

Repositório ISCTE-IUL

Deposited in Repositório ISCTE-IUL:

2022-06-15

Deposited version:

Submitted Version

Peer-review status of attached file:

Unreviewed

Citation for published item:

Santana, V., Rathke, A., Lourenço, I. & Dalmácio, F. (2014). IFRS accounting quality in Latin America: A comparison with anglo-saxon and continental European countries and the role of cross-listing in the U.S. In 2014 American Accounting Association's Annual Meeting. Atlanta: SSRN.

Further information on publisher's website:

https://eventegg.com/american-accounting-association-annual-meeting-2014/

Publisher's copyright statement:

This is the peer reviewed version of the following article: Santana, V., Rathke, A., Lourenço, I. & Dalmácio, F. (2014). IFRS accounting quality in Latin America: A comparison with anglo-saxon and continental European countries and the role of cross-listing in the U.S. In 2014 American Accounting Association's Annual Meeting. Atlanta: SSRN.. This article may be used for non-commercial purposes in accordance with the Publisher's Terms and Conditions for self-archiving.

Use policy

Creative Commons CC BY 4.0

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in the Repository
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

IFRS Accounting Quality in Latin America:

A Comparison with Anglo-Saxon and Continental European Countries and the Role of Cross-Listing in the U.S.

Verônica de Fátima Santana*, Alex Augusto Timm Rathke*, Isabel M. E. Costa Lourenço** and Flávia Zóboli Dalmácio*

*University of São Paulo
**Lisbon University Institute, University of São Paulo

2014

Abstract

This study analyses the level of IFRS accounting quality in Latin America, when compared to Anglo-Saxon and Continental European countries. It also analyses the role of cross-listing in the US when comparing the level of accounting quality of Latin American firms with foreign firms. Prior literature has focused on developed countries. There is a lack of knowledge about less developed countries, especially in Latin America, despite their relevant role on the global economy. This paper fills this gap in the literature by analysing the level of IFRS accounting quality in the main Latin American Countries applying IFRS (Brazil and Chile), when compared to the main Anglo-Saxon countries with IFRS tradition (United Kingdom and Australia), but also when compared with the main European Continental economies (France and Germany). The results show that Latin American firms present a lower level of accounting quality, even when only those firms cross-listed in the U.S., regarded as global players, are compared. Thus, even with a unique set of high quality accounting standards (IFRS) and strong reporting incentives, countries' specific characteristics still play an important role in the way as IFRS are applied.

1 Introduction

This paper examines the level of accounting quality of Latin American IFRS adopters, when compared to the main Anglo-Saxon and Continental European firms that have also adopted IFRS. Furthermore, we compare the level of accounting quality of these groups of countries regarding only those firms that are cross-listed in the U.S., usually referred as global players and identified as firms with stronger reporting incentives. Our findings show that even with a unique set of high quality accounting standards (IFRS) and strong reporting incentives (cross-listed in the US), countries' specific characteristics still play an important role in the way as IFRS are applied.

It is largely argued that IFRS increase accounting information quality due to their requirements of accounting recognition and measurement that better reflect the economic and financial position of the firm. Hence, IFRS adoption can reduce the information asymmetry and the cost of capital, increasing the capital flow across countries. However, IFRS application seems to be not the same for every country, mainly because of cultural and environmental characteristics that influence accounting practices. A global accounting standard might not be able to eliminate this influence and, thus, specific local characteristics are likely to affect the way as IFRS is adopted in each country.

Previous studies have found empirical evidence of specific country characteristics that affect the relation between IFRS adoption and accounting quality, namely, the level of enforcement and investor protection (e.g., Soderstrom & Sun, 2007; Lara, Torres, & Veira, 2008; Barth, Landsman, & Lang, 2008; Paananen, 2008; Paananen & Lin, 2009; Chen, Tang, Jiang, & Lin, 2010; Gebhardt, Novotny-Farkas, et al., 2011; Aubert & Grudnitski, 2011; Ahmed, Chalmers, & Khlif, 2013). Besides country factors, there are some firm-specific characteristics that reflects managers' incentives to prepare high quality financial statements. According to Ball, Robin, and Wu (2003), preparers' incentives depend on market and political forces, such as the amount of publicly traded equity. Some authors argument that cross listing in the United States is related to a better informational environment around a firm (M. H. Lang, Lins, & Miller, 2003) and higher accounting quality (M. Lang, Raedy, & Yetman, 2003), working as an incentive for managers and auditors do report more transparent financial statements (e.g., Barth et al., 2008; Chen et al., 2010), once the American economy consolidate the most developed capital market in the world. In this line, global player firms which operate in many countries and seek to raise funds internationally, especially in the United States, have higher incentives to report transparent financial statements that reflect their real economic activity and financial position, and a unique global accounting language, as intended by the IFRS, is even more relevant for

them. Therefore, global player firms have incentives to disclose financial statements with higher accounting quality than other firms do, and the importance of country specific cultural and economic characteristics for these firms is not so much clear.

Based on cultural and environmental differences, which are reflected in the accounting systems, the traditional accounting literature segregated the countries into three groups: Anglo-Saxon, Continental European and Latin American countries (Frank, 1979). Recent researches, although not considering Latin America, have provided evidence that the Anglo-Saxon and Continental European segregation remained the same, despite the widespread adoption of IFRS in these countries (Nobes, 2011). This finding may indicate that IFRS have different impacts on accounting quality depending on specific cultural and environmental variables of each country.

Some Latin American countries have adopted IFRS in the recent years, but its relationship with accounting quality has not yet been extensively examined. Latin America's importance to the global economy is a growing issue in current years, since a significant recovery from late 2008 world economic instability. This region has presented a significant real GDP growth up to the third quarter of 2013, of near 3.0%, together with a latent increase of the participation on worldwide economic development (International Monetary Fund, 2013).

It is also important to note the recent economic integration that Latin America has been passing through, namely the market liberalization and institutional reforms that led to expansion strategies of international banks and foreign direct investment decisions by multinational enterprises. Treviño and Mixon Jr (2004) split this reform into two phases. In the first one, the interest rates are determined by market forces, allowing the development of areas such as leasing and factoring, brokerage underwriting and pension fund management. The second phase came with reforms in the regulatory environment, creating a less uncertain investment climate, opening the door for foreign resources. As a consequence, the amount of foreign direct investment has increased substantially, (Mortimore, 2000; Zhang, 2001; Trevino, Thomas, & Cullen, 2008), specially from the United States (Tuman & Emmert, 2004). The capital flow through Latin America also happens through the growing number of firms issuing American Depositary Receipts, specially in the 1990s (Karolyi, 2004). In 2013, Latin American firms represent 21% of the total amount of the ADR trading volume (J. P. Morgan, 2013).

The importance of the Latin American countries to the global economy highlights the need for including them in the accounting literature of the IFRS era. In this study, we analyse the accounting quality in Brazil and Chile, the most representative Latin American countries that assumed to adopt IFRS as its official accounting standard. Since 2010 Chilean listed companies are required to apply IFRS, while Brazil has reached full convergence in the same year.

