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International Financial Reporting Regulations and their informational relevance: Empirical evidence from Colombian listed companies

Las Normas Internacionales de Información Financiera y su relevancia informativa: evidencia empírica en empresas cotizadas de Colombia

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Abstract

This article exposes the effect of the adoption of the International Financial Reporting Standards (IFRS) in the disclosure of information of Colombia listed companies and examine the association between the level of compliance of IFRS and firm characteristics, as possible additional drivers of disclosure. The study uses a content analysis of the notes of the financial statements published in 2014 and 2015 of Colombian companies to observe compliance with the disclosure requirements and used a model of Ordinary Minimum Squares with cross-sectional data to establish its possible determinants. The study showed an improvement in the disclosure of accounting information from the adoption of IFRS and it was determined that the internationalization of companies has a positive and significant relationship with the level disclosure of information.

JEL Code: F20, M41, M48
Keywords: international financial reporting standards; IFRS; disclosure of information; accounting information quality; determinants

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Resumen

Este artículo expone el efecto de la adopción de las Normas Internacionales de Información Financiera (NIIF) en la revelación de información en empresas cotizadas en Colombia y examina la asociación entre el nivel de cumplimiento de los requisitos de revelación de las NIIF y las características de las empresas, como posibles impulsores adicionales de la revelación de información. Se realiza un análisis de contenido de las notas de los estados financieros publicados en los años 2014 y 2015 de compañías cotizadas colombianas para observar el cumplimiento de los requisitos de revelación y se hace uso de un modelo de Mínimos Cuadrados Ordinarios con datos de corte transversal para establecer sus posibles determinantes. El estudio evidenció una mejoría en la revelación de la información contable, a partir de la adopción de las NIIF y se determinó que la internacionalización de las compañías tiene una relación positiva y significativa con la mayor revelación de información.

Código JEL: F20, M41, M48
Palabras clave: normas internacionales de información financiera; NIIF; revelación de información; calidad de la información contable; determinantes

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Introduction

The adoption of International Financial Reporting Regulations has brought about significant changes in the generation and presentation of accounting information. This situation results from applying new criteria for recognition, measurement, presentation, and disclosure of information. These changes require a study of their real consequences and impact to evaluate the proper drafting and application of these guidelines and the benefits they have brought to companies and their stakeholders in terms of information.

Pascan (2015) opines that to achieve the expected benefits of IFRS adoption, related to greater comparability and transparency of financial reporting, implementing these regulations should result in improved quality of accounting information. Authors such as Barth, Landsman, and Lang (2008) and Iatridis (2010) have empirically demonstrated that following IFRS leads to higher-quality information. For their part, Cutillas, Sánchez and Yague (2016) have pointed out that once IFRS has been adopted, there is evidence of an increase in the valuation relevance of the operating result, given the inclusion of non-recurring results.

These and other studies have provided empirical evidence in companies in Europe, Asia, and North America. Nevertheless, it should be noted that a single set of standards may not be suitable for all environments and, therefore, may not uniformly improve the quality of information, especially given the differences between countries (Soderstrom & Sun, 2007). Hence, it is necessary to study other contexts, such as the case of companies located in emerging economies (Eng, Lin, & Neiva, 2019), in order to determine the effects brought about by the application of IFRS, even more so when it is essential for the

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development of this type of economy, to reduce opacity in earnings and promote greater confidence in the information disclosed (Mongrut & Winkelried, 2019).

Colombia is a benchmark that can serve to this end since it has been one of the countries that have followed the accounting convergence process in recent years and have defined the mandatory application of IFRS in official financial statements since 2015. This has favored the recognition of the most recent guidelines issued by the *International Accounting Standards Board* (IASB).

