The Role of Country-Specific Factors and the Adoption of a Global Business Language

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Abstract
The global business world requires precise, reliable financial information. It has been argued that the International Financial Reporting Standards (IFRSs) and International Standards on Auditing (ISAs) are important tools in developing a global business language. Historically, countries have developed and pursued their own accounting and auditing standards; however, as national markets grow into a global market, a common set of accounting and auditing standards is needed. Consequently, there is a trend towards IFRS and ISA harmonization worldwide. This study aims to investigate why some countries have adopted the IFRS and ISA standards while others have only partially adopted them. Moreover, previous studies have not examined the adoption of IFRS and ISA and country-specific factors simultaneously. This study suggests that voice and accountability, regulatory quality, and control of corruption achieved within a national economy are all predictive of the degree to which the IFRSs and ISAs are adopted across 113 jurisdictions.

Keywords:
IFRS; ISA; global harmonization

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1. Introduction

The globalization of the world economy and financial markets has highlighted the problems caused by differences in financial statements used in different countries (e.g. Samaha and Khlif, 2016). Therefore, the movement for international harmonization of accounting and auditing standards and practices has been widely accepted as appropriate and beneficial (e.g. Judge, Li and Pinasker 2010, Fraser 2010, Boolaky and Omoteso 2016, Samaha and Khlif, 2016, Boolaky and Soobaroyen 2017).

It has been argued that accurate, comparable, and transparent financial information is fundamental to the successful operation of global markets (Humphrey, Loft and Woods, 2009). Dunn (2002, p.267) suggested that there are a few steps in the quest for convergence. First, accounts must be prepared in accordance with an internationally acknowledged set of accounting standards to enable comparisons of financial information. This requires the adoption of International Financial Reporting Standards (IFRSs). Secondly, Dunn (2002) suggested that accounts must be audited in accordance with an internationally recognized set of auditing standards, to provide comparability in relation to audit opinions. This means the adoption of the International Standards on Auditing (ISAs). The process of preparing accounts using IFRSs and auditing them using ISAs should enhance the credibility of financial information; therefore, this process has been argued to be a road towards developing a universal business language. In addition, Francis, Khurana, and Pereira (2003) found that high-quality accounting and auditing are positively related to financial market development. Therefore, convergence enhances the need for strong accounting and auditing because the two are inextricably linked. Moreover, the positive effects of harmonizing global accounting and auditing practices have been increasingly recognized by countries around the world (e.g. Hope, Jin and Kang, 2006; Alon and Dwyer, 2014; Boolaky and Soobaroyen, 2017). Meanwhile, Boolaky, Krishnamurti and Hoque (2013, p.18) asserted that ‘good accounting and auditing regulations facilitate transparency through better disclosure of information and easier cross-firm comparison.’ The authors also argued that strong regulations motivate firms to provide valuable and relevant information for investors. Hence, Boolaky et al. (2013) stated that the relevant regulations in this context include common financial reporting requirements and auditing standards. If regulations are weak and open to interpretation, companies may disclose unreliable information. Therefore, Boolaky et al., (2013, p.18) stated that ‘the risk arising from lack of transparency is relevant to governments as they seek to progress economically by making their countries attractive to investment.’

The accounting literature has begun to pay more attention the determinants IFRS and ISA adoptions across countries (e.g. Hope et al. 2006, Judge et al. 2010, Alon and Dwyer 2014, Boolaky and Omoteso 2016; Kim 2016; Boolaky and Soobaroyen 2017; Mantzari, Sigalas and Hines 2017; Sharma, Joshi and Kansal, 2017). The adoption of the IFRSs has been widely discussed and debated in the accounting literature (Samaha and Khlif, 2016). For instance, Hope et al. (2006) argued that the importance of the IFRSs in the context of global accounting harmonization is evident. Albu, Albu and Alexander (2014) supported this view, suggesting that the IFRSs are intended to be the global accounting language. To clarify, Hope et al. (2006) found that countries with weaker investor protection mechanisms are more likely to adopt the IFRSs; furthermore, their evidence is consistent with the view that countries can improve investor protection and make their capital markets more accessible to foreign investors by adopting the IFRSs. Similarly, Zeghal and Mhedhbi (2006) examined the
adoption of the IFRSs and institutional factors. Their findings suggested that the developing countries with the highest literacy rates, which have capital markets, and an Anglo-American culture are the most likely to adopt international accounting standards. Zehri and Chouaibi (2013) obtained similar results. Their empirical analysis suggested that developing countries with a high economic growth rate, a high level of education and a common-law system are the most favorable to the adoption of the IFRSs. In addition, Judge et al. (2010) found that foreign aid (coercive pressure), import penetration (mimetic pressure) and the level of education (normative pressure) attained within a national economy are all predictive of the degree to which the IFRSs are adopted across 132 economies. Finally, using a conceptual framework of the institutional framework and resource dependence, Alon and Dwyer (2014) proposed that the interaction between transnational forces and local factors influences the level of IFRS adoption.

