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The Role of Foreign Shareholders in Disciplining Financial Reporting

ABSTRACT

We investigate the role of foreign shareholders in improving the quality of accounting information provided by firms domiciled in poor institutional quality countries. Using a sample of firms from four South-European countries (Portugal, Italy, Greece and Spain) for which we observe detailed ownership evolutions over the period 2002-2007, we find that firm-level earnings quality is positively associated with foreign shareholdings. More particularly, we show that increases in foreign ownership from firms domiciled in countries with strong institutional quality lead to a *subsequent* increase in firm-level earnings quality, while the opposite is not true. Further, we find that the improvement in earnings quality is more pronounced when we consider the effect of institutional investors. Finally, we find that the results hold before and after the introduction of the International Financial Reporting Standards (IFRS) in 2005. Combined, these results are consistent with the institutional environment and the presence of foreign ownership having a higher impact on earnings quality than a mandatory switch to better reporting standards.

JEL-classifications: G30, M40

Keywords: earnings quality; foreign investors; institutional investors; ownership structure.

1. Introduction

There is a widespread consensus that the quality of financial reporting hinges upon the institutional framework in which a firm operates. Prior studies show that the pervasiveness of earnings management is increasing in the incentives and opportunities to extract private control benefits and is decreasing in the presence of strong institutional mechanisms to protect investors' rights (Leuz et al. 2003, Gopalan and Jayaraman, 2012). Consistent with this view, Ball et al. (2003) find that the institutional framework, and not just the quality of accounting standards, affects the quality of the financial reporting. The current study builds upon and expands this stream of literature by examining the role that foreign shareholders play in shaping the financial reporting quality of firms domiciled in countries with a weak institutional framework.

In particular, we examine whether foreign shareholders domiciled in countries with strong institutional quality contribute to curbing firm-level earnings management in the firms in which they participate and that are domiciled in countries with weak institutional quality. There is evidence that the presence of foreign shareholders based in the US and in other countries with strong investor protection improves firm-level corporate governance mechanisms of firms domiciled in countries with weak investor protection (Aggarwal et al. 2011). However, the evidence on the outcomes of such improvements in corporate governance so far remains undocumented. In this paper, we directly analyze one of the expected outcomes of improved corporate governance: higher quality accounting numbers. Consistent with the arguments in Aggarwal et al. (2011), we conjecture that, for firms domiciled in countries with weak institutional quality, an increase in foreign ownership from strong institutional quality countries is associated

with a subsequent increase in firm level earnings quality. We also expect this effect of foreign investors on earnings quality to be more pronounced if institutional investors are involved, since this type of investors are claimed to have superior monitoring capabilities (Chung et al. 2002; Ferreira and Matos 2008; Aggarwal et al. 2011).

In our empirical tests we focus on four Southern European countries: Portugal, Italy, Greece and Spain. We select these countries because they have substantial foreign direct ownership holdings (FESE 2008) but at the same time rank relatively low in investor protection mechanisms and other institutional features relative to the U.S., the UK and other developed countries (La Porta et al., 1998, 2000; Djankov et al., 2008). These Southern European countries are often viewed as a cluster of low governance-ranked countries in many respects and prior literature has found that, on average, firms domiciled in these countries are more likely to engage in earnings management than firms in other developed countries (Bhattacharya et al. 2003; Leuz et al. 2003; Leuz 2010).

Consistent with the view that these countries are perceived as having a weak institutional design and poor reporting practices, the financial press often refers to them with the pejorative acronym "PIGS". Nevertheless, the economic activity in these countries has been growing fast over the last decade and foreign shareholdings have followed this trend. At the same time, these countries have been typically considered as being more stable and culturally closer to developed markets like the U.S., United Kingdom or Germany, than other high-growth countries like Brazil, Russia, India or China (the so-called "BRIC" countries). Also, even if the institutional framework is weaker in the PIGS than in other developed countries, they are all European-Union

countries and thus follow EU-wide regulations, making the legal and institutional framework substantially better than in developing countries. Thus, we believe the PIGS are an interesting case to study, as they have "de jure" a good institutional framework that is backboned by the European Union, but that weak implementation and lax enforcement of regulations might lead to a weaker than expected "de facto" institutional quality.

We study changes in foreign and domestic ownership for the four countries under study over the time-period 2002-2007 and find that increases in foreign ownership from shareholders located in countries with strong institutional quality lead to a subsequent increase in firm-level earnings quality. We measure earnings quality using a discretionary accruals estimation procedure especially designed for small samples, like in DeFond and Park (2001) and Francis and Wang (2008). We obtain consistent results if we apply the Jones (1991) accruals model. To address the concern that these results might be attributable to foreign investors investing only in firms with either good corporate governance provisions or high quality accounting numbers (Leuz et al., 2009), we employ causality tests in the spirit of Granger (1969). We find that increases in ownership by firms from strong institutional quality countries lead to subsequent increases in earnings quality, while the opposite is not true. Our results are stronger when foreign shareholders are institutional investors, and hold for the periods before and after the implementation of the International Financial Reporting Standards (IFRSs), which became compulsory in the four countries under study in 2005.

The combination of these results suggests that foreign shareholdings from high institutional quality countries results into positive spill-overs for the financial reporting quality outcome; and especially so when the monitoring abilities of shareholders are high

– like is the case with institutional investors. These results are consistent with the findings of Denis and Huizinga (2004) that high quality foreign ownership may act as a substitute for poor local institutions. Moreover, our results suggest that the effect of foreign shareholders on reporting outcomes in weak institutional countries outweighs the foreseen positive effects of a mandatory switch to higher quality accounting standards.

Our study contributes to the literature in a number of ways. We add to the international evidence on the impact of ownership structure on the properties of accounting numbers (Fan and Wong, 2002; Haw et al. 2004; Wang 2006; Gopalan and Jayaraman, 2012). We focus on an issue that has not been analyzed in prior studies: whether foreign ownership from countries with high institutional quality contributes to an improvement in the quality of accounting numbers. Consequently, we contribute to the emerging literature on the impact of foreign shareholders on corporate decision-making. Our results are in line with those in Aggarwal et al. (2011) and Ramalingegowda and Yu (2012) who find that increases in shareholders' monitoring capabilities lead to positive governance outcomes, and which in our case materializes in improved earnings quality.

In summary, our results show that foreign shareholders do not necessarily select international investment opportunities on high quality financial reporting criteria but that once an investment decision is made, foreign investors from high institutional quality countries are able to internalize the good institutions of their home-country and monitor their participated firms in such a way that the financial reporting quality is positively affected. This may help them in making future investment decisions with respect to the dedicated capital and new investments of the respective firms.

The remainder of the paper is set out as follows. In Section 2 we review prior literature and develop our hypotheses. In Section 3 we present the research design. In Section 4 we present the results. Finally, Section 5 summarizes and concludes.

2. Literature and Hypotheses Development

Despite the general consensus about institutional factors shaping the average financial reporting quality in an economy (Ball et al. 2000, 2003; Leuz et al. 2003), there are very little insights into how specific economic agents would be influential enough for improving the financial reporting quality at the firm-level in countries with weak enforcement and/or poor investor protection mechanisms. To the best of our knowledge, there is no prior evidence about the impact of foreign shareholders in shaping the financial reporting quality of firms located in weak institutional quality settings, and whether this impact varies depending on the country of origin of the foreign shareholder.[1]

There exists, however, related evidence on the interaction between foreign ownership and firm-level corporate governance. Aggarwal et al. (2011) for instance document that institutional investors based in countries with strong protection for minority shareholder rights are the main drivers of improvements in governance outside of the U.S., while institutions from countries with weak shareholder rights are not. While Aggarwal et al. (2011) also address outcomes of these improvements in corporate governance (such as the probability of dismissing poorly performing CEOs and the effects on firm value) they do not address whether corporate governance effects

[1] There is prior evidence however on the association between ownership structure and earnings quality. Warfield et al. (1995) and Wang (2006) document that managerial and family ownership, respectively, are associated with higher earnings quality. Also, Beuselinck et al. (2009) and Katz (2009) document that private equity shareholdings positively affect the accounting quality of portfolio firms.

introduced by foreign shareholders affect actual outcomes such as financial reporting practices and quality. It is however important to learn about these outcomes because the effects of improved financial reporting quality have been shown to be non-trivial and could lead to improved pricing and non-pricing conditions for debt contracts (Bharath et al., 2008) and a lower cost of debt and equity in general (Francis et al., 2005).

In a recent paper, Gormley et al. (2012) show that firms may adhere to higher accounting quality in an attempt to satisfy the information needs of foreign providers of capital. In particular, the aforementioned authors analyze and find that Indian firms increased conservatism as a response to the entrance of foreign banks in the country. Improved financial reporting quality is especially important for foreign banks entering a new market since these rely to a large extent on the information in the financial statements to make loan-granting decisions and to subsequently monitor the firm, while domestic banks use other soft sources of information and place less weight in the financial statements for their decision-making processes.