In Colombia, studies on this matter have focused on evaluating the convenience of adopting IFRS (Mantilla, 2002; Consejo Técnico de la Contaduría Pública, 2009; Grajales, Cuevas & Usme, 2015) and the financial and equity impacts of applying them (Lasso, Vargas, & Ruano, 2018; Superintendencia de Sociedades, 2015). It has been pointed out that once the IFRS is adopted, accounting figures are more adjusted to a financial reality, transcending the fiscal needs that determine how to generate accounting information in the country. Likewise, there has been a decrease in the equity figures of many companies once the new accounting framework has been applied.

To this end, the studies carried out have focused on studying the value relevance of IFRS, leaving in the background the empirical study of the informational value in terms of observing the variation in disclosure practices. For Holthausen and Watts (2001), the variety of demands for financial reports from parties other than stock market investors means that value relevance tests may be less relevant to the objectives of regulators and the objectives of financial reports.

This topic, which does not appear on the agenda of many researchers, is still a minor issue in the study of accounting regulation since it can be understood as deriving from the political concerns within organizations to decide what to disclose, which is perhaps different from "measurement issues" that are largely a technical and non-political issue (Coy, Fischer, & Gordon, 2001).

Both researchers and accounting professionals know that financial statements are not self-explanatory. Consequently, the descriptions and explanations provided in the notes to the financial statements are crucial to contextualize and understand the information provided. Therefore, if companies do not adapt narrative elements to complement quantitative information, they risk reporting a set of financial statements that fail to meet their ultimate objective: provide relevant and useful information for economic decision-making (Henderson, 2019).

In addition to analyzing the effects of the mandatory adoption of IFRS on disclosure practices, it is important to consider whether there are factors associated with the characteristics of the companies that have been drivers of adoption and, in this case, the level of disclosure achieved after adopting IFRS. Authors such as Mongrut and Winkelried (2019) and Hutagaol, Valentincic, and Warganegara (2019) consider that the mere adoption of IFRS does not, by itself, increase the quality of the financial reporting process and thus does not guarantee transparency in emerging markets.

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Based on the above, this study aims to analyze the impact of the IFRS application on accounting disclosure practices in Colombian companies. For this purpose, content analysis is performed on the notes to the financial statements for 2014 and 2015 in 31 listed companies in the Colombian industrial sector. The purpose of the above is to understand whether or not there has been a benefit in terms of greater informational value. Likewise, it is evaluated whether the degree of disclosure obtained with the application of IFRS may be determined, beyond their mandatory application, by business variables that may explain the greater disclosure of information.

The article begins with an introduction and moves on to a theoretical framework that sets out the pressures that the new regulations and the characteristics of the companies may exert on the increased disclosure of accounting information. This is followed by the methodology that supports the empirical work. Based on this, the results and conclusions on the impact of the application of IFRS on the disclosure of information are presented.

Theoretical framework

Disclosure of information is designed as a desired mechanism of organizational transparency that favors stakeholder decision-making (Schnackenberg & Tomlinson, 2016; Henderson, 2019). The accounting literature has used different theories to understand the role and relevance of enhanced disclosure in corporate practices (García & Sánchez, 2006).

Different theories have been put forward, such as Agency, Signals, Owner Costs, Transaction, and Institutional Costs theories (Hoque, 2006, Hellman, Carenys, & Moya, 2018). These theories suggest that information disclosure can serve: a). to bring the principal and the agent closer together in order to mitigate information asymmetries and allow for better control, b). to favor relations between organizations and their different stakeholders given the influence that may exist between them, and c). as a mechanism to signal to the market the best relative position of a company compared to others (García & Sánchez, 2006).

Under these theories, the selection of policies vis-à-vis organizational information to be disclosed will depend on regulatory requirements and the willingness to generate more information, which will depend on managers' perceptions of their costs and benefits (Albu, Albu & Gray, 2020; Hellman, Carenys, & Moya, 2018), and the influences arising from the complex set of forces of information supply and demand (Larran & Garcia, 2004).

