ethics*, 93(1), 137-160.
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*: MIT press.
- Wysocki, P. (2011). New institutional accounting and IFRS. *Accounting and Business Research*, 41(3), 309-328.
- Yin, R. K. (2017). *Case study research and applications: Design and methods*: Sage publications.
- Zeghal, D., & Mhedhbi, K. (2006). An analysis of the factors affecting the adoption of international accounting standards by developing countries. *The International Journal of Accounting*, 41, 373-386.