Although the information needs of equity holders might differ from those of banks, we expect that the arguments in Gormley et al. (2012) also hold for foreign equity holders. Foreign equity holders (being it individual or institutional equity holders) are also at an informational disadvantage vis-à-vis domestic equity holders in that their access to other "soft" information sources can be more complicated.[2] As a consequence, we expect foreign shareholders to demand and enforce better quality accounting information so that they can better monitor and closely follow the firm. This may be a

[2] In a related paper, Malloy (2005) shows that, even within the US, analysts geographically closer to the firm they follow issue more accurate forecasts. His evidence is consistent with equity investors that are close to the firm enjoying informational advantages.

particular concern when the institutional quality in the foreign-entity country is inferior to the one that applies in the home country. At the same time, foreign investors are more likely to "vote with their feet" or take other types of actions against management. Again, this will especially be true if foreign shareholders come from a high institutional quality country. This expectation is in line with the arguments in Aggarwal et al. (2011) that foreign ownership, and especially ownership from high institutional quality countries contributes to better governance provisions. In the context of our study, we expect a positive effect of foreign, high institutional quality origin ownership over a particular channel through which improved corporate governance is manifested: better quality accounting numbers. In particular, we predict this effect to be especially valid when the risk for receiving low quality information is highest, namely when foreign investments are domiciled in relatively weak institutional quality countries (in this case the selected four countries: Portugal, Italy, Greece and Spain). This combination of conjectured effects results into our first hypothesis:

> *H1: Foreign shareholder ownership from strong institutional quality countries positively impacts earnings quality of firms domiciled in weak institutional quality countries.*

Despite the evidence that firm-level corporate governance provisions improve thanks to the monitoring and activism of foreign investors (Aggarwal et al., 2011) and that the presence of institutional investors leads to future improvements in governance (Bushee et al., 2010), the concern exists that foreign investors might initially only select firms where they already observe good corporate governance mechanisms or, as in the specific case of our study, high quality accounting numbers. Leuz et al. (2009) show that foreign investors avoid investing in firms domiciled in weak enforcement countries if

these are subject to potential governance problems. In a similar vein, Giannetti and Simonov (2006) and Chung and Zhang (2011) show that, on average, different categories of non-connected investors (individual and institutional investors; domestic and foreign investors) have a preference for well governed firms. Given this evidence, we conduct causality analyses in our empirical tests in the spirit of Granger (1969) to investigate whether high institutional quality foreign investments drive improvements in financial reporting quality rather than the other way around.

We also consider whether the improvement in earnings quality driven by an increase in foreign, high institutional quality origin shareholdings (H1) is more pronounced when these increases in foreign ownership are coming from shareholdings owned by institutions. Prior literature (Chung et al., 2002; Ramalingegowda and Yu, 2012, among others) argues that institutional investors have the motivation and the skills to monitor the financial reporting process in their participated companies, and finds that the presence of institutional investors is associated with lower earnings management and increased conservatism. Given these enhanced monitoring abilities of institutional investors, we expect that foreign institutional ownership from strong investor protection countries will contribute to larger improvements in the quality of the accounting numbers of their participated firms domiciled in weak-enforcement countries. This leads to our second hypothesis:

> *H2: Foreign institutional investor ownership contributes more to earnings quality improvements for firms domiciled in weak institutional quality countries compared to foreign, non-institutional investor ownership.*

3. Research design

To explore whether the presence of foreign shareholders, domiciled in either strong or non-strong institutional quality countries, affects the quality of the earnings of their participated firms in Portugal, Italy, Greece and Spain, we estimate a model of changes in earnings quality on changes in the percentage of foreign ownership and controls. In the model we distinguish between foreign ownership from strong versus less strong institutional quality countries. The model is as follow:

$$\begin{aligned}\Delta EQ_{j,t} = \alpha &+ \beta_1 \Delta ForeignStrong_{j,t} + \beta_2 \Delta ForeignOthers_{j,t} + \\ &+ \beta_3 \Delta Size_{j,t} + \beta_4 \Delta Lev_{j,t} + \beta_5 \Delta Profitability_{j,t} + \beta_6 \Delta NumAnal_{j,t} \\ &+ \beta_7 NegEPS_{j,t} + \beta_8 Xlist_{j,t} + \beta_9 MAD_{j,t} + \beta_{10} TPD_{j,t} + \\ &+ \Sigma_y \beta_y Yeardummy_{y,j,t} + \Sigma_i \beta_i Industrydummy_{i,j,t} + \\ &+ \Sigma_c \beta_c Countrydummy_{c,j,t} + \varepsilon_{j,t}\end{aligned} \quad (1)$$

where *EQ* is a proxy for earnings quality. We describe the different proxies used for measuring earnings quality in Section 3.1. *ForeignStrong* is the proportion of ownership held by foreign investors from countries with strong institutional quality. *ForeignOthers* refers to the proportion of ownership from investors from all other countries. In Section 3.2 we describe how we assign countries to the strong versus other institutional quality groups. The main coefficients of interest in Equation (1) are β_1 and β_2. We expect a positive and significant β_1, consistent with foreign shareholders from strong institutional quality countries contributing to enhanced earnings quality. However, we do not expect a similar earnings quality impact from foreign shareholders from non-strong institutional quality countries. Consequently, we expect β_2 to be insignificantly different from zero. In line with prior literature (for example, Ferguson et al., 2004; Francis and Wang, 2008) we control for other firm-specific factors that may affect accounting quality.

We control for firm size (*Size*), measured through the natural logarithm of total assets, because prior studies document that large firms are more visible, and, thus,

manage earnings less. Leverage (*Lev*) is measured as the ratio of long term debt to total assets. Leverage controls for debt contracting pressures and it is expected that a higher leverage ratio indicates a higher probability of debt covenant violation which in itself creates an incentive for more earnings management. *Profitability*, measured as the fractional rank of return on assets, controls for performance effects on discretionary accruals. A dummy variable (*NegEPS*) takes the value of 1 if the firm reported negative earnings in the previous year and serves as a proxy for financial distress and bankruptcy risk and therefore is an incentive to increase reported earnings in the subsequent year (Francis and Wang, 2008).

We also include the number of analysts following the firm (*NumAnal*), and a dummy variable (*Xlist*) taking value 1 if the firm has ADRs listed in the U.S., and 0 otherwise. These variables control for a firm's information environment. While findings from Dechow et al. (2000) and Matsumoto (2002) suggest that analyst following results into increased benchmark beating pressures and, thus, increases the likelihood of earnings management, Yu (2008) shows that analyst coverage refrains earnings management behavior. We therefore do not predict a particular direction for the coefficient on analyst following. In line with the arguments in Leuz and Verrecchia (2000), we expect cross listed firms to have higher financial reporting quality, since ADR firms are subject to the stricter U.S. litigation environment and are required to provide US GAAP reconciliations under the form of 20-F filings.[3]

[3] Note that the 20-F reconciliation requirement is no longer obligatory for IFRS filers post-2007. More precisely, In December 2007, the SEC ruled that it would begin accepting foreign private issuers' financial statements prepared under International Financial Reporting Standards (IFRS) as adopted by the IASB without requiring reconciliation to US GAAP *starting* fiscal years ending after November 15, 2007. During

In addition to the firm-specific controls above, we also control for the introduction of two European Union Directives (EU regulations) that might affect the incentives and probabilities of engaging in earnings management: the Market Abuse Directive (MAD) and the Transparency Directive (TPD). These two directives were implemented in each EU country at a different date. Christensen et al. (2011) find that the implementation of both directives increased liquidity and reduced cost of capital. Both effects are consistent with an improvement in the information environment that is likely to be unrelated to changes in foreign shareholdings. To control for this country-specific time effect that may materialize into earnings quality, we create two additional dummy variables, *MAD* and *TPD*. They take the value 1 if in a given year the directive was enforced in the country under analysis and 0 otherwise. Finally, we also include year, industry and country dummies. All continuous variables enter the regression in changes specifications and the dummy variables in levels.

Acknowledging the fact that foreign investors may have a preference for firms with better governance mechanisms (e.g., Leuz et al., 2009), and for firms that use high quality accounting standards like US GAAP or IFRS (Bradshaw et al., 2004; Covrig et al., 2007), we analyze whether the flow of causality goes from foreign shareholders to financial reporting quality, as we hypothesize, and not vice-versa. We therefore perform causality tests, in the spirit of Granger (1969), of the following form:

$$\Delta EQ_{j,t} = \alpha + \beta_1 \Delta ForeignStrong_{j,t-1} + \beta_2 \Delta ForeignStrong_{j,t-2} + \beta_3 \Delta EQ_{j,t-1} + \\ + \beta_4 \Delta EQ_{j,t-2} + \beta_5 \Delta ForeignOthers_{j,t} + \Phi Controls + \varepsilon_{j,t} \quad (2a)$$

$$\Delta ForeignStrong_{j,t} = \alpha + \beta_1 \Delta ForeignStrong_{j,t-1} + \beta_2 \Delta ForeignStrong_{j,t-2} +$$

the period of investigation, however, foreign firms with ADRs listed on US stock exchanges were required to provide 20-F reconciliations.

$$\beta_3 \Delta EQ_{j,t-1} + \beta_4 \Delta EQ_{j,t-2} + \beta_5 \Delta ForeignOthers_{j,t} + \Phi\ Controls + \varepsilon_{j,t} \quad (2b)$$

where all variables, including the vector of control variables, are defined as in Equation (1). These leads-lags tests are in line with those in Aggarwal et al. (2011).

Finally, to test hypothesis H2 and to explore whether foreign institutional ownership contributes more to earnings quality improvements in weak institutional quality countries compared to foreign non-institutional ownership, we re-run Equation (1) and additionally distinguish between institutional and non-institutional foreign shareholders. Also here, we perform Grange-type causality tests.