Accordingly, the generation of accounting information is subject to two influences: pressure from regulatory bodies and market pressures (Giner, 1997). The first considers that accounting quality is a function of the institutional environment, including the legal and political system of the country in which

the company resides (Soderstrom & Sun, 2007). The regulatory environment in which companies operate is believed to influence the informational quality of disclosed financial reports since, by monitoring information, regulators increase the incentives for high-quality financial reporting (Firmino, Nogueira, Cavalcante, Magalhães, & Rodrigues, 2019).

This influence includes the accounting convergence processes toward international financial reporting standards, widely adopted worldwide (El-Helaly, Ntim & Al-Gazzar, 2020). This has led regulators and compilers of information to recognize new criteria and review existing ones to achieve information that meets the new information demands arising from international regulations.

The second pressure arises from the market, which corresponds to the aspects and situations that condition the actions of companies. This is reflected in the characteristics associated with the companies' attributes (Giner, 1997). Hence, the aim was to test how these characteristics can determine the level of information companies disclose (Hellman, Carenys & Moya, 2018). This provides insight that disclosing new information may transcend the binding role of regulations and include other explanatory factors (Mongrut & Winkelried, 2019; Hutagaol, Valentincic, & Warganegara, 2019).

This makes sense, considering that it has been shown that improvements in accounting quality after adopting IFRS are limited to companies with incentives to adopt, meaning that the best results have been obtained by companies that have voluntarily applied IFRS. Christensen, Lee, Walker, and Zeng (2015) find that, in the case of Germany, those companies that voluntarily adopted such guidelines prior to their mandatory adoption in 2005 achieved better conditions in the quality of information.

Soderstrom and Sun (2007) have argued that using a single set of accounting standards may not improve the quality of accounting uniformly for each company and country due to additional factors. Therefore, it is necessary to understand the impact of adopting new regulations on the disclosure of information and the factors that characterize companies that achieve better information transparency for their stakeholders.

The pressure of accounting regulation on information disclosure

Studies in this area have focused in recent years on analyzing the effects of IFRS implementation on the quality of accounting information (Firmino, Nogueira, Cavalcante, Magalhães, & Rodrigues, 2019; Cardona, Gómez, & Cano, 2019; Key & Kim, 2020). The latter is assumed from the earnings management and the timely recognition of losses, as accounting attributes, or from the valuation and informational relevance, as market attributes (Christensen, Lee, Walker & Zeng, 2015; Hellman, Carenys, & Moya, 2018; Cardona, Gómez & Cano, 2019; Eng, Lin, & Neiva, 2019).

Regarding the latter, Soderstrom and Sun (2007) and Angla (2013) point out that the study of the quality of accounting information has been approached from the perspective of stock market investors since they consider that making decisions on when and how much to invest or disinvest is preferably done based on having more information to reduce uncertainty related to profitability and future risks, so a shortage of information can lead to biased decisions. It is assumed that the more information, the higher the quality and vice versa (Giner, 1995; Angla, 2013). This reflects one of the requirements of the IFRS conceptual framework to ensure the quality of accounting information through the information disclosed.

For the IASB, financial statements must satisfy the quality of relevance. In other words, the information incorporated in them must be capable of influencing users' decisions (International Accounting Standards Board, 2010). The data disclosed in the financial statements and the information in their notes should promote effective communication and a proper understanding and avoid excessive information that entails costs in time to analyze it (International Accounting Standards Board, 2017a).

Disclosures in the notes to the financial statements clarify the financial position and results that management presents in the financial statements by providing information on policies, estimates, accounting judgments, and explanations of economic events. This enables better information that leads to informed decision-making and a better company performance evaluation.

Given the above, it is understood that disclosure of information is a broad term that entails accountability to other persons or parties of interest (Mantilla, 1996), so companies cannot ignore compliance with minimum requirements to be disclosed on accounting items (Hellman, Carenys, & Moya, 2018).