ISA studies have suggested that the global auditing standards are considered as important as the IFRSs in providing an economy with a sound and stable financial system (e.g. Boolaky and Ometoso 2016). This is due to the fact that financial statements audited under the ISAs are considered reliable and hence ISAs increase transparency for global investors (Humphrey et al. 2009). Boolaky and Omoteso (2016) and Boolaky and Soobaroyen (2017) examined ISA adoption on a cross-country basis. Boolaky and Omoteso (2016) argued that political, economic, social and legal factors influence the ISA adoption in the International Financial Service Centers (IFSCs). Furthermore, Boolaky and Soobaroyen (2017) hypothesized and found that the protection of minority interests, regulatory enforcement, lenders/borrowers' rights, foreign aid, prevalence of foreign ownership, educational attainment and particular forms of political systems (levels of democracy) prevailing in a country are significant predictors of the scope of engagement to the adoption and harmonization of the ISAs. Similar to Judge et al. (2010), Boolaky and Soobaroyen (2017) used coercive, mimetic, and normative pressures as a starting point for their analysis. To conclude, their findings revealed the important fact that attempts by the International Federation of Accountants (IFAC), the International Accounting Standards Board (IASB) and other international agencies to implement the IFRSs and ISAs need to recognize a broad set of institutional determinants when improving the implementation process of these standards.

Hence, given the rise of the IFRSs and ISAs as the global universal business language benchmark, it is extremely timely to ask why this general tendency has occurred and, moreover, why some jurisdictions have resisted the adoption of global standards and why some jurisdictions have adopted the IFRSs but not the ISAs. For instance, Boolaky and Cooper's (2015) results revealed that, where the IFRSs are mandatory, it does not necessarily follow that the ISA are also mandatory. Thus, because of the above arguments, it is important to combine the two adoption decisions. This study joins this effort and addresses deficiencies by analyzing data on the adoption of the IFRSs and ISAs at the national level.

To summarize, this study examines the relationship between country-specific factors and IFRS and ISA adoption. This study contributes to the accounting literature following ways. First, it examines the predictors

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1 Coercive, mimetic and normative pressures are steaming from the neo-institutional theory (NIT). It is based on the assumption that organizations respond to pressures from their institutional environments and adopt procedures (e.g. adopt global standards) that are socially accepted as being the appropriate organizational choice (e.g., Carpenter & Feroz, 2001).
of IFRS and ISA adoption simultaneously. Second, prior studies have concentrated on the importance of the political system to the accounting and auditing standards and practices of a country (e.g. Nobes 1998, Hope et al. 2006, Boolaky and Cooper 2015, Boolaky and Soobaroyen, 2017). However, none has provided empirical evidence regarding how the country-specific factors are associated with the adoption process of the IFRSs and ISAs. This research, therefore contributes to the literature on accounting and auditing by providing evidence on the specific political factors exerting an impact on universal business language adoption. It contends that, in a country with high levels of voice and accountability, there is more freedom of choice, speech, and media, thus facilitating the universal business language adoption process. Moreover, this study suggests that the regulatory quality and corruption control achieved within a national economy are predictive of the degree to which the IFRSs and ISAs are adopted. These findings are essential to standard-setters because a better understanding of the motivations for adoption will enable them to promote the use of a global business language more efficiently. For policy-makers, the findings of this study suggest that the institutional forces and good governance within a country are the key drivers of IFRS and ISA adoption. Furthermore, the results provide insights that can help to explain and forecast future universal business language adoption within countries. This is due to the fact, that when adopting the IFRSs and ISAs, economies make accounting information more accurate, transparent, and reliable for global financial market actors and investors (e.g. Dunn 2002, Fraser 2010).

The remainder of the paper is organized as follows. Section 2 presents the relevant background information, and Section 3 develops the hypotheses. Section 4 describes the data and explains the methodology, and Section 5 presents the results. The paper concludes with comments on the contributions of the study and the implications of the results.

2. Background

2.1 IFRS and ISA adoption: global considerations

The IFRSs are a set of uniform, principle-based standards and developed by the International Accounting Standards Board (IASB), the aim of which is to establish a single, global set of financial reporting standards (Alon and Dwyer 2014). As discussed earlier, proponents of the IFRSs have suggested that the standards bring benefits, including improved accuracy, global comparability, market efficiency and cross-national investment flows (Alon and Dwyer 2014). The International Standards on Auditing (ISAs) are professional standards for the performance of financial information auditing. The ISAs are issued by the International Federation of Accountants (IFAC) through the International Auditing and Assurance Standards Board (IAASB) (Fraser 2010). As the name implies, the ISAs are international standards aiming to harmonize auditing around the globe. The ISAs guide the auditor to add value to the assignment, thus building the confidence of investors (Köhler, Merkt and Wolfgang 2009, Kleinman, Lin and Palmon 2016). While the ISAs have been in use for much longer, the newest, “clarified” version of the standards was released in 2009 (Boolaky and Soobaroyen 2017). The clarification of the ISAs provided more relevance and clearer guidance on some of the purposes behind auditing.

2.2 Institutional determinants and the adoption of the IFRSs and ISAs

Investors tend to make their investment decisions based on financial statements (e.g. García Lara, García Osma and Penalva, 2016). In relation to this, Biddle, Hilary, and Verdi (2009) found that accounting quality improves investment efficiency. Currently,
progress is being made toward the global comparability and harmonization of national accounting and auditing standards through the adoption of the IFRSs and ISAs (e.g. Judge et al., 2010, Boolaky, Soobaroyen and Quick, 2019). It has been argued that global accounting and auditing standards improve accounting quality. However, various national institutional factors may affect domestic regulators and play a significant role in the standards’ adoption process (Touron 2005, Judge et al., 2010, Boolaky and Soobaroyen 2017).