We compared the level of accounting quality in these two Latin American countries with that of the main Anglo-Saxon countries with IFRS tradition (United Kingdom and Australia), and also with the main European Continental economies (France and Germany). Given the dissimilarities in the countries' specific variables, including the level of enforcement and investor protection, and their effect in the accounting practices, we expect to find a different level of accounting quality in the Latin American countries, when compared to the Anglo-Saxon and the Continental European countries. Regarding the firms from these countries that are cross-listed in the U.S., it is not very clear if the differences will persist among them.

The empirical analysis those relies on listed firms from Brazil, Chile, France, Germany, Australia and the United Kingdom. We used data from 2011 and 2012, in order to guarantee that all the firms apply IFRS. Since some variables are defined in terms of variation, we also used data from 2010. We have estimated the absolute discretionary accruals based on the Modified Jones Model (Dechow, Sloan, & Sweeney, 1995), used as a proxy of accounting quality. We, then, regressed this proxy against a country variable in order to capture differences in the level of accounting quality between countries. We also used a set of firm-level variables in order to control for other factors influencing the level of accounting quality.

Thereafter, we performed a similar analysis but considering only those firms from the 6 countries that are cross-listed in the US, i.e., firms with American Depositary Receipts (ADR). We aim to analyse whether, for firms with greater incentives for financial reporting, the differences between countries still remain.

The empirical findings for the entire sample, including sensitivity tests, allow us to conclude that firms from Latin American countries present a lower level accounting quality, when compared to firms from Continental European and Anglo-Saxon countries. We also find that the Latin American and the European Continental firms that are cross-listed in the U.S. (global players) present a higher level of accounting quality, when compared to local players. Finally, when considering only the global players sub-sample, the results remain the same, i.e., the Latin American firms present a lower level of accounting quality, when compared to firms from Continental European and Anglo-Saxon countries.

The most important contribution of this study is the evidence that institutional specific characteristics remain relevant to accounting quality, regardless the incentives to prepare high quality financial statements by global players. This result highlights the relevance of country level incentives over IFRS adoption and indicates, in line with Leuz (2010), that full convergence is unlikely to happen, even among global players, despite the efforts developed in order to achieve a unique set of accounting standards.

This study also contributes to the accounting literature by analysing the IFRS accounting quality of Latin American firms, which have recently assumed a significant role on the global economy and demonstrated a solid recovery from 2008 economic instability. Considering that economic growth have the potential to attract foreign direct investment (Bengoa & Sanchez-Robles, 2003), IFRS adoption become a relevant factor on contributing to increase capital flows in Latin America.

This paper is structured as follows. Section 2 shows the motivation behind this research and how the hypotheses have been developed. Section 3 explains how we have conducted the research, showing the variables we have studied and their interpretation. Section 4 shows the empirical results.

2 Literature Review

2.1 IFRS Adoption and Accounting Quality

It is chiefly concurred that IFRS has the potential to improve the quality of accounting information, because they are considered a set of principles-based financial reporting standards that allow companies to prepare information that better reflects its financial and economic reality. IFRS are more rigorous about accounting alternatives and measurement requirements, diminishing the range for accounting options and limiting management's opportunistic discretion in determining accounting amounts. As a consequence, restricting opportunistic behaviour implies a reduction of eventual manipulations and increases the extent to which financial statements reflect firms' real economic position (Ashbaugh & Pincus, 2001; Ball et al., 2003).

Some studies examined the association between the IFRS adoption and measures of accounting quality. Barth et al. (2008) examined whether the IFRS adoption is associated with an increase of accounting quality in 21 countries. It was explained that the adoption of IFRS reflects combined effects of elements inside the financial reporting system, including the standards itself, their interpretation, enforcement and litigation. The study found a general increase of accounting quality after the IFRS adoption, with firms showing less earnings management, more timely loss recognition and more value relevance of accounting amounts.

Jeanjean and Stolowy (2008) examined the level of earnings management before and after mandatory IFRS adoption in Australia, France and the United Kingdom. The results evidence that the management of earnings did not decreased following the adoption of IFRS. The authors suggest that management incentives and embedded institutional factors play a relevant role in the IFRS adoption. Aharony, Barniv, and Falk (2010) analysed the impact of mandatory

IFRS adoption on the price and return-based value-relevance models, in order to evaluate how accounting standards affect the accounting information to investors. The evidences indicate that the effect of IFRS on information quality is higher in countries with larger differences between domestic standards and IFRS.

2.2 IFRS Adoption and Country-Level Incentives

Despite the arguments supporting the increase of accounting quality with IFRS adoption, it is important to highlight that cultural and domestic characteristics are believed to influence accounting practices and a global accounting standard might not be able to eliminate this influence. The effective accounting standards in two countries with distinct economic and business systems are not necessarily the same due to these differences. In fact, IFRS offers a number of accounting alternatives (e.g. cost or fair value measurement for properties), which allows the firm to opt for the one which best fits its business. However, it also allows two firms to choose different accounting practices to reflect the same economic phenomena on the financial statements. Being IFRS a principles-based set of accounting standard, it demands responsible judgemental behaviour from preparers of accounting information. Specific country-level incentives related to local business and culture can influence the preparers when applying these accounting standards. Even with a uniform set of accounting standards being applied in several countries, the mitigation of the influence of local variables on IFRS application is not guaranteed.

Several studies focus in examining the effect of local business environments and institutional frameworks in the application of accounting standards. Burgstahler, Hail, and Leuz (2006) show that rigid enforcement and strong legal systems are associated with reduced levels of earnings management. The higher accounting quality is attributed to incentives related to institutional factors engaged in reporting earnings that reflect economic reality. Ball et al. (2003) found that timely loss recognition for analysed firms located in common law countries is no better than it is for firms in code law countries. The results are ascribed to the preparers incentives related to the interplay between different market and political forces. Similar implications are observed in the findings of Bradshaw and Miller (2008) and M. Lang, Smith Raedy, and Wilson (2006), suggesting that the regulatory environment is important in the application of accounting standards.

Some studies examined comparatively the application of IFRS in different countries, considering that local characteristics might affect the implementation and application of IFRS. Kvaal and Nobes (2010) examined if there are systematic differences between countries with respect to the accounting policies adopted by firms under IFRS in order to be possible to identify national

IFRS patterns. The authors identified diverse national versions of IFRS practices, which are strictly related to pre-IFRS accounting practices originated in their domestic GAAP. The results showed an inertial utilization of local traditional practices after the adoption of IFRS standards.

Nobes (2011) studied the classification of accounting systems after the IFRS adoption, analysing specifically the dichotomous segregation of countries into Anglo-Saxon and Continental European countries. The classification was prepared based on the accounting policy choices made by the largest IFRS adopters in eight countries. The author verified that the countries classification by IFRS practices respected the same Anglo-Saxon and Continental European groups as the classification drawn up on 1983, despite of the European Union harmonization. The author argues that these differences in accounting practices are possibly due to the intrinsic flexibility within IFRS.