Although the information to be disclosed depends on the judgment of the compiler, when deciding what information to disclose in the financial statements and the most effective way to organize and communicate it, it is necessary to comply with the requirements of the accounting regulations to describe those aspects that are at least proposed and understood to be relevant to users (Henderson, 2019).

Thus, studies such as that by Barth, Landsman, and Lang (2008) in 327 companies in 21 countries in Europe, Asia, and Africa found that those companies that followed IFRS guidelines achieved a better quality of accounting information than those that followed local guidelines. Iatridis (2010), in evaluating the change from UK GAAP to IFRS, found that there is a reduction in the manipulation of results, given the more timely recognition of losses and the generation of more relevant measures of value. Therefore, this author concludes that IFRS have provided less skewness and higher quality accounting information that favors investors to make informed and unbiased judgments.

In turn, Harakeh, Lee, and Walker (2019), in examining the potential of IFRS to influence the equity market in the UK and France, find that, although there is a minor divergence between UK national accounting regulation and IFRS (low divergence companies) and material divergence of national

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accounting regulation in France from IFRS (high divergence companies), the adoption of IFRS has served to mitigate information skewness and improve accounting quality.

In evaluating other contexts, Key and Kim (2020) find in 439 South Korean companies a strong commitment to a successful and transparent implementation of IFRS, which has positively impacted accounting quality. The results are consistent with lower earnings management following the adoption of IFRS and more timely loss recognition, indicating higher accounting quality.

In the same vein, Dayanandan, Donker, Ivanof, and Karahan (2016) determined the existence of changes in financial reporting after IFRS were adopted in Europe and in countries on other continents. To this end, they evaluated data from 3030 companies in 35 countries and found evidence of revenue and earnings management smoothing. The study concludes that earnings management has declined in the post-IFRS period, particularly for French and Scandinavian civil law countries, but not for German civil law and common law countries. The latter can be explained by the fact that common law countries have strong investor protection laws, strict law enforcement, and high levels of financial disclosure. Overall, the study shows that adopting IFRS improved the quality of financial reporting.

De Moura, Altuwaijri, and Gupta (2020) researched whether IFRS adoption has affected the cost of long-term capital and debt in Latin American firms, where enforcement of accounting regulations and investor protection mechanisms are weak compared to developed nations. Analyzing a sample of companies from Argentina, Brazil, Chile, Mexico, and Peru, they showed that the mandatory adoption of IFRS reduced the cost of capital. The results suggest that the improved disclosure and comparability derived from IFRS compared to previous national accounting regulations helped mitigate the problem of information skewness and had positive economic consequences for Latin American companies.

Thus, IFRS have contributed to improving the quality of the financial information provided, which is expected to generate opportunities and advantages regarding information transparency for companies. Carreño (2015) points out the advantages of applying IFRS: 1. Encourages reforms in internal management reporting systems to properly manage financial accounting and generate financial statements within the new regulations; 2. Refines measures for evaluating company and executive performance, focusing on generating shareholder value; and 3. Improves communication of the company's financial position and results, along with other performance indicators, to analysts, investors and other users of financial information.

Nevertheless, Grossman, Smith and Tervo (2013), when comparing in the United States the presentation of financial statements under IFRS with those obtained under US GAAP in 126 European Union companies listed on the New York Stock Exchange, found that there are no significant differences in the results of the financial statements and that the information disclosed is very similar, indicating that

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international regulations in countries such as the United States have not caused difficulty when considering their use.

Cardona, Gómez, and Cano (2019) show that in listed companies in Latin America and the Caribbean during 2006-2016, there has been a partial improvement in accounting quality, evidenced by a decrease in earnings management only after several years of IFRS application. Nonetheless, there is no greater opportunity to recognize large losses, and at the same time, the accounting information generated under IFRS is not considered more useful by market agents.

Meanwhile, Abdul, and Haniffa (2020) find that adopting IFRS in Nigeria after accounting regulations were strengthened had a negative effect on the quality of accounting because while earnings management increased, timely loss recognition and earnings persistency declined.