Even though notable progress has been made towards the adoption of the ISAs, the world is still some way from having converged on them (Boolaky and Soobaroyen, 2017). The increasing globalization of financial markets and business practices has emphasized the limitations associated with national auditing standards and the difficulties created by the diversity of transnational auditing practices (Dellaportas, Senarath Yapa, and Sivanantham, 2008). Financial statements audited with national auditing standards lack global comparability, which in turn hinders the development of international financial markets (e.g. Dellaportas et al. 2008, Fraser, 2010). Though the audit is conducted on behalf of the members of the firm, it provides valuable assurance to the external users of financial statements, such as investors and other finance providers (Haapamäki, 2018). In general, ISAs have been argued to have a number of benefits, mainly related to the audit reports, which are used across different countries (Köhler et al. 2009, Kleinman et al. 2016). Further, the benefits are related to, for example, a reduction of the standards overload, an improvement in the quality of auditing, and a reduction of auditors’ liability risk. In addition, Sami and Zhou (2008, p.142) emphasized that ‘higher quality accounting and auditing standards improve market liquidity and benefit investors by providing enhanced comparability of financial information about investment choices.’

Accounting and auditing harmonization, in general, contributes to cost reduction because it makes it easier for companies in a global world to comply with the law (e.g. Barth 2008, Fraser 2010). Furthermore, it has been argued that international investors are more willing to diversify their investments across borders if they are able to rely on accounting information created and audited in accordance with a similar set of standards (Köhler et al. 2009, Fraser 2010). Therefore, understanding what affects the IFRS and ISA adoption process is vital for national regulators, international investors, as well as standard-setters, accounting and auditing professionals. For instance, political and economic environments have been found in previous research to affect the accounting and auditing development directly (e.g. Cooke and Wallace 1990; Gernon and Wallace 1995, Wood 1996, Ali and Hwang 2000, Jaggi and Low 2000,).

It has been suggested that, due to the scope of globalization, increasing amount of countries are opening their doors to foreign investment and expanding their businesses across borders (e.g. Barrett, Cooper and Jamal 2005). Therefore, the public and private sectors are identifying the important benefits of having a globally understood financial reporting framework supported by strong, internationally spread auditing standards (e.g. Humphrey et al., 2009). However, before the advantages can be realized fully, there must be greater convergence to and implementation of one uniform set of globally accepted high-quality accounting and auditing standards.

3. Hypotheses

There are a number of studies on the environmental and institutional determinants influencing accounting and auditing practices (Cooke and Wallace 1990, Gernon and Wallace 1995, Nobes 1998, Zeghal and Mhedhbi 2006, Nobes 2006, Boolaky 2012, Nurunnabi 2015, Boolaky and Omoteso 2016, Boolaky...
and Soobaroyen 2017). For example, Hope et al. (2006), Zeghal and Mhedhbi (2006), Judge et al. (2010), Alon and Dwyer (2014) and Boolaky and Soobaroyen (2017) provided a list of factors affecting accounting and auditing development, including the decision to adopt the IFRSs and ISAs. Over time, industrialized jurisdictions have developed their own local accounting and auditing standards (Boolaky and Omoteso 2016). However, with globalization, which has simplified capital mobility across the world, nations have moved towards the adoption of the IFRSs and ISAs. Therefore, this study suggests that it is important and timely to examine the factors that influence the universal business language adoption decision.

3.1 Political factors

3.1.1 Voice, accountability and regulatory quality
Accounting and auditing standards have been suggested to be the products of political decisions (Belkaoui, 1983; Larson and Kenny, 1995; Boolaky and Omoteso, 2016; Boolaky and Soobaroyen, 2017). For instance, Belkaoui (1983) argued that civil freedom is an important part of the development of accounting practices. According to Belkaoui (1983), a low level of political freedom is related to a low level of democracy. Further, an insufficient level of democracy constrains people’s freedom of choice in all forms. These forms include freedom of expression, freedom of association and free media (Houqe, Van Zijl, Dunstan and Karim 2012; Boolaky and Omoteso 2016). Freedom of association includes the freedom of a country to associate with international bodies, such as the IFAC and IASB, to adopt global standards (e.g. Boolaky and Omoteso, 2016). Moreover, governance quality is the basis of a nation’s political and legal institutions, and policies that formulate the governance infrastructure of a country (e.g. Globerman and Shapiro 2003, Baird 2012, Alon and Dwyer 2014). Globerman and Shapiro (2003) suggested that a strong governance infrastructure includes an effective and transparent legal structure, credible and stable public institutions, and free and open authority policies. A country’s political stability has been asserted to have a positive impact on the economy and, accordingly, both its accounting development and auditing development (e.g. Larson and Kenny 1995, Boolaky and Omoteso 2016). Moreover, as suggested by Simunic, Ye and Zhang (2016), adopting standards without a sufficient legal enforcement system will not automatically improve the audit quality.

Because of the arguments above, this study suggests that a country with a high level of voice and accountability is more likely to adopt the universal business language than those that are low on the scale. Moreover, it could be assumed that a country with a government that has the ability to formulate and implement sound policies and regulations that permit and promote private sector development, is more likely to adopt the universal business language. Therefore, this study tests the following hypotheses:

Hypothesis 1. The greater the voice and accountability that a nation experiences, the more complete the adoption of global accounting and auditing standards.

Hypothesis 2. The greater the regulatory quality that a nation experiences, the more complete the adoption of global accounting and auditing standards.

