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IFRS adoption and company conservatism in Colombia and Brazil

Adoção das IFRS e conservadorismo das companhias na Colômbia e no Brasil

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Abstract: We analysed changes in the levels of conservatism in Colombia and Brazil after International Financial Reporting Standards (IFRS) adoption, in accordance with the theory of cultural influence in accounting (Gray, 1988). We found that IFRS adoption resulted in decreased conservatism of accounting practices in Brazil; however, it resulted in increased conservatism in Colombia. We found uniformity in conservatism among economic sectors in Brazil. In Brazil and Colombia, the industrial, investment, commercial, and financial sectors showed a decrease in conservatism, as expected. The service and public sectors showed an important increase in conservatism in Colombia, however.

Keywords: IFRS, theory of cultural influence, conservatism index, Brazil, Colombia.

Resumo: Analisamos as mudanças nos níveis de conservadorismo na Colômbia e no Brasil após a adoção das Normas Internacionais de Contabilidade (IFRS), de acordo com a teoria da influência cultural na contabilidade (Gray, 1988). Constatamos que a adoção das IFRS resultou em diminuição do conservadorismo das práticas contábeis no Brasil; no entanto, resultou em maior conservadorismo na Colômbia. Foi encontrada uniformidade no conservadorismo entre os setores econômicos no Brasil. No Brasil e na Colômbia, os setores: industrial, de investimento, comercial e financeiro, apresentaram uma queda no conservadorismo, como esperado. No entanto, os setores público e de serviços mostraram um aumento importante no conservadorismo na Colômbia.

Palavras-chave: IFRS, teoria da influência cultural, índice de conservadorismo, Colômbia.

Introduction

By 2016, the approximately 140 jurisdictions around the world that required or permitted the use of International Financial Reporting Standards (IFRS) accounted for 60% of the world's gross domestic product (Pacter, 2016). Several studies have analysed this process of converting to IFRS, including the effects of adoption (e.g., Aubert & Grudnitski, 2011; Barbosa Neto, Dias, & Pinheiro, 2009; Bissessur & Hodgson, 2012; Cotter & Wee, 2012; De Souza, Borba, & Zandonai, 2011; Durukan, Ozkan, & Dalkilic, 2012; Guimarães dos Santos, Lima, Freitas, & Lima, 2011; Iatridis, 2012a; Lima, 2011; Martins & Brasil, 2008; Martins & Paulo, 2010; Muller, Oliveira & Lemes, 2011; Riedl,

& Sellhorn, 2012; Pelucio-Grecco, Geron, & Formigoni, 2010; Pires & Decourt, 2015; Santos & Calixto, 2010); its relation to earnings management (e.g., Aubert & Grudnitski, 2012; Barth, Landsman, Lang, & Williams, 2012; Fernandes, 2011; Iatridis, 2012b; Jeanjean & Stolowy, 2008; Leventis, Dimitropoulos, & Anandarajan, 2011; Pelucio-Grecco, Geron, Grecco, & Lima, 2014; Shelton, Owens-Jackson, & Robinson, 2011; Tsipouridou & Spathis, 2012; Wang & Campbell, 2012; Zéghal, Chtourou, & Sellami, 2011); and the effects of substituting US Generally Accepted Accounting Principles (GAAP) to prepare financial reports for the US capital market by companies not located in the United States (e.g., Mcenroe & Sullivan, 2011a, 2011b; Duh, Hsu, & Alves, 2012; Kim, Li, & Li, 2012). Academics, professionals, governments, and regulators are interested in the impacts of IFRS adoption.

In this paper, we analyse and compare IFRS adoption in Colombia in 2015 and in Brazil in 2010. In Colombia, the process was divided among three groups of companies: public and large companies (Group 1); small and medium entities (Group 2); micro-enterprises (Group 3). We focus on the first group, which includes listed companies with a date of transition of January 1, 2014. In Brazil, adoption occurred in two phases, starting with a partial adoption in 2008 and full adoption in 2010 with a date of transition of January 1, 2009.

