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# The diffusion of innovation theory and the effects of IFRS adoption by multinational corporations on capital market performance: a cross-country analysis

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# The diffusion of innovation theory and the effects of IFRS adoption by multinational corporations on capital market performance: a cross-country analysis

## Abstract

This paper seeks to contribute to IFRS literature by examining the effects of adopting international financial reporting standards (IFRS) on stock market performance around the world from the perspective of the diffusion of innovation theory. Using combinations of unique panel data sets from 110 countries around the world spanning 1995-2014, and robust empirical analysis, our study revealed several interesting findings including the following; First, we find a positive association between the late mandatory IFRS adoption and EU stock market integration. Second, our findings indicate a significant negative association between the early IFRS adoption and the following financial indicators: stock market trading volumes, stock market capitalization, stock market turnover, and return. Third, our study revealed an insignificant association between early IFRS adoption and stock price volatility alongside stock market development. Our findings are robust and have important practical and policy implications for regulators and policymakers of multinational corporations.

**Keywords**: International Financial Reporting Standards; Diffusion of Innovation Theory; Stock Market Indicators; Financial Market Consequences.

# 1. Introduction

Following the recent global financial crisis and the associated high-profile corporate scandals, a large number of countries around the world have mandated the adoption of the IFRS by all listed multinational companies to ensure transparency and financial reporting integrity. While some studies argue that voluntary adoption of IFRS enhances better transparency and efficiency in the stock market (De George, Li, & Shivakumar, 2016; Palea, 2013), other studies provide a contrary view that mandatory IFRS adoption should rather be the way forward because of their regulatory and legal embarkment (Florou & Pope, 2012; Daske, Hail, Leuz, & Verdi, 2008). Further, a significant number of studies that focused on IFRS effects on the stock market have yielded mixed findings either due to methodological limitations or limited data

which have concentrated on a few countries. Our study contributes to the extant international business and accounting literature by using combinations of innovation diffusion theory and unique panel datasets from 110 countries sampled from emerging economies, developing economies, and developed economies to investigate the effects of the different classification stages of IFRS adoption on capital markets across different capital markets around the world.

A compendium of empirical studies implies that capital market performances and associated stock prices shape capital allocation (De George, Li, & Shivakumar, 2016; Abata, 2015; Hong, & Shim, 2019). Further, the international financial reporting standards (IFRS) arguably represents the nexus between financial reporting transparency and capital market allocation of scarce resources around the world (Chakrabarty & Bass, 2013; De George, 2013). The simultaneous mandatory adoption of the IFRS by a large number of countries across the world has rekindled varied research interests in several areas especially from the perspective of IFRS adoption effects on firm performance and stock market performance (De George, 2013; De George, Li, & Shivakumar, 2016). The majority of studies on IFRS adoption argue that IFRS provides significant benefits to adopting countries including, improved transparency in financial reporting, lower transaction cost in the capital market, improved cross-country investment, etc (Chakrabarty & Bass, 2013; De George, 2013; 2016). Although many of these studies include caveats about the time of adoption (albeit whether early adoption or late adoption), our knowledge and understanding about the effects of early IFRS adoption and stock market performances across the different capital markets remain unexplored. Therefore, our study contributes to the extant literature by investigating the effects of the early/late adoption of IFRS on capital market performance around the world through the lenses of the diffusion of innovation (DOI) theory. The coding scheme suggested by DOI theory is mainly based on the adoption-time of IFRS internationally (Rogers, 1983).

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Although achieving positive outcomes are not a guarantee post-IFRS adoption, we can assume that countries would not adopt IFRS if the positive consequences were not perceived to be achieved. Yet, the time of IFRS adoption varies across countries where some nations have adopted IFRS at the early period while others adopted IFRS in the later periods for different reasons (Hwang, Hur, & Kang, 2018; Ramanna, & Sletten, 2009). Thus, we argue that there is a causal relationship between the adoption of IFRS and financial market consequences, which may also vary among countries. Although adopting IFRS has the potential to provide financial benefits to stock markets and leads to enhance financial integration (Horton, Serafeim, & Serafeim, 2013; Negi, Srivastava, & Bhasin, 2014), it may also adversely affect short-term performance and only lead to having positive impacts in the distant future (Ball, 2016; Armstrong, Barth, Jagolinzer, & Riedl, 2010). Indeed, previous research has shown that the future benefits of IFRS adoption were unclear at the time of its adoption (Lin, Riccardi, Wang, Hopkins, & Kabureck, 2019). Therefore, the reactions of financial markets to IFRS adoption differ greatly among countries, since not all countries have imposed IFRS as issued by the IASB at the same time. For example, some countries have voluntarily allowed IFRS for certain firms and certain purposes, whereas others have modified their national GAAP in favor of IFRS requirements which might negatively impact their economic and financial performance (Horton, Serafeim, & Serafeim, 2013).

Different theories have been used by previous studies in examining IFRS adoption effects. For example, most studies have relied on positive theories to explain the cause and effect relationship between IFRS adoption and financial market consequences, such as the institutional theory (e.g., Hope, Jin, & Kang, 2006; Pricope, 2016; Judge, Li, & Pinsker, 2010; Lasmin, 2011), signaling theory (e.g., Masoud, 2017; Smith, 2008; Shima & Yang, 2012), resource dependence theory (e.g., Alon & Dwyer, 2014), and economic network theory (e.g., Ramanna & Sletten, 2014; Ben-Othman & Kossentini, 2015). Yet, the relationships between

IFRS adoption time and financial market consequences across countries has been overlooked in the previous international business literature. Accordingly, to the best of our knowledge, only limited studies have investigated the effects of IFRS adoption on the capital markets from the perspective of the four diffusions of innovation theoretical positions that include; experimental adopters, early adopters, late adopters, and the laggards. To address this issue, our study focuses on the following two related research questions: (a) To what extent does IFRS adoption time influence the financial market indicators across countries?, and (b) How does early and late IFRS adoption impact the financial consequences of capital markets?.

Empirically, prior studies have focused on IFRS adoption effects by using few firm-level variables or by including a single stock market indicators and for small samples and short-term. This study, therefore, contributes to the current IFRS literature by including a range of financial market variables at the macro country-level towards the long-term rather than the short-term. Furthermore, we have used three multidimensional variables to control for their effects on financial market performance, namely the official language of the country, colonial history, the geographical background of the country to examine the effect of these three multidimensional variables on stock market performance. We argue that financial markets can be affected not only by the stock price and the other firm-level variables, but it should also investigate the impact of IFRS adoption on the macroeconomic indicators of different countries. Additionally, this study has a methodological contribution since we have applied fixed-effects models in addition to 2SLS estimations to control for endogeneity problems existing in our models and to achieve more reliable findings consistent with prior studies, we have addressed the effects of IFRS adoption on a range of financial consequences, such as financial market integration (Jayaraman & Verdi, 2014; Cai & Wong, 2010; De George, 2013), stock market capitalization (Lasmin, 2011; Judge, Li, & Pinsker, 2010; Shima & Yang, 2012), stocks trading volumes (Okoye, Okoye, & Ezejiofor, 2014; Brüggemann et al., 2012; Leuz & Verrecchia, 2000), stock

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market turnover ratio (Leuz & Verrecchia, 2000; Loureiro & Taboada, 2012), stock market returns (Escaffre & Sefsaf, 2011; Loureiro & Taboada, 2012), stock market volatility (Leuz & Verrecchia, 2000; Auer, 1998; Daske, 2006), and stock market development (Klibi & Kossentini, 2014; Ben-Othman & Kossentini, 2015). This study, therefore, provides a great contribution to the existing empirical IFRS literature by examining the impact of IFRS adoption time on a range of financial market consequences of adopting countries at the macro-country level and for a long time. This paper helps scholars who are interested in the debate on the future of global IFRS adoption by looking at the financial market benefits of adopting IFRS and the influence of their adoption times on the efficiency of international stock markets.

Our study contributes to the extant literature from the following context. Firstly, as far as we are aware, our study is the first that used combinations of panel dataset from 110 countries across the world together with the four main diffusions of innovation theoretical classifications (thus experimenters, early adopters, late adopters, and laggards) in examining the effects of IFRS adoption on stock market performance. For example, prior studies applied individual theories to explain the financial consequences of IFRS adoption, such as signaling theory (e.g., Shima & Yang, 2012), resource dependence theory (e.g., Lundqvist et al, 2008; Alon & Dwyer, 2014), and the economic network theory to address the effects of the IFRS adoption (e.g., Ramanna & Sletten, 2014). However, very few studies have applied the DOI theory to illustrate the benefits of IFRS adoption (El-Helaly, Ntim, & Al-Gazzar, 2020; Dayyala, Zaidi, & Bagchi, 2020; Elmghaamez, 2019). Secondly, previous studies have investigated the impact of IFRS adoption only by focusing on individual financial market indicators. These approaches have yielded mixed findings and consequently fuel a more pessimistic orientation towards mandatory IFRS adoption. Our study examines the effects of IFRS adoption on the stock market from a multi-dimensional perspective by using classifications such as the geographical background of the multinational corporations (MNCs) such as; geographical region, official

language (either English, French, Spanish, Portugal, etc), colonial history, etc. These factors enable us to provide a deeper investigation and analysis into other background attributes or factors that may influence the IFRS adoptor's behavior and how these attributes affect stock market performance. Thirdly, unlike the previous studies that have used a binary code for measuring whether a country has adopted IFRS or not yet, we have employed alternative measures for IFRS adoption status (required or permitted for certain firms in a country) to better explain the impact of IFRS adoption on the financial performance of capital markets, including the IFRS status for listed firms, the IFRS status for unlisted firms, the IFRS status for foreign firms and the IFRS adoption by SMEs. Fourthly, unlike the previous studies that focused on few stock market indicators, our study used examined the effects of IFRS adoption on the stock market by examining stock market performance from the perspective of seven key financial indicators; including financial market integration, stock market capitalization, stocks trading volumes, stock market turnover, stock market returns, stock market volatility, and stock market development. Fifthly, unlike the other previous IFRS studies that used ordinary linear regression models (e.g., Ramanna & Sletten, 2014; Shima & Yang, 2012; Judge, Li, & Pinsker, 2010), our study used both fixed-effects model and 2SLS regression models to strengthen the robustness of our findings by controlling for fixed year effects and endogeneity problem. Last but not the least, the findings from our study is based on unique panel datasets collected from across 110 countries from different economic background including; emerging economies, developed economies, developing economies and the G4 economies. Our findings therefore are based on more representative data across the world with more rigorous and robust analysis.

We test our theoretical framework in a multilevel analysis for seven financial market indicators from 110 countries over the period from 1995 to 2014. We find a positive association between the late mandatory IFRS adoption and EU stock market integration. We also found a significant negative association between the early IFRS adoption and the following financial

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indicators: stock market trading volumes, stock market capitalization, stock market turnover, and return. Additionally, our findings suggest that IFRS adoption for unlisted firms has negatively and significantly affected the stock market turnover level for the adopting nations regardless of whether or not required or permitted for unlisted firms operating in the country. Moreover, we also found that financial integration and market capitalization both have positive and significant increase after IFRS adoption by SMEs, however, stock market turnover and return have negatively and significantly decreased post-IFRS adoption by SMEs.