3.1.2 Corruption
It has been argued that economic conditions are a major determinant of the development of a country’s accounting and auditing system (e.g. Zeghal and Mhedhbi, 2006, Hassan, Rankin and Lu 2014). For instance, in countries where the level of economic growth is relatively high, the social function of the audit as a
tool of communication has been suggested to be important (Lopez Combarros 2000). However, it has been argued that corruption hinders sustained economic development. For instance, Jeppesen (2018) stated that systematic corruption is generally seen as the main problem for economic and political development in any country where corruption exists. This is because corruption has many consequences, which include a loss of government revenue, costs for companies and businesses that engage in corruption, and missed chances for those that do not (Evereitt, Neu and Rahaman 2007a). Furthermore, 'corruption is said to distort standards of merit, erode the respect of law and result in higher public investment and lower quality of infrastructure' (Evereitt et al. 2007a, p. 513). Corruption is believed to hinder political and economic advance (Evereitt, Neu and Rahaman 2007b), promote the illegal export of resources, encourage conspicuous consumption and generate distrust. Hence, Evereitt et al. (2007a, 2007b) examined the global fight against corruption. These studies emphasized that the accounting profession must be at the forefront of the fight against domestic and international corruption. Therefore, it has also been suggested that auditors and auditing work are significant elements in reducing fraud and corruption (e.g. IFAC, 2017). For instance, Jeppesen (2018) highlighted the role of auditing in the fight against corruption. He argued that auditing needs to gain a more prominent role in this battle. From the practice point of view, he asserted that auditing standards must include corruption in the definition of fraud and that auditors need to collaborate and exchange information. Finally, Jeppesen (2018) stated that auditing techniques to detect corruption should be employed.

To conclude, countries that want to fight against and prevent corruption and furthermore, to improve their accountability systems should work toward adopting and applying global accounting standards (e.g. Thurston 1997, Torres 2004, Iyoha and Oyerinde 2010). Eventually, Everett et al. (2007a) argued that the harmonization of accounting and auditing standards should be the top priority for accountants who are interested in the prevention process of corruption. Therefore, this study tests the following hypothesis:

**Hypothesis 3.** The greater the controls of corruption within an economy, the more complete the adoption of global accounting and auditing standards.

### 3.2 Economic factors

#### 3.2.1 Economic growth

There is an association between economic development and financial reporting quality (e.g. Nobes 1998, Zeghal and Mhedhbi 2006, Ding, Hope, Jeanjean and Stolowy 2007). For instance, Zeghal and Mhedhbi (2006) found a link between a country's economic growth and the adoption of international accounting standards. Furthermore, Ding et al. (2007) suggested that the economic development of a country shapes its accounting and auditing standards. Therefore, Zeghal and Mhedhbi (2006) suggested that in countries where the level of economic development is relatively high, the social function of accounting is essential. Within this context, Zeghal and Mhedhbi (2006, p. 377) 'emphasize that business and economic activities will reach a size and complexity that requires a sophisticated, high-quality accounting system and standards.' Furthermore, they argued that where information plays a crucial role, the accounting system will undergo remarkable changes in response to the demands of the changing economic conditions of a more dynamic business world. In the same way, Boolaky and Omoteso (2016) found that economic growth is associated with the adoption of ISAs. Hence, these views lead to the argument that the decision to adopt a global business language is a response to recorded economic growth.
this study suggests that the more developed a nation is, the more likely it is that it will adopt international accounting and auditing standards. Specifically, the following hypothesis is tested:

**Hypothesis 4.** The higher the economic growth within an economy, the more complete the adoption of global accounting and auditing standards.

### 3.2.2 Import penetration

Barth (2008) stated that proponents of the IFRSs argue that, by adopting global accounting standards, countries can expect to lower the cost of financial information processing. Thus, if the adoption of the IFRSs and ISAs is expected to lower the information costs to financial markets, this study expects countries to be more dependent on foreign capital and trade. When a country is relatively open to the international economy, it is exposed to the norms and practices of global firms (Judge et al., 2010). Therefore, the presence of international trade partners in a country could accelerate the distribution of the IFRSs due to imitation (Albu et al. 2011, Hassan et al., 2014). Similarly, Judge et al., (2010) suggested that, when there is extensive import penetration in a domestic economy, the nation is more likely to be exposed to and emulate the accounting standards of the multinational firms involved. Moreover, Judge et al. (2010) suggested that *import penetration* shows a relatively strong and consistent positive effect on IFRS adoption. Boolaky and Sooberoyen (2017) hypothesized that import penetration as an institutional pressure is associated with ISA adoption. They argued that a country’s commitment to ISA adoption and harmonization could be influenced by the presence of foreign trading partners. Therefore, consistent with prior studies, this study hypothesizes the following:

**Hypothesis 5.** The higher the import penetration within an economy, the more complete the adoption of global accounting and auditing standards.