2.3 IFRS Adoption and Firm-Level Incentives: the Role of Global Players

Despite country-level features, accounting quality is strictly related to the managers incentives to report transparent financial statements. Ball et al. (2003) argues that the financial reporting practice is sensitive to the incentives of managers and auditors for preparing financial statements and that they depend on the combination of market and political forces. While the market demands high-quality financial reporting according to the amount of publicly traded equity, size, the amount of public debt; there are political forces related to the involvement of the government and political incentives to reduce volatility of reported income. Daske, Hail, Leuz, and Verdi (2013) assess some of these firms' incentives analysing firm size, profitability, foreign sales, financial needs, growth opportunities and ownership concentration. Barth et al. (2008) include in their analysis variables identifying firms audited by one of the Big Four and the number of exchanges on which the firm's stocks is listed and specifically if they are listed in the United States.

Cross-listing in the United States is associated with a better informational environment, affecting firm-specific information flow (Fernandes & Ferreira, 2008), analyst coverage and forecast accuracy (M. H. Lang et al., 2003). Non-US firms issuing American Depositary Receipts are seeking for other markets access and enhancing their visibility (Licht, 2003). These firms issuing securities in foreign exchanges, raising finance internationally make their presence important to markets worldwide and can be regarded as global players firms. For them, a unique global accounting language as intended by the IFRS is especially relevant. There appears to be a substantial demand for investors, analysts and regulators for comparable financial reporting by global player firms (Leuz, 2013). Therefore, global players have incentives to disclose financial

statements with higher accounting quality than other firms do. In line with this argument, Leuz (2013) proposed a specific approach to global reporting convergence, consisting on a "Global Player Segment" (GPS), in which companies would be required to use the same reporting rules (e.g. IFRS), face the same enforcement mechanisms, and have similar incentives for transparent reporting. This proposal highlights the importance of IFRS for firms that operate and raise finance internationally. Based on the fact that the United States' stock market is highly developed and strongly significant for the global economy, companies listed in the American market are considered to be pursuing international recognition and, thus, to be global players. Firms issuing American Depositary Receipts (ADR) face different enforcement and institutional incentives i.e. extra enforcement by SEC (Securities and Exchange Commission) tending to present more disclosure (Coffee Jr, 2002) and to improve investor protection (Benos & Weisbach, 2004; Reese Jr & Weisbach, 2002). Therefore, the impact of country specific factors on the level of accounting quality of global players is not clear, once they might not be as relevant as for those firms that are only traded on their domestic markets.

Therefore, we may assume two possible scenarios for firms that are cross-listed in the United States. The first one is that they might not present differences, once they are all under the American capital market's incentives and enforcement. In this case, the market forces overcome the country-level characteristics that could be influencing accounting quality. The second one is that they might still present differences, once they are from different countries with different specific characteristics, and the market incentive is not strong enough to overcome these characteristics. In this scenario, the domestic political forces are stronger than the American market demand for higher quality financial statements.

2.4 IFRS in Latin America

The Latin America's importance to the global economy is a growing issue in current years, since a significant recovery from late 2008 world economic instability. In the third quarter of 2013, real GDP growth of countries located in Latin America amounted a weighty 3.0%, with a pronounced influence of Chilean production (4.5%), while Anglo-Saxon countries presented a near 2.0% growth and European Union remained practically stagnated. Besides that, based on the October 2013 WEO from International Monetary Fund, there is a clear growth of Latin America's participation on the worldwide economic development, with an increase in economic activity supported on the strength of external demand.

Several Latin American countries have assumed the compromise of adopting IFRS as the official accounting standard in the last years, from which Chile and Brazil are the most rep-

resentative ones. Since 2010, Brazil and Chile listed companies apply IFRS. The adoption of IFRS by the Chilean companies began in 2009, when IFRS were required for major listed firms, including 2008 comparative information. By 2010, IFRS were applied for smaller listed companies, insurance companies, mutual and pension funds, stock brokers, dealers and insurance agents. In Brazil, changes in local accounting rules were stated in 2007, in order to converge the Brazilian accounting rules to IFRS standards. In 2008 the first lot of accounting standards based on IFRS were issued by a Committee established for this purpose, and it took until 2010 to all IFRS issued by the IASB to be fully adopted (Carvalho & Salotti, 2012).

Nowadays, there is limited literature about the effect of IFRS adoption in the Latin American countries. Most of the studies regarded the effect of IFRS on several countries around the world do not examined specifically the IFRS adoption in Latin America. Some of the few exceptions regarding the effects of IFRS in Brazil is the study of Lourenço, Branco, and Dias Curto (2013), who analyzed earnings management of Brazilian firms before and after the IFRS adoption. These authors found evidence suggesting that Brazilian firms managed their earnings to avoid losses before but not after the mandatory adoption of IFRS by 2008. Another evidence concerning earnings management can be viewed in Silva (2013), who has found that the level of earnings management in Brazil has decreased in the period of full adoption and that conditional conservatism has increased. The author also found evidence of an improvement in the value relevance and in the timeliness of financial information, and a reduction of the cost of equity capital. Still regarding Brazilian firms, Lima (2011) has found empirical evidence that firms with a higher level of compliance with IFRS present a lower cost of capital.

Therefore, the IFRS adoption in Latin American countries is still a recent phenomenon and, consequently, still little explored. The first studies have provided evidence of an improvement in the informational environment related to IFRS, but only in an isolated way. It is important to assess if, and in which extent, these improvements have led accounting quality in Latin America to an equivalent level of the Continental European and Anglo Saxon countries.

3 Research Design

3.1 Sample and Data

This study aims to examine the level of accounting quality under IFRS adoption by Latin American firms, when compared to the Anglo-Saxon and Continental European firms, considering all the firms together and also the subset of local firms cross-listed in the U.S.. We aim to analyse whether, for firms with greater incentives for financial reporting (cross-listed), the differences

between countries still remain.

The empirical analysis relies on the listed firms located in the main Latin American countries applying IFRS (Brazil and Chile), the main Continental European countries (France and Germany), and the main Anglo-Saxon countries with IFRS tradition (Australia and United Kingdom). We used data from 2011 and 2012, in order to guarantee that all the firms apply IFRS, and since some variables are defined in terms of variation, we also used some data from 2010.

The sample comprises 3,164 firm-year observations. Table 1 shows the sample distribution across countries and industries. We excluded financial firms, once the model used in the empirical analysis cannot capture the specific characteristics of this industry.

Table 1: Sample distribution across countries and industries

Countries	SIC 0	SIC 1	SIC 2	SIC 3	SIC 4	SIC 5	SIC 7	SIC 8	Total
Brazil	8	22	66	71	87	27	10	12	303
Chile	5	14	44	23	50	21	9	3	169
Latin America	13	36	110	94	137	48	19	15	472
France	1	28	94	130	47	57	105	29	491
Germany	4	14	84	224	46	45	71	26	514
Continental Europe	5	42	178	354	93	102	176	55	1005
United Kingdom	19	140	142	187	101	124	231	75	1019
Australia	15	200	57	94	75	61	94	72	668
Anglo-Saxon	34	340	199	281	176	185	325	147	1687
Total	52	418	487	729	406	335	520	217	3164

On Table 1, one can see that the number of firm-year observations is heterogeneously distributed. In general, Latin American countries amounts the lower number of observations, followed by the Continental European group. Firms from the Manufacturing industry (SIC Code 2 and 3) are the most representative one, followed by the Service industry (SIC Code 7).