The structure of our study proceeds as follows; First, we provide brief discussions about IFRS adoption and the global financial market. Second, we provide the theoretical underpinnings to the study and use that as a springboard to develop our hypotheses. Third, we show our model specifications follow by our empirical design. Four we conduct our analysis followed by robustness tests. Last but not the least, our final chapter focuses on discussions, practical and policy implications as well as the limitations of the study.

# 2. IFRS adoption and global financial market

In 1977, the International Accounting Standards (IAS) have been formed by the International Accounting Standards Committee (IASC) to enhance the quality of financial reports, (Ben Othman & Kossentini, 2015). Since 2001, the IASC has been replaced by the International Accounting Standards Board (IASB), which has published International Financial Reporting Standards (IFRS) to enhance the international comparability and transparency among countries, thus increase investors trust and help financial market participants to make informed decisions (Tyrrall & Aggestam, 2011). After international financial reporting standards (IFRS) have been mandatorily required by many countries around the world, the IASB has also started working closely with the Securities and Exchange Commission (SEC) to converge IFRS with the US Generally Accepted Accounting Principles GAAP (Ortega, 2017). Therefore, foreign

investors tend to invest in financial markets characterized by high-quality accounting information and transparent accounting standards, such as IFRS (Krishnan & Zhang, 2019). Hence, international financial reporting standards have been widely adopted by numerous countries globally to attract more inward FDI (Rudhani et al., 2017). Accordingly, Stock markets are primarily motivated by the desire to adopt IFRS to gain other types of financial benefits, such as lower cost of capital (Fraser, 2010). In this regard, Comprix et al. (2003) identified 11 dates from 2000 to 2002 that signal the possibility or the timing of the adoption of IFRS in the EU and pointed out that stock markets reacting positively to news related to increasing the likelihood of IFRS adoption. Notably, in countries with strong legal enforcement for investor protection, the development of stock markets is positively associated with high-quality accounting standards (Francis et al., 2003). This implies the added value of the investigation of the IFRS-SMIs nexus worldwide.

Since the IASB has started to develop the International Accounting Standards and enhance the transparency of financial information, many countries were encouraged to adopt IFRS (De George, 2013). Even after the EU mandatory adoption of IFRS in 2005, the number of countries that have adopted IFRS has exponentially grown resulting in making over 120 countries around the world adopt and implement IFRS (VaseNak, 2015). Most prior IFRS studies have applied a binary scheme for IFRS adoption status. However, this classification is no longer working on the diffusion of innovation DOI theory in a wide and ever-changing environment. (Trimble, 2017). Additionally, IFRS adoption has been significantly affected by several macro-economic factors, such as the colonial history and the financial system of a country, among other factors (Pais & Bonito, 2018; Ramanna & Sletten, 2014).

# **3.1 Theoretical framework**

According to the diffusion of innovation DOI theory, adopters of innovations might experience desirable or undesirable outcomes, direct or indirect consequences, and expected or unexpected benefits, as a result of the changes that might happen to a social system of adopters, which could lead to rejection of accepting such innovations (Rogers, 1995, Oliveira & Santos, 2019; El-Helaly, Ntim, & Al-Gazzar, 2020; Elmghaamez, Gerged, Ntim, 2020). The financial consequences are one of the relative advantages that adopters can benefit from adopting innovations, which might be either desirable or undesirable effects (Rogers, 2003). Accordingly, the application of DOI theory in the accounting literature is very useful because the international accounting standards have been primarily designed to address many accounting problems and meet various needs, such as improving transparency, enhancing international comparability, providing global integration markets, and increases the efficiency of financial markets (Jorissen, 2015; Abata, 2015; Tweedie & Seidenstein, 2005).

Based on DOI theory, adopters can also be classified regarding their adoption time into five groups: experiments, early adopters, early majority, late majority, and laggards, which are usually affected by the characteristics of each group separately (Rogers, 2003). DOI theory can, therefore, complement our understanding regarding how country-specific characteristics could explain the impact of adopting international accounting innovations (i.e., IFRS) and the financial efficiency of stock exchanges (Jorissen, 2015; Abata, 2015). Previous international accounting literature, nevertheless, has no evidence and implications of using the DOI theoretical framework in studying the financial consequences of global IFRS adoption (El-Helaly, Ntim, & Al-Gazzar, 2020). this study, consequently, uniquely closes this existing gap in the literature by employing the adoption classification scheme proposed by DOI theory to interpret the financial market consequences of global IFRS adoption.

The adoption time is one of the most essential elements affecting IFRS adoption since it was increased gradually over time. Therefore, the IFRS adoption rate can be measured by calculating the number of countries that adopted IFRS over a certain period (Botha & Atkins, 2005). As the number of countries that adopted IFRS has remarkably increased over time, this complies with the theoretical framework suggested by the DOI theory (Dayyala et al., 2020). Accordingly, the DOI theory is the most suitable theory that can be utilized to explain the dynamic diffusion of IFRS (e.g., Dayyala et al., 2016; Alon, 2010).

# **3.2 Hypotheses Development:**

Burgeoning empirical studies continue to report mixed findings regarding the effects of IFRS adoption and capital market integration by using either country-specific samples or a small sample size. For example, most scholars have found a positive and significant association between IFRS adoption and financial market integration (e.g., Cai & Wong, 2010; De George, 2013; Li et al., 2013). In contrast, few others have argued an insignificant association between IFRS adoption and the global integration of capital markets (e.g., Alnodel, 2016). These studies have used limited sample sizes and varied theoretical arguments to buttress their results. The empirical foundation is shaped by the diffusion of innovation theoretical (DOI) premise that implies that early adopters of innovations may experience desirable/beneficial outcomes due to possible favorable market consequences. This indicates that countries with lower levels of financial integration and less market development are more likely to adopt IFRS at the early times to increase their financial integration. This led us to hypothesize that:

**H1:** There is a positive association between early adoption of IFRS and stock market integration and development.

An increase in the volume of trade in the stock market as a result of IFRS adoption will result in higher stock market returns (e.g., Escaffre & Sefsaf, 2011; Yip & Young, 2012; Bartov

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et al., 2005; Okafor, Anderson, & Warsame, 2016; Paglietti, 2009). Results from the above studies imply that earlier adopters of IFRS seemed to be from those countries that have lower stock market returns and market capitalization to improve their financial situations. To further examine the veracity of these findings, we hypothesized that:

**H2:** There is a positive association between early IFRS adoption and stock market returns and market capitalization.

Further, from the DOI theoretical perspective, the early adopting countries of international financial reporting standards (IFRS) are more likely to achieve a greater higher volume of trade and stock turnover (Rogers, 2003). This indicates that countries with lower levels of stock market trade and turnover are more prone to adopt IFRS at the early times to enhance their financial performance and attract more investors. This led us to propose our third hypothesis:

**H3:** *There is a positive association between early adoption of IFRS and stock market volume of trade and turnover.* 

Most prior studies argue that there is an insignificant relationship between stock market volatility and IFRS adoption (e.g., Leuz & Verrecchia, 2000; Cuijpers & Buijink, 2005; Auer, 1998; Daske, 2006; Floros, 2007). However, few others found a negative and significant association between the level of stock market volatility and the adoption of IFRS (e.g., Patro & Gupta, 2016; Nulla, 2014). From the DOI theoretical perspective, we argue that the financial consequences of early IFRS adoption coupled with market skepticism by late adoptors may result in stock market volatility. This led us to hypothesize that:

**H4:** *There is an insignificant association between the early adoption of IFRS and the volume of stock market volatility.* 

# 4. Research Design

Our total sample size include110 countries around the world covering the period from 1995 to 2014 with an overall 2200 country-year observation. Appendix 1 shows the classification of the sampled countries based on their IFRS adoption time as proposed by DOI theory. The sample selected represents about 56% of the population (196 countries), which enhances the generalizability and reliability of the findings (Vittinghoff & McCulloch, 2007). Table 1 operationally defines the definitions and measures of all variables included in this study. These variables are divided into three groups. First, dependent variables (financial market indicators), second, explanatory variables, namely IFRS adoption categories suggested by DOI theory and IFRS adoption status applied by previous research. Finally, control variables (social factors), including geographical regions (*GERI*), official language (*OFLN*), colonial history (*COHI*), and year dummies of 2008-09 (D08-09) to control for the effect of the most recent financial crisis of 2008-2009 on the financial performance of stock exchanges around the world.

# Insert table 1 about here

## 4.1 Model Specification

Following the DOI theoretical standpoint, our study assumes a linear relationship between the outcome variables (financial market indicators) and the independent variables (IFRS adoption categories and IFRS adoption status). Accordingly, this study employs a multivariate linear regression analysis by using the ordinary least squares estimator (OLS) to examine the cause-effect relationship between the financial market consequences and IFRS adoption. The multiple linear regression model is specified as shown in the equation below:

$$FCIFRS_{it} = \alpha_0 + \beta_1 IFRSAC_{it} + \beta_2 IFRSLF_{it} + \beta_3 IFRSUF_{it} + \beta_4 IFRSFF_{it} + \beta_5 IFRSME_{it} + \sum_{i=1}^{4} \beta_i CONTROLS_{it} + \varepsilon_{it}$$

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Where, *FCIFRS*<sub>it</sub> is the financial consequences of IFRS adoption for a country (i) in a year (t) which involves a wide range of macro-financial indicators, including financial market integration (*IFNI*), market capitalization in current USD (*SMCP*), stocks trading volume (*SMTD*), stock market turnover (*SMTO*), stock market return (*SMRT*), stock price volatility (*SPVO*), and financial market development (*FMKD*),  $\alpha_0$  is the constant term,  $\beta_j$  are the coefficients on the independent variables. The explanatory variables used in the model of economic consequences of IFRS including the IFRS adoption categories (*IFRSAC*), the IFRS status for listed firms (*IFRSLF*), the IFRS status for unlisted firms (*IFRSUF*), the IFRS status for foreign firms (*IFRSFF*), and the IFRS adoption status for SMEs (*IFRSME*).  $\sum_{i=1}^{4} \beta_i$ *CONTROLS*<sub>it</sub> refers to three control variables identical to those used in models 1, 2, 3, 4, in addition to year dummies to control for the global financial crisis period (*D08-09*).  $\varepsilon_{it}$  refers to the error term for the country (i) in a year (t).

## 5. Empirical analysis

Our study adopts a multi-dimensional empirical approach by simultaneously combining a unique panel dataset from 110 countries around the world with robust two-stage multiple regressions in examining the effects of both early and late adoption of IFRS on the global capital market. Further, we contribute to the extant literature by examining the effects of both early and late adoption of IFRS on seven unique capital market attributes. Table 2 shows the descriptive statistics of the financial consequences of IFRS adoption for all 110 countries in our dataset from 1995 to 2014.

## **Insert table 2 here**

Table 3 presents the descriptive statistics of the independent variables (IFRSs adoption categories and IFRS adoption status) and control variables (social characteristics of the sample) for 110 countries from 1995 to 2018. The results show a high level of variability in all variables.