### 3.3 The legal factor

#### 3.3.1 The strength of legal rights

The legal structure in a nation exploits mechanisms in the form of laws to discipline managers and diminish the risk of insider dealings (La Porta, Lopez-de-Silanes, Shleifer and Vishny, 1997, 2000, Leuz, Nanda and Wysocki 2003, La Porta, Lopez-de-Silanes and Shleifer 2006, Daske, Hail, Leuz and Verdi 2008, Francis and Wang 2008). For example, corporate laws worldwide require directors to prepare and disclose a true and fair financial statement to the shareholders (lenders as well) at the annual general meeting ( Boolaky and Omoteso 2016). Furthermore, the law usually requires an independent external auditor to express a professional opinion about the truth and fairness of the financial statements disclosed. Hence, this paper argues that the adoption and implementation of global standards is crucial to gain the confidence of lenders. For instance, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) argued that lenders’ rights’ are more complicated than shareholders’ rights because there might be creditors with overriding rights. In addition, Boolaky and Sooberoyen (2017) suggested and found evidence that there is a positive relationship between lenders’ and borrowers’ rights and the extent of the commitment to ISA adoption and harmonization. Therefore, this study proposes that a country with a strong legal rights index is more inclined to adopt the IFRSs and ISAs, because, by so doing, lenders will feel more confident in and assured about the quality of the financial statements. To conclude, this study hypothesizes the following:

**Hypothesis 6.** The greater the strength of the legal rights index within an economy, the more complete the adoption of global accounting and auditing standards.
4. Research design
This study hypothesizes relationships between selected macro factors and the level of IFRS and ISA adoption. Next, this study defines the variables and the sample.

4.1 Dependent variable – extent of the adoption of the IFRSs and ISAs
Consistent with prior IFRS research (e.g. Judge et al. 2010, Alon and Dwyer 2014), data on the level of adoption were obtained from an annual publication by DT (Deloitte & Touche 2012), which identified the status of IFRS adoption across different countries. This study recognized three discrete levels of IFRS adoption. The Deloitte & Touche 2012 report provided data on whether countries required, permitted, or did not allow the IFRSs. Therefore, the IFRS adoption level was coded as “3” if IFRS adoption is required for all domestic listed companies or for firms in some industries, “2” if the IFRSs are permitted (but not required), and “1” if the IFRSs are not permitted and domestic accounting standards are utilized exclusively. In addition, consistent with previous ISA adoption studies (e.g. Boolaky and Omoteso 2016, Boolaky and Sooberoyen 2017), the source for the ISA adoption comes from the compliance report of the International Federation of Accountants’ (IFAC) (2012), summarizing the current status of ISA adoption in 126 countries. Similar to IFRS adoption, this study recognized three distinct levels of ISA adoption. Thus, ISA adoption was coded as “3” if ISAs are required by law or regulations, “2” if ISAs are adopted by standard-setters or adopted with modification and “1” if ISAs are not adopted.

After the category analysis for both IFRS and ISA adoption, the above data sources were used to code the dependent variable, which measures the degree of adoption of the IFRSs and ISAs. Thus, the IFRS and ISA adoption levels have been added together, given that the minimum and maximum values for the dependent variable are 2 and 6, respectively. To conclude, a low value means that the IFRSs and ISAs are not permitted or adopted and domestic standards are utilized exclusively. In contrast, a high value signifies that the IFRSs and ISAs are widely adopted within the country. Figure 1 presents
a Pareto analysis of global business language adoption.

4.2 Independent variables

4.2.1 Voice and accountability
Voice and accountability captures perceptions of the extent to which a country’s citizens are able to participate in selecting their government as the level of freedom of expression, freedom of association, and free media. The estimate gives the country’s score on the aggregate indicator, in units of a standard normal distribution that is, ranging from approximately -2.5 to 2.5 for the year 2012 (source: World Bank).

4.2.2 Regulatory quality
Regulatory quality captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. The estimate gives the country’s score on an aggregate indicator, in units of a standard normal distribution that is, ranging from approximately -2.5 to 2.5 for the year 2012 (source: World Bank).

4.2.3 Control of corruption
Control of corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “the capture” of the state by elites and private interests. The estimate gives the country’s score on the aggregate indicator, in units of a standard normal distribution that is, ranging from approximately -2.5 to 2.5 for the year 2012 (source: World Bank).

4.2.4 GDP growth
Gross domestic product (GDP) growth is the annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. It is obtained for the year 2012. Source: World Bank.

4.2.5 Import penetration
The data used to capture the variable ‘import penetration’ are from the World Bank’s World Development Indicators. It is computed as the value of imported goods and services sold as a proportion of the GDP for the year 2012 (source: World Bank).

4.2.6 Strength of legal rights index
The strength of legal rights index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. The index ranges from 0 to 12, with higher scores indicating that these laws are better designed to expand access to credit. The strength of legal rights index was not available for the year 2012. However, while examining the stability of the measure over the years available, it was apparent that the values were stable. Therefore, this study uses the strength of legal rights index for the year 2013 (source: World Bank).

4.3 Data
The sample was formulated by overlaying the different databases mentioned above. Countries that had missing values for any of the variables were excluded from the analysis. Overall, 113 countries had data for all of the variables examined in this study. The countries ranged from developing and emerging countries to developed nations and are located all over the world. Together, they formulate a comprehensive overview of countries in the world in terms of institutional settings.
4.4 The empirical model

The empirical testing strategy is to conduct a comprehensive and robust statistical analysis; therefore, this study uses a variety of regression techniques to assess the country-specific factors of IFRS and ISA adoption. Specifically, this study first treats IFRS and ISA adoption as an ordinal variable with categories ranging from “no” adoption to “substantial” adoption and uses simple Ordinary Least Squares (OLS) regression to fit it. Moreover, because the modus of global business language adoption has more than two categories, it can be defined as a multinomous variable, thus allowing the use of multinomial logistic regression. Therefore, this study uses multinomial logistic regression to test the robustness of the OLS results. In addition to the main analysis, the study examines the empirical model separately for IFRS adoption and ISA adoption. Thus, it can be seen whether the same factors load or whether there are different factors that affect ISA and IFRS adoption.