3.2 Measurement of accounting quality

We use the magnitude of absolute discretionary accruals as a proxy for earnings management, which is an operational concept for accounting quality. According to Leuz, Nanda, and Wysocki (2003), managers can use reporting discretion to misstate their firm's economic performance. They can overstate reported earnings in order to reach a target or report extraordinary performance in specific situations. For the authors, the magnitude of discretionary accruals measures the extent to which managers exercise discretions in reporting earnings. For Warfield, Wild, and Wild (1995), greater magnitude of discretionary accruals reflect difficulties in accounting numbers in effectively measuring economic performance. As income-increasing accruals and income-decreasing accruals can be used in earnings management, it is usual to use the magni-

tude of absolute discretionary accruals. Greater magnitudes indicates greater level of earnings managements and lower accounting quality (Chen et al., 2010).

Discretionary (abnormal) accruals can be measured as total accruals minus estimated nondiscretionary (normal) accruals. Several models can estimate normal accruals. This study used a modified version from the model proposed by Jones (1991).

Dechow et al. (1995) analysed some alternative accrual-based models for detecting earnings management and found that the most powerful is the modified version of the model developed by Jones (1991). The original model used a regression approach to identify non-discretionary factor by a linear relation between total accruals and change in sales and in property, plant and equipment (McNichols, 2001).

The model proposed by Jones (1991) starts with an expectation model for total accruals to control for changes in the economic circumstances, as seen on equation 1 where $TA_{i,t}$ is the total accruals for firm i on year t; $A_{i,t-1}$ is the total assets for firm i on year t; $\Delta REV_{i,t}$ is the revenues of firm i on year t minus the revenues on year t-1; $PPE_{i,t}$ is the gross property, plant and equipment for firm i on year t; and $\epsilon_{i,t}$ is the error term.

$$\frac{TA_{i,t}}{A_{i,t-1}} = \alpha_1 \left(\frac{1}{A_{i,t-1}}\right) + \alpha_2 \left(\frac{\Delta REV_{i,t}}{A_{i,t-1}}\right) + \alpha_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + \epsilon_{i,t} \tag{1}$$

One can use the coefficients estimates by equation 1 on equation 2 to estimate non-discretionary accruals.

$$NDA_{i,t} = a_1 \left(\frac{1}{A_{i,t-1}}\right) + a_2 \left(\frac{\Delta REV_{i,t}}{A_{i,t-1}}\right) + a_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right)$$
(2)

With the results of equation 2, it is possible to calculate the discretionary accruals by taking the difference between total accruals and non-discretionary accruals.

The model by Jones (1991) assumes that revenues are non-discretionary. However, in a situation where managers accrues revenues at year-end, when the cash has not yet been received and it is questionable whether the revenues have been earned, resulting in an increase in revenues and total accruals through an increase in receivables (Dechow et al., 1995).

Thus, Dechow et al. (1995) proposed a modified version from this model, eliminating its tendency to measure discretionary accruals with errors when revenues are opportunistically modified. In this model, the non-discretionary accruals are estimated as equation 3 and 4, where $\Delta REC_{i,t}$ is the net receivables of firm i on year t minus the net receivables on year t-1.

$$\frac{TA_{i,t}}{A_{i,t-1}} = \alpha_1 \left(\frac{1}{A_{i,t-1}}\right) + \alpha_2 \left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}}\right) + \alpha_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + \epsilon_{i,t}$$
(3)

$$NDA_{i,t} = a_1 \left(\frac{1}{A_{i,t-1}}\right) + a_2 \left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}}\right) + a_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right)$$
(4)

We have calculated total accruals as the difference between the variation of current assets and the variation of current liabilities, minus variation on cash flow from operations and depreciation, plus the variation on debt in current liabilities. We used subsamples in order to calculate the absolute discretionary accruals, i.e., we calculated them for each group of countries and for each industry.

3.3 Empirical Model

In order to compare the amount of absolute discretionary accruals in Latin American firms with that of Continental European firms, and Anglo-Saxon firms, we regressed the absolute discretionary accruals against a country dummy variables, which assumes the value 1 for the Latin American firms and 0 for the Continental European (or Anglo-Saxon) firms. We also used a set of firm-level variables in order to control for other factors influencing the level of accounting quality. Equation 5 shows the empirical model used in this research.

$$|DA_{i,t}| = \alpha_0 + \alpha_1 G1 +$$

$$= +\beta_1 ROA_{i,t} + \beta_2 MTB_{i,t} + \beta_3 CFO_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 LEV_{i,t} + \beta_6 GROW_{i,t} +$$

$$= +\beta_7 LOSS_{i,t} + \beta_8 AUD_{i,t} + \beta_9 ADR_{i,t} + \sum_{i,t} Industry_i + \epsilon_{i,t}$$
(5)

This empirical model is performed as a polled regression model and the analysis is made separately for two subsamples. The first one comprises firms from Latin American and Continental European countries and the second one comprise firms from Latin American and Anglo Saxon countries.

The parameter of interest in equation 5 is α_1 . If α_1 is positive and statistically significant, it shows that firms from Latin America have greater amounts of discretionary accruals and, therefore, less accounting quality, when compared with Continental European countries and with Anglo-Saxon countries, although all the firms apply the same accounting standards, the IFRS.

We control for firms incentives to be transparent, because differences on absolute discretionary accruals can be sensitive to these incentives, rather than to the country classification. Many studies have identified firm-level variables that are likely to influence accounting quality (e.g. Barth et al., 2008; Chen et al., 2010; M. Lang et al., 2003; Francis, Khurana, Martin, &

Pereira, 2008). Based on prior literature, we control for firm's profitability (ROA, defined as the ratio between net income and total assets), its growth potential (MTB, defined as the ratio between the market value and book value of the equity), its size (SIZE, defined as the natural logarithm of total assets), its leverage (LEV, defined as the ratio between total liabilities and total assets), its growth (GROW, defined as the annual percentage change in sales), and its cash flow from operations scaled by total assets (CFO). Additionally, we used dummy variables to indicate if the firm is audited by a Big 4 audit firms (AUD), if it presents losses in the period analysed (LOSS) and if it is considered a global player, that is, if it issues American Depositary Receipts (ADR). We also control for the firms' industries.

After this first comparison, we address the question of whether the differences between countries still can be found when comparing only those firms from the 6 countries that are cross listed in the U.S., i.e., firms with American Depository Receipts (ADR), which are usually referred as global players. If firms operate in many countries and seek to raise funds internationally, they have stronger incentives to be transparent and, consequently, the countries specific features might not be so important in explain the amount of discretionary accruals.

Finally, we expect that firms from Latin American countries present a different level of accounting quality, when compared to the Anglo-Saxon and the Continental European countries. Specific features related to culture and economic environment might be strong enough to produce differences in the application of IFRS, giving rise to different levels of earnings management across countries. Regarding firms cross-listed in the U.S., the differences may persist or not, depending on whether the American market's incentives are strong enough to guarantee a similar level of accounting quality across firms.