3.1. Earnings quality measures

In our empirical tests, we employ two measures of earnings quality. First, we employ a proxy for discretionary accruals especially designed for small samples, because cross-sectional accruals models estimated on an country-industry basis may suffer from small sample biases. This proxy is based on the linear expectation model employed in DeFond and Park (2001) and Francis and Wang (2008) and uses a firm's own prior year current and long-term accruals in calculating the expectation benchmark. As such, it is not based on comparisons with the behavior of (industry) peers and uses a firm as its own control. We select this variable as our main measure of earnings quality. As a robustness check, we also employ discretionary accruals from the Jones (1991) model, estimated in cross-section. Consistent results across both earnings management proxies should provide comforting evidence on the documented relations.

Regarding the first proxy, especially suited for small samples, we follow Francis and Wang (2008), and calculate predicted accruals as:

Predicted accruals= {[Sales in year t ×(current accruals in year t-1/sales in year t-1)]- [gross PPE in year t × × (depreciation in year t-1/gross PPE in year t-1)]}/ / total assets in year t-1. (3)

Discretionary accruals are the difference between firm's total accruals in year *t*, and the predicted total accruals for year *t*. Because our tests care about the magnitude of earnings management rather than its direction, we use absolute values of discretionary accruals as the variable of interest. To ease the interpretation we multiply the absolute values by minus one so that larger values (i.e., less negative) correspond to better earnings quality. We refer to this proxy as EQ_{FW}.

As a second proxy for earnings quality we use the residuals from the Jones (1991) model, with estimations performed at the country-industry-year level as follows:

$$\frac{TA_{j,t}}{Assets_{j,t-1}} = \alpha_{i,j}\left[\frac{1}{Assets_{j,t-1}}\right] + \beta_{i,j}\left[\frac{\Delta REV_{j,t}}{Assets_{j,t-1}}\right] + \gamma_{i,j}\left[\frac{PPE_{j,t}}{Assets_{j,t-1}}\right] + \varepsilon_{j,t} \quad (4)$$

where: $TA_{j,t}$ is firm j's total accruals in year *t*; $Assets_{j,t}$ is firm j's total assets in year *t*; $\Delta REV_{j,t}$ is firm j's change in revenues between year *t*-1 and *t*; $PPE_{j,t}$ is firm j's gross Property, Plant and Equipment in year *t*.[4]

We estimate equation (4) separately for each country-industry by year, and take the Fama and French 12 industry classifications to construct our groups.[5] We require a minimum of 7 observations for estimations at the country-industry-year level. Then, for each firm *j*, we calculate the discretionary accruals as:

[4] With total accruals calculated as $\Delta CA_{j,t} - \Delta CL_{j,t} - \Delta Cash_{j,t} + \Delta STDEBT_{j,t} - \Delta DEPN_{j,t}$; $\Delta CA_{j,t}$ is firm j's change in current assets between year t-1 and year t; $\Delta CL_{j,t}$ is firm j's change in current liabilities between year t-1 and year t; $\Delta Cash_{j,t}$ is firm j's change in cash between year t-1 and year t; $\Delta STDEBT_{j,t}$ is firm j's change in debt in current liabilities between year t-1 and year t; $\Delta DEPN_{j,t}$ is firm j's depreciation and amortization expense in year t.

[5] http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/det_12_ind_port.html

$$DACC_t = \frac{TA_{j,t}}{Assets_{j,t-1}} - \left(\hat{\alpha}_{i,j} \left[\frac{1}{Assets_{j,t-1}} \right] + \hat{\beta}_{i,j} \left[\frac{\Delta REV_{j,t}}{Assets_{j,t-1}} \right] + \hat{\gamma}_{i,j} \left[\frac{PPE_{j,t}}{Assets_{j,t-1}} \right] \right) \quad (5)$$

where $\hat{\alpha}_J, \hat{\beta}_J, \hat{\gamma}_J$ are the fitted coefficients from model (4). We use the absolute values of *DACC*, again multiplied by -1 so that larger values correspond to better earnings quality, as our second proxy for earnings quality. Also here, we multiply by minus one for interpretation purposes so that larger (i.e., less negative) values of the proxy correspond to better earnings quality. We refer to this second proxy as EQ_{JONES}.

3.2. Classifying foreign investors in ForeignStrong and ForeignOthers

The classification of the proportion of foreign ownership among foreign investors from countries with strong investor protection (*ForeignStrong*), and foreign investors from other countries (*ForeignOthers*) is performed as follows. We use the Worldwide Governance Indicators (WGIs) of Kaufmann, Kraay and Mastruzzi (2009) to create a country-level institutional quality index. The governance indicators contain six dimensions that reflect a country's institutional quality: (1) Voice and Accountability, (2) Political Stability and Absence of Violence/Terrorism, (3) Government Effectiveness, (4) Regulatory Quality, (5) Rule of Law, and (6) Control of Corruption. The use of the Kaufmann et al. (2009) index is becoming common in international accounting research. Examples include Daske et al. (2008) and Landsman, Maydew and Thornock (2012).

We rank the 200 countries available in the Kaufmann et al. (2009) study for each of the six dimensions, and calculate the mean of the six rankings for each country. We then rank all countries according to this mean, and we label the top 10% of countries with the highest average rankings as countries with strong institutional quality. We, thus, focus

on investments coming from countries with a very high institutional quality and in any case substantially higher than the one in Portugal, Italy, Greece and Spain. We denote as *ForeignStrong* the equity stake (%) owned by investors from countries classified as countries within the top 10% institutional quality worldwide. For the countries classified as strong, the ones that hold equity stakes in the PIGS are (in alphabetical order): Australia, Austria, Belgium, Canada, Denmark, Germany, Ireland, Luxembourg, the Netherlands, Norway, Sweden, Switzerland, United Kingdom and United States of America. We recode the equity stakes owned by foreign investors from all other countries as *ForeignOthers*.[6]

We also distinguish between institutional and non-institutional investors. We label shareholdings by pension funds, insurance companies and mutual funds as institutional holdings. We denote as *InstForeignStrong* the equity stake (%) owned by institutional investors from countries classified as countries with high institutional quality (classified as described above). We denote as *InstForeignOthers* the equity stake (%) owned by foreign institutional investors from all other countries.

3.3. Sample Selection

For the purpose of our analyses, we focus on listed firms from four EU countries: Portugal, Italy, Greece and Spain. We extract financial statement data from all listed

[6] One could argue that the 10% cutoff may seem rather *ad hoc* in nature and that the strong institutions cluster excludes specific countries with higher-ranked institutions than in Portugal, Italy, Greece and Spain (which rank on places 35, 62, 57 and 39, respectively, out of 200). The only two countries with significant stakes of ownership in the PIGS and that might generate doubts as to whether their institutions are stronger than in the PIGS, are France and Japan. We conduct sensitivity tests where we re-classify these two countries from non-strong to strong institutional quality countries and the results do not change qualitatively.

firms from those four countries available in the Amadeus database (© Bureau Van Dijk) for the period 2002 to 2007, with the necessary data to calculate the earnings quality measures and all variables needed for our tests. For each year in our sample period (2002-2007), we additionally gather ownership data for all listed firms included in the yearly tapes (December issues) of the Amadeus ownership database of Bureau van Dijk. This compilation procedure is necessary because the ownership variable is treated as a static variable and overwritten in Amadeus updates.

Ownership data is based on voting shares and comes from official country bodies; from Bureau Van Dijk associated information providers; or is obtained directly from annual reports. For each firm that we observe at least once in the database, we identify all shareholders for each available year. Consistent with Denis and Huizinga (2004), we calculate ownership measures based on direct shareholdings, i.e. ownership that investors hold directly rather than through related parties. We classify as institutional investors all shareholdings belonging to the categories (1) Pension fund/Trust; (2) Financial company and (3) Insurance company.

We then merge our database with I/B/E/S to measure analyst following. We use the Worldwide Governance Indicators (WGI) of Kaufmann, Kraay and Mastruzzi (2009) to classify countries among strong versus weak shareholder protection. Finally, we require a constant sample for reasons of comparability. All of these data requirements lead to a final sample consisting of 1,590 firm-year (265 firms) observations, corresponding to 198 Portuguese (12.5%), 612 Italian (38.5%), 372 Greek (23.4%) and 408 (26.6%) Spanish firm-years.

INSERT TABLE 1 HERE

Table 1 reports detailed WGI scores for 2007 for the four countries under study and compare them with the United States, the United Kingdom, the OECD average, the EU15 (EU countries before the enlargement to Eastern Europe) average and the BRIC (Brazil, Russia, India and China) cluster average. These statistics confirm the claim that, on average, Portugal, Italy, Greece and Spain score low on all dimensions compared to all other groups of countries, except compared to the BRIC countries. Within the cluster of PIGS, Italy ranks lowest on 4 out of 6 categories. The average values of the BRIC countries are substantially worse than the values of any of the PIGS, for all of the individual attributes.

4. Results

4.1. Descriptive Statistics

Table 2, Panel A reports the evolution of the average foreign ownership for all firms in each country over the sample period, and Panel B presents the evolution of institutional ownership, broken down according to whether institutional investors are either domestic, foreign from a high institutional quality country, or foreign from other countries. Panel A further splits the proportion of foreign ownership across each category (*ForeignStrong* and *ForeignOther*) by the respective country of origin.