5. Results

5.1 Descriptive statistics

Table 1 reports the descriptive statistics on the variables of interest. First, it should be noted that the mean of IFRS adoption is 2.442 and the mean of ISA adoption is 1.778, with a minimum of 1.000 and a maximum of 3.000. This finding suggests that the IFRSs are more widely adopted than the ISAs. In addition, the mean of global business language adoption is 4.221, with a minimum of 2.000 and a maximum of 6.000. On the basis of Table 1, it is also worth noting that the sample’s voice and accountability average is 0.165, with a minimum of -2.006 and a maximum of 1.764. In addition, the jurisdictions under review have an average regulatory quality of 0.306, with a minimum...
rate of -1.878 and a maximum rate of 1.973. The control of corruption average is 0.104, with a minimum value of -1.340 and a maximum value of 2.404. Examining the GDP growth, the average is 2.892 percent, with a minimum rate of -7.300 percent and a maximum rate of 15.046 percent. Moreover, the sample’s import penetration average is 51.591, with a minimum of 12.941 and a maximum of 224.431. Finally, it is noticeable that the strength of legal rights index’s average is 5.070, with a minimum of 0.00 and a maximum of 12.00.

While examining the correlations between several independent variables, it must be mentioned that they are relatively high. However, conclusions about the presence or the absence of multicollinearity that are based solely on a simple correlation between explanatory variables must be made with care. Therefore, collinearity diagnostics based on the variance inflation factor (VIF) and tolerance are carried out to measure the degree of collinearity. The values calculated indicate that collinearity between the independent variables does not distort the analyses (see Table 2). Values of VIF that exceed 10 are often regarded as indicating multicollinearity; in addition, it has been suggested that a tolerance value of less than 0.1 should be investigated further (e.g. Dormann et al. 2013). Nevertheless, the highest VIF is 7.18, which can still be considered to be quite high as a VIF given that the sample size is relatively small. As a further examination, the Durbin–Watson (D–W) test is conducted on the variables as part of the regression to detect the presence of multicollinearity.

5.2 Model testing
Table 3 contains the main regression model for the hypothesis testing, in which three of the independent variables of interest are predictive of IFRS and ISA adoption. The overall model fit is 30 percent, measured using the adjusted R-squared. Specifically, voice and accountability are positively associated with IFRS and ISA adoption ($t = 3.45, p<.01$); thus, Hypothesis 1 is supported. Regulatory quality also provides support and positive pressure for IFRS and ISA adoption ($t= 1.67, p<.10$); therefore, Hypothesis 2 is supported. The model also suggests that control of corruption is positively associated with IFRS and ISA adoption ($t = 2.29, p<.05$). This finding provides relatively good empirical support for Hypothesis 3. However, the analysis does not show statistical support for Hypotheses 4, 5 and 6. Nevertheless, the above findings indicate that a country with a high level of voice and accountability is more likely to adopt the universal business language. Moreover, this study suggests that a country with a government that has the ability to formulate and implement sound policies and regulations is more likely to adopt the universal business language. Finally, the control of corruption within an economy is an important predictor of the adoption of global accounting and auditing standards.
Table 3. Results of the regression model, n=113
Model: IFRS_ISA_ADOPTIONᵢ = α₀ + α₁ VOICEᵢ + α₂ REGQUALITYᵢ + α₃ CORRᵢ + α₄ GDPᵢ + α₅ IMPORTᵢ + α₆ STRENGTHᵢ + ε

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<th>VARIABLES</th>
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<td>14.27***</td>
</tr>
<tr>
<td>VOICE</td>
<td>+</td>
<td>0.683</td>
<td>3.45***</td>
</tr>
<tr>
<td>REGQUALITY</td>
<td>+</td>
<td>0.457</td>
<td>1.67*</td>
</tr>
<tr>
<td>CORR</td>
<td>+</td>
<td>0.485</td>
<td>2.29**</td>
</tr>
<tr>
<td>GDP</td>
<td>+</td>
<td>0.003</td>
<td>1.21</td>
</tr>
<tr>
<td>IMPORT</td>
<td>+</td>
<td>0.004</td>
<td>1.24</td>
</tr>
<tr>
<td>STRENGTH</td>
<td>+</td>
<td>0.039</td>
<td>1.05</td>
</tr>
</tbody>
</table>

R²: 0.333
Max-rescaled R²: 0.295
F-value: 8.64***
The Durbin–Watson test: 2.286

N: 113

Notes: ***Significant at level 1%, ** significant at level 5%, *significant at level 10%, See Table 2 for variable description.