4 Empirical Results

4.1 Descriptive Statistics

Table 2 presents the descriptive statistics for the variables used in the empirical analysis, and statistical tests for mean differences between the groups of countries. From it, we see that Brazil and Chile present higher level of absolute discretionary accruals than France and Germany (at 0.1% of significance). However, the firms of these two groups present some different characteristics. Firms from Continental Europe are smaller (at 0.1% of significance) and slightly more leveraged (at 5% of significance), than the Latin American ones. Firms from Brazil and Chile present higher market value proportional to their book value (at 5% of significance) and a greater capacity for generating cash flows (at 5% of significance) than the ones from Germany

and France.

Table 2: Descriptive Statistics for All Firms

		Latin	Continental		Student's t	-Test
		American	European	(I	atin Amer	ica and
		Countries	Countries	Ċ	ontinenal E	Europe)
DA	Mean	0.0665	0.0489	t-Stat.	6.3606	
	Std. Deviation	(0.0521)	(0.0430)	p-value	(0.0000)	***
DO 4	Mean	$0.0278^{'}$	$0.0225^{'}$	t-Stat.	1.1551	
ROA	Std. Deviation	(0.0871)	(0.0719)	p-value	(0.2484)	
MTD	Mean	2.2696	1.7268	t-Stat.	2.4546	
MTB	Std. Deviation	(3.8588)	(4.1767)	p-value	(0.0143)	**
CFO	Mean	0.0900	0.0769	t-Stat.	2.4068	
CFO	Std. Deviation	(0.1057)	(0.0777)	p-value	(0.0163)	**
SIZE	Mean	15.2011	11.8934	t-Stat.	19.9972	
SIZE	Std. Deviation	(3.0997)	(2.6530)	p-value	(0.0000)	***
LEV	Mean	0.5431	0.5708	t-Stat.	-2.0645	
LEV	Std. Deviation	(0.2384)	(0.2437)	p-value	(0.0393)	**
GROW	Mean	10.2359	34.0561	t-Stat.	-1.1121	
GNOW	Std. Deviation	(137.1518)	(648.8589)	p-value	0.2663	
Anglo Student's t-Test						
			Saxon	`	atin Amer	
			Countries		lo Saxon C	Countries)
$\mid DA \mid$	Mean	-	0.0656	t-Stat.	0.3099	
211	Std. Deviation		(0.0557)	p-value	(0.7567)	
ROA	Mean	-	-0.0110	t-Stat.	6.2461	
10011	Std. Deviation		(0.1954)	p-value	(0.0000)	***
MTB	Mean	-	2.3496	t-Stat.	-0.2290	
1,112	Std. Deviation		(12.3646)	p-value	(0.8189)	
CFO	Mean	-	0.0577	t-Stat.	4.2815	
010	Std. Deviation		(0.2362)	p-value	(0.0000)	***
SIZE	Mean	-	10.9084	t-Stat.	27.2919	
	Std. Deviation		(2.7195)	p-value	(0.0000)	***
LEV	Mean	-	0.5216	t-Stat.	1.3227	
22,	Std. Deviation		(0.4947)	p-value	(0.1861)	
GROW	Mean	-	15.8272	t-Stat.	-0.5944	
	Std. Deviation		(286.4056)	p-value	(0.5523)	

 $\mid DA \mid$: Absolute Discretionary Accruals; ROA: return on assets; MTB: market-to-book ratio; CFO: cash flow from operations scaled by total assets; SIZE: natural logarithm of total assets; LEV: ratio between total liabilities and total assets; GROW: annual percentage change in sales.

Obs: The null hypothesis of the Two Sample Student's t-Test is that the true difference in means is equal to zero. The alternative hypothesis states that the true difference is not equal to zero.

When comparing the level of absolute discretionary accruals of Latin American and Anglo Saxon firms we see no statistical difference. Table 2 also shows that the mean profitability of firms from the Anglo Saxon group is negative, while the one from Latin America is positive (difference statistically significant at 0.1%). The cash flow generation capacity is also different

Table 3: Descriptive Statistics for Global Players Firms

	Latin	Continental			
	American	European	(
	Countries	Countries	C	ontinenal E	Europe)
Mean	0.0585	0.0397	t-Stat.	4.0859	
Std. Deviation	(0.0460)	(0.0371)	p-value	(0.0001)	***
Mean	0.0194	0.02580	t-Stat.	-1.0076	
Std. Deviation	(0.06430)	(0.0506)	p-value	(0.3147)	
Mean	1.9189	2.0387	t-Stat.	-0.4615	
Std. Deviation	(2.6292)	(2.0145)	p-value	(0.6449)	
Mean	0.1033	0.0898	t-Stat.	1.5983	
Std. Deviation	(0.0877)	(0.0589)	p-value	(0.1115)	
Mean	15.154	14.1433	t-Stat.	3.5876	
Std. Deviation	(2.7755)	(2.3657)	p-value	(0.0004)	***
Mean	0.5622	0.5906	t-Stat.	-1.5983	
Std. Deviation	(0.1522)	(0.1894)	p-value	(0.1109)	
Mean	0.4427	14.8479	t-Stat.	-0.2073	
Std. Deviation	(93.2418)	(1093.325)	p-value	(0.8359)	
		Anglo		Student's t	-Test
		Saxon	(Latin America and		ica and
		Countries			Countries)
	-				
		` /	_	,	
	-				
		,	•	,	
	-				
		\ /	•	,	***
	-		t-Stat.	-0.1376	
		\ /	•	,	
	-	13.0857	t-Stat.	7.8620	
Std. Deviation		(2.3327)	p-value	(0.0000)	***
Mean	-	0.5484	t-Stat.	0.8519	
Std Dovintion		(0.2017)	p-value	(0.3950)	
		'	-	` ,	
Mean Std. Deviation	-	-6.446 (423.6369)	t-Stat.	0.3195 (0.7495)	
	Mean Std. Deviation	Mean 0.0585 Std. Deviation (0.0460) Mean 0.0194 Std. Deviation (0.06430) Mean 1.9189 Std. Deviation (2.6292) Mean 0.1033 Std. Deviation (0.0877) Mean 15.154 Std. Deviation (0.1522) Mean 0.5622 Std. Deviation (0.1522) Mean 0.4427 Std. Deviation (93.2418) Mean - Std. Deviation - Mean -	Latin American Countries Continental European Countries Mean 0.0585 0.0397 Countries Std. Deviation Mean 0.0194 0.02580 0.0371) Mean 1.9189 0.02580 Countries Std. Deviation Mean 1.9189 2.0387 Countries Std. Deviation Mean 0.1033 0.0898 0.0898 Std. Deviation (0.0877) (0.0589) (0.0589) Mean 15.154 14.1433 14.1433 Std. Deviation (2.7755) (2.3657) (0.1894) Mean 0.5622 0.5906 0.5906 Std. Deviation (93.2418) (1093.325) Anglo Saxon Countries Mean 0.4427 14.8479 Anglo Saxon Countries Mean 0.0563 Countries Mean 0.0563 O.0563 Std. Deviation (0.0485) (0.1286) Mean 0.0275 O.01046 Std. Deviation (0.1286) (0.1208) Mean 0.1046 O.1046 Std. Deviation (0.1208) (0.1208) Mean 0.1046 O.1046 Std. Deviation (0.1208) (0.1208)	Latin American Countries Continental European Countries (I Countries) Mean 0.0585 0.0397 t-Stat. Std. Deviation (0.0460) (0.0371) p-value Mean 0.0194 0.02580 t-Stat. Std. Deviation (0.06430) (0.0506) p-value Mean 1.9189 2.0387 t-Stat. Std. Deviation (2.6292) (2.0145) p-value Mean 0.1033 0.0898 t-Stat. Std. Deviation (0.0877) (0.0589) p-value Mean 15.154 14.1433 t-Stat. Std. Deviation (2.7755) (2.3657) p-value Mean 0.5622 0.5906 t-Stat. Std. Deviation (93.2418) (1093.325) p-value Mean 0.4427 14.8479 t-Stat. Std. Deviation (0.0485) p-value Mean - 0.0563 t-Stat. Std. Deviation (0.1286) p-value <	Mean Countries European Countries (Latin Amer Countries) Mean 0.0585 0.0397 t-Stat. 4.0859 Std. Deviation (0.0460) (0.0371) p-value (0.0001) Mean 0.0194 0.02580 t-Stat. -1.0076 Std. Deviation (0.06430) (0.0506) p-value (0.3147) Mean 1.9189 2.0387 t-Stat. -0.4615 Std. Deviation (2.6292) (2.0145) p-value (0.6449) Mean 0.1033 0.0898 t-Stat. 1.5983 Std. Deviation (0.0877) (0.0589) p-value (0.1115) Mean 15.154 14.1433 t-Stat. 3.5876 Std. Deviation (2.7755) (2.3657) p-value (0.0004) Mean 0.5622 0.5906 t-Stat. -1.5983 Std. Deviation (0.1522) (0.1894) p-value (0.1109) Mean 0.4427 14.8479 t-Stat. -0.2073 Std. Deviation (93.2418) (1093.325) p-value (0.8359) Mean - 0.0563 t-Stat. 0.4788 Std. Deviation (0.01286) p-value (0.6325) Mea