For instance, the data relevant to the *LTMJF* group ranges from a minimum of -341.61 to a maximum of 4,641.46, with a 90.47 mean value, and a standard deviation of 358.40. Likewise, the data of *IFNI* relevant to the *ERMJF* group ranges from -24.24 to 768.59, with an average of 35.13, and a standard deviation of 106.84. Similarly, the data of *SMCP* relevant to the *LGGRF and LTMJF* groups present the biggest variability among the four adopter categories of IFRS. The results in this regard are in line with previous studies (e.g., Brochet, Jagolinzer, & Riedl, 2013; Cai & Wong, 2010; De George, 2013; Li et al., 2013; Alnodel, 2016).

# Insert table 3 here

Table 4 reports the results of the correlation matrices of the dependent, explanatory, and control variables included in the analysis for 2,200-country observations. Table 4 shows that the correlation coefficients of both Pearson and Spearman matrices are relatively low, indicating that there is no multi-collinearity severe problem that could affect the results. For example, Table 4 reports that there are positive and significant correlations between the LTMJF group and all the financial consequences, except for two financial effects (i.e., SMCP and SMRT) that show insignificant correlations, suggesting that countries with higher levels of the following financial indicators IFNI, SMTD, SMTO, SPVO, & FMKD are more likely to adopt IFRS during the late stages. Furthermore, Table 4 reports that the LGGRF group is positively and significantly correlated with the SMCP. This means that countries with higher levels of *SMCP* tend to become non-adopters of IFRS. Additionally, Table 4 presents that the three early adopter groups of IFRS namely, the EXPRF, ERADF, and ERMJF, are either negatively and significantly or insignificantly correlated with the financial consequences of IFRS adoption. Remarkably, the coefficients' magnitude and direction on both Pearson and Spearman matrices are commonly similar. This implies that any residual non-normality issues are less likely to affect the reliability and robustness of the empirical analysis.

## **Insert table 4 here**

## 5.1 Regression Analysis

This study employs a multivariate linear regression method to test the stated associations between the adoption of IFRS and a range of stock market indicators. We have run some statistical tests to check for the violation of OLS assumptions including heteroscedasticity, linearity, normality, serial-correlation, and unit-roots. We found that the p-values of the Shapiro-Wilk test are statistically significant at 1% across all the financial consequences of IFRS adoption, implying that the residuals of variables are not normally distributed. Therefore, we employed the two-step transformation method to mitigate the violation of a normality assumption. We also found that the p-value of Durbin's alternative test for detecting autocorrelation is statistically significant at the 1% level, indicating that there is serious autocorrelation in the residuals across all models. Likewise, We found that the p-values of White's test for the heteroscedasticity of residuals are statistically significant at the 1% level, inferring that the spread of the residuals is heteroscedastic. Hence, we applied the cluster-robust standard errors to handle the violation of the homoscedasticity and autocorrelation violations.

Table 5 reports the findings of estimating a multiple linear regression with cluster-robust standard errors to examine the effects of IFRS adoption on the financial consequences for a panel of 110 countries. Specifically, column 1 of Table 5 shows that there is an insignificant association between the early IFRS adoption and the global integration of capital markets. This finding is in line with the findings of prior IFRS studies (e.g., Alnodel, 2016), who found an insignificant association between the financial market integration and the adoption of IFRS. However, we found a positive and significant association between financial market integration (*IFNI*) and the late IFRS adoption. As shown in column 7 of Table 5, there is an insignificant association between financial market development (*FMKD*) and the adoption of IFRS during the early times. This implies that hypothesis H.1 is not supported. This finding contradicts the

results of some prior studies (e.g., Ben-Othman & Kossentini, 2015; Klibi & Kossentini, 2014) who stated that countries characterized with early adoption of IFRS are expected to have higher *FMKD* as compared to those countries that have not embraced IFRS yet.

Column 2 of Table 5 shows that there is a negative and significant association between stock market capitalization (*SMCP*) and the early IFRS adoption. Empirically, this result provides support to earlier evidence provided by (e.g., Shima & Yang, 2012; Hope, Jin, & Kang, 2006; Brochet, Jagolinzer, & Riedl, 2013), that revealed a negative significant association between the financial market capitalization and IFRS adoption. Similarly, column 5 of Table 5 reports a significant negative association between the levels of stock market return (*SMRT*) and the early adoption of IFRS. This means that hypothesis H.2 is statistically rejected. This finding, however, is in line with the results of some previous studies (e.g., Patro & Gupta, 2016; Key & Kim, 2017; Klimczak, 2011) that suggested a significant negative connexion between IFRS adoption and stock market returns.

## Insert table 5 about here

Column 3 of Table 5 shows a significant negative association between the early IFRS adoption and stock trading volumes (*SMTD*). This implies that hypothesis H.3 was not accepted. Nevertheless, this finding is consistent with the results of Figlioli, Lemes, & Lima, (2017) who reported that the adoption of IFRS leads to reducing the price of stocks traded which in turn triggers a decrease in the volume of shares trading in financial markets. Likewise, column 4 of Table 5 indicates that the early adoption of IFRS is negatively and significantly associated with the level of stock market turnover (*SMTO*). This finding does not support hypothesis H.3. Nonetheless, it is tied to the results of some previous IFRS studies (e.g., Khurana & Michas, 2011; Burnett et al., 2013) who indicated that the ratio of stock market

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turnover has been significantly reduced after the mandatory adoption of IFRS due to higher investment costs resulted in decreasing foreign investments.

As has been hypothesized, column 6 of Table 5 reports an insignificant association between stock price volatility (*SPVO*) and IFRS adoption during the early times, except for the experimenters' group (*EXPRF*), which is found to be negatively and significantly associated with IFRS adoption. This result agrees with hypothesis H.4. This finding tends to support the findings of previous studies (e.g., Leuz & Verrecchia, 2000; Cuijpers & Buijink, 2005; Auer, 1998; Daske, 2006; Floros, 2007), who found an insignificant association between IFRS adoption and the stock market volatility.

Regarding IFRS adoption for listed firms, we found a negative and significant association between IFRS adoption in countries where IFRS adoption is not required for listed firms and the following financial consequences SMTO, SMRT, SPVO, FMKD. We also found that stock market turnover SMTO has been significantly reduced in countries that adopted IFRS for unlisted firms. Further, we found that stock market capitalization and market development have significantly decreased in countries where IFRS is permitted for all foreign companies operating in the adopting countries. Additionally, our findings suggest that IFRS adoption for unlisted firms has a negative and significant effect on the stock market turnover level for the adopting nations regardless of whether or not required or permitted for unlisted firms operating in the country. Moreover, we also found that financial integration and market capitalization both have a positive and significant impact on financial indicators after IFRS adoption by SMEs, however, stock market turnover and return have negatively and significantly decreased post-IFRS adoption by SMEs.

Markedly, though not the important emphasis of the current study, the control variables (country-specific social characteristics) have heterogeneous influences on the financial

consequences of IFRS adoption. For example, adopters of IFRS in the *EURO* region tend to have higher levels of *SMTO*, whereas adopters in the *LNAM* region appeared to have higher levels of *SMCP*. Similarly, adopting countries that were never colonized before *NEVC* are more likely to have higher levels of *IFNI*, *SMCP*, *SMTD*, *SMTO*, and *FMKD*, while countries colonized by the British Empire *BRTC* tend to attain higher levels of *FMKD*. Likewise, those adapters were colonized by the French Empire *FRNC* have a propensity for lower levels of the following financial market indicators: *SMCP*, *SMTD*, *SMTO*, and *SPVO*, although others colonized by the Spanish Empire *SPNC* seemed to have higher levels of the *IFNI*, and lower levels of *SMCP*, *SMTD*, *SMTD*, *SMTO*, SMTD, *SMTO*, and *SPVO*, and *SPVO* (refer to Table 5).

# **5.2 Robustness**

The country-level heterogeneities may not be addressed only by using multiple linear regression. Therefore, and drawing on previous studies (e.g., Lima, Lima, & Gotti, 2018; Hong & Shim, 2019; Florou & Kosi, 2015), a country-level fixed-effects model has been employed in the present study to control for the omitted variables bias. Table 7 shows the findings of estimating fixed-effects models. Table 6 indicates that the magnitudes and directions of the vast majority of the employed SMIs in this model remained comparatively similar to the results of estimating multiple linear models in Table 5. For example, the coefficients on IFRS status for domestically listed firms (*IFRS*) remained negatively and insignificantly associated with international financial integration (*IFNI*).

Similarly, the coefficients on IFRS adoption status for foreign firms (*PAFC*) remained negatively and significantly correlated with the *SMCP* (see Table 6). Likewise, the coefficient on IFRS adoption status for unlisted firms (*NREQ*) remains negatively and significantly related to *SMTO* at a 1% level of significance (refer to table 6). This implies that this result is rigorous and reliable as it is not affected by the potential existence of country-level heterogeneities.

## Insert table 7 about here

To address any concerns regarding the potential occurrence of endogeneity problems, this study has applied two-stage least square regression models (2SLS) to control for endogeneity problems. Table 7 presents the findings of estimating 2SLS models. The findings of 2SLS are supportive of the earlier inferences attained from estimating clustered OLS regression models and country-level fixed-effects models, with a small level of sensitivity.

# Insert table 7 about here

For example, the results related to the international financial integration (*IFNI*) model remained the same as those findings reported in column 1 of Table 5, with a few changes. Besides, the results of conducting 2SLS regression yield comparable results in conducting OLS regression models concerning the market capitalization (*MCPL*) model, with slight exceptions. This means that the potential incidence of endogeneity problems is not a primary concern in the current study.

# **5.3** Conclusion, Implication, and Limitations

The stock markets represents the nexus of most economic transactions and resources allocation across the world. Further, foreign investors rely on the transparency and integrity of the financial reporting quality that is conditioned by the IFRS. (Krishnan & Zhang, 2019). Consequently, studies that focus on the effects of IFRS adoption on stock market are critical to deepen our knowledge and understanding about the essence of IFRS global adoption. Although significant number of countries around the world have attracted direct foreign investment and increase in economic prosperity as a result of earlier adoption of the IFRS (Rudhani et al., 2017), other countries are bit hesitant in adopting the IFRS. Our studies provide both practical and academic benefits to policy makers of multinational companies, financial service regulators and academic reserachers. First, our results implies that, early IFRS adoptors signal better

disclosure and financial reporting quality that strengthen invetors trust in the stock market. This findings strethen the argument by the financial service regulators who argue for the mandatory adoption of IFRS by all multinational companies around the world. Second, our studies enhances the investors protectionist argument regarding mergers and acquisitions. Thus IFRS adoption enhances easier cross-boarder investment (either by merger or acquisition). Decision makers of most multinaltions companies that engages in acquisition and merger deals mostly rely on critical factors including adoption of IFRS standards by the aquired company. IFRS stadards adoptions is analogous to high financial reporting standards, high quality finacial disclosure practices and transparency in the stock market activies. Third, our findings show a positive association between the late mandatory IFRS adoption and EU stock market integration. This findings has a critical practical implication to the governments from emerging economies background. Thus both governments from emerging and developing economies need to embrace IFRS adoption for a long term economic prosperity. IFRS adoption brings the potentials for boosting direct foriegn investment and ensure better allocation of scarce economic resources in these regions a long-term. Fouth, regarding IFRS adoption for listed multinational companies, we found asignificant negative association between IFRS adoption in countries where IFRS adoption is not mandated for listed firms and the stock market performance. This result offers some practical policy implications to directors of multinational corporations to ensure strict adoption of IFRS by their company to secure better market performance. Investors have less trust in the multinaltions that eschew IFRS adoption for superfluous reasons. Additionally, our findings suggest that IFRS adoption for unlisted firms has a negative and significant effect on the stock market turnover level for the adopting nations regardless of whether or not required or permitted for unlisted firms operating in the country. Five, our results collabolarte with the diffusion of innovation theory (DOI) that suggests that adopters of innovations can experience either desirable or undesirable outcomes as a result of other

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stakeholders' actions, which might lead to obtaining many unexpected outcomes and few desirable outcomes.