Table 4. Multinomial logistic regression model, n=113, Dependent variable = IFRS_ISA_ADOPTION

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>FUNCTION NUMBER</th>
<th>ESTIMATE</th>
<th>CHI-SQUARE</th>
<th>PR &gt; CHISQ</th>
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</thead>
<tbody>
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<td>8.75</td>
<td>0.0031</td>
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<tr>
<td></td>
<td>2</td>
<td>4.7010</td>
<td>6.28</td>
<td>0.0122</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>5.7705</td>
<td>10.17</td>
<td>0.0014</td>
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<tr>
<td></td>
<td>4</td>
<td>4.2588</td>
<td>5.95</td>
<td>0.0147</td>
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<tr>
<td>VOICE</td>
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<td>4.1228</td>
<td>10.40</td>
<td>0.0013</td>
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<tr>
<td></td>
<td>2</td>
<td>3.8670</td>
<td>7.91</td>
<td>0.0049</td>
</tr>
<tr>
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<td>3</td>
<td>4.1499</td>
<td>11.74</td>
<td>0.0006</td>
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<td></td>
<td>4</td>
<td>2.7361</td>
<td>5.70</td>
<td>0.0170</td>
</tr>
<tr>
<td>REGQUALITY</td>
<td>1</td>
<td>4.9434</td>
<td>6.92</td>
<td>0.0085</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>5.1357</td>
<td>8.26</td>
<td>0.0041</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>5.0660</td>
<td>8.26</td>
<td>0.0041</td>
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<td></td>
<td>4</td>
<td>2.5277</td>
<td>2.14</td>
<td>0.1434</td>
</tr>
<tr>
<td>CORR</td>
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<td>4.0512</td>
<td>7.99</td>
<td>0.0047</td>
</tr>
<tr>
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<td>5.82</td>
<td>0.0156</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.4188</td>
<td>8.99</td>
<td>0.0027</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2.8710</td>
<td>7.82</td>
<td>0.0052</td>
</tr>
<tr>
<td>GDP</td>
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<td>0.0858</td>
<td>0.36</td>
<td>0.5467</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.0311</td>
<td>0.07</td>
<td>0.7944</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.0198</td>
<td>0.03</td>
<td>0.8598</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.0559</td>
<td>0.29</td>
<td>0.5898</td>
</tr>
<tr>
<td>IMPORT</td>
<td>1</td>
<td>0.0496</td>
<td>4.11</td>
<td>0.0425</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.0183</td>
<td>1.51</td>
<td>0.2193</td>
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<td>0.0268</td>
<td>3.76</td>
<td>0.0523</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.0167</td>
<td>1.88</td>
<td>0.1708</td>
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<tr>
<td>STRENGTH</td>
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<td>0.3255</td>
<td>1.88</td>
<td>0.1698</td>
</tr>
<tr>
<td></td>
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<td>1.71</td>
<td>0.1915</td>
</tr>
<tr>
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<td>3</td>
<td>0.2965</td>
<td>2.75</td>
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<tr>
<td></td>
<td>4</td>
<td>0.1144</td>
<td>0.50</td>
<td>0.4794</td>
</tr>
</tbody>
</table>

Notes: See Table 2 for variable description.

To explore the robustness of these results, this study uses a different regression specification to fit IFRS and ISA adoption and the six independent variables of interest. Because the modus of global business language adoption has five categories, the study uses multinomial logistic regression to test the robustness of the results. Table 4 presents the multinomial logistic regression and the Wald estimates and significance levels. The findings from the robustness test in general support the prediction found in the original
regression model. Voice and accountability remains statistically significant, and as can be seen from Table 4, three of the estimates are statistically significant at the strictest level of significance (p<.01) and one estimate at the level of significance (p<.05). The results from Table 4 also indicate support for Hypothesis 2; three of the estimates are statistically significant at the level of significance (p<.01). Eventually, control of corruption remains statistically significant; all the estimates are statistically significant at least at the level of significance (p<.05).

5.3 Additional analyses
In addition to the main analysis, this study examines the regression model separately for IFRS adoption and ISA adoption to investigate whether the same factors load or whether there are different factors that affect ISA and IFRS adoption. These results are reported in Table 5 for ISA adoption and in Table 6 for IFRS adoption.

When examining the ISA adoption results, the model also suggests other statistically significant factors that are associated with ISA adoption. The overall model fit is 23 percent, measured by the adjusted R-squared. Voice and accountability are positively associated with ISA adoption (t = 3.34, p<.01). Control of corruption also suggests support and positive pressure for ISA adoption (t= 1.68, p<.10). However, regulatory quality has lost its significance. The model also implies that import penetration is positively associated with ISA adoption (t = 1.85, p<.10) and the

---

**Table 5. Results of the regression model, n=113**

Model: ISA_ADOPTIONᵢ = α₀ + α₁VOICEᵢ + α₂REGQUALITYᵢ + α₃CORRᵢ + α₄GDPᵢ + α₅IMPORTᵢ + α₆STRENGTHᵢ + ε

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>EXPECTED RESULTS</th>
<th>COEFFICIENT</th>
<th>WALD STATISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.327</td>
<td>8.19***</td>
<td></td>
</tr>
<tr>
<td>VOICE</td>
<td>+</td>
<td>0.394</td>
<td>3.34***</td>
</tr>
<tr>
<td>REGQUALITY</td>
<td>+</td>
<td>0.001</td>
<td>0.41</td>
</tr>
<tr>
<td>CORR</td>
<td>+</td>
<td>0.212</td>
<td>1.68*</td>
</tr>
<tr>
<td>GDP</td>
<td>+</td>
<td>0.001</td>
<td>0.07</td>
</tr>
<tr>
<td>IMPORT</td>
<td>+</td>
<td>0.003</td>
<td>1.85*</td>
</tr>
<tr>
<td>STRENGTH</td>
<td>+</td>
<td>0.062</td>
<td>2.77***</td>
</tr>
</tbody>
</table>

R²: 0.2643
Max-rescaled R²: 0.227
F-value: 6.35***
The Durbin–Watson test: 2.162
N: 113

Notes: ***Significant at level 1%, ** significant at level 5%, *significant at level 10%, See Table 2 for variable description.