 $\mid DA \mid$: Absolute Discretionary Accruals; ROA: return on assets; MTB: market-to-book ratio; CFO: cash flow from operations scaled by total assets; SIZE: natural logarithm of total assets; LEV: ratio between total liabilities and total assets; GROW: annual percentage change in sales.

Obs: The null hypothesis of the Two Sample Student's t-Test is that the true difference in means is equal to zero. The alternative hypothesis states that the true difference is not equal to zero.

between the two groups of firms (at 0.1% of significance).

Table 3 presents the descriptive statistics and mean tests for the group of Global Players. Latin American and Continental European Global Players form a quite more homogeneous group. There are still differences in the level of absolute discretionary accruals, but all the other variables have the same mean, except for the size. Although the difference of the size between the two groups is quite smaller, it is still statistically significant.

Comparing the Latin America group with the Anglo Saxon, we see that the difference between the level of absolute discretionary accrual remains not significant, so as the MTB ratio. But, there are no difference on profitability among global players of these two groups and the difference in the size of the firms is still significant, but smaller than when we compare all firms of the sample.

4.2 Regression Results

Table 4: Regression Results for all Firms

Dependent	Latin American versus	Latin American versus		
Variable:	Continental European	Anglo-Saxon		
DA	countries	countries		
Intercept	0.0657 ***	0.0817 ***		
G1	0.0222 ***	0.0152 ***		
ROA	-0.0181	0.0172		
MTB	0.0002	0.0001		
CFO	0.0244	-0.0175		
SIZE	-0.0013 **	-0.0018 ***		
LEV	0.0004	0.0041		
GROW	0.0000	0.0000		
LOSS	0.0166 ***	0.0069 *		
AUD	-0.0033 **	-0.0060 *		
ADR	-0.0092 **	-0.0044		
	N: 1,477	N: 2159		
	Adj. R2: 0.074161	Adj. R2: 0.058008		
	F Stat.: 9.10778***	F Stat.: 10.231***		

 $\mid DA \mid$: Absolute Discretionary Accruals; ROA: return on assets; MTB: market-to-book ratio; CFO: cash flow from operations scaled by total assets; SIZE: natural logarithm of total assets; LEV: ratio between total liabilities and total assets; GROW: annual percentage change in sales; LOSS: dummy variable that equals one if the firm presented losses and zero otherwise; AUD: dummy variable that equals one if the firm is audited by a Big 4 audit firm and zero otherwise; ADR: dummy variable that equals one if the firm issues American Depositary Receipts and zero otherwise

*** Significant at 0.001 level; ** significant at 0.05 level; * significant at 0.10 level
Obs.: The results are from a pooled regression. The significances are computed through
Arellano robust standard errors.

Table 4 presents the regressions results for the sample comprising all the firms divided into

two sub-groups, the Latin American versus Continental European firms, and the Latin American versus Anglo-Saxon firms.

The results show that firms from Brazil and Chile have, on average, a greater amount of absolute discretionary accruals than those from France and Germany. Moreover, the Brazilian and Chilean ones also have greater absolute discretionary accruals when compared with firms from United Kingdom and Australia.

Our findings thus provide evidence that firms from Latin American countries engage in a higher level of earnings management, and therefore, less accounting quality, when compared with Anglo-Saxon and Continental European ones. Although all these firms adopt full IFRS, the local features related to culture, economic and legal environment might still influence the accounting practices and the way as the IFRS are applied.

Even when we compare Latin American firms with the ones from France and Germany, which are immersed in a code law system, just like Brazil and Chile, differences in accounting quality persist. The lower level of accounting quality found for the Latin-American firms can be explained by the legal system in Brazil and Chile, which some authors have identified as related with less accounting quality (Van Tendeloo & Vanstraelen, 2005; Paananen, 2008) and also by the lower level of enforcement in these countries, as seen in López de Silanes, La Porta, Shleifer, and Vishny (1998) and in Kaufmann, Kraay, and Mastruzzi (2007).

Our findings also provide evidence that the group of Latin American and the European Continental firms that are cross-listed in the U.S. (global players) present a higher level of accounting quality, when compared to local players. Untabulated findings also show that, for the Anglo Saxon firms, to be traded in the U.S. does not influence the amount of discretionary accruals, probably because these firms already have a strong market incentive. However, for the Latin American firms, being a global player is a very important feature regarding the quality of accounting information.

Finally, Table 5 presents the regressions results for the sample comprising only those firms from the 6 countries that are cross listed in the U.S., i.e., firms with American Depository Receipts (ADR), which are usually referred as global players.