Accordingly, the studies as a whole show that the effect of IFRS adoption is contextual, meaning that it cannot be said that the improvement in the quality of accounting or information in terms of its valuation or informational relevance depends only on the adoption of IFRS and that its effect is the same for all countries so that recognizing the pressures that exist in the market is a complementary issue in accounting research.

Market pressure on information disclosure

In order to analyze how this pressure manifests itself, accounting research has analyzed the presence of different factors that can affect companies' information practices. To this end, the existence of business characteristics that may impact the level of information reported has been noted (Hellman, Carenys, & Moya, 2018).

Soderstrom and Sun (2007) indicate that the choice of a company's accounting regulations should be predicted by factors such as legal origin, level of indebtedness, ownership, operating cycle, international exposure, and type of industry, among others. De Lima, De Lima, De Carvalho, and Lima (2010) have found in the case of Brazilian companies that firm-level incentives are important drivers of compliance with IFRS convergence. The results suggest that larger companies, which are more exposed to international markets and have greater financing needs, are more likely to adopt IFRS guidelines by implementing substantial changes in their accounting policies.

For García and Sánchez (2006), the size of the company, stock price, ownership concentration, size of the auditor, and level of indebtedness or profitability are some of the variables that in some ways have been associated with the disclosure policy of companies. For these authors, companies are aware of the benefits of providing a greater amount of information, among which are the reduction of the cost of capital, improved liquidity and image, benefits in internal management, reduction of information

skewness, increased analyst coverage, credibility and reputation of the company, and collective benefits derived from the improvement in economic growth, employment, and standard of living.

On the other hand, Mir, Moreno, and Olmeda (2006) have studied, within the scope of Spanish companies, how the different regulatory proposals that have been developed in recent years regarding accounting information on financial derivatives, with the ever-closer presence of the IASB proposals, had a significant influence on the transparency and quality of the accounting data reported by listed companies. Based on regulatory developments from 2000 to 2002, the paper evaluated the generation of voluntary information on financial derivatives. Based on this, the authors also conclude that there are determinants that affect the disclosure of information on financial derivatives, which are linked to the size of the company and the volume of indebtedness.

Zheng and Chen (2017) find that firms' financial reporting quality in China is conditioned by industry, geographic location, and the rate of shareholders' equity (ROE) of companies. Nevertheless, they show that external auditing significantly influences the quality of financial reports, but there are no conclusive results, so this factor still needs to be studied.

In recent studies, Mnif and Znazen (2020) consider, within the scope of Canadian companies, the effect of two corporate governance mechanisms, the board of directors and the audit committee, on the level of compliance with the mandatory disclosures of IFRS 7 "Financial Instruments: Disclosures." They find that the level of compliance has a positive link with the Board's size and its members' independence. Similarly, the independence of the Audit Committee and financial accounting expertise is shown to affect compliance with IFRS 7 positively. Notwithstanding, the CEO/Chairman duality, the size of the Audit Committee, and the frequency of meetings do not correlate significantly with the level of compliance with IFRS 7.

Tawiah and Boolaky (2019) find a positive and significant relation between compliance and the audit committee in examining the drivers of IFRS compliance in 205 companies in 13 African countries. In contrast, there is an inverse relation between compliance and ownership concentration. These same authors studied the determinants of variation in capital adjustments among Indian companies from convergence to IFRS (Tawiah & Boolaky, 2020). Using a sample of 323 publicly traded companies, they showed that the amount of total capital adjustment is subject to firm characteristics such as leverage, level of family control, auditor type, and ownership structure.

Thus, the results obtained in the empirical research on the effects on the quality of information from the adoption of IFRS should be interpreted in relation not only to the pressures exerted by regulation and institutions but also considering country and company-specific factors (Pascan, 2015; Hellman, Carenys, & Moya, 2018).