For the four countries studied, we find that the top 10% of institutional quality countries account for about 30 percent of the foreign investments (=7.32% compared to 24.07%). Further, we observe that the UK (1.97%), the Netherlands (1.73%) and the U.S. (0.92%) are among the top-3 foreign high institutional quality investor countries. However, on average, these ownership proportions are smaller than those from the top-3

countries in the *ForeignOther* countries: France (3.42%); Italy (3.18%) and Spain (3.00%). Finally, it is noteworthy that foreign investments are coming from both other European countries as well as overseas countries.[7]

The proportion of foreign shareholders (Panel A) is increasing over the 6 years considered (2002-2007), from 18.66% of ownership in 2002 (5.94 corresponding to countries with strong institutional quality countries; 12.72 to all other countries) to 27.09% in 2007 (8.83% for strong institutional quality countries; 18.26% for all other countries). We observe in Panel B that foreign institutional shareholdings account for less than 10 percent of total foreign ownership for our sample firms, representing about 2 percent of total ownership in all years. Also, the proportion of domestic institutional shareholdings fluctuates between fairly modest levels of 2.9 and 4.3 percent.

INSERT TABLE 2 HERE

In Table 3 we present the descriptive statistics of the main variables of interest. Foreign ownership at the firm level varies substantially, between 0 percent and close to 100 percent. Less than half of the sample firms have foreign shareholders from strong enforcement countries, and also less than half have institutional investors. With respect to the earnings quality proxies, we observe mean and median values (both -0.03) very much in line with prior work.[8] Both mean and median log-transformed total assets equal 19.4, which corresponds to about a quarter billion Euro. Mean (median) leverage equals 16%

[7] These detailed country ownership statistics also indicate that a specific proportion of foreign investments come from so-called tax havens (i.e., [in order of importance] Luxembourg and Switzerland for the *ForeignStrong* sample and Cyprus, Monaco, Bermuda, Cayman Islands, British Virgin Islands, Andorra, Gibraltar, Singapore and Mauritius for the *ForeignOther* sample). Results are consistent when we exclude investments from tax-haven countries from our analyses.

[8] Recall that these values are negative because we multiply the absolute value of discretionary accruals by minus one so that larger values (i.e. less negative) indicate higher earnings quality.

(13%), indicating that our sample firms have fairly modest leverage ratios. Median profitability, measured as net income scaled by total assets, equals 0.05. An average value of 12.10 suggests the variable is substantially influenced by positive outliers and calls for the use of a normalized variable in our multivariate tests. Further, 14 percent of sample firms report a negative EPS. On average, 5.8 analysts follow the firms under analysis (median=2) and the maximum analyst following is 40. Finally, we observe that 20 percent of all firms are cross-listed on a U.S. stock exchange.

In Panel B, we present country means of the variables of interest. Greek firms have the highest level of foreign shareholdings (37.11 percent), followed by Italian (24.34 percent), Spanish (16.68 percent) and Portuguese firms (13.52 percent). These numbers are generally in line with Denis and Huizinga (2004) who report country averages for a larger EU sample for 1996 to 2000. Further, Spain ranks highest on the proportion of foreign shareholdings from strong institutional quality countries (9.2 percent). With respect to investor type, we observe that Greek firms have the lowest levels of institutional holdings (2.5 percent), while Portuguese firms have the highest levels (almost 8 percent). However, almost all institutional shareholdings of Portuguese firms are domestic. Finally, Spain also has the highest level of foreign institutional shareholders domiciled in countries with strong institutions.

Further, we observe the lowest levels of earnings quality in Greece (-0.05 for EQ_{FW} and -0.06 for EQ_{JONES}). The largest firms are located in Spain (mean of 20.9, about 1.2 billion Euro) and Portuguese sample firms have the highest leverage levels (22.2 percent). Italian and Portuguese firms have more negative EPS years (slightly more than 20 percent of the observations). Portuguese sample firms are cross-listed in more than

one quarter of the observations. In line with the findings that Spanish firms are on average larger, we observe the highest analyst following for Spanish firms (mean=10.4). Finally, MAD and TPD are indicator variables that capture for a given year and a given country, when the Market Abuse and Transparency European Union Directives were enforced. Italy did not enforce the transparency directive over our period of observation (mean=0) and Portugal was the last enforcing the market abuse directive (mean=0.36 versus 0.50 for Greece and Spain).

INSERT TABLE 3 and 4 HERE

We present correlations between our variables of interest in Table 4. Although the correlation of the two earnings quality proxies with foreign investments from strong institutional quality countries is positive, it is only significant when we use the EQ_{FW} proxy. When we focus on foreign institutional investors from strong institutional quality countries, we observe a positive correlation with both EQ_{JONES} and EQ_{FW}. Foreign investor ownership from strong institutional quality countries is also positively correlated with size, accounting performance and analyst following.

4.2 Regression results

INSERT TABLE 5 HERE

In Table 5, we show the results of the estimation of model (1), where we regress the change in earnings quality (either EQ_{FW}, in Columns 1 and 2, or EQ_{JONES}, in Columns 3 and 4) on changes in foreign ownership held by investors from strong enforcement countries (*ForeignStrong*). The coefficient of Δ*ForeignStrong* is positive and significant (0.41; $p<0.01$, in Column 1, where we consider the Francis and Wang proxy for earnings

management, and 0.22; p<0.01, in Column 3, where we use the Jones model). In columns 2 and 4 we also introduce change in the percentage of ownership held by the remaining foreign investors (Δ*ForeignOther*). In both columns, the coefficient on Δ*ForeignOther* is not significant at conventional levels. This result is consistent with our first hypothesis, and confirms that only increases in the percentage of ownership held by foreign investors from strong institutional quality countries lead to increases in earnings quality. With respect to the control variables, we find that only the size control (*ΔSize*), and the profitability related controls (*ΔProfitabilility* and *ΔNegEPS*) have an impact on earnings quality changes. However, the magnitude and significance depends upon the proxy for earnings quality employed.

INSERT TABLE 6 HERE

In Table 6 we analyze the causality flows that lead to the positive relation between changes in foreign ownership from high institutional quality countries and changes in earnings quality documented in Table 5. To do so, we estimate models (2a) and (2b), where we formally analyze whether it is the change in earnings quality that causes changes in foreign investments; or whether it is the change in foreign investments that leads to changes in earnings quality, as we hypothesize. To perform these tests, we first estimate regression (2a) and assess the joint significance of β_1 and β_2. For the Francis and Wang (2008) measure of earnings quality (columns 1 and 2), we find that the p-value of $\beta_1=0$, $\beta_2=0$ equals 0.0000, and the p-value of $\beta_1+\beta_2=0$ equals 0.0002. As both tests are highly significant, this provides comforting evidence that an increase in ownership from investors from countries with strong institutional quality countries causes an increase in earnings quality in a Granger (1969) sense. Then, we estimate regression (2b) and test the

joint significance of β_3 and β_4 to observe whether our results suffer from reverse causality. The p-value of $\beta_3=0$, $\beta_4=0$ equals 0.5970, and the p-value of $\beta_3+\beta_4=0$ equals 0.9580. This evidence indicates that changes in earnings quality do not lead to (i.e., do not cause in a Granger sense) increases in ownership from investors domiciled in high institutional quality countries. Combined, our results show that the causality flows from changes in ownership from investors from high institutional quality countries to earnings quality changes, and not vice versa. We find similar results when we use the Jones (1991) model to estimate earnings quality (columns 3 and 4).

INSERT TABLE 7 HERE

In Table 7 we test for H2; i.e., whether the results documented in Tables 5 and 6 are stronger in the case of institutional investors. To do so, we split the main explanatory variable in those two tables (Δ*ForeignStrong*), into Δ*InstForeignStrong* and Δ*NonInstForeignStrong*. In the first column of Panel A, where we consider the Francis and Wang (2008) proxy for earnings quality, the coefficient for Δ*InstForeignStrong* is 0.85 ($p<0.01$), which is almost double the size of the coefficient for Δ*NonInstForeignStrong* (0.41; $p<0.01$). Although both coefficients are significant, the results suggest that the largest impact arises when institutional investors from foreign high quality countries are increasing their shareholdings. These results support our conjecture that especially institutional investors may be able to induce higher earnings quality increases in their participated firms. At the same time, and potentially equally important, these results also indicate that the positive earnings quality effect from foreign investors from high institutional quality countries is not entirely driven by foreign institutional investors. Results are robust to the use of the Jones (1991) earnings quality

proxy, and to the inclusion in the model of changes in the ownership of other foreign shareholders (Panel A, columns 2, 3 and 4).

In Table 7 Panel B we replicate the causality tests in Table 6 taking into account the differential effect of institutional ownership. The results confirm that the causality flows from changes in ownership to changes in earnings quality, and not vice-versa. β_1 and β_2 are positive and significant ($p<0.01$) in model 2a (first column), and β_3 and β_4 are not significant at conventional levels in model 2b (second column). Also, the values of the coefficient of ownership changes in model 2a are always larger for institutional investors as compared to non-institutional investors. Results hold for both the Francis and Wang (2008) and Jones (1991) proxies for earnings quality.

Finally, in unreported tests, we also replicate the tests in Table 7 Panels A and B considering only the equity stakes of foreign institutional investors. That is, we drop foreign non-institutional investors from the set of explanatory variables. We do so as the correlation between the stakes of foreign institutional and foreign non-institutional investors are correlated. The results are in line with those reported in Table 7.

4.3 IFRS-related effects

As an additional analysis, we investigate whether the mandatory adoption of International Financial Reporting Standards (IFRS), which took place in 2005 in the four countries under study, affects the relations described in H1 and H2. Prior research suggests that the adoption of IFRS by European firms contributed to increase the quality of accounting numbers (Barth, Landsman and Lang, 2008). Recent studies by Garcia Osma and Pope (2010) and Landsman, Maydew and Thornock (2012), however, document that the

increased quality in financial reporting is not homogenous across all adopting countries and is negatively related to the quality of a country's institutional setting.