According to Hendriksen and Van Breda (1992), social and economic consequences of an accounting policy must be considered. These effects include improved information, reduced manufacturing costs, and better investment decisions among users of accounting information. These changes also affect equity and income elements. Equity value measurements can vary depending on their norms. In accordance with the theory of cultural influence in accounting, Colombia and Brazil are classified in the developing Latin group. Their accounting systems are heavily regulated, inflexible, not transparent, and very conservative (Gray, 1988).

The objective of this paper is to analyse changes in the level of conservatism in companies listed in Colombia and Brazil after adopting IFRS. The specific objectives are as follows:

· Analyse the levels of conservatism in Colombia and Brazil by comparing accounting standards before and after IFRS adoption, using the conservative index developed by Gray (1980);

· Analyse the levels of conservatism by economic sectors in Colombia and Brazil using the conservative index developed by Gray (1980); and

· Analyse the levels of conservatism by accounting theme in Colombia and Brazil using the index of partial conservatism developed by Gray (1980).

We hope that the result of this work will contribute to the understanding of the effects of IFRS adoption in Colombia and Brazil. The economic sector analysis aims to contribute to the understanding of the sectors most affected by changes in accounting standards. Analysis by accounting theme aims to help prioritize accounting issues during the process of accounting standardization in Colombia.

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Background

Conservatism and the Theory of Cultural Influence in Accounting

Accounting conservatism is defined as the anticipated recognition of all losses and earnings. According to Basu (1997), the financial results reflect bad news faster than good news. Conservatism affects the systems that recognize gains and losses (Basu, 1997; Watts, 2003a). According to a study by Watts (2003a), conservatism has survived for centuries and grown over the last 30 years. In the United States, since the 1930s, financial accounting has emphasized profits and losses with a corresponding emphasis on conservatism (Basu, 1997).

According to Watts (2003a), although the Financial Accounting Standards Board seems to avoid conservatism, recent changes in US GAAP regarding impairment of goodwill indicate alterations in conservatism of results. Watts (2003a, p. 207) argues that the successful elimination of conservatism alters managerial behavior and imposes significant costs on investors and the economy in general and that researchers and regulators who propose the inclusion of unverifiable capitalized future cash flows in financial reports should consider these costs. Watts (2003b, p. 287) further emphasizes that researchers should consider how accounting effects on managerial behaviour influence accounting and financial reporting. For example, assessing the relevance of an accounting method for financial reporting users requires assessing the ability of managers to use that method to manipulate accounting numbers and commit fraud.

The studies by Basu (1997) and those described by Watts (2003a) focus on US accounting practices that are standardized by the Financial Accounting Standards Board and rely on empirical evidence that focuses on companies in the United States. Lopes and Martins (2005) point out that, although conservatism exists in standards around the world (e.g., Financial Accounting Standards Board, International Accounting Standards Board), the degree of conservatism varies.

Conservatism appears explicitly in the literature of accounting theory as a necessary attribute. Although it does not occur in the IFRS conceptual framework, international standards do include conservatism for certain transactions. For example, in the definition of contingencies, which are not recognized in accounting, a probable asset is considered contingent, but a probable obligation is not contingent and must be recognized as a liability provision. The International Accounting Standards Board states that the information must be a perfectly faithful representation that is complete, neutral, and free from error. Thus, the intention to exclude conservatism from accounting is clear.

Based on cultural theory of Hofstede, Neujien, Ohayv and Sanders (1990), Gray (1988) developed the theory of cultural influence in accounting through sociocultural analysis of individual countries and groups of countries with similar characteristics. According to Gray (1988), various environmental influences can be enumerated in accounting practices. These influences include the entity's business activity, financial resources, capital market development, the tax system, the existence and significance of the accounting profession, the status of research and accounting education, the political system, economic development, inflation, and accounting regulations. Gray (1988) identified the following cultural dimensions in accounting systems: professionalism, uniformity, conservatism, and secrecy. Then, by analysing the connections between culture and accounting systems in the context of authority and enforcement characteristics on the one hand and measurement and disclosure on the other hand, we classified countries into groups with similar characteristics.