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**Table 6. Results of the regression model, n=113**

Model: IFRS_ADOPTIONᵢ = α₀ + α₁VOICEᵢ + α₂REGQUALITYᵢ + α₃CORRᵢ + α₄GDPᵢ + α₅IMPORTᵢ + α₆STRENGTHᵢ + ε

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>EXPECTED RESULTS</th>
<th>COEFFICIENT</th>
<th>WALD STATISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.369</td>
<td>12.32***</td>
<td></td>
</tr>
<tr>
<td>VOICE</td>
<td>+</td>
<td>0.288</td>
<td>1.91*</td>
</tr>
<tr>
<td>REGQUALITY</td>
<td>+</td>
<td>0.456</td>
<td>2.19**</td>
</tr>
<tr>
<td>CORR</td>
<td>+</td>
<td>0.273</td>
<td>1.69*</td>
</tr>
<tr>
<td>GDP</td>
<td>+</td>
<td>0.002</td>
<td>0.10</td>
</tr>
<tr>
<td>IMPORT</td>
<td>+</td>
<td>0.001</td>
<td>0.18</td>
</tr>
<tr>
<td>STRENGTH</td>
<td>+</td>
<td>0.011</td>
<td>0.78</td>
</tr>
</tbody>
</table>

R²: 0.2265
Max-rescaled R²: 0.1827
F-value: 5.17
The Durbin–Watson test: 2.180
N: 113

Notes: ***Significant at level 1%, ** significant at level 5%, *significant at level 10%, See Table 2 for variable description.
strength of legal rights is positively associated with ISA adoption \( (t = 2.77, p<.01) \). This finding is interesting and important, because Boolaky and Soobaroyen (2017) reported for the first time in the auditing literature that lenders’ and borrowers’ rights are statistically positively associated with ISA adoption. Therefore, the findings of this study support Boolaky and Soobaroyen’s (2017) results and suggest the robustness of this relationship. Moreover, as import penetration shows moderate pressure for ISA adoption, this finding is also interesting and important, because contrary to their expectations, Boolaky and Soobaroyen (2017) did not find that import penetration is significantly associated with ISA adoption.

Regarding the IFRS adoption, the results remain similar to the initial results reported in Table 3. However, the statistical significances have changed a little. The overall model fit is 18 percent, measured by the adjusted R-squared. Specifically, voice and accountability are positively associated with IFRS adoption \( (t = 1.91, p<.10) \). Regulatory quality also shows support and positive pressure for IFRS adoption \( (t = 2.19, p<.05) \). The model also suggests that control of corruption is positively associated with IFRS adoption \( (t = 1.69, p<.10) \). These findings provide moderate empirical support for the suggestion that voice and accountability, regulatory quality and control of corruption are associated with IFRS adoption across 113 jurisdictions.

### 6. Conclusions

Over recent decades, as the International Financial Reporting Standards (IFRS) and International Standards on Auditing (ISA) have been formally adopted by many jurisdictions, the topic of the national-level adoption choice of these standards has become of greater academic interest (e.g. Nurunnabi 2015, Kim 2016, Sharma et al. 2017). While there is substantial variation between countries in their accounting and auditing standards and practices, the various economic systems are converging around the IFRSs and ISAs (e.g. Judge et al., 2010, Boolaky and Soobaroyen 2017). The value of having a shared body of accounting and auditing standards has been argued to be far-reaching. For instance, the IFRSs and ISAs were developed specifically for wide international use (e.g. Nobes 2006, Fraser 2010). Supporters of the IFRSs and ISAs argue that, by adopting a global accounting and auditing standards, countries can expect a cost reduction for information processing. Furthermore, users of financial reports and accounting information can be expected to become familiar with one common set of global standards than with various local accounting and auditing standards. Previous studies have suggested that corporate governance is influenced by the institutional structures within countries (e.g. Judge et al., 2010). Therefore, this study seeks to identify and describe the country-specific predictors of the adoption of IFRSs and ISAs simultaneously. This study suggests that the voice and accountability, regulatory quality, and control of corruption achieved within a national economy are all predictive of the degree to which the IFRSs and ISAs are adopted across 113 jurisdictions.

However, as with any other study, this study has some limitations. First, the study accesses IFRS and ISA adoption data published by Deloitte and Touche (2012) and in the IFAC’s (2012) compliance report. Second, the data are based exclusively on archival sources, which can be considered to be limiting in scope. However, this approach is the dominant practice for studying cross-national differences in accounting and auditing harmonization (Judge et al., 2010; Boolaky and Soobaroyen 2017). However, field research on the actual process of adopting and implementing the IFRSs and ISAs should be conducted. Thus, it would be interesting to learn how the enforcement of those new
standards unfolds. The third limitation of the study is the heavy reliance on the World Bank database. While there is no evidence of systematic bias in their data collection, this study does not have any certainty regarding the reliability and validity of their national ratings. Despite the limitations discussed above, this study provides a comprehensive and beneficial theoretical framework to examine national differences in the adoption of a global business language. Moreover, international harmonization of accounting and auditing standards is beneficial to the development of efficient global financial markets through accurate accounting information (e.g. Zeghal and Mhedhbi 2006, Fraser 2010, Boolaky and Soobaroyen 2017). Thus, it is extremely important to examine the country-specific factors that affect the adoption process of a global business language.

References
Boolaky, P.K., Soobaroyen, T., & Quick, R. (2019). The perceptions and determinants of auditing