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Study hypothesis

Based on the evidence obtained on the effect that IFRS has had on the quality of the information in companies located in contexts different from the Colombian one, the purpose is to demonstrate whether the same effect has existed in the accounting practices followed in Colombian companies. Accordingly, the first hypothesis of the study is formulated.

H1: There has been an improvement in the quality of the information disclosed by Colombian companies once IFRS have been applied.

On the other hand, considering that the effects on the disclosure of information may be a consequence of market pressures, which are reflected in the characteristics of the companies, transcending regulatory pressures, the following are considered as possible explanatory factors for this research: the size of the company, its level of indebtedness, its profitability, the quality of the auditor, its degree of internationalization, and its age.

In this regard, empirical evidence has shown heterogeneous results, so no general theory exists to explain or predict company behavior regarding information disclosure (García & Sánchez, 2006; Hellman, Carenys, & Moya, 2018). Partial theories have been adopted to understand the amount of information disclosed. Some of these are based on theories such as the Agency, Signals, Owner Costs, Transaction Costs, and Market Efficiency theories (Hellman, Carenys & Moya, 2018; Nassreddine, 2016; Angla, 2013; Bravo, Abad, & Trombetta, 2009; Larrán & García, 2004). The agency theory is used for the present research to justify the possible relation between the determinants and the amount of information disclosed.

Company size

Based on García and Sánchez (2006), Agency theory may be considered a reasonable theoretical basis for understanding the relation between size and disclosure of information since it helps understand that the larger the size of an organization, the greater the importance of potential conflicts of interest and therefore the higher the agency costs among shareholders and managers. It is considered, then, that as the size of a company increases, there is a greater interest in the company and, probably, a greater demand for information about it (Larrán & García, 2004).

Previous research has determined the existence of a significant relation between this variable and disclosure (Hellman, Carenys, & Moya, 2018; De Lima, De Lima, De Carvalho, & Lima, 2010; Bonsón & Escobar, 2004), suggesting that large companies tend to have better and more extensive disclosure policies. Despite this, authors such as Aksu and Kosedag (2006) do not find a relation between

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these variables, and therefore consider that mandatory information probably reduces the variation in the disclosure of information. Therefore, the formulated hypothesis is as follows:

H2: The disclosure of accounting information in Colombian companies, based on the application of IFRS, is positively related to the company's size.

Level of indebtedness

Agency theory states that a greater transfer of wealth from creditors to shareholders is expected as the level of indebtedness is higher since agency costs are higher for firms that use more external financing (García & Sánchez, 2006). Accordingly, greater disclosure of information to rating agencies and lenders is expected to reduce the cost of debt (Armitage & Marston, 2008). Mi, Sheng, and Elrod (2016) believe that a company will improve its information disclosure quality when it decides to finance, as the quality of information disclosure can be seen as its reputation. Hence, empirical results show a positive correlation between disclosure decisions and financing (Tawiah & Boolaky, 2020).

H3: The disclosure of accounting information in Colombian companies, based on the application of IFRS, is positively related to the companies' level of indebtedness.

Profitability

The amount of information disclosed may be related to the variability of the company's profitability due to the informational asymmetries generated and the greater possibility of litigation due to its higher price volatility (Garcia & Sanchez, 2006; Hellman, Carenys, & Moya, 2018). From the agency theory perspective, when the firm's profitability is good, managers will want to let the owners know to improve the company's image and their level of remuneration (Subramaniam, 2006). Therefore, it is necessary to demonstrate the relation between the information disclosed and the company's financial performance.

H4: The disclosure of accounting information in Colombian companies, based on the application of IFRS, is positively related to the companies' profitability level.