Adoption of International Financial Reporting Standards

Gray (1988) points out that the local socio-economic environment influences each country's GAAP, resulting in a diversity of accounting practices and thus differences in the accounting statements of companies from different countries. According to Souza and Coutinho Filho (2007), the focus on accounting harmonization intensified in the late 1990s, partially because of economic crises in Japan, Asia, and Russia. In response, the International Accounting Standards Board was created in 2001 to review existing international accounting standards issued by the International Accounting Standards Committee and IFRS. Member states of the European Union adopted IFRS in 2005. Since then, much research has analysed the effects of IFRS adoption around the world.

According to Martins and Brasil (2008), high-quality standards strengthen information, and transparency and comparability reduce investment risk and capital costs. Some countries may experience an optimistic reaction regarding IFRS, as pointed out by Pelucio-Grecco et al. (2013). Despite the difficulties in converting to IFRS in Brazil, new accounting practices are expected to produce positive reflections of investments. Some studies indicate a reduction in the manipulation of results after IFRS adoption (e.g., Aubert & Grudnitski, 2012; Barth et al., 2012; Leventis et al., 2011; Pelucio-Grecco et al., 2014, Zéghal et al., 2011) and other do not find evidence that IFRS adoption deters earnings management (e.g., Fernandes, 2011; Wang & Campbell, 2012; Jeanjean & Stolowy, 2008). Some studies suggest that firms located in common law countries tend to have less manipulation of results than those in code law countries, even after IFRSs adoption (e.g., Jeanjean & Stolowy, 2008; Shelton et al., 2011).

In contrast, Ozu, Shiosaki, Shin, and Gray (2010) showed that Japanese executives believe that the costs of IFRS adoption exceed the benefits of its implementation. Daske (2006) also did not identify any economic benefit for companies that applied IFRS or US GAAP instead of local accounting practices. The expected capital cost did not decrease, and therefore IFRS adoption alone did not reduce capital costs for companies. Jeanjean and Stolowy (2008) researched management of accounting results after adopting IFRS in Australia, France, and United

Kingdom and found that the management of results did not decrease and actually increased in France. Sharing accounting rules thus may not create a common language in business.

Horton, Serafeim and Serafeim (2013) researched accounting information quality in several European countries and concluded that it increased in companies that voluntarily adopted IFRS. In cases of mandatory adoption, accounting information quality improved for non-financial companies, which is consistent with the controversy regarding fair value. Nevertheless, by 2016, 140 jurisdictions around the world had adopted IFRS (Pacter, 2016).

IFRS in Colombia and Brazil

Colombia started the process of IFRS adoption in 2015. A comparative effect is observable in 2014 for some companies, including listed companies. The local body responsible for the Colombian convergence process is the Technical Council of Public Accounting, which was created in 1990 through Law 43 and answers to the Ministry of Commerce, Industry, and Tourism and Ministry of Finance and Public Credit. In 2009, it oversaw the standardization of accounting and financial information and information assurance (Article 6, Law 1314), proposing the laws, decrees, and resolutions issued by Congress, the president, and the ministers.

It took until December 2012 to issue a presidential decree for the regulatory technical framework for Group 1 financial information preparers. Group 1 companies are those listed on the Colombian Stock Exchange that manage public resources (e.g., financial institutions, pension funds, capitalization companies) and other entities that meet specific technical criteria for large companies (Decree 2784 of 2012). Non-Group 1 companies submitted information according to local regulations (Decree 2649 of 1993 and Decree 2650 of 1993). These decrees define local accounting standards, known as COL GAAP (Colombian General Accepted Accounting Principles).

Many papers on IFRS have been published in local Colombian literature from different perspectives. For example, a literature review found more than 80 articles published in two journals in just over a decade (Grajales, Cuevas, & Usme, 2013). These articles included technical (53), conceptual (11), critical (9), comparative (7) and other studies (8). Among these, no empirical studies measuring the first effects of the implementation of IFRS in Group 1 companies were found.