In particular, Garcia Osma and Pope (2012) find that, on average, the institutional and market forces that shape preparers incentives continue to dominate the reporting habits, leading to unequal IFRS earnings quality effects. Consistent with this result, Daske et al. (2008) show that only firms from strong enforcement countries benefit from a reduction in cost of capital and a lower bid-ask spread upon the adoption of IFRS. This is consistent with the idea that the institutional framework and proper enforcement mechanisms are more important than the standards in shaping the financial reporting quality in a given country (Ball et al., 2003). Provided this evidence and the fact that for our sample firms reporting quality may be hit by this mandatory accounting switch around 2005, we investigate the IFRS effect in more detail.

In particular, we study whether the monitoring role of foreign shareholders from countries with strong enforcement is more important in explaining improvements in earnings quality than the mandatory, country-wide switch to IFRS in 2005. This additional test serves two goals. First, it is a robustness test to eliminate the possibility that our results would be affected by uncontrolled market-wide events that may impact the overall earnings quality. Second, this test can provide preliminary evidence about the importance of foreign shareholders acting as a substitute for poor institutional quality (Denis and Huizinga, 2004).

To study these issues, we split the sample into two subsamples: pre-adoption of IFRS (2002-2004) and post-adoption of IFRS (2006-2007), and re-estimate model (1). Table 8, Panel A, contains the results of estimating the model for the two subperiods.

Results when we use the Francis and Wang (2008) proxy (columns 1 and 2) show that the coefficient on the main variable of interest, (Δ*ForeignStrong*), is significantly positive and relatively stable in both the pre- and post-IFRSs period. Pre-IFRS it is 0.435 ($p<0.05$). Post-IFRS it is 0.408 ($p<0.02$). The difference in the coefficients in the pre- and post-IFRS period is not significant at conventional levels ($p= 0.91$). The results are similar (columns 3 and 4) if we use the Jones (1991) proxy for earnings quality. Results are also similar when we include in the model separately the stakes of institutional and non-institutional investors (Table 8, Panel B). The coefficient on Δ*InstForeignStrong*, is positive and significant in both the pre- and post-IFRSs period. Pre-IFRS it is 0.488 ($p<0.01$). Post-IFRS it is 0.380 ($p<0.01$). Again, the difference in the coefficients in the pre- and post-IFRS period is not significant at conventional levels ($p=0.24$). Results also hold for the Jones (1991) earnings quality proxy (columns 3 and 4). Overall, our results are consistent with foreign shareholders from strong-enforcement countries playing a role in improving accounting quality both before and after IFRS adoption.

4.4. Additional Tests

We performed several sensitivity analyses to test the robustness of our findings. A first analysis relates to the ranking of countries according to their institutional quality. In the tests that are reported in the paper, we use the 2007 ranking of countries based upon the 6 WGI indicators. Country scores on institutional quality however change over time (Kaufmann et al. 2009). We therefore rank the countries according to their 2002 institutional quality and results remain unaltered.

Second, we pay particular attention to the endogeneity issue that may affect our results. While our Granger (1969) type analyses indicate that the relation goes from changes in foreign ownership to changes in earnings quality and not the other way around, we additionally perform a Heckman (1979) selection model (levels specification). In particular, we run a 2-stage model where the first step models the determinants of foreign investments[9]. We then add the inverse Mills ratio in our second stage model and test for the relation between foreign ownership and earnings quality, thereby ruling out the potential endogeneity in the observed relation. Results are consistent with the ones obtained in our main analyses, both for *ForeignStrong* and *InstForeignStrong*.

Third, we replicate all of our tests dropping the year 2005 from the sample. We do so as firms implemented accounting changes in 2005 due to the shift from local standards to IFRS and these accounting reconciliations might unduly affect the measures of earnings quality for 2005. This might be especially problematic in the case of the proxies based in Francis and Wang (2008), as they use the firm in the prior year as benchmark. To avoid this problem we replicate all tests dropping 2005 and all of the previously described results hold. Inferences do not change.

Finally, we analyze whether results also hold if we consider only US foreign investors. We do so since Aggarwal et al. (2011) suggest that U.S. investors are the ones that are better prepared to monitor their participated foreign firms. For our sample, however, we do not find a significant result for foreign U.S. investors in isolation. A

[9] Determinants of the first step are *Size (natural logarithm of total assets), Profitability (net income scaled by total assets), Xlist (a cross-listing dummy), NumAnal* (analyst following) and *Distance* between local-GAAP and IFRS, measured as the number of IAS rules differing from local-GAAP in 2001, which we take from Bae, Tan and Welker (2008).

potential reason for this is that U.S. investors only hold small proportions for the studied sample (average of 0.92 percent over the period under study) and that their shareholdings are relatively stable over time.

5. Conclusions

We investigate whether firms domiciled in European countries with comparatively weak institutions (we focus on Portugal, Italy, Greece and Spain) improve their accounting numbers if they have foreign shareholders domiciled in countries with a strong institutional framework. We expect that differences in ownership origin will lead to differences in the quality of financial reporting, due to differences in the monitoring that these shareholders may be able to perform. At the same time, because of the superior regulatory and institutional framework at home, foreign shareholders from strong institutional quality countries may be better equipped to demand and impose improved monitoring mechanisms, leading to improved accounting numbers.

Our results are generally consistent with this expectation. At the same time, we also find an economically stronger effect for institutional investors, consistent with the conjecture that especially institutional investors have superior monitoring abilities. However, the survival of the results for non-institutional investors from high institutional quality countries suggests that the ability to internalize good institutions from the home country is true for different types of foreign investors. Our results hold before and after the mandatory implementation of IFRS. We interpret this result as being consistent with the institutional environment and the presence of foreign ownership having a higher

impact on ex post earnings quality than a country-wide mandatory switch to better reporting standards.

Our study is one of the first that advances the understanding on how corporate ownership structures and ownership origin affect the quality of accounting numbers in an international setting. Our results are important for various market participants and suggest that foreign investments from high to low institutional quality countries may not only lead to improved capital availability, but can also have positive spill-overs on the average financial reporting quality in an economy. Interesting additional questions may relate to the mechanisms through which foreign investors achieve this higher reporting quality. We leave this question for future research.

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7. Tables

Table 1
Regulatory Quality Indicators

Country (Rank)	Voice and accountability	Political stability and absence of violence	Government effectiveness	Regulatory quality	Rule of law	Control of corruption
Greece (57)	0.96	0.49	0.64	0.87	0.80	0.26
Italy (62)	1.09	0.46	0.30	0.87	0.37	0.22
Portugal (35)	1.24	0.77	0.85	1.10	1.01	0.96
Spain (39)	1.10	-0.15	0.95	1.21	1.10	1.00
PIGS Average	**1.10**	**0.39**	**0.69**	**1.01**	**0.82**	**0.61**
EU 15	1.35	0.90	1.53	1.50	1.54	1.63
UK (15)	1.33	0.52	1.67	1.85	1.70	1.72
US (17)	1.09	0.23	1.58	1.50	1.60	1.29
OECD	1.30	0.96	1.59	1.49	1.50	1.65
BRICs Average	-0.44	-0.72	-0.04	-0.20	-0.45	-0.52

This table presents the Worldwide Governance Indicators (WGI) for six broad dimensions of governance in 2007 as reported in Kaufman et al. (2009): (1) Voice and Accountability, (2) Political Stability and Absence of Violence, (3) Government Effectiveness, (4) Regulatory Quality, (5) Rule of Law, and (6) Control of Corruption, in Greece, Italy, Portugal and Spain. US, UK, OECD, EU 15 and BRICs (Brazil, Russia, India and China) are presented for comparative purpose. Between brackets we report the weighted institutional quality rank for individual countries (not for country groups). Ranks are to be interpreted as follows: a rank of 1 suggests the country ranks highest on the weighted WGI institutional quality score. There are 200 countries that enter the ranking procedure (Kaufman et al. 2009). The six dimensions of governance in the WGI are defined as followed (data definitions from Kaufman et al., 2009: (1) Voice and Accountability – measuring the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. (2) Political Stability and Absence of Violence – measuring perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism. (3) Government Effectiveness – measuring the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. (4) Regulatory Quality – measuring the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. (5) Rule of Law – measuring the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence. (6) Control of Corruption – measuring the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. The units in which governance is measured are standardized and lie between -2.5 and 2.5, with higher scores corresponding to better outcomes (Kaufman et al., 2009).