Also, our findings provides practical policy implcations that supports regulatory authorities' arguments for mandatory adoption of IFRS by all multinational corporations listed in the world biggest stock market. Thus the adoption of IFRS enhances financial reporting transparency and promotes international stock market integration and efficient stock market transactions. Stock market regulatory commissions such as th security and exchange commission of the USA and the financial service authority (FSA) of UK and other stock market regulatory agencies around the world rely on IFRS as a beacon of hope for securing consistency, transparency, and financial reporting integrity among multinational corporations listed in the stock market. Last but not the least, our results collaborate with the argument by previous studies that posit that mandatory adoption of IFRS by multinationals corporations around the world will ensure better allocation of capital resources as well as promote stakeholder's trust in business activities and the capital market.

This study, however, has some limitations, which might be considered for future research. For example, future studies may focus on established stock markets around the world rather than including 110 stock markets. Besides, other theoretical frameworks such as neoinstitutional theory could be used along with DOI theory to explain the determinants and financial effects of global IFRS adoption. Additionally, future studies should include firm-level variables and macro-country and micro-firm financial market indicators to better explore the dynamics between IFRS adoption and effects on capital market and firm performance.

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Experimenters	Early adopters	Early majority	Late	majority	Laggards	
(1991-1995)	(1996-2000)	(1996-2000) (2001-2004)		(2005-2014)		
Bangladesh	Bahrain	Armenia	Argentina	Malaysia	Colombia	
Barbados	Bolivia	Botswana	Australia	Malta	Cote d'Ivoire	
	El Salvador	Costa Rica	Austria	Mexico	Indonesia	
	Georgia	Kazakhstan	Belgium	Moldova	Iran	
	Guyana	Kyrgyzstan	Brazil	Montenegro	Thailand	
	Jamaica	Malawi	Bulgaria	Morocco	Tunisia	
	Jordan	Mauritius	Canada	Namibia	USA	
	Kenya	Saint Kitts & Nevis	Chile	Netherlands	Vietnam	
	Kuwait	Saudi Arabia	China	New Zealand		
	Lebanon	Singapore	Croatia	Nigeria		
	Macedonia	Sri Lanka	Cyprus	Norway		
	Mongolia	Tanzania	Czech Republic	Pakistan		
	Nepal	Turkey	Denmark	Paraguay		
	Oman		Ecuador	Philippines		
	Panama		Egypt	Poland		
	Papua New Guinea	6	Estonia	Portugal		
	Peru		Fiji	Romania		
	Qatar		Finland	Russia		
	Trinidad and		France	Serbia		
	Uganda		Germany	Slovakia		
	United Arab Emirates		Ghana	Slovenia		
	Zimbabwe		Greece	South Africa		
			Hong Kong	South Korea		
			Hungary	Spain		
			Iceland	Swaziland		
			India	Sweden		
			Ireland	Switzerland		
			Israel	Ukraine		
			Italy	UK		
			Japan	Uruguay		
			Latvia	Venezuela		
			Lithuania	Zambia		
			Luxembourg			

# Appendix 1: The classification of a sample of 110 countries based on their first-time IFRS adoption

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Variables	<b>Definitions and measures</b>	Data sources
Dependent variables		
IFNI (\$)	International financial integration is measured through multiplying the net foreign assets in the current local currencies by the annual official exchange rates provided by the International Monetary Fund (IMF) to convert the value of international financial integration from the local currency to current U.S. dollars.	The World Development Indicators-World Bank Data.
SMCP (\$)	The data of market capitalization of listed domestic companies are measured by multiplying the number of outstanding stocks by the current market price of one share.	The World Development Indicators-World Bank Data.
SMTD (%)	The data of stocks traded to GDP ratio are measured by using the total number of all shares traded in a stock market at the end of the year, multiplied by their respective matching prices and divided by GDP, then multiplied by 100 to convert the value of stocks traded to GDP to a percentage of GDP.	The World Development Indicators-World Bank Data.
SMTO (%)	The data of stock market turnover ratio are measured by using the total value of shares traded in a stock market at the end of the year divided by the average market capitalization for the period, then multiplied by 100 to convert the value of the stock market turnover to a percentage.	The World Development Indicators-World Bank Data.
SMRT (%)	The stock market return might be in the form of profit through trading, or in the form of dividends paid by a company to its shareholders from time to time.	The Global Financial Development Database (GFDD)
SPVO	The data of stock price volatility is measured by deducting the average from the daily stock prices to compute the difference. Then, by squaring the differences and dividing them by 360 days to extract the variance and calculate the square root of the variance to compute the standard deviation which represents the stock-price volatility.	The Global Financial Development Database (GFDD)
FMKD	The data score of financial market development ranges from 1-7, where '1'= indicates that a country has not offered any financial services to shareholders, whereas '7'= denotes that a country has provided a higher level of financial services to shareholders.	The Global Competitiveness Index is provided by the World Economic Foru
Independent variables	Definitions and measures	
Independent variables (aa	opter categories and status of IFRS adoption)	
IFRSAC	The IFRS adopter categories are based on the first-time adoption by a country, and the classification is derived from DOI theory and involves five groups:	Use of IFRS by jurisdiction from Deloitte Touche Tohmatsu website, IAS plus, 2015
EXPRF	"1" = Experiments refers to countries that adopted the IFRS before 1995	
ERADF	"2" = Early adopters refers to countries that adopted the IFRS 1995-2000	
ERMJF	"3" = Early majority refers to countries that adopted the IFRS 2001-2004	
LTMJF	"4" = Late majority refers to countries that adopted the IFRS 2005-2014	
LGGRF	"5" = Laggards refers to countries that haven't adopted the IFRS till 2014	

Table 1: Definition and measures of all variables included in this s	study (dependent, inde	pendent, and control variables)
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Continued Table 1	Definitions and measures	Data sources
ndependent variables (ad	opter categories and status of the IFRS)	
Independent variables	Definitions and measures	
IFRSLF	The IFRS adoption status for domestic listed firms	Use of IFRS by jurisdiction from Deloitte Touche Tohmatsu website, IAS plu 2015
NOSE	"0" = There is no local stock exchange in the country	
NREQ	"1" = IFRS is not required for domestic listed companies	
NPER	"2" = IFRS is not permitted for domestic listed companies	
RFAL	"3" = IFRS is required for all domestic listed firms	
PFAL	"4" = IFRS is permitted for all domestic listed companies	
RFBI	"5" = IFRS is required only for domestic banks and insurance firms	
EXBI	"6" =IFRS is required for all firms except banks and insurance firms	
IFRSUF	The IFRS status for unlisted domestic firms	Use of IFRS by jurisdiction from Deloitte Touche Tohmatsu website, IAS ph 2015
NORQ	"0" = IFRS is not required for unlisted domestic firms	Use of IFRS Standards by jurisdiction provided by the IFRS Foundati (IFRS.org)
NOTP	"1" = IFRS is not permitted for unlisted domestic firms	
RADF	"2" = IFRS is required for all unlisted domestic firms	
RBIP	"3" = IFRS is required for unlisted domestic banks & insurance firms	
PADF	"4" = IFRS is permitted for all unlisted domestic firms	
RFFI	"5" = IFRS is required for domestic unlisted financial institutions	
RPAF	"6" = IFRS is required for publicly accountable firms	
PEBI	"7" = IFRS is permitted for all unlisted firms except banks and insurance companies	11,
IFRSFF	The IFRS adoption status for foreign firms	Use of IFRS Standards by jurisdiction provided by the IFRS Foundation (IFRS.org)
NOTA	"0" = IFRS is not applicable	
NOTR	"1" = IFRS is not required for foreign firms	
RAFC	"2" = IFRS is required for all foreign companies	
PAFC	"3" = IFRS is permitted for all foreign companies	
RSPO	"4" = IFRS is required for some foreign firms, permitted for others	
IFRSME	The IFRS adoption status for SMEs	Use of IFRS Standards by jurisdiction provided by the IFRS Foundation (IFRS org)
NSME	"0" = IFRS is not adopted by SMEs	
ASME	"1" = IFRS is adopted by SMEs	

Continued Table 1	Definitions and measures	Data sources
Control variables (Soci	al factors)	
GERI	The geographical regions	The classification of all countries by the continental regions presented at the
EURO	"1" = The country is in Europe	World Bank website
NLSA	"2" = The country is in North, Latin, and South America	
CSAS	"3" = The country is in Central & South Asia	
EASP	"4" = The country is in East Asia & the Pacific	
MENA	"5" = The country is in the Middle East & North Africa	
AFRC	"6" = The country is in Sub-Saharan Africa	
OFLN	The official language per group	The World Factbook website established by the Central Intelligence Agency
ENGL	"1" = English is an official language in the country	(CIA)
FRNL	"2" = French is an official language in the country	
SPNL	"3" = Spanish is an official language in the country	
ARBL	"4" = Arabic is an official language in the country	
GRML	"5" = German is an official language in the country	
RUSL	"6" = Russian is an official language in the country	
OTLN	"7" = Other languages are official languages in the country	
СОНІ	The colonial history	The World Factbook website established by the Central Intelligence Agency
NEVC	"0" = Never colonized countries	(CIA)
BRTC	"1" = Countries colonized by the British Empire	
FRNC	"2" = Countries colonized by the French Empire	
SPNC	"3" = Countries colonized by the Spanish Empire	
PORC	"4" = Countries colonized by the Portuguese Empire	
DUTC	"5" = Countries colonized by the Dutch Empire	
GRMC	"6" = Countries colonized by the German Empire	
RUSC	"7" = Countries colonized by the Russian Empire	
OTCO	"8" = Countries colonized by other colonists	
D08-09	Year dummy for the crisis period, where $1 = 2008-09$ , $0 =$ otherwise	Year dummies to control for the financial crisis period of 2008-2009.