The Superintendence of Companies published a financial analysis of the largest companies in the real sector as of December 31, 2015. The report separated 1,000 companies that prepared information using local regulations from 1,000 companies that prepared information using international standards. Of the 1,000 companies in Group 1, 945 are supervised by the Superintendence of Corporations, 46 are supervised by the Financial Superintendence, 6 by public services, 2 by the National Accountancy Office, and 1 by the Superintendence of Solidarity Economy. Among the 20 companies in Group 1 with the highest income from ordinary activities in 2015, seven are from the mining sector, which was adversely affected by the international panorama of the sector (Supersociedades, 2016, p. 28). The profits of the main companies decreased significantly in 2015, compared to 2014, especially among the mining-energy sector (Supersociedades, 2016). It is important to analyse companies in the mining-energy sector separately from others, because of the specific situation faced by this sector in 2015. The changes in the data of the companies in this sector are a combined effect of their business operations and IFRS implementation.

For Group 1 companies, revenues from ordinary activities in the mining sector (oil, oil products, and coal) decreased by 18.6%, whereas the best performance was in manufacturing (15.2% increase), agriculture (12.4% increase), services (11.4% increase), commerce (11.0% increase), and construction (3.9% increase). Although operating revenues increased in most sectors, profits fell sharply in mining (422.5% decrease), agriculture (17.3% decrease), and services (14.2% decrease). Profits showed good performance in construction (23.9% increase), manufacturing (13.5% increase), and commerce (6.6% increase; (Supersociedades, 2016, p. 20–21).

For the 1,000 companies that did not apply IFRS in 2015, operating revenues grew 15.68% in that year and net income decreased by 0.10%. For the 1,000 largest companies that used IFRS, revenues increased only 3.9% and profits decreased by 70.5%, which was especially high in the mining sector (Supersociedades, 2016, p. 29). The return on equity generated by Group 1 companies was 2% in 2015, compared to 7% in 2014. Costs and expenses increased, so they were less profit. However, the general indicators among non-extractive companies in Group 1 remained stable, with returns on equity of 8% in 2014 and 2015. During the first half of 2016, local newspapers presented specific examples of companies that seriously diminished their gains by adopting IFRS, indicating that conservatism increased, rather than diminished.

Another way to understand local conservatism is through Article 188 of the Colombian Tax Code, which compiles all current tax regulations. This code states that the net profit must not be less than 3% of net worth in the previous year. Statistical information available from the National Tax and Customs Office website corroborates that most taxpayers report a profit that is very close to presumptive earnings. Due to the tributary tradition in Colombia and to avoid paying income tax, companies usually report a profit that is very close to the minimum allowed locally, according to the assets of their property.

In Brazil, IFRS adoption occurred in two phases, a partial adoption in 2008 and full adoption in 2010. Brazil has three periods of accounting norms. Pre-IFRS accounting practices expired in 2007. The Brazilian Securities Commission determined the total transition from the norms to IFRS on January 1, 2009, the initial date for the full IFRS period. During the hybrid period of 2008–2009, the transition date was supposed to be January 1, 2007, although companies could opt for January 1, 2008 if they reported the equity conciliation on December 31, 2008. All corporations that used this option reported their equity values in these three periods on December 31, 2008, or January 1, 2009.

Brazilian accounting practices underwent several modifications to the knowledge, measurement, and disclosure of equity conditions and the performance of local entities. In this study, the main changes are listed, by we do not explore each modification. Regarding knowledge, some assets that were recognized up to 2007 and then restricted after IFRS adoption are highlighted. For example, pre-operational expenses were classified as deferred assets before IFRS and were then recognized directly in income. R&D expenses also were classified as deferred assets with restrictions that were inferior to those defined by IFRS, and some of these assets were changed to expenses. However, assets that previously could not be recognized because they did not belong to the company could be recognized with IFRS, but only if the entity possessed the risk, benefits, and control inherent to the possession, even without owing it in fact.

Another important change in the Brazilian accounting practices involved the restriction of maintaining assets measured at cost. Recoverable value became inferior to net book value because of a new write-off per impairment. Regarding measurement of assets, the accounting policy of revaluation was no longer permitted, although IFRS norms enabled such policy. Classifying financial instruments at initial recognition also was necessary, which caused the utilization of fair value of those characterized as available for sale or in negotiation, with effects on net equity and income, respectively. Inventory also underwent changes concerning measurement, replacing market value with net realizable value when compared to cost. Assets that previously were measured by the history cost value were measured based on fair value, highlighting properties for investment and biological assets.