These findings show that although issuing ADRs is an important incentive inside Latin America, it is not an incentive strong enough to overcome the country specific features. Even among global players that are more exposed to capital markets, which result in strong incentives to produce financial information with better quality, local features still play an important role in earnings management. Summarizing, the empirical evidence indicates that national characteristics, potentially linked to culture and enforcement and legal systems, remain important and

still influence the level of accounting quality.

Table 5: Regression Results for Global Players Firms

Dependent Variable: $\mid DA \mid$	Latin American versus Continental European countries	Latin American versus Anglo-Saxon countries		
$Intercept \ G1 \ ROA$	0.0748 *** 0.1067 *** 0.0557	0.1067 *** 0.0114 *** 0.0602		
MTB CFO $SIZE$	0.0008 0.0179 ** -0.0022 **	0.0007 -0.0239 *** -0.0035 ***		
$LEV \ GROW \ LOSS \ AUD$	-0.0047 0.0000 0.0227 ** -0.0116	0.0041 0.0000 0.0219 ** -0.0208 **		
110 D	N: 386 Adj. R ² : 0.10239 F Stat.: 3.68373***	N: 2159 Adj. R^2 : 0.11304 F Stat.: 6.21007***		

 $\mid DA \mid$: Absolute Discretionary Accruals; ROA: return on assets; MTB: market-to-book ratio; CFO: cash flow from operations scaled by total assets; SIZE: natural logarithm of total assets; LEV: ratio between total liabilities and total assets; GROW: annual percentage change in sales; LOSS: dummy variable that equals one if the firm presented losses and zero otherwise; AUD: dummy variable that equals one if the firm is audited by a Big 4 audit firm and zero otherwise; ADR: dummy variable that equals one if the firm issues American Depositary Receipts and zero otherwise

*** Significant at 0.001 level; ** significant at 0.05 level; * significant at 0.10 level

Obs.: The results are from a pooled regression. The significances are computed through Arellano robust standard errors.

4.3 Sensibility Tests

In order to control for deficiencies in the Jones Modified Model, we have entertained the empirical model (for all subsamples) using absolute discretionary accruals estimated by different models, namely the versions based on Larcker and Richardson (2004) and Kothari, Leone, and Wasley (2005).

Larcker and Richardson (2004)) added the current operating cash flows (CFO) and the book-to-market ratio (BTM) as a proxy for expected growth in the firm's operations, because they expect growing firms to have large accruals. The model is estimated according to equations 6 and 7. The authors used the ratio between the book value and the market value of the firm, but here it was used the opposite, the ratio between the market value and the book value (MTB).

$$\frac{TA_{i,t}}{A_{i,t-1}} = \alpha_1 \left(\frac{1}{A_{i,t-1}}\right) + \alpha_2 \left(\frac{\Delta REV_{i,t}}{A_{i,t-1}}\right) + \alpha_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + \alpha_4 MTB_{i,t} + \alpha_5 CFO_{i,t} + \epsilon_{i,t}$$
 (6)

$$NDA_{i,t} = a_1 \left(\frac{1}{A_{i,t-1}}\right) + a_2 \left(\frac{\Delta REV_{i,t}}{A_{i,t-1}}\right) + a_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + a_4 MTB_{i,t} + a_5 CFO_{i,t}$$
 (7)

Kothari et al. (2005) included the current ROA as a performance measure on the calculation of accruals, as shown in equations 8 and 9.

$$\frac{TA_{i,t}}{A_{i,t-1}} = \alpha_1 \left(\frac{1}{A_{i,t-1}}\right) + \alpha_2 \left(\frac{\Delta REV_{i,t}}{A_{i,t-1}}\right) + \alpha_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + \alpha_4 ROA_{i,t} + \epsilon_{i,t}$$
(8)

$$NDA_{i,t} = a_1 \left(\frac{1}{A_{i,t-1}}\right) + a_2 \left(\frac{\Delta REV_{i,t}}{A_{i,t-1}}\right) + a_3 \left(\frac{PPE_{i,t}}{A_{i,t-1}}\right) + a_4 ROA_{i,t}$$
(9)

None of these other two versions of the Jones Model have provided significant different results.

5 Concluding Remarks

This paper examine the level of accounting quality of Latin American IFRS adopters, when compared to Anglo-Saxon and Continental European firms that adopted IFRS. The results indicate that Latin American firms have, in general, lower accounting quality in comparison with the other two groups of firms.

The results showed that the Latin American firms have a higher amount of discretionary accruals, despite of the adoption of a global set of accounting standards worldwide, which suggest that specific country factors, related to cultural and economic characteristics, have influenced the way as IFRS is applied in each country.

Furthermore, we find that the Latin American firms that are cross-listed in the U.S. also engage in a lower level of accounting quality when compared with the ones from Anglo-Saxon and Continental European countries. It means that, even with strong incentives to reach high quality financial information, global player firms from Latin America have presented higher amounts of discretionary accruals. These results highlights the importance of the country level variables, related to institutional features, enforcement and economic influences, that can affect the way as IFRS are applied.

It is important to mention that the Latin American listed firms have adopted full IFRS since

2010, that is, very recently. Therefore, these results may change in the future, after a period of transition and learning experience.

However, these preliminary findings confirm that the IFRS adoption by all the examined firms and the strong inducements to disclose a high quality information by companies listed in U.S. market are not sufficient to improve the accounting quality, at least in a short term. These findings are consistent with the accounting literature explaining that managements' incentives and national institutional factors play an important role in preparing financial information. Due to this, the success of the global accounting standards, as proposed by (Leuz, 2013), might not be limited to the accounting standards itself, but may lie on the efforts of the convergence of the enforcement mechanisms and the disclosures incentives.

References

Aharony, J., Barniv, R., & Falk, H. (2010). The impact of mandatory IFRS adoption on equity valuation of accounting numbers for security investors in the EU. *European Accounting Review*, 19(3), 535–578.

- Ahmed, K., Chalmers, K., & Khlif, H. (2013). A meta-analysis of IFRS adoption effects. *The International Journal of Accounting*, 48(2), 173–217.
- Ashbaugh, H., & Pincus, M. (2001). Domestic accounting standards, international accounting standards, and the predictability of earnings. *Journal of Accounting Research*, 39(3), 417–434.
- Aubert, F., & Grudnitski, G. (2011). The impact and importance of mandatory adoption of International Financial Reporting Standards in Euope. *Journal of International Financial Management & Accounting*, 22(1), 1–26.
- Ball, R., Robin, A., & Wu, J. S. (2003). Incentives versus standards: properties of accounting income in four east asian countries. *Journal of Accounting and Economics*, 36(1), 235–270.
- Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467–498.
- Bengoa, M., & Sanchez-Robles, B. (2003). Foreign direct investment, economic freedom and growth: new evidence from Latin America. *European Journal of Political Economy*, 19(3), 529–545.
- Benos, E., & Weisbach, M. S. (2004). Private benefits and cross-listings in the united states. *Emerging Markets Review*, 5(2), 217–240.
- Bradshaw, M. T., & Miller, G. S. (2008). Will harmonizing accounting standards really harmonize accounting? Evidence from non-US firms adopting US GAAP. *Journal of Accounting, Auditing & Finance*, 23(2), 233–264.
- Burgstahler, D. C., Hail, L., & Leuz, C. (2006). The importance of reporting incentives: earnings management in European private and public firms. *The accounting review*, 81(5), 983–1016.
- Carvalho, L. N., & Salotti, B. M. (2012). Adoption of IFRS in Brazil and the consequences to accounting education. *Issues in Accounting Education*, 28(2), 235–242.
- Chen, H., Tang, Q., Jiang, Y., & Lin, Z. (2010). The role of International Financial Reporting Standards in accounting quality: Evidence from the European Union. *Journal of International Financial Management & Accounting*, 21(3), 220–278.
- Coffee Jr, J. C. (2002). Racing towards the top: The impact of cross-listing and stock market