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Table 2: Summary	/ descriptive	statistics of de	pendent variables	s in a panel of 110 countrie
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Dep Var	IFRSAC	Ν	%	Mean	Std. D	Variance	Min	Max
	EXPRF	40	1.8%	3.02	4.43	0.20	0.77	20.62
	ERADF	440	20.0%	6.46	13.61	1.85	-112.57	78.50
	ERMJF	260	11.8%	35.13	106.84	114.16	-24.24	768.59
(\$)	LTMJF	1300	59.1%	90.47	358.40	1,284.5	-341.61	4,641.46
	LGGRF	160	7.3%	19.86	76.37	58.33	-535.68	266.35
	EXPRF	40	1.8%	5.17	5.44	0.00	0.49	23.55
SMCD	ERADF	440	20.0%	15.80	31.05	0.10	0.01	201.11
(\$)	ERMJF	260	11.8%	51.59	112.23	1.26	0.00	646.10
	LTMJF	1300	59.1%	346.25	739.77	54.73	0.01	6,226.31
	LGGRF	160	7.3%	2,010.67	5,415.33	2,932.58	0.15	26,368.33
	EXPRF	40	1.8%	4.37	5.13	0.26	0.15	15.83
CMTD	ERADF	440	20.0%	7.58	19.58	3.83	0.00	163.32
SMID	ERMJF	260	11.8%	16.55	40.96	16.78	0.01	331.26
(%)	LTMJF	1300	59.1%	33.84	61.86	38.27	0.00	723.59
	LGGRF	160	7.3%	34.25	72.42	52.44	0.08	387.54
	EXPRF	40	1.8%	35.99	47.19	2.23	0.34	212.56
CMTO	ERADF	440	20.0%	20.06	96.56	9.32	0.00	1,612.94
SMIO	ERMJF	260	11.8%	41.78	76.94	5.92	0.17	580.60
(%)	LTMJF	1300	59.1%	51.15	57.63	3.32	0.00	497.40
	LGGRF	160	7.3%	46.62	61.29	3.76	0.71	404.07
	EXPRF	40	1.8%	1.00	0.00	0.00	1.00	1.00
CLART	ERADF	440	20.0%	8.48	28.89	8.35	-54.47	402.46
SMRT	ERMJF	260	11.8%	12.10	35.09	12.31	-44.15	378.83
(70)	LTMJF	1300	59.1%	10.71	31.98	10.23	-63.16	386.44
	LGGRF	160	7.3%	11.44	24.13	5.82	-50.89	122.49
	EXPRF	40	1.8%	1.00	0.00	0.00	1.00	1.00
~~~~	ERADF	440	20.0%	11.41	15.58	2.43	1.00	141.58
SPVO	ERMJF	260	11.8%	13.04	15.35	2.36	1.00	81.55
(70)	LTMJF	1300	59.1%	19.18	12.06	1.45	1.00	95.46
	LGGRF	160	7.3%	15.11	10.67	1.14	1.00	44.58
	EXPRF	40	1.8%	4.38	0.41	0.16	3.68	5.27
EMED	ERADF	440	20.0%	4.17	0.54	0.29	3.07	5.65
FMKD (Sogla)	ERMJF	260	11.8%	4.15	0.71	0.50	3.00	6.04
(Scale)	LTMJF	1300	59.1%	4.47	0.70	0.49	2.85	6.40
	LGGRF	160	7.3%	4.09	0.60	0.36	3.05	5.84
Note: The re	esearch variabl	les have bee	n entirely de	fined in Table	1.	2		

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Variables	Observations	Countries	Percent	Cumulative	Tolerance	V
Independent	Variables					
Panel A: (IF.	RSAC)					
EXPRF	40	2	1.8%	1.8%	0.66	1.5
ERADF	440	22	20.0%	21.8%	0.45	2.2
ERMJF	260	13	11.8%	33.6%	0.51	1.
LTMJF	1300	65	59.1%	92.7%	0.30	3.3
LGGRF	160	8	7.3%	100%	0.29	3.3
Total	2200	110	100%			
Panel B: (IF.	RSLF)				·	
NOSE	3	1	0.1%	0.1%	0.98	1.
NREQ	666	81	30.3%	30.4%	0.10	10.
NPER	392	27	17.8%	48.2%	0.21	4.
RFAL	929	86	42.2%	90.5%	0.12	9.:
PFAL	156	21	7.1%	97.5%	0.14	6.9
RFBI	40	6	1.8%	99.4%	0.35	2.8
EXBI	14	3	0.6%	100%	0.52	1.9
Total	2200		100%			
Panel C: (IF.	RSUF)	$\mathbf{Q}$				
NORQ	738	83	33.5%	33.5%	0.16	6.2
NOTP	414	25	18.8%	52.4%	0.12	8.
RADF	359	27	16.3%	68.7%	0.14	7.2
RBIP	195	20	8.9%	77.5%	0.22	4.4
PADF	312	33	14.2%	91.7%	0.19	5.2
RFFI	62	7	2.8%	94.5%	0.42	2.3
RPAF	91	11	4.1%	98.7%	0.36	2.7
PEBI	29	3	1.3%	100%	0.58	1.
Total	2200		100%	4		
Panel D: (IF	RSFF)					
NOTA	180	10	8.2%	8.2%	0.47	2.
NOTR	928	98	42.2%	50.4%	0.11	9.4
RAFC	601	52	27.3%	77.7%	0.12	8.9
PAFC	199	22	9.0%	86.7%	0.15	6.
RSPO	292	30	13.3%	100.0%	0.37	2.
Total	2200		100.0%			
Panel E: (IF.	RSME)					
NSME	1974	110	89.7%	89.7%	0.71	1.4
ASME	226	47	10.3%	100%	0.70	1.4
Total	2200		100%			

Control Varia	ne s ables					
Panel F: (GE	RE)					
EURO	720	36	32.7%	32.7%	0.11	8.95
LNAM	420	21	19.1%	51.8%	0.16	6.28
CSAS	220	11	10.0%	61.8%	0.36	2.77
EASP	300	15	13.6%	75.5%	0.37	2.69
MENA	260	13	11.8%	87.3%	0.12	8.68
AFRC	280	14	12.7%	100%	0.29	3.44
Total	2200	110	100%			
Panel G: (OF	LN)					
ENGL	620	31	28.2%	28.2%	0.27	3.73
FRNL	60	3	2.7%	30.9%	0.58	1.72
SPNL	280	14	12.7%	43.6%	0.08	11.4
ARBL	220	11	10.0%	53.6%	0.09	10.7
GRML	140	7	6.4%	60.0%	0.47	2.12
RUSL	60	3	2.7%	62.7%	0.48	2.10
OTHL	820	41	37.3%	100%	0.23	4.31
Total	2200	110	100%			
Panel H: (CO	HS)				1	
NEVC	340	17	15.5%	9.20%	0.33	3.06
BRTC	740	37	33.6%	41.60%	0.17	5.89
FRNC	100	5	4.5%	55.70%	0.53	1.89
SPNC	260	13	11.8%	65.40%	0.09	10.9
PORC	40	2	1.8%	69.70%	0.68	1.47
DUTC	60	3	2.7%	71.90%	0.56	1.80
GRMC	40	2	1.8%	75.70%	0.77	1.29
RUSC	200	10	9.1%	84.30%	0.35	2.87
OTHC	420	21	19.1%	100%	0.25	4.07
Total	2200	110	100%			

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Variables	IFNI	MCPL	SMCP	SMTD	SMTO	SMRT	SPVO	FMKD	EXPRF	ERADF	ERMJF	LTMJF	LGGRF	IFRSLF	IFRSUF	IFRSFF	IFRSME	GERE	OFLN	COHS
IFNI		.361***	.562***	.412***	.303***	.091***	.281***	.230***	058***	113***	075***	.122***	.066***	.173***	.167***	.032	.045**	.020	.036*	177***
MCPL	.143***		.745***	.749***	.389***	.096***	.160***	.609***	.008	018	132***	.116***	031	.111***	.057***	.112***	050**	051**	200***	382***
SMCP	.195***	.176***		.861***	.659***	.125***	.473***	.510***	081***	256***	212***	.330***	.075***	.073***	.108***	.071***	081***	151***	.021	332***
SMTD	.237***	.741***	.444***		.836***	.081***	.456***	.582***	043**	242***	142***	.288***	.026	.003	.015	.015	192***	151***	.081***	339***
SMTO	.195***	.158***	.259***	.458***		.122***	.490***	.375***	-0.027	327***	093***	.305***	.056***	108***	048**	069***	251***	232***	.279***	190***
SMRT	018	.024	.001	034	.042**		.128***	.064***	070****	050**	013	.043**	.049**	097***	056***	092***	082***	.007	.033	013
SPVO	.094***	.058***	.061***	.201***	.228***	.135***		.155***	179***	249***	133***	.338***	.002	152***	053**	120***	181***	217***	.340***	.056***
FMKD	.087***	.489***	.211***	.468***	.200***	044**	.063***		.018	120***	105***	.219***	108***	042**	008	.071***	085***	125***	115***	269***
EXPRF	028	002	030	053**	014	041*	153***	.007		068***	050**	164***	038*	.097***	.051**	.115***	.088***	002	011	086***
ERADF	096***	055**	105***	167***	164***	029	179***	127***	068***		183***	601***	140***	.266***	.128***	.103***	.112***	.253***	153***	.024
ERMJF	033	062***	069***	063***	007	.021	087***	103***	050**	183***		440***	103***	.062***	.057***	.002	.150***	.243***	046**	120***
LTMJF	.129***	.109***	010	.170***	.135***	.016	.257***	.225***	164***	601***	440***		337***	225***	118***	.032	163***	462***	.121***	.074***
LGGRF	040*	043**	.282***	.042*	.013	.010	024	105***	038*	140***	103***	337***		110***	070***	281***	095***	.183***	.069***	.016
IFRSLF	.163***	.075***	.011	.067***	001	050**	122***	043**	.083***	.238***	.059***	208***	088***		.823***	.727***	.286***	.152***	071***	082***
IFRSUF	.053**	.053**	026	.070***	.025	022	038*	.009	.013	.089***	.056***	046**	126***	.723***		.735***	.278***	.030	018	007
IFRSFF	.019	.105***	.035	.101***	.001	065***	091***	.087***	.106***	.090***	008	.043**	264***	.696***	.746***		.207***	202***	032	.038*
IFRSME	030	.031	054**	055***	126***	027	162***	087***	.088***	.112***	.150***	163***	095***	.284***	.268***	.191***		.165***	127***	028
GERE	009	.026	070***	060***	145***	007	164***	076***	031	.227***	.222***	411***	.170***	.149***	005	199***	.149***		349***	323***
OFLN	.086***	187***	107***	067***	.149***	.053**	.330***	135***	011	160***	031	.121***	.061***	066****	007	011	124***	325****		.390***
COHS	069***	235***	147***	243***	051**	.023	.148***	232***	101***	043**	106***	.151***	036*	121***	.004	.055**	056***	388***	.518***	