Table 2: Ownership by shareholder type (annual means)

Panel A: By country of origin (mean)

Variable	ALL	2002	2003	2004	2005	2006	2007
ForeignStrong	**7.32**	**5.94**	**6.44**	**7.10**	**7.04**	**8.55**	**8.83**
UK	*1.97*	*1.72*	*1.74*	*1.79*	*1.75*	*2.25*	*2.56*
Netherlands	*1.73*	*1.56*	*1.56*	*1.72*	*1.72*	*1.98*	*1.84*
U.S.	*0.92*	*0.68*	*0.80*	*0.92*	*0.89*	*1.16*	*1.04*
Luxembourg	*0.74*	*0.54*	*0.64*	*0.72*	*0.72*	*0.86*	*0.98*
Switzerland	*0.69*	*0.54*	*0.60*	*0.73*	*0.73*	*0.80*	*0.75*
Germany	*0.48*	*0.35*	*0.39*	*0.43*	*0.43*	*0.58*	*0.72*
Belgium	*0.28*	*0.20*	*0.25*	*0.29*	*0.30*	*0.31*	*0.32*
Ireland	*0.20*	*0.13*	*0.19*	*0.19*	*0.19*	*0.24*	*0.24*
Denmark	*0.13*	*0.08*	*0.09*	*0.12*	*0.12*	*0.17*	*0.18*
Sweden	*0.07*	*0.07*	*0.10*	*0.09*	*0.09*	*0.04*	*0.04*
Norway	*0.05*	*0.03*	*0.03*	*0.04*	*0.04*	*0.07*	*0.07*
Canada	*0.04*	*0.02*	*0.03*	*0.04*	*0.04*	*0.04*	*0.04*
Australia	*0.02*	*0.01*	*0.01*	*0.01*	*0.01*	*0.03*	*0.02*
Austria	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.02*	*0.02*
ForeignOthers	**16.75**	**12.72**	**14.98**	**18.50**	**18.45**	**17.58**	**18.26**
France	*3.42*	*2.74*	*3.28*	*3.66*	*3.66*	*3.54*	*3.65*
Italy	*3.18*	*2.26*	*2.72*	*3.43*	*3.46*	*3.58*	*3.65*
Spain	*3.00*	*1.98*	*2.43*	*3.42*	*3.42*	*3.31*	*3.42*
Portugal	*1.56*	*1.48*	*1.51*	*1.57*	*1.65*	*1.49*	*1.64*
Cyprus	*1.01*	*0.25*	*0.88*	*1.23*	*1.23*	*1.25*	*1.24*
Japan	*0.97*	*0.75*	*0.75*	*1.32*	*1.34*	*0.82*	*0.82*
Mexico	*0.92*	*0.88*	*0.88*	*0.89*	*0.92*	*0.99*	*0.98*
Greece	*0.91*	*0.87*	*0.88*	*0.89*	*0.93*	*0.93*	*0.93*
Brazil	*0.84*	*0.61*	*0.63*	*0.96*	*0.96*	*0.92*	*0.95*
Libya	*0.17*	*0.21*	*0.22*	*0.22*	*0.06*	*0.06*	*0.22*
Peru	*0.11*	*0.21*	*0.21*	*0.21*	*0*	*0*	*0*
Romania	*0.10*	*0.13*	*0.11*	*0.18*	*0.18*	*0*	*0*
Monaco	*0.09*	*0.08*	*0.12*	*0.12*	*0.08*	*0.07*	*0.05*
Bermuda	*0.05*	*0*	*0*	*0.01*	*0.08*	*0.09*	*0.09*
United Arab Emirates	*0.04*	*0.04*	*0.04*	*0.04*	*0.04*	*0.04*	*0.04*
Cayman Islands	*0.04*	*0.03*	*0.04*	*0.04*	*0.04*	*0.04*	*0.04*
South Africa	*0.04*	*0*	*0.03*	*0.05*	*0.05*	*0.05*	*0.05*
British Virgin Islands	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0*	*0.02*
Togo	*0.02*	*0*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*
Andorra	*0.02*	*0*	*0*	*0*	*0.03*	*0.03*	*0.03*
Thailand	*0.02*	*0*	*0*	*0*	*0.03*	*0.03*	*0.03*
Kuwait	*0.01*	*0*	*0.01*	*0.01*	*0.01*	*0.02*	*0.02*
Gibraltar	*0.01*	*0*	*0*	*0*	*0*	*0.03*	*0.03*
Singapore	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0*
Hungary	*0.01*	*0*	*0*	*0*	*0*	*0.02*	*0.03*
China	*0.01*	*0*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
Hong Kong	*0.01*	*0.01*	*0.01*	*0.01*	*0*	*0*	*0.01*
Mauritius	*0.01*	*0.01*	*0.01*	*0.01*	*0*	*0*	*0.01*
Argentina	*0.01*	*0*	*0*	*0*	*0.03*	*0*	*0*
Israel	*0.01*	*0*	*0*	*0*	*0.01*	*0.01*	*0.01*
Others	*0.19*	*0.15*	*0.16*	*0.17*	*0.18*	*0.22*	*0.27*

Panel B: Institutional investors by country of origin (mean)

Variable	ALL	2002	2003	2004	2005	2006	2007
InstForeignStrong	1.73	1.61	1.73	1.59	1.39	2.02	2.00
InstForeignOthers	0.14	0.07	0.02	0.02	0.23	0.17	0.34
InstDomestic	3.51	3.59	3.76	4.29	3.54	3.15	2.94

Table 2 presents the mean ownership proportion by different shareholder groups during 2002-2007. Panel A presents the development of mean ownership, in percentages in the total sample. Panel B presents the development of mean institutional ownership in the total sample. *ForeignStrong* is the equity stake (%) owned by investors from countries classified as high institutional quality countries. *ForeignOthers* is the equity stake (%) owned by investors from countries not classified as as high institutional quality countries. *InstForeignStrong* is the equity stake (%) owned by institutional investors from high institutional quality countries . *InstForeignOthers* is the equity stake (%) owned by institutional investors from countries not classified as high institutional quality countries. *InstDomestic* is the equity stake (%) owned by domestic institutional investors.

Table 3: Descriptive statistics

Panel A: Full Sample

Variable	Mean	Std Dev	Min	Median	Max
ForeignStrong	7.32	14.04	0	0	97.00
ForeignOthers	16.76	23.86	0	4.87	96.90
InstForeignStrong	1.73	5.42	0	0	53.59
InstForeignOthers	0.14	1.54	0	0	33.34
InstDomestic	3.51	10.56	0	0	82.79
EQ_{FW}	-0.03	0.02	-1.60	-0.04	0
EQ_{JONES}	-0.03	0.07	-1.00	-0.01	0
Size	19.37	2.15	10.62	19.36	25.41
Lev	0.16	0.14	0.00	0.13	0.71
Profitability(raw)	12.10	25.72	-0.11	0.05	85.5
NegEPS	0.14	0.35	0	0	1
Xlist	0.20	0.40	0	0	1
NumAnal	5.80	7.78	0	2	40
MAD	0.48	0.50	0	0	1
TDP	0.11	0.31	0	0	1

Panel B: By country of origin (means)

Variable	Greece	Italy	Portugal	Spain
Number of firms	62	102	33	68
ForeignStrong	5.34	8.25	4.44	9.16
ForeignOthers	31.77	16.09	9.08	7.52
InstForeignStrong	2.00	1.09	0.42	3.05
InstForeignOthers	0.28	0.09	0.29	0.03
InstDomestic	0.22	4.36	6.93	3.67
EQ_{FW}	-0.05	-0.03	-0.02	-0.03
EQ_{JONES}	-0.06	-0.03	-0.02	-0.01
Size	18.26	19.63	17.64	20.83
Lev	0.17	0.12	0.22	0.19
Profitability(frank)	51.72	50.39	51.23	50.37
NegEPS	0.07	0.24	0.20	0.06
Xlist	0.14	0.23	0.27	0.18
NumAnal	3.54	4.46	4.60	10.44
MAD	0.5	0.5	0.36	0.5
TDP	0.17	0	0.18	0.16

Table 3 presents the descriptive statistics of the dependent and independent variables. Panel A reports detailed statistics for the full sample and Panel B reports means by country. *ForeignStrong* is the equity stake (%) owned by investors from countries classified as countries with high institutional quality. *ForeignOthers* is the equity stake (%) owned by investors from countries not classified as countries with high institutional quality. *InstForeignStrong* is the equity stake (%) owned by institutional investors from countries classified as high institutional quality countries. *InstForeignOthers* is the equity stake (%) owned by institutional investors from countries not classified as high institutional quality countries. *InstDomestic* is the equity stake (%) owned by domestic institutional investors. EQ_{FW} is calculated as the absolute value of the total accruals minus predicted total accruals as in Francis and Wang (2008) and is multiplied by minus one so that larger values correspond to higher earnings quality. EQ_{JONES} is calculated as the absolute value of the residual of the Jones (1991) accruals model as applied to total accruals and further is multiplied by minus one so that larger values correspond to higher earnings quality. *Size* is the natural logarithm of total assets. *Lev* is measured as the ratio of long term debt to total assets. *Profitability(raw)* is the raw value of return on assets (panel A) and *Profitability(frank)* is the fractional rank of the return on assets variable (Panel B). *NegEPS* is a dummy variable taking the value of 1 if the firm experienced negative earnings in the previous year, and 0 otherwise. *Xlist* is a dummy variable taking the value of 1 if the firm has ADRs listed in the U.S., and 0 otherwise. *NumAnal* is the number of analyst following of the firm. *MAD*: Market Abuse Directive (Christensen, Hail and Leuz, 2011). *TPD*: Transparency Directive (Christensen, Hail and Leuz, 2011).