Finally, regarding disclosure, there were changes in the classification of equity and income elements in the mandatory reports and disclosure in the notes. Concerning the classification of possessing elements, the permanent asset and deferred assets groups were eliminated, and the noncurrent assets and noncurrent liability groups were created, as well as the intangible assets and equity assessment adjustment subgroups. For income and expenses, extraordinary and non-operational earnings were eliminated, and a line of subtotal of earnings before income and financial expenses was created. A highlight was added after net income concerning ongoing operations of a company for income from discontinued operations. In the mandatory accounting reports, the statement of cash flows and added value was aggregated. The statement of changes in the financial position was no longer mandatory. Brazil also opted to permit the comprehensive income statement as a component of equity changes.

Several studies have cited the difficulties of implementing IFRS. Lemes and Silva (2007) and Pelucio-Grecco et al. (2010) studied the impacts of implementing the new accounting practices on Brazilian companies at the beginning of the adoption process. Ozu et al. (2010) researched

Japanese people's perceptions and scepticism regarding costs and benefits of IFRS adoption. According to Dantas et al. (2010), although the consensus that accounting systems based on principles like IFRS offer benefits, adoption requires professional judgment and subjective criteria that may bring high costs and risks. The expectation is that information will improve, but the risk is that professional prerogatives will not be applied in good faith. Souza (2009) researched deterrents for adopting IFRS in Brazil and highlighted the transition of an accounting model based on rules to one based on principles and that lacks qualified professionals and the influence of fiscal accounting laws. As Colombia and Brazil are classified among the most conservative countries (Gray, 1988), these countries likely will present less conservative accounting results than they did before migrating to the international standards. We thus present the following research thesis:

Accounting in Colombia and Brazil after the adoption of IFRS is less conservative than before adoption.

Research Design and Data

Our study population comprised companies listed on the Stock Exchange of Colombia and the Stock Exchange of Brazil with market capitalization. For the Colombian sample, we obtained 75 companies that had stock market capitalization on September 11, 2016. The final sample comprised 30 companies representing 77% of the stock market capitalization of Colombia. The data were extracted from the 2015 financial reports of the Financial Superintendence of Colombia website (www.superfinanciera.gov.co).

For the Brazilian sample, we obtained 529 companies listed on the BM&F BOVESPA website (www.bmfbovespa.com.br) for the São Paulo Stock Market and Future Market on November 8, 2011. Of the 529 companies that identified the segment of corporate governance under which the entity is classified, we excluded 23 companies that opened their capital after 2008 and were part of the list. We also excluded four companies whose base date of financial statements was not December 31, leaving 502 companies. We then extracted notes presented on the base date of December 31, 2008, included the conciliation between the equity of these companies in the pre-IFRS and hybrid periods, the quantity of shares composing the capital of such entities in the mentioned base date, and the economic sector to which this entity belonged. We excluded a further 28 companies that did not report their financial statements on December 31, 2008, and one company that reported its statement only under IFRS. The final sample thus contained 473 Brazilian listed companies.

For the data treatment, we used context analyses to identify entities that reported equity values during the pre-IFRS and hybrid periods on December 31, 2008. We identified 107 such entities. Section 4.1 discusses the results of these analyses. We then identified 109 entities collected at the Stock Exchange of Brazil website on December 21, 2008. We extracted the equity value of the full IFRS period on the transition dates of January 1, 2009, or December 31, 2008. To analyse the effect of IFRS adoption on the level of conservatism of the accounting system in Colombia and Brazil, we used Gray's (1980) total and partial conservative indices.