Note: The bottom left side of the table represents the Pearson matrix for parametric correlations while the top right side of the table represents the Spearman matrix for non-parametric correlations. The stars refer to the significant level of the correlation coefficient which denotes \*\*\* p < 0.01 level (2-tailed), \*\* p < 0.05 level (2-tailed), \* p < 0.1 level (2-tailed). The variables have been operationally defined in Table 1.

Table 5: The results of multiple linear regression with cluster-robust standard errors in a panel of 110 countries

Dependent variables	IFNI	SMCP	SMTD	SMTO	SMRT	SPVO	FMKD
Independent variables	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
EXPRF	3.45	-28.96***	-58.79*	-39.54	-26.82***	-16.66***	-0.33
	(0.796)	(0.008)	(0.070)	(0.411)	(0.000)	(0.003)	(0.290)
ERADF	0.98	-18.86**	-48.96**	-47.34*	-15.48**	-3.78	-0.09
	(0.904)	(0.010)	(0.023)	(0.090)	(0.020)	(0.479)	(0.758)
ERMJF	4.37	-18.47**	-32.55	-26.85	-13.61**	-3.64	-0.06
	(0.619)	(0.012)	(0.125)	(0.344)	(0.032)	(0.505)	(0.865)
LTMJF	10.55*	-5.86	-16.42	-14.04	-8.88	3.94	0.10
	(0.082)	(0.336)	(0.339)	(0.553)	(0.105)	(0.357)	(0.993)
The IFRS for listed firms							
NREQ	-31.26*	4.73	-50.50	-64.90***	-27.66***	-21.33***	-2.69***
	(0.059)	(0.923)	(0.197)	(0.000)	(0.002)	(0.007)	(0.000)
NPER	-25.85*	7.31	8.12	-4.71	0.10	11.54	-0.32
	(0.097)	(0.219)	(0.834)	(0.899)	(0.991)	(0.134)	(0.497)
RFAL	-16.96	9.65	29.16	9.54	-4.15	9.01	-0.17
	(0.225)	(0.196)	(0.373)	(0.753)	(0.535)	(0.128)	(0.667)
PFAL	-6.98	9.25	20.22	2.91	-2.15	0.22	-0.46
	(0.569)	(0.240)	(0.483)	(0.898)	(0.694)	(0.964)	(0.219)
RFBI	-3.38	14.35	15.86	-3.62	-6.37	-2.11	-0.74**
	(0.799)	(0.316)	(0.598)	(0.896)	(0.256)	(0.697)	(0.046)
EXBI	5.36	15.56	30.29	19.62	0.87	4.63	-0.35
	(0.724)	(0.144)	(0.324)	(0.520)	(0.916)	(0.487)	(0.402)
The IFRS for unlisted firms							
NOTP	-5.87	0.76	-16.15	-62.22**	-5.08	-9.99**	-0.38
	(0.730)	(0.891)	(0.594)	(0.018)	(0.360)	(0.013)	(0.555)
RADF	-0.22	1.17	-26.93	-44.93**	-4.13	-7.75*	-0.65
	(0.990)	(0.840)	(0.318)	(0.042)	(0.515)	(0.067)	(0.335)
RBIP	-6.70	0.31	-22.98	-61.48***	2.20	-2.29	0.18
	(0.683)	(0.950)	(0.359)	(0.000)	(0.682)	(0.517)	(0.977)
PADF	-5.98	-3.03	-29.94	-66.59***	-0.45	-2.50	-0.24
	(0.698)	(0.469)	(0.199)	(0.000)	(0.926)	(0.424)	(0.719)
RFFI	-1.95	-6.30*	-38.86*	-63.35***	1.94	-5.46*	-0.13
	(0.901)	(0.091)	(0.086)	(0.000)	(0.687)	(0.054)	(0.834)
RLPF	-2.79	-1.63	-38.14*	-50.76***	7.81	-1.85	-0.31
	(0.902)	(0.750)	(0.097)	(0.001)	(0.348)	(0.593)	(0.653)
PEBI	-4.63	-0.68	-43.02*	-87.66***	4.62	-2.34	-0.33
	(0.789)	(0.883)	(0.070)	(0.000)	(0.441)	(0.516)	(0.612)
The IFRS for foreign firms	16.75	0.1.5*	04.50	0.00	4.25	0.02	0.17
NOIR	16.75	-9.15*	-24.50	-8.32	4.35	0.92	-0.17
D ( D C	(0.134)	(0.091)	(0.192)	(0.742)	(0.505)	(0.816)	(0.454)
RAFC	15.59*	-6.92	-14.69	9.21	3.22	-1.78	0.14
	(0.088)	(0.267)	(0.484)	(0.746)	(0.621)	(0.694)	(0.937)
PAFC	5.28	-/.2/***	-12.37	0.24	1.01	0.27	-0.31**
DGDQ	(0.393)	(0.009)	(0.197)	(0.985)	(0./19)	(0.899)	(0.030)
RSPO	8.38	3.72	17.03	12.02	4.61	5.65**	0.32
IEBC - Louis - Con CME	(0.424)	(0.286)	(0.203)	(0.508)	(0.143)	(0.041)	(0.114)
IFKS adoption for SMES	0 (1+++	1 1 7 4 4 4	4.05	21 10***	0 71***	1 4 4	0.04
ASME	8.01***	4.15***	-4.95	-21.10***	-8./1***	-1.44	0.04
D	(0.001)	(0.001)	(0.335)	(0.005)	(0.003)	(0.140)	(0.478)
Dummy 08-09	20144	1 20***	15 05444	0 17444	2( 22***	( )0+++	0 1344
D09-09	2.84**	1.28***	15.05***	ð.4/***	-30.22***	0.29***	-0.12***
	(0.044)	(0.008)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)
Control Variables							
Geographical regions		_			_		
EURO	3.09	5.33	29.82	44.59**	-7.49	-2.40	0.29
	(0.740)	(0.352)	(0.108)	(0.049)	(0.116)	(0.624)	(0.235)

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3	LNAM	2.78	13.08**	28.15	17.58	-5.39	1.84	-0.11
4		(0.674)	(0.043)	(0.194)	(0.487)	(0.146)	(0.531)	(0.749)
5	CSAS	4.92	11.09**	32.57**	62.94***	0.10	0.95	0.04
6		(0.590)	(0.012)	(0.024)	(0.004)	(0.987)	(0.857)	(0.819)
7	EASP	13.33	9.84*	43.68**	51.59**	-8.28**	2.16	0.36
8		(0.268)	(0.077)	(0.020)	(0.012)	(0.029)	(0.586)	(0.199)
9	MENA	11.49	1.33	-3.76	-17.38	-12.30	-14.34*	-0.21
10		(0.353)	(0.842)	(0.855)	(0.508)	(0.228)	(0.081)	(0.704)
11	Official language			× ,		· · · ·		
12	ENGL	0.10	3.03	10.32	-6.38	-2.91	-8.47***	0.14
13		(0.989)	(0.358)	(0.301)	(0.598)	(0.287)	(0.003)	(0.390)
14	FRNL	17.17	12.69***	29.30*	20.61	-4.80	-2.74	0.15
15		(0.222)	(0.000)	(0.058)	(0.396)	(0.131)	(0.439)	(0.370)
16	SPNL	-32.22***	7.04**	30.67***	52.59***	-3.77	-0.08	-0.43**
17		(0.000)	(0.016)	(0.001)	(0.000)	(0.147)	(0.974)	(0.010)
18	ARBL	11.32	17.01**	76.25***	77.14***	9.74	14.50*	0.42
19		(0.363)	(0.019)	(0.001)	(0.008)	(0.340)	(0.078)	(0.435)
20	GRML	18.04	5.45	24.37**	9.19	-2.71	-7.52**	0.52***
21		(0.123)	(0.283)	(0.038)	(0.582)	(0.363)	(0.049)	(0.004)
22	RUSL	12.51*	-1.82	-6.97	18.82	-1.69	5.99	-0.65**
23		(0.094)	(0.785)	(0.730)	(0.681)	(0.838)	(0.543)	(0.012)
24	<b>Colonial history</b>			× ,	. ,	· · · ·		
25	NEVC	14.40*	15.87***	46.05***	38.27***	2.35	1.64	0.50***
26		(0.058)	(0.000)	(0.000)	(0.003)	(0.416)	(0.547)	(0.007)
27	BRTC	-4.50	0.09	0.55	-6.21	1.53	-4.87	0.47**
28		(0.620)	(0.982)	(0.967)	(0.705)	(0.660)	(0.200)	(0.023)
29	FRNC	-8.55	-16.20***	-59.02***	-61.98**	-5.72	-11.39**	-0.16
30		(0.387)	(0.008)	(0.002)	(0.020)	(0.272)	(0.034)	(0.518)
31	SPNC	37.39***	-15.03*	-67.91***	-93.01***	7.95	-11.08*	0.58
32		(0.005)	(0.076)	(0.009)	(0.005)	(0.184)	(0.067)	(0.171)
33	PORC	-9.86	4.91	14.80	20.69	5.29	-0.23	0.59**
34		(0.337)	(0.446)	(0.434)	(0.332)	(0.277)	(0.968)	(0.024)
35	DUTC	19.88	2.08	-24.19	-66.95*	-1.01	-6.12	0.41**
36		(0.106)	(0.608)	(0.148)	(0.060)	(0.833)	(0.249)	(0.042)
37	GRMC	-20.97*	-7.61	-55.63***	-84.19**	2.85	-2.15	-0.36
38		(0.095)	(0.261)	(0.001)	(0.011)	(0.604)	(0.806)	(0.417)
39	RUSC	-13.12**	-14.35***	-37.23***	-34.23**	1.02	-7.28	-0.02
40		(0.032)	(0.000)	(0.001)	(0.033)	(0.818)	(0.110)	(0.897)
41	Constant	-1.83	0.50	34.73	92.43**	31.45***	23.82***	4.65***
42		(0.924)	(0.968)	(0.341)	(0.022)	(0.000)	(0.004)	(0.000)
43	Observations	2200	2200	2200	2200	2200	2200	2200
44	F value	22.80***	67.07***	56.73***	50.01***	8.85***	31.59***	35.29***
45		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
46	R-squared	0.308	0.566	0.525	0.493	0.147	0.381	0.407
47	Adjusted R-squared	0.294	0.558	0.516	0.484	0.130	0.367	0.396
48	Polynomials contrasts	4.56**	9.77***	4.65**	6.42***	17.49***	11.01***	5.36***
49	5	(0.034)	(0.002)	(0.033)	(0.001)	(0.000)	(0.001)	(0.001)
50	Jarque-Bera LM test	0.146	0.704	0.268	0.484	0.219	0.563	0.393
51	1	(0.930)	(0.703)	(0.874)	(0.785)	(0.989)	(0.581)	(0.821)
52	Levin-Lin-Chu test	-22.6***	-11.1***	-15.02***	-8.93***	-7.77***	-7.07***	-15.16***
53		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
54	Breitung test	-17.7***	-3.64	-11.28***	-5.48***	-16.26***	-5.45***	-13.16***
55	5	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
56	Note: The variables have been o	perationally de	efined in Table	e 1. The last in	dependent cate	egorical variab	les have been	chosen as base