- competition on international corporate governance. Columbia Law Review, 102, 1757.
- Daske, H., Hail, L., Leuz, C., & Verdi, R. (2013). Adopting a label: Heterogeneity in the economic consequences around IAS/IFRS adoptions. *Journal of Accounting Research*, 51(3), 495–547.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *The Accounting Review*, 193–225.
- Fernandes, N., & Ferreira, M. A. (2008). Does international cross-listing improve the information environment. *Journal of Financial Economics*, 88(2), 216–244.
- Francis, J. R., Khurana, I. K., Martin, X., & Pereira, R. (2008). The role of firm-specific incentives and country factors in explaining voluntary ias adoptions: Evidence from private firms. *European Accounting Review*, 17(2), 331–360.
- Frank, W. G. (1979). An empirical analysis of international accounting principles. *Journal of Accounting Research*, 593–605.
- Gebhardt, G. u., Novotny-Farkas, Z., et al. (2011). Mandatory IFRS adoption and accounting quality of European banks. *Journal of Business Finance & Accounting*, 38(3-4), 289–333.
- International Monetary Fund. (2013, October). World Economic Outlook: Transitions and tensions. Retrieved from
 - http://www.imf.org/external/pubs/ft/weo/2013/02/pdf/text.pdf
- J. P. Morgan. (2013). DR market briefing. Retrieved from https://www.adr.com/Home/LoadPDF?CMSID=da009b293f3e4e2db76bfe727d2d3c1f
- Jeanjean, T., & Stolowy, H. (2008). Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption. *Journal of accounting and* public policy, 27(6), 480–494.
- Jones, J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193–228.
- Karolyi, G. A. (2004). The role of American Depositary Receipts in the development of emerging equity markets. *Review of Economics and Statistics*, 86(3), 670–690.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2007). Governance matters vii: Aggregate and individual governance indicators, 1996-2007. World Bank, World Bank Institute, Global Programs Division, and Development Research Group, Macroeconomics and Growth Team.
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of accounting and economics*, 39(1), 163–197.

Kvaal, E., & Nobes, C. (2010). International differences in ifrs policy choice: a research note. Accounting and Business Research, 40(2), 173–187.

- Lang, M., Raedy, J. S., & Yetman, M. H. (2003). How representative are firms that are cross-listed in the United States? An analysis of accounting quality. *Journal of Accounting Research*, 41(2), 363–386.
- Lang, M., Smith Raedy, J., & Wilson, W. (2006). Earnings management and cross listing: Are reconciled earnings comparable to US earnings? *Journal of Accounting and Economics*, 42(1), 255–283.
- Lang, M. H., Lins, K. V., & Miller, D. P. (2003). Adrs, analysts, and accuracy: Does cross listing in the united states improve a firm's information environment and increase market value? *Journal of Accounting Research*, 41(2), 317–345.
- Lara, J. M. G., Torres, J. A. R., & Veira, P. J. V. (2008). Conservatism of earnings reported under International Accounting Standards: A comparative study. Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad, 37(138), 197–210.
- Larcker, D. F., & Richardson, S. A. (2004). Fees paid to audit firms, accrual choices, and corporate governance. *Journal of Accounting Research*, 42(3), 625–658.
- Leuz, C. (2010). Different approaches to corporate reporting regulation: How jurisdictions differ and why. Accounting and Business Research, 40(3), 229–256.
- Leuz, C. (2013). A new approach to global reporting convergence: The global player segment.
- Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: an international comparison. *Journal of Financial Economics*, 69(3), 505–527.
- Licht, A. N. (2003). Cross-listing and corporate governance: bonding or avoiding. *Chicago Journal of International Law*, 4, 141.
- Lima, V. S. d. (2011). Incentivos no nível da firma e consequências econômicas da convergência ao ifrs no brasil (Unpublished master's thesis).
- López de Silanes, F., La Porta, R., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of Political Economy*, 106, 1113–1155.
- Lourenço, I., Branco, M. C., & Dias Curto, J. (2013). Do IFRS matter in emerging countries?

 An exploratory analysis of Brazilian firms. An Exploratory Analysis of Brazilian Firms
 (December 30, 2013).
- McNichols, M. F. (2001). Research design issues in earnings management studies. *Journal of Accounting and Public Policy*, 19(4), 313–345.
- Mortimore, M. (2000). Corporate strategies for fdi in the context of latin americas new

- economic model. World Development, 28(9), 1611–1626.
- Nobes, C. (2011). IFRS practices and the persistence of accounting system classification. Abacus, 47(3), 267-283.
- Paananen, M. (2008). The IFRS adoption's effect on accounting quality in sweden. *University of Hertfordshire*.
- Paananen, M., & Lin, H. (2009). The development of accounting quality of IAS and IFRS over time: The case of Germany. *Journal of International Accounting Research*, 8(1), 31–55.
- Reese Jr, W. A., & Weisbach, M. S. (2002). Protection of minority shareholder interests, cross-listings in the United States, and subsequent equity offerings. *Journal of Financial Economics*, 66(1), 65–104.
- Silva, R. L. M. d. (2013). Adoção completa das ifrs no brasil: qualidade das demonstrações contábeis eo custo de capital próprio (Unpublished doctoral dissertation). Universidade de São Paulo.
- Soderstrom, N. S., & Sun, K. J. (2007). IFRS adoption and accounting quality: a review. European Accounting Review, 16(4), 675–702.
- Treviño, L. J., & Mixon Jr, F. G. (2004). Strategic factors affecting foreign direct investment decisions by multi-national enterprises in Latin America. *Journal of World Business*, 39(3), 233–243.
- Trevino, L. J., Thomas, D. E., & Cullen, J. (2008). The three pillars of institutional theory and fdi in latin america: An institutionalization process. *International Business Review*, 17(1), 118–133.
- Tuman, J. P., & Emmert, C. F. (2004). The political economy of US foreign direct investment in Latin America: a reappraisal. *Latin American Research Review*, 39(3), 9–28.
- Van Tendeloo, B., & Vanstraelen, A. (2005). Earnings management under german gaap versus ifrs. European Accounting Review, 14(1), 155–180.
- Warfield, T. D., Wild, J. J., & Wild, K. L. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics*, 20(1), 61–91.
- Zhang, K. H. (2001). Does foreign direct investment promote economic growth? evidence from east asia and latin america. *Contemporary Economic Policy*, 19(2), 175–185.