Formula of the Total Conservative Index

To analyse the level of conservatism in Colombia, we compared the accounting results to equity in accordance with accounting standards before and after IFRS, based on the conservative index developed by Gray (1980). We present formula 1, adapted from Gray (1980) for comparison in Colombia, for the analysis of the effect on the results:

$$ICE = 1 - [(\text{Colombian GAAP earning} - \text{IFRS earning}) / |\text{Colombian GAAP earning}|] \quad [1]$$

where ICE is the index of conservatism of earning; IFRS earning is the earning according to IFRS; Colombian GAAP earning is the earning according to Colombian GAAP before IFRS; and |Colombia GAAP earning| is the absolute value of Colombian earning. Earnings data before and after the IFRS were extracted from the financial reports upon initial adoption of IFRS and compared to 2014. If ICE was greater than 1, then the 2014 earnings in Colombia after the adoption of IFRS were less conservative than those presented in that year that were in accordance with previous accounting standards.

Next, we present formula 2, also adapted from Gray (1980), for comparing the analysis of the effect on equity in Colombia:

$$ICEq = 1 - [(\text{Colombian/Brazilian GAAP equity} - \text{IFRS equity}) / |\text{Colombian/ Brazilian GAAP equity}|] \quad [2]$$

where ICEq is the index of conservatism of equity; IFRS equity is the equity according to IFRS; Colombian/Brazilian GAAP equity is the equity according to Colombian or Brazilian GAAP before IFRS; and | Colombian/Brazilian GAAP equity| is the absolute value of Colombian or Brazilian GAAP equity. The equity data before and after IFRS were taken from the financial reports upon initial adoption of IFRS in relation to the adjustment made in equity at the date of transition (January 1, 2009, in Brazil and January 1, 2014, in Colombia). If ICEq was greater than 1, then accounting in Colombia or Brazil was less conservative after the adoption of IFRS in relation to the recognition and measurement of assets, liabilities, losses and gains, and the cumulative effects on January 1, 2014 and January 1, 2009, respectively.

Formula of Partial Conservative Index

To analyse the level of accounting conservatism in Colombia, we compared the accounting equity in accordance with accounting standards before and after IFRS, based on the partial conservative index developed by Gray (1980). Formula 3, adapted from Gray (1980), analyses the effect on equity by accounting subject, for the comparison in Colombia:

$$ICEqP = 1 - (PA_x/\text{Colombian GAAP equity}) \quad [3]$$

where ICE_qP is the index of partial conservatism of equity; PAx is the partial adjustment of the accounting theme x in equity; and Colombian GAAP equity is the equity according to Colombian GAAP before IFRS. Earning and equity data before and after the IFRS and the estimates made by the companies for the initial adoption were taken from the financial reports on the initial adoption of IFRS in relation to accounting item x.

Data Treatment

To verify if significant alteration in accounting conservatism occurred in Colombia and Brazil, we compared the earnings and equity of the sample companies before and after IFRS adoption using the Wilcoxon test. This test is applicable for comparing related groups at a significance level of 5%. In accordance with our thesis that accounting in Colombia and Brazil after the adoption of IFRS is less conservative than before adoption, we constructed the following research hypotheses.

Hypothesis 1: ICE > 1, being that the Colombian earning mean is statistically different from the mean earning IFRS, with a significance level of 5%.

Hypothesis 2: ICEq > 1, being that the Colombian and Brazilian equity mean is statistically different from the average IFRS equity, with a significance level of 5%.

To verify if there was asymmetric alteration in the different economic sectors of Colombia and Brazil, we did the same analyses by sectorial group:

Hypothesis 3: $ICEq_{\text{sector } w} > 1$, in which $ICEq_{\text{sector } w}$ is the conservative index of equity of sector w and that the Colombian and Brazilian mean of sector w is statistically different from the mean of IFRS equity of sector w, with a level of significance of 5%

To identify which accounting themes were most responsible for the alteration of the level of conservatism in Colombia, we used the level of partial conservatism:

Hypothesis 4: ICEP > 1, being that the average of Colombia earning is statistically different from the average of Colombia earning adjusted by the accounting theme x, with a level of significance of 5%.

Hypothesis 5: ICEqP > 1, being that the Colombian equity mean is statistically different from the Colombian equity average adjusted by the accounting theme x, with a significance level of 5%.

Results Analysis

Context Analyses of the Notes and Sample Profile

The sample of this study comprised mostly companies in the industrial sector. Table 1 shows the sample composition per sector.