57	categories for each group of nomin	nal data include	ed in the model	. The p-value ir	parentheses *	** p<0.01, ** p	o<0.05, * p<0.	1.

Table 6: Fixed effects results to control for country fixed effects for a panel of 110 countries

Dependent variables	IFNI	SMCP	SMTD	SMTO	SMRT	SPVO	FMKD
Independent variables	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
The IFRS Adopters							
EXPRF	18.69	-21.04*	-46.27	-35.62	-25.82***	-16.83***	-0.45
	(0.169)	(0.059)	(0.164)	(0.464)	(0.001)	(0.004)	(0.161)
ERADF	11.28	-13.47*	-40.21*	-44.43*	-14.48**	-3.94	-0.16
	(0.184)	(0.081)	(0.069)	(0.079)	(0.045)	(0.467)	(0.575)
ERMJF	12.88	-14.12*	-26.48	-25.32	-13.85**	-3.76	-0.13
	(0.150)	(0.065)	(0.229)	(0.380)	(0.048)	(0.495)	(0.685)
LTMJF	15.19**	-3.50	13.40	-13.44	-9.37	3.89	-0.04
	(0.023)	(0.580)	(0.447)	(0.577)	(0.105)	(0.367)	(0.837)
The IFRS for listed firms							
NREQ	-19.24	7.99	-31.70	-57.53***	-31.25***	-18.70**	-2.73***
	(0.202)	(0.510)	(0.427)	(0.000)	(0.000)	(0.022)	(0.000)
NPER	-14.58	11.91	18.85	-1.62	-0.27	12.22	-0.41
	(0.317)	(0.329)	(0.634)	(0.966)	(0.973)	(0.122)	(0.389)
RFAL	-7.67	13.32	36.40	10.65	-6.83	9.79	-0.27
	(0.537)	(0.203)	(0.273)	(0.729)	(0.296)	(0.115)	(0.494)
PFAL	-9.51	9.48	17.29	0.89	-4.60	0.92	-0.46
	(0.397)	(0.326)	(0.563)	(0.970)	(0.396)	(0.858)	(0.202)
RFBI	-5.02	9.50	13.04	-5.97	-9.93*	-1.45	-0.76**
	(0.683)	(0.339)	(0.674)	(0.835)	(0.071)	(0.796)	(0.033)
EXBI	2.39	13.93	26.95	17.62	-1.55	5.34	-0.35
	(0.868)	(0.171)	(0.397)	(0.576)	(0.838)	(0.441)	(0.383)
The IFRS for unlisted firms							
NOTP	-6.86	0.52	-13.27	-59.39**	-0.72	-10.03**	-0.32
	(0.690)	(0.925)	(0.662)	(0.026)	(0.888)	(0.013)	(0.628)
RADF	-1.02	1.02	-24.12	-42.28*	-0.04	-7.87*	-0.58
	(0.954)	(0.857)	(0.372)	(0.059)	(0.995)	(0.097)	(0.384)
RBIP	-7.50	0.01	-22.36	-60.53***	3.50	-2.37	0.05
	(0.651)	(0.998)	(0.375)	(0.001)	(0.488)	(0.508)	(0.942)
PADF	-6.72	-3.26	-28.75	-65.26***	-1.51	-2.58	-0.20
	(0.666)	(0.434)	(0.219)	(0.000)	(0.735)	(0.413)	(0.760)
RFFI	-2.34	-6.38	-37.67*	-62.19***	3.42	-5.48*	-0.11
	(0.882)	(0.110)	(0.097)	(0.000)	(0.433)	(0.056)	(0.870)
RLPF	-2.64	-1.52	-37.86	-50.53***	8.14	-1.99	-0.30
	(0.908)	(0.767)	(0.111)	(0.001)	(0.285)	(0.573)	(0.658)
PEBI	-5.94	-1.22	-41.76*	-86.14***	6.13	-2.26	-0.29
	(0.733)	(0.789)	(0.081)	(0.000)	(0.298)	(0.541)	(0.659)
The IFRS for foreign firms							
NOTR	18.33	-8.51	-25.67	-8.94	4.33	0.48	-0.20
	(0.109)	(0.120)	(0.166)	(0.728)	(0.499)	(0.906)	(0.375)
RAFC	17.72*	-5.99	-15.46	8.83	3.54	-2.39	0.02
	(0.064)	(0.311)	(0.450)	(0.757)	(0.572)	(0.608)	(0.948)
PAFC	8.28	-5.94**	-12.71	0.47	0.04	0.02	-0.36**
	(0.191)	(0.036)	(0.189)	(0.972)	(0.987)	(0.997)	(0.013)
RSPO	9.27	4.09	16.29	11.82	5.12*	5.29*	0.30
	(0.381)	(0.237)	(0.225)	(0.521)	(0.095)	(0.061)	(0.138)
IFRS adoption for SMEs		• • <b>-</b>			1 (0	4 40	0.01.4.4.4
ASME	-1.12	0.87	3.66	-17.27*	1.60	-1.49	-0.21***
D 00.00	(0.755)	(0.576)	(0.561)	(0.058)	(0.636)	(0.242)	(0.007)
Dummy 08-09							
D08-09	18.35***	10.89***	44.87***	25.53***	-19.59***	3.89***	-0.17***
<u></u>	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)
Control Variables							
Geographical regions			<u> </u>		× +-		0.00
EURO	3.50	5.57	30.56	45.28**	-6.45	-2.52	0.30

1								
2								
3		(0.702)	(0.330)	(0.102)	(0.048)	(0.173)	(0.609)	(0.222)
4	LNAM	2.11	12 74**	27 79	17.56	-5 34	1.87	-0.10
5		(0.737)	(0.044)	(0.197)	(0.487)	(0.138)	(0.528)	(0.769)
6	CSAS	3 30	10 33**	32 37**	63 41***	1 12	0.97	0.07
7	Cons	(0.713)	(0.018)	(0.025)	(0,004)	(0.862)	(0.855)	(0.693)
8	FASP	12 94	9 70*	(0.023)	52 17**	-7 40*	2 17	0.38
9	EAD	(0.278)	(0.080)	(0.019)	(0.011)	(0.051)	(0.588)	(0.181)
10	MENA	12 21	(0.000)	-3 20	-17.16	-12.06	-14 30*	-0.21
10	MENA	(0.308)	(0.797)	(0.877)	(0.516)	(0.239)	(0.083)	(0.694)
17	Official language	(0.508)	(0.777)	(0.877)	(0.510)	(0.237)	(0.003)	(0.074)
12	ENGI	0.90	3 /3	10.77	-6.33	-2.03	_8 /0***	0.14
13	ENGE	(0.808)	(0.285)	(0, 277)	(0.602)	(0.212)	(0,002)	(0.412)
14 1 <i>C</i>	EDMI	(0.898)	(0.203)	(0.277)	(0.002)	(0.312)	(0.003)	(0.415)
15	FRINL	(0.222)	(0,000)	29.80	(0,200)	-4.33	-2.74	(0.252)
16	CDM	(0.252)	(0.000)	(0.037)	(0.390)	(0.170)	(0.442)	(0.552)
17	SPNL	-31.93***	(0.012)	30.52***	52.42***	-3.93	-0.13	-0.44***
18		(0.000)	(0.013)	(0.001)	(0.000)	(0.141)	(0.958)	(0.009)
19	AKBL	10.74	16.84**	//.43***	/8.13***	10.98	14.49*	0.46
20	CD1/4	(0.379)	(0.019)	(0.001)	(0.008)	(0.288)	(0.079)	(0.401)
21	GRML	18.35	5.62	24.67**	9.29	-2.63	-7.52*	0.52***
22		(0.119)	(0.268)	(0.036)	(0.579)	(0.378)	(0.052)	(0.005)
23	RUSL	13.93*	-1.12	-6.32	18.79	-2.03	5.96	-0.67**
24		(0.062)	(0.867)	(0.756)	(0.684)	(0.809)	(0.547)	(0.010)
25	Colonial history							
26	NEVC	14.56*	15.95***	46.14***	38.34***	2.38	1.63	0.50***
27		(0.057)	(0.000)	(0.000)	(0.003)	(0.419)	(0.552)	(0.007)
28	BRTC	-5.13	-0.26	-0.18	-6.49	1.33	-4.88	0.48**
29		(0.571)	(0.947)	(0.989)	(0.693)	(0.707)	(0.201)	(0.022)
30	FRNC	-8.47	-16.22***	-59.74***	-62.40**	-6.12	-11.45**	-0.17
31		(0.398)	(0.008)	(0.002)	(0.020)	(0.247)	(0.034)	(0.493)
27	SPNC	37.56***	-14.93*	-67.55***	-92.8***	8.08	-11.03*	0.58
J∠ 22		(0.005)	(0.074)	(0.009)	(0.005)	(0.178)	(0.069)	(0.173)
24	PORC	-9.32	5.18	15.33	20.89	5.36	-0.18	0.59**
34 25		(0.370)	(0.434)	(0.420)	(0.328)	(0.280)	(0.975)	(0.025)
35	DUTC	19.67*	1.94	-24.62	-67.23*	-1.38	-6.08	0.41**
36		(0.063)	(0.633)	(0.143)	(0.060)	(0.769)	(0.257)	(0.045)
37	GRMC	-21.61*	-7.97	-56.45***	-84.56**	2.45	-2.15	-0.36
38		(0.078)	(0.217)	(0.001)	(0.011)	(0.659)	(0.807)	(0.407)
39	RUSC	-13.43**	-14.57***	-38.19***	-34.91**	0.17	-7.24	-0.03
40		(0.029)	(0.000)	(0.000)	(0.032)	(0.970)	(0.113)	(0.856)
41	Constant	-23.52	-11.78	-0.76	-58.7	18.63*	21.41**	4.95***
42		(0.196)	(0.345)	(0.984)	(0.171)	(0.088)	(0.014)	(0.000)
43	Observations	2200	2200	2200	2200	2200	2200	2200
44	F value	18.47***	52.90***	42.68***	35.61***	13.51***	24.53***	26.08***
45		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
46	R-squared	0.341	0.597	0.545	0.499	0.275	0.408	0.423
47	Adjusted K-squared	0.323	0.586	0.532	0.485	0.255	0.391	0.406
48	Nagelkerke R-Square	0.341	0.397	0.545	0.499	0.275	0.408	0.423
49	Sargan-Hansen Statistic	31 83**	43 89***	71 19***	60 39***	41 14***	27 16***	86 07***
50	Surgui Hunsen Suustie	(0.023)	(0.000)	(0.000)	(0.000)	(0.001)	(0.009)	(0.000)
51	Note: The variables have been ful	ly defined in T	able 1. The las	t independent c	ategorical varia	ables have beer	chosen as bas	e categories fo
<b>J</b> 1	anah group of nominal data includ	ad in the mode	1 Than value i	n noranthagas *	**	n < 0.05 * n < 0	1	

for **Note:** The variables have been fully defined in Table 1. The last independent categorical variables have been c each group of nominal data included in the model. The p-value in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. 

Table 7: The results of 2SLS estimations for a panel of 110 countries

Dependent variables	IFNI	SMCP	SMTD	SMTO	SMRT	SPVO	FMKD
Independent variables	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
The IFRS Adopters							
EXPRF	12.98	-16.44**	-27.20	-3.18	-25.10***	-13.39**	-0.04
	(0.228)	(0.011)	(0.233)	(0.928)	(0.001)	(0.022)	(0.894)