Table 4: Pairwise correlations

Variable		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1)	EQ_{FW}	1												
(2)	EQ_{JONES}	**0.34**	1											
(3)	ForeignStrong	**0.05**	0.03	1										
(4)	ForeignOthers	-0.03	-0.04	**-0.17**	1									
(5)	InstForeignStrong	**0.05**	0.00	**0.28**	**-0.05**	1								
(6)	InstForeignOthers	**0.03**	**0.05**	**-0.06**	**-0.12**	**-0.10**	1							
(7)	InstDomestic	0.00	-0.00	0.00	**0.06**	-0.03	**-0.04**	1						
(8)	Size	**0.06**	**0.05**	**0.05**	**-0.16**	**0.08**	**0.07**	-0.02	1					
(9)	Lev	0.04	**0.06**	-0.03	**-0.06**	0.00	0.03	-0.02	**0.15**	1				
(10)	Profitability	**0.04**	0.03	**0.05**	-0.02	**0.08**	0.04	-0.00	**0.24**	0.03	1			
(11)	NegEPS	**-0.04**	-0.04	**-0.08**	0.02	-0.04	0.01	0.00	**-0.14**	**-0.11**	**-0.54**	1		
(12)	Xlist	-0.01	-0.02	0.00	**-0.05**	-0.03	0.00	**0.09**	**0.13**	**0.11**	0.03	0.01	1	
(13)	NumAnal	**0.04**	**0.05**	**0.05**	**-0.12**	**0.08**	**0.07**	-0.00	**0.46**	**0.25**	**0.47**	**-0.21**	**0.15**	1

Table 4 presents the correlations of the dependent and independent variables. The correlations in bold are significant at the 5% level or less. *ForeignStrong* is the equity stake (%) owned by investors from countries classified as countries with high institutional quality. *ForeignOthers* is the equity stake (%) owned by investors from countries not classified as high institutional quality countries. *InstForeignStrong* is the equity stake (%) owned by institutional investors from countries classified as high institutional quality countries. *InstForeignOthers* is the equity stake (%) owned by institutional investors from countries not classified as high institutional quality countries. *InstDomestic* is the equity stake (%) owned by domestic institutional investors. EQ_{FW} is calculated as the absolute value of the total accruals minus predicted total accruals as in Francis and Wang (2008), also multiplied by minus one. EQ_{JONES} is calculated as the absolute value of the residual of the Jones (1991) accruals model as applied to total accruals, multiplied by minus one. *Size* is the natural logarithm of total assets. *Lev* is measured as the ratio of long term debt to total assets. *Profitability* is the return on assets fractional rank. *NegEPS* is a dummy variable taking the value of 1 if the firm experienced negative earnings in the previous year, and 0 otherwise. *Xlist* is a dummy variable taking the value of 1 if the firm has ADRs listed in the U.S., and 0 otherwise. *NumAnal* is the number of analyst following of the firm.

Table 5: Regression of Changes in Earnings Quality on Changes in Foreign Ownership

		$\Delta(EQ_{FW})$	$\Delta(EQ_{FW})$	$\Delta(EQ_{JONES})$	$\Delta(EQ_{JONES})$
Variable	Expected sign	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*
ΔForeignStrong	+	0.4094 *(0.006)*	0.4119 *(0.006)*	0.2211 *(0.010)*	0.2217 *(0.012)*
ΔForeignOther	0		0.0019 *(0.805)*		0.0005 *(0.937)*
ΔSize		0.4646 *(0.000)*	0.4651 *(0.000)*	0.0650 *(0.113)*	0.0650 *(0.114)*
ΔLev		0.0230 *(0.740)*	0.0228 *(0.742)*	0.0516 *(0.137)*	0.0516 *(0.137)*
ΔProfitability		-0.1972 *(0.095)*	-0.1981 *(0.093)*	-0.0594 *(0.255)*	-0.0591 *(0.251)*
ΔNumAnal		0.0044 *(0.384)*	0.0043 *(0.382)*	0.0037 *(0.407)*	0.0037 *(0.404)*
Xlist		0.1907 *(0.381)*	0.1909 *(0.381)*	0.1557 *(0.140)*	0.1557 *(0.141)*
NegEPS		-0.4266 *(0.108)*	-0.4265 *(0.108)*	-0.2392 *(0.025)*	-0.2393 *(0.025)*
MAD		0.9662 *(0.160)*	0.9723 *(0.159)*	0.4744 *(0.133)*	0.4744 *(0.136)*
TPD		0.1498 *(0.725)*	0.1498 *(0.725)*	0.3180 *(0.175)*	0.3180 *(0.175)*
Control year		Yes	Yes	Yes	Yes
Control country		Yes	Yes	Yes	Yes
Control industry		Yes	Yes	Yes	Yes
Cluster firm		Yes	Yes	Yes	Yes
Cons		0.4120 *(0.482)*	0.4180 *(0.478)*	0.3194 *(0.238)*	0.3180 *(0.242)*
Adj-R^2		0.0661	0.0654	0.0231	0.0231

ForeignStrong is the equity stake (%) owned by investors from countries classified as countries with high institutional quality. *ForeignOthers* is the equity stake (%) owned by investors from countries not classified as high institutional quality countries. EQ_{JONES} is calculated as the absolute value of the residual of the Jones (1991) accruals model as applied to total accruals, multiplied by minus one. EQ_{FW} is calculated as the absolute value of the total accruals minus predicted total accruals as in Francis and Wang (2008), multiplied by minus one. *Size* is the natural logarithm of total assets. *Lev* is measured as the ratio of long term debt to total assets. *Profitability* is the return on assets fractional rank. *NumAnal* is the number of analyst following of the firm. *Xlist* is a dummy variable taking the value of 1 if the firm has ADRs listed in the U.S., and 0 otherwise. *NegEPS* is a dummy variable taking the value of 1 if the firm experienced negative earnings in the previous year, and 0 otherwise. *MAD*: Market Abuse Directive (Christensen, Hail and Leuz, 2011). *TPD*: Transparency Directive (Christensen, Hail and Leuz, 2011).

Table 6: Granger causality test

		$\Delta(EQ_{FW})$	$\Delta ForeignStrong$	$\Delta(EQ_{JONES})$	$\Delta ForeignStrong$
Variable		Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*
$\Delta ForeignStrong_{t-1}$	β_1	0.7186 *(0.000)*	-0.1991 *(0.012)*	0.0916 *(0.329)*	-0.2022 *(0.010)*
$\Delta ForeignStrong_{t-2}$	β_2	0.2159 *(0.128)*	-0.1476 *(0.004)*	0.1554 *(0.008)*	-0.1494 *(0.001)*
ΔEQ_{t-1}	β_3	0.3014 *(0.000)*	-0.0157 *(0.558)*	0.4307 *(0.000)*	-0.0001 *(0.996)*
ΔEQ_{t-2}	β_4	0.1526 *(0.010)*	0.0182 *(0.557)*	0.1149 *(0.066)*	0.0173 *(0.599)*
$\Delta ForeignOthers$		0.0126 *(0.341)*	-0.0231 *(0.000)*	0.0078 *(0.366)*	-0.0156 *(0.037)*
Controls		Yes	Yes	Yes	Yes
Control year		Yes	Yes	Yes	Yes
Control country		Yes	Yes	Yes	Yes
Country industry		Yes	Yes	Yes	Yes
Cluster firm		Yes	Yes	Yes	Yes
Cons		-0.5820 *(0.748)*	0.0316 *(0.903)*	-0.2955 *(0.274)*	0.1133 *(0.651)*
Adj-R^2		0.0993	0.0884	0.1331	0.0905
p-value $\beta_1=0$, $\beta_2=0$		0.0000		0.0281	
p-value $\beta_1 + \beta_2=0$		0.0002		0.0471	
p-value $\beta_3=0$, $\beta_4=0$			0.5970		0.8516
p-value $\beta_3 + \beta_4=0$			0.9580		0.7476

ForeignStrong is the equity stake (%) owned by investors from countries classified as countries with high institutional quality. *ForeignOthers* is the equity stake (%) owned by investors from countries not classified as high institutional quality countries. EQ_{JONES} is calculated as the absolute value of the residual of the Jones (1991) accruals model as applied to total accruals, multiplied by minus one. EQ_{FW} is calculated as the absolute value of the total accruals minus predicted total accruals as in Francis and Wang (2008), multiplied by minus one. *Size* is the natural logarithm of total assets. *Lev* is measured as the ratio of long term debt to total assets. *Profitability* is the return on assets fractional rank. *NumAnal* is the number of analyst following of the firm. *Xlist* is a dummy variable taking the value of 1 if the firm has ADRs listed in the U.S., and 0 otherwise. *NegEPS* is a dummy variable taking the value of 1 if the firm experienced negative earnings in the previous year, and 0 otherwise. *MAD*: Market Abuse Directive (Christensen, Hail and Leuz, 2011). *TPD*: Transparency Directive (Christensen, Hail and Leuz, 2011).