Quality of the auditor

From agency theory, it has been pointed out that managers, knowing that shareholders will seek to control their behavior through bonding and monitoring activities (Subramaniam, 2006), will disclose more information to convince shareholders that they are acting optimally. Assuming that the quality of the

auditor can be measured in terms of its size, it is considered that the fact that the accounting figures are audited by one of the four most representative audit companies in the world (the Big Four) means certain desired conditions of experience and expertise are obtained for the generation of information with better disclosure conditions (Mnif & Znazen, 2020; Albu, Albu, & Gray, 2020), so it is expected that large audit companies are more concerned about what their clients disclose.

Several studies have empirically analyzed the relation between auditor size and the degree of disclosure (Agyei, 2017; Ahmed & Karim, 2005), as well as with IFRS compliance (Tawiah & Boolaky, 2019). This variable has been found to significantly influence the volume of information disclosed by increasing the company's concern for designing a quality information policy (García & Sánchez, 2006).

Nonetheless, Mongrut and Winkelried (2019) have suggested that audit quality only matters as a proxy signal for companies that have not adopted IFRS, as they have shown that there are companies where IFRS adoption is associated with lower audit quality, so managers might believe that simply adopting international regulations is sufficient to ensure greater transparency. Therefore, the relation to be studied is as follows:

H5: The disclosure of accounting information in Colombian companies, based on the application of IFRS, is positively related to the quality of the company's auditor.

Degree of internationalization

Companies operating in an international context tend to disclose more information to attract international clients and foreign capital at a lower cost and improve their public image (García & Sánchez, 2006). In turn, the business environment of companies participating in international contexts is more complex than that of domestic companies, so the existence of uniform regulations for the preparation and presentation of financial statements benefits not only investors, creditors, and financial analysts but also processes such as accounting and auditing (Tran, Ngo, Phan, Do, & Pham, 2020) and facilitates the comparison of financial statements in companies from different countries, based on the information disclosed (Rico, Montoya, Franco, & Laverde, 2020).

Previous work highlights positive relations between foreign sales and disclosure levels (Skouloudis, Jones, & Malesios, 2014; De Lima, De Lima, De Carvalho, & Lima, 2010). Cooke (1989) emphasizes that a company's presence in foreign markets forces it to disclose complete information under the reporting rules of the foreign business system. Thus, the relation to be posed is:

H6: The disclosure of accounting information in Colombian companies, based on the application of IFRS, is positively related to the company's level of internationalization.

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Age of the company

The age of a company is considered from the time elapsed once it has been included in a public stock market (Zeng, Xu, Yin, & Tam, 2012; Liu & Anbumozhi, 2009). It is expected that a company that has been in the market for a longer period has better consolidated its control and reporting structure (Coluccia, D'Amico, Fontana, & Solimene, 2017), which enables them to account for a better and greater amount of information to be disclosed.

On the other hand, Bravo (2016) and Zeng, Xu, Yin, and Tam (2012) show that age has an inverse relation to the level at which companies disclose their information. This may indicate that the length of time a company has been in the market has a low impact on the level of disclosure of information to third parties or that young companies seek to capture attention and achieve market presence by making their performance widely known in order to achieve credibility and trust among their stakeholders. The latter may make sense according to the principles of signaling theory (Hoque, 2006). Companies may be interested in providing information as a signal or as a mechanism to provide the market with additional information about their financial circumstances to change investors' expectations and reduce information asymmetries (Frías, Rodriguez, & García, 2014). Therefore, it is expected that:

H7: The disclosure of accounting information in Colombian companies, based on the application of IFRS, is positively related to the company's age.

Research design

Sample selection

The selected sample corresponds to listed companies in Colombia belonging to the Colombian industrial sector as of February 2017. A total of 67 companies were found, from which those that reported some degree of market capitalization and that for 2014 and 2015 reported items associated with inventories and property, plant, and equipment in their financial statements were selected. Based on these criteria, a total of 31 companies that meet these conditions was obtained.

The study of the disclosure of information in companies belonging to a specific sector or segment corresponds to the existence of economic sectors with characteristics that may affect accounting practices when evaluating the regulatory changes