Table 1.
Sample per Sector

Sector	Colombian companies	Brazilian companies
Industrial sector - 01	15	54
Investment sector - 02	5	2
Commercial sector - 03	1	2
Financial sector - 04	4	6
Public sector - 05	3	17
Service sector - 06	2	26
Total	30	107

Through the context analyses of the notes of the 473 Brazilian listed companies that reported their financial statements according to IFRS in 2010, 107 entities presented their equity value and their income value in accordance with the Brazilian accounting practices in the base date 2010. Brazil adopted in two stages, one in 2008 and one in 2010. The comparison of the profits in accordance with the different accounting standards generates different proportions of conservatism (Gray, 1980). Similarly, we selected the 30 largest companies in Colombia that reported their financial statements according to IFRS in 2015 and presented their equity value and their income value, also in accordance with the Colombian accounting practices in the base date 2014. For measuring the effects of new accounting practices on shareholders' equity and income, the values before and after the adjustments and the adjustments were converted into 100 basis, as shown in Table 2. The Conservatism Index (Gray, 1980) also was calculated.

Table 2.
Conservatism Index

	Values before IFRS	Values - IFRS	Conservatism Index
Colombia			
Equity - 2014	100,00	94,04	0,94
Income - 2014	100,00	102,73	1,03
Brazil			
Equity - 2010	100,00	118,06	1,18

Index amounts greater than 1 indicate that the new accounting practices adopted in these countries were less conservative than those presented in that year in accordance with previous accounting standards. According to the Table 2, the financial statements in Brazil were less conservative after the adoption of IFRS (Equity´s Conservatism Index: 1,18), and the financial statements in Colombia show greater conservatism after convergence of their accounting standards to IFRS (Equity´s Conservatism Index: 0,94). The effect on profit for the period is the opposite, but this effect is timely. Lopes and Martins (2005) point out that conservatism is present in different normalizations. Nevertheless, according to the International Accounting Standards Board´s Framework, the financial information must be relevant and faithful.

The differences between the mean values of Equity were tested by a Wilcoxon Test for both countries. The Wilcoxon Test verifies for two paired samples if the median of differences between the equity values according to the country accounting standards and equity values according to IFRS equals zero.

The equity values in Colombia on January 1, 2014, are significantly different compared to the values before and after IFRS adoption, with a significance level of 5% and a p-value of 0.012 (Wilcoxon Test). This finding corroborates the conclusion that financial statements show greater conservatism after adopting the accounting standards (Equity Conservatism Index: 0,94) in Colombia. The profit values are not significantly different when comparing their values before and after IFRS adoption, with a significance level of 5% and a p-value of 0,568 (Wilcoxon Test). The equity values in Brazil on January 1, 2009, are significantly different compared to the values before and after IFRS adoption, with a significance level of 5% and a p-value of 0,001 (Wilcoxon Test). This finding corroborates the conclusion that the financial statements show less conservatism after adopting the accounting standards (Equity Conservatism Index: 1,18) in Brazil.

In Table 3, the obtained IC is shown per economic sector. In Colombia, IC uniformity occurred among sectors. The industrial, investment, commercial, and financial sectors had a decrease in conservatism. However, the service and public sectors show an important increase in conservatism. It is important to point out the significant adjustments in the equity of companies in the public sector in Colombia.

Table 3.
Conservatism Index per Sector, Colombia (January 1, 2014)

Sector	Equity before IFRS	Equity IFRS	IC	Income before IFRS	Income IFRS	IC
Industrial sector - 01	100,00	44,10	0,44	100,00	132,71	1,33
Investment sector - 02	100,00	99,90	1,00	100,00	139,43	1,39
Commercial sector - 03	100,00	96,70	0,97	100,00	129,50	1,30
Financial sector - 04	100,00	100,60	1,01	100,00	124,03	1,24
Public sector - 05	100,00	97,20	0,97	100,00	53,13	0,53
Service sector - 06	100,00	94,10	0,94	100,00	94,95	0,95

In Table 4, the obtained IC is shown per economic sector, in which Brazil showed IC uniformity among the industrial, investment, financial, and public sectors, which had a decrease in conservatism. The commercial and services sectors show increases in conservatism.