Table 7: Institutional vs. Non-Institutional Foreign Shareholders

Panel A: Earnings quality and the role of Institutional and Non-Institutional Foreign Shareholders

		$\Delta(EQ_{FW})$	$\Delta(EQ_{FW})$	$\Delta(EQ=_{JONES})$	$\Delta(EQ=_{JONES})$
Variable	Expected sign	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*
ΔInstForeignStrong	+	0.8497 *(0.000)*	0.8523 *(0.000)*	0.3757 *(0.001)*	0.3763 *(0.001)*
ΔInstForeignOthers	?		0.0466 *(0.855)*		0.0323 *(0.853)*
ΔNonInstForeignStrong	+	0.4149 *(0.005)*	0.4175 *(0.005)*	0.2231 *(0.009)*	0.2236 *(0.011)*
ΔNonInstForeignOthers	?		0.0022 *(0.779)*		0.0005 *(0.926)*
ΔSize	+	0.4563 *(0.000)*	0.4568 *(0.000)*	0.0680 *(0.451)*	0.0678 *(0.453)*
ΔLev	+	0.0145 *(0.835)*	0.0136 *(0.845)*	0.0546 *(0.126)*	0.0551 *(0.123)*
ΔProfitability	-	-0.1875 *(0.115)*	-0.1890 *(0.112)*	-0.0628 *(0.225)*	-0.0625 *(0.224)*
NegEPS	-	-0.4314 *(0.103)*	-0.4311 *(0.104)*	-0.2375 *(0.026)*	-0.2377 *(0.026)*
Xlist	+	0.2119 *(0.329)*	0.2119 *(0.329)*	0.1632 *(0.125)*	0.1630 *(0.126)*
ΔNumAnal	+	0.0048 *(0.782)*	0.0047 *(0.787)*	0.0039 *(0.388)*	0.0038 *(0.387)*
MAD	+	0.9106 *(0.181)*	0.9193 *(0.176)*	0.4940 *(0.116)*	0.4909 *(0.120)*
TPD	+	0.1378 *(0.746)*	0.1407 *(0.741)*	0.3138 *(0.180)*	0.3159 *(0.175)*
Control year		Yes	Yes	Yes	Yes
Control country		Yes	Yes	Yes	Yes
Control industry		Yes	Yes	Yes	Yes
Cluster firm		Yes	Yes	Yes	Yes
Cons		1.2377 *(0.271)*	1.2436 *(0.269)*	0.3469 *(0.196)*	0.3445 *(0.202)*
Adj-R^2		0.0796	0.0783	0.0295	0.0281

Panel B: Granger test on the relation of earnings quality and the role of Institutional and Non-Institutional Foreign Shareholders

		$\Delta(EQ_{FW})$	$\Delta InstForeignStrong$	$\Delta(EQ_{JONES})$	Δ *InstForeignStrong*
Variable		Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*
ΔInstForeignStrong $_{t-1}$	β_1	1.0831 *(0.000)*	-0.6709 *(0.000)*	-0.0392 *(0.743)*	-0.6673 *(0.000)*
ΔInstForeignStrong $_{t-2}$	β_2	0.2362 *(0.416)*	-0.3476 *(0.000)*	-0.0236 *(0.828)*	-0.3484 *(0.000)*
ΔNonInstForeignStrong $_{t-1}$		0.4863 *(0.000)*	0.0476 *(0.012)*	0.1153 *(0.163)*	0.0497 *(0.010)*
ΔNonInstForeignStrong $_{t-2}$		-0.1351 *(0.373)*	-0.0331 *(0.109)*	0.0857 *(0.277)*	0.0334 *(0.105)*
ΔEQ_{t-1}	β_3	0.5273 *(0.000)*	0.0148 *(0.235)*	0.4324 *(0.000)*	0.0232 *(0.162)*
ΔEQ_{t-2}	β_4	0.0551 *(0.535)*	0.0085 *(0.620)*	0.1061 *(0.085)*	-0.0034 *(0.818)*
Controls		Yes	Yes	Yes	Yes
Control year		Yes	Yes	Yes	Yes
Control country		Yes	Yes	Yes	Yes
Country industry		Yes	Yes	Yes	Yes
Cluster firm		Yes	Yes	Yes	Yes
Cons		0.3430 *(0.542)*	0.0727 *(0.566)*	0.2638 *(0.313)*	0.0765 *(0.543)*
Adj-R^2		0.2050	0.3708	0.1411	0.3714
p-value β_1=0, β_2=0		0.0000		0.9398	
p-value $\beta_1 + \beta_2$=0		0.0098		0.7320	
p-value β_3=0, β_4=0			0.4514		0.3743
p-value $\beta_3 + \beta_4$=0			0.3914		0.3480

InstForeignStrong is the equity stake (%) owned by institutional investors from countries classified as high institutional quality countries. *InstForeignOthers* is the equity stake (%) owned by institutional investors from countries not classified as high institutional quality countries. *NonInstForeignStrong* is the equity stake (%) owned by non-institutional investors from countries classified as high institutional quality countries. *NonInstForeignOthers* is the equity stake (%) owned by non-institutional investors from countries not classified as high institutional quality countries. EQ_{JONES} is calculated as the absolute value of

the residual of the Jones (1991) accruals model as applied to total accruals, multiplied by minus one. EQ_{FW} is calculated as the absolute value of the total accruals minus predicted total accruals as in Francis and Wang (2008), multiplied by minus one. *Size* is the natural logarithm of total assets. *Lev* is measured as the ratio of long term debt to total assets. *Profitability* is the return on assets fractional rank. *Xlist* is a dummy variable taking the value of 1 if the firm has ADRs listed in the U.S., and 0 otherwise. *NumAnal* is the number of analyst following of the firm. *NegEPS* is a dummy variable taking the value of 1 if the firm experienced negative earnings in the previous year, and 0 otherwise. *MAD*: Market Abuse Directive (Christensen, Hail and Leuz, 2011). *TPD*: Transparency Directive (Christensen, Hail and Leuz, 2011).

Table 8.

Panel A: Effects of Foreign Shareholders on Earning Quality before and after IFRS adoption

		$\Delta(EQ_{FW})$		$\Delta(EQ_{JONES})$	
		Pre-IFRS	*Post-IFRS*	*Pre-IFRS*	*Post-IFRS*
Variable	Expected sign	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*
ΔForeignStrong *(β_1)*	+	0.4350 *(0.038)*	0.4084 *(0.016)*	0.3023 *(0.049)*	0.1859 *(0.027)*
ΔForeignOthers	?	0.0009 *(0.934)*	0.0057 *(0.609)*	0.0083 *(0.361)*	-0.0058 *(0.492)*
Controls		Yes	Yes	Yes	Yes
Control country		Yes	Yes	Yes	Yes
Control industry		Yes	Yes	Yes	Yes
Cluster firm		Yes	Yes	Yes	Yes
Cons		1.8220 *(0.049)*	0.6638 *(0.388)*	0.2731 *(0.125)*	-0.5283 *(0.095)*
Adj-R^2		0.0443	0.0705	0.0421	0.0182
N		795	530	795	530
p-value $\beta_{1,PRE\text{-}IFRS} = \beta_{1,POST\text{-}IFRS}$		0.91		0.28	

ForeignStrong is the equity stake (%) owned by investors from countries classified as countries with high institutional quality. *ForeignOthers* is the equity stake (%) owned by investors from countries not classified as high institutional quality countries. EQ_{FW} is calculated as the absolute value of the total accruals minus predicted total accruals as in Francis and Wang (2008), multiplied by minus one. EQ_{JONES} is calculated as the absolute value of the residual of the Jones (1991) accruals model as applied to total accruals, multiplied by minus one. *Size* is the natural logarithm of total assets. *Lev* is measured as the ratio of long term debt to total assets. *Profitability* is the return on assets fractional rank . *Xlist* is a dummy variable taking the value of 1 if the firm has ADRs listed in the U.S., and 0 otherwise. *NumAnal* is the number of analyst following of the firm. *NegEPS* is a dummy variable taking the value of 1 if the firm experienced negative earnings in the previous year, and 0 otherwise. *MAD*: Market Abuse Directive (Christensen, Hail and Leuz, 2011). *TPD*: Transparency Directive (Christensen, Hail and Leuz, 2011).

Panel B: Effects of Institutional Foreign Shareholders on Earning Quality before and after IFRS adoption

		$\Delta(EQ_{FW})$		$\Delta(EQ_{JONES})$	
		Pre-IFRS	*Post-IFRS*	*Pre-IFRS*	*Post-IFRS*
Variable	Expected sign	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*	Coef. *(p-value)*
ΔInstForeignStrong *(β_1)*	+	0.4876 *(0.000)*	0.3800 *(0.004)*	0.1599 *(0.174)*	0.1551 *(0.074)*
ΔInstForeignOthers	?	-0.2589 *(0.461)*	0.1180 *(0.718)*	-0.0665 *(0.754)*	0.0681 *(0.735)*
Controls		Yes	Yes	Yes	Yes
Control country		Yes	Yes	Yes	Yes
Control industry		Yes	Yes	Yes	Yes
Cluster firm		Yes	Yes	Yes	Yes
Cons		1.6756 *(0.059)*	0.7322 *(0.348)*	0. 2785 *(0.120)*	-0.5549 *(0.085)*
Adj-R^2		0.0330	0.0604	0.0209	0.0052
N		795	530	795	530
p-value $\beta_{1,PRE\text{-}IFRS} = \beta_{1,POST\text{-}IFRS}$		0.24		0.95	

InstForeignStrong is the equity stake (%) owned by institutional investors from countries classified as countries with high enforcement. *InstForeignOthers* is the equity stake (%) owned by institutional investors from countries not classified as high institutional quality countries. EQ_{FW} is calculated as the absolute value of the total accruals minus predicted total accruals as in Francis and Wang (2008). EQ_{JONES} is calculated as the absolute value of the residual of the Jones (1991) accruals model as applied to total accruals. *Size* is the natural logarithm of total assets. *Lev* is measured as the ratio of long term debt to total assets. *Profitability* is the return on assets fractional rank . *Xlist* is a dummy variable taking the value of 1 if the firm has ADRs listed in the U.S., and 0 otherwise. *NumAnal* is the number of analyst following of the firm. *NegEPS* is a dummy variable taking the value of 1 if the firm experienced negative earnings in the previous year, and 0 otherwise. *MAD*: Market Abuse Directive (Christensen, Hail and Leuz, 2011). *TPD*: Transparency Directive (Christensen, Hail and Leuz, 2011).