ERADF	8.71	-10.49**	-31.62*	-22.19	-13.71**	-0.55	-0.02
	(0.295)	(0.021)	(0.050)	(0.271)	(0.049)	(0.920)	(0.951)
ERMJF	10.78	-9.45**	-15.45	-2.05	-11.52*	-0.35	-0.06
	(0.172)	(0.036)	(0.311)	(0.923)	(0.086)	(0.949)	(0.803)
LTMJF	14.73**	-1.86	-9.61	-3.08	-7.77	5.11	0.07
	(0.046)	(0.580)	(0.411)	(0.842)	(0.170)	(0.231)	(0.743)
The IFRS for listed firms		. ,	<b>`</b>	. ,	· · · ·		. ,
NREQ	-13.59	7.01	-38.08	-68.64***	-24.87***	-18.32**	-2.42***
~	(0.298)	(0.532)	(0.279)	(0.000)	(0.006)	(0.018)	(0.000)
NPER	-13.14	13.88	27.53	<b>9.89</b>	2.12	15.63**	-0.17
	(0.269)	(0.217)	(0.422)	(0.766)	(0.802)	(0.039)	(0.702)
RFAL	-3.91	18.40*	52.99*	32.22	-1.90	14.22**	-0.06
	(0.717)	(0.054)	(0.054)	(0.185)	(0.788)	(0.016)	(0.881)
PFAL	-6.35	9.60	15 50	-3.52	-1 84	0.20	-0.50
1 1 112	(0.487)	(0.280)	(0.507)	(0.819)	(0.739)	(0.964)	(0.122)
RFRI	-1 23	10 50	16 33	-7 31	-6 14	-2.11	-0 69**
	(0.904)	(0.247)	(0.511)	(0.734)	(0.281)	(0.677)	(0.034)
FXRI	5 89	13.89	27 72	13 73	0.47	4 46	_0.054)
LADI	(0.623)	(0.151)	(0.324)	(0.628)	(0.953)	(0 648)	-0.50 (0 326)
The IFRS for unlisted firms	(0.023)	(0.131)	(0.324)	(0.020)	(0.955)	(0.040)	(0.520)
	_13 75	0.13	_10.21	-68 17***	_1 75	_11 5***	-0.33
NOTI	(0.270)	(0.099)	-19.21	-00.17	-4.73	-11.3	-0.55
BADE	(0.379)	(0.988)	(0.443)	(0.003)	(0.403)	(0.007)	(0.340)
KADF	-0.30	1.24	-34.97	-01.03	-5.51	-10.13**	-0.33
		(0.787)	(0.106)	(0.002)	(0.595)	(0.029)	(0.343)
KBIP	-11.43	0.06	-22.55	-62.24***	1.8/	-3.23	0.00
	(0.454)	(0.987)	(0.216)	(0.000)	(0.730)	(0.367)	(0.911)
PADF	-11.94	-1.39	-24.77	-61.12***	-0.52	-3.58	-0.13
	(0.415)	(0.622)	(0.128)	(0.000)	(0.917)	(0.250)	(0.820)
RFF1	-10.31	-5.09*	-40.11***	-59.60***	2.85	-5.45*	-0.19
	(0.479)	(0.060)	(0.009)	(0.000)	(0.565)	(0.068)	(0.711)
RLPF	-11.27	-1.95	-38.28**	-49.46***	7.40	-3.61	-0.25
	(0.577)	(0.585)	(0.036)	(0.000)	(0.364)	(0.283)	(0.656)
PEBI	-9.22	-0.60	-36.94**	-87.03***	3.52	-4.30	-0.14
	(0.558)	(0.853)	(0.030)	(0.000)	(0.564)	(0.199)	(0.797)
The IFRS for foreign firms							
NOTR	2.04	-11.62***	-25.31*	-1.69	1.80	-3.30	-0.10
	(0.820)	(0.005)	(0.091)	(0.942)	(0.775)	(0.428)	(0.642)
RAFC	5.30	-8.76*	-15.58	13.52	1.37	-5.33	0.11
	(0.503)	(0.065)	(0.389)	(0.588)	(0.833)	(0.260)	(0.693)
PAFC	5.00	-1.14	-1.94	14.94	2.20	0.63	-0.09
	(0.384)	(0.595)	(0.812)	(0.165)	(0.444)	(0.748)	(0461)
RSPO	3.82	4.94*	18.82*	17.98	4.74	5.01*	0.34**
	(0.688)	(0.076)	(0.092)	(0.251)	(0.137)	(0.057)	(0.045)
IFRS adoption for SMEs			- /	. ,		- /	. ,
ASME	8.61***	3.68***	-8.87*	-23.21***	-8.26***	-1.29	-0.02
	(0.001)	(0.003)	(0.078)	(0.002)	(0.006)	(0.204)	(0.766)
Dummy 08-09		( )	<pre></pre>			× - )	(
D08-09	4.33***	1.42***	14.20***	7.41**	-35.87***	6.70***	0.12***
	(0.005)	(0.007)	(0.000)	(0.016)	(0.000)	(0.000)	(0.000)
Control Variables	(	(	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(	(3.2.2.9)	(1100)	(2.200)
Geographical regions							
FURO	0.56	2 98	15 01	44 20*	-6 73	0.03	0.15
LUKU	(0.040)	2.30 (0.517)	(0.375)	-++.20* (0.067)	(0.176)	(0.05)	(0.15
ΙΝΙΔΙΔ	0.545)	6.01	5.00	(0.007)	(0.170)	1 99	(0.300)
LIVAW	(0.93)	(0,104)	J.70 (0.729)	4.71 (0.912)	-4.09	1.00	-0.40
CSAS	(0.8/2)	(0.104)	(0.728)	(U.812) 10 11**	(0.239)	(0.349)	(0.181)
CSAS	3.03	$0.38^{\circ}$	20.19	(0, 0, 2, 2)	-0.2/	-0.35	0.04
	(0.035)	(0.066)	(0.103)	(0.032)	(0.966)	(0.945)	(0.807)
EASP	3.24	/.44	29.49 <sup>*</sup>	$34.35^{**}$	$-1.80^{\text{TT}}$	3.11	0.07
	(0.627)	(0.109)	(0.088)	(0.011)	(0.048)	(0.435)	(0.885)
MENA	8.90	0.67	-/./1	-8.13	-12.73	-12.95	-0.48

3		(0.418)	(0.886)	(0.650)	(0.719)	(0.238)	(0.142)	(0.367)
4	Official language	(0.110)	(0.000)	(0.050)	(0.,1))	(0.230)	(0.112)	(0.507)
5	ENGL	-1.85	2.89	6.30	-6.88	-2.25	-7.80***	0.04
6		(0.738)	(0.271)	(0.440)	(0.541)	(0.420)	(0.008)	(0.801)
7	FRNL	18.03	8.20***	19.77	9.61	-5.78*	-2.69	-0.03
7		(0.276)	(0.009)	(0.148)	(0.642)	(0.093)	(0.456)	(0.951)
8	SPNL	-26.1***	8.51***	40.33***	54.20***	-4.38*	-0.03	-0.25*
9		(0.000)	(0.000)	(0.000)	(0.000)	(0.095)	(0.995)	(0.086)
10	ARBL	9.91	11.57**	61.52***	56.55***	9.54	13.46	0.33
11		(0.379)	(0.014)	(0.000)	(0.006)	(0.380)	(0.132)	(0.534)
12	GRML	20.79*	-1.01	4.22	-3.27	-3.30	-6.50	0.11
13	51.01	(0.094)	(0.836)	(0.697)	(0.821)	(0.321)	(0.101)	(0.557)
14	RUSL	3.12	-4.66	-14.43	19.83	-2.75	4.62	-0.80***
15		(0.567)	(0.370)	(0.497)	(0.6/1)	(0.712)	(0.597)	(0.002)
16	Colonial history	0.47	0.21***	26 24***	10 5 4*	2.02	0.21	0.20*
10	NEVC	9.47	9.31***	$20.24^{+++}$	$18.34^{\circ}$	2.03	(0.21)	$(0.29^{+})$
17	RRTC	(0.203)	(0.000)	(0.001)	(0.078)	(0.301)	(0.933)	(0.000)
18	BRIC	(0.292)	(0.555)	(0.703)	-3.99	(0.827)	(0.210)	(0.28)
19	FRNC	-6.33	-8 /8**	-46 43***	-30 70**	(0.027)	-8.76	-0.13
20	TAVE	(0.555)	(0.030)	(0.001)	(0.034)	(0.523)	(0.112)	(0.555)
21	SPNC	26 73**	-14 69**	-67 66***	-75 62***	6.85	-11 48**	0.39
22	Sinc	(0.035)	(0.011)	(0.001)	(0.003)	(0.245)	(0.048)	(0.293)
23	PORC	-18.44**	2.22	10.77	19.58	3.87	-2.43	0.57**
24		(0.036)	(0.553)	(0.418)	(0.277)	(0.389)	(0.588)	(0.011)
25	DUTC	9.91	-1.89	-41.22**	-66.94**	-1.18	-6.17	0.01
25		(0.289)	(0.579)	(0.032)	(0.019)	(0.806)	(0.196)	(0.972)
26	GRMC	-27.99***	-5.10	-43.31***	-69.89*	1.66	-2.88	-0.24
27		(0.009)	(0.255)	(0.009)	(0.060)	(0.808)	(0.780)	(0.579)
28	RUSC	-11.77**	-9.74***	-30.78***	-23.18	2.79	-5.19	-0.05
29		(0.038)	(0.001)	(0.003)	(0.151)	(0.522)	(0.199)	(0.833)
30	Constant	1.43	-4.00	20.76	77.09***	31.52***	24.33***	4.45***
31		(0.936)	(0.643)	(0.444)	(0.005)	(0.001)	(0.002)	(0.000)
32	Observations	2200	2200	2200	2200	2200	2200	2200
33	F value	146.3***	297.2***	723.1***	790.5***	426.2***	103.5***	516.4***
34		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
2F	Adjusted R-squared	0.382	0.688	0.596	0.554	0.132	0.398	0.493
55	The SW Chi2 test for underid	11 20***	11 20***	11 20***	11 20***	11 20444	11 20444	11 20444
30	EXPRA	11.39***	11.39***	11.39***	11.39***	11.39***	11.39***	11.39***
37		(0.003)	(0.003) 12 $44***$	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
38	ERADA	(0.001)	(0.001)	(0,001)	(0.001)	(0,001)	(0.001)	(0.001)
39	FRMIA	13 10***	13 10***	13 10***	13 10***	13 10***	13 10***	13 10***
40	LINIOT	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
41	LTMIA	42 89***	42 89***	42 89***	42 89***	42 89***	42 89***	42 89***
42		(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)
/3	The LM test of IV redundancy	280 4***	280 4***	280 4***	280 4***	280 4***	280 4***	280 4***
43		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
44	The Sargan-Hansen of overid	0.78	0.78	0.74	3.93	5.09**	4.33	5.13
45	6	(0.377)	(0.378)	(0.389)	(0.284)	(0.024)	(0.137)	(0.474)
46	The C statistic of endogeneity	174.3***	642.4***	367.6***	269.1***	3.28	93.37***	354.9***
47	C y	(0.000)	(0.000)	(0.000)	(0.000)	(0.512)	(0.000)	(0.000)
48	Reset test of omitted variables	0.35	4.64	0.70	6.70	5.85	3.08	1.11
49		(0.553)	(0.152)	(0.403)	(0.143)	(0.156)	(0.179)	(0.293)
50	Note: The variables have been operati	onally defined	in Table 1. The	last independen	nt categorical v	ariables have b	een chosen as	base categories

for each group of nominal data included in the model. The p-value in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1