Table 4.
Conservatism Index per Sector, Brazil (January 1, 2009)

Sector	Equity before IFRS	Equity IFRS	Conservatism Index
Industrial sector - 01	100,00	128,42	1,28
Investment sector - 02	100,00	156,35	1,56
Commercial sector - 03	100,00	94,64	0,95
Financial sector - 04	100,00	122,80	1,23
Public sector - 05	100,00	126,39	1,26
Service sector - 06	100,00	88,85	0,89

The investment sector had the lowest decrease of conservatism in Brazil. The major change in accounting practices in that sector was the fact that goodwill was no longer amortized, in accordance with IFRS. The change in Brazilian accounting practices that influenced the increase in conservatism in the commercial and services sectors refers to international accounting standard 21 – Effects of Changes in Foreign Exchange Rates.

The adjustments derived from the adoption of new accounting practices in Colombia were classified by type, as shown in table 5.

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Table 5.
Adjustments by Type, Colombia

Subject	Conservatism Index
Financial instruments	1,01
Inventory	1,00
Technical reserve	1,00
Property, plant, and equipment	1,02
Investment property	1,00
Intangible assets	0,96
Biological assets	0,99
Impairment	1,00
Investments in associates	0,97
Effects of changes in foreign exchange rates	1,00
Non-current assets held for sale	0,98
Provisions	1,01
Employee benefits	1,02
Minority interests	0,99
Other adjustments	1,05
Deferred taxes on these adjustments	1,06

The amount of deferred taxes refers to the fiscal effect of the adjustments that had been done. The changes in Colombian accounting practices that influenced the decrease in conservatism refer to intangible assets, biological assets, and non-current assets held for sale. The changes in Colombian accounting practices that influenced the increase in conservatism refer to financial instruments; property, plant, and equipment; provisions; and employee benefits.

Final Considerations

We analysed the changes in the levels of conservatism in companies listed in Colombia and Brazil after they adopted IFRS. According to the International Accounting Standards Board´s Framework, accounting information must be complete, neutral, free from error, and consequently, not conservative. Based on cultural theory of Hofstede, Neujien, Ohayv and Sanders (1990), Gray (1988) developed the theory of cultural influence in accounting, through sociocultural analysis of individual countries and groups of countries with similar characteristics. Gray (1988) classified Colombia and Brazil among the most conservative groups of countries.

Colombia adopted IFRS in 2015, with a comparative effect in 2014 for some companies, including listed companies. Brazil adopted IFRS in two phases, 2008 and 2010, and this study focuses on 2010. In Brazil, IFRS adoption resulted in a decrease in conservatism of accounting practices in general. In Colombia, the financial statements show greater conservatism after IFRS adoption. The effect on profit for the period is the opposite, but this effect is timely.

When analysing conservatism per economic sector, Brazil showed IC uniformity among sectors. Thus, despite the general view, companies experienced decreased conservatism in their previous practices, compared to their present ones, and this effect occurred in the industrial, investment, financial, and public sectors. In Colombia, the industrial, investment, commercial, and financial sectors showed decreased conservatism. However, the service and public sectors showed important increases in conservatism. It is that the accounting practices in public-sector companies differed significantly from IFRS principles.

Analysis of equity changes in Brazil showed that the adjustments occurred in investment, after goodwill was no longer amortized (in accordance with IFRS) and effects of changes in foreign exchange rates. The changes in Colombian accounting practices that influenced the decrease in conservatism were intangible assets, biological assets, and non-current assets held for sale. The changes in Colombian accounting practices that influenced the increase in conservatism were financial instruments; property, plant and equipment; provisions, and employee benefits. High quality and the fact that transparency and comparability reduced the risk of investments and the cost of capital were advantages that the Brazilian and Colombian market gained with IFRS adoption (Martins & Brasil, 2008).

The main limitation of the present study was lack of uniformity in the disclosure of the effects of adoption of the new accounting practices among Colombian companies. Additionally, the present study was limited to the effects in Brazilian and Colombian listed companies. Future studies should examine companies in other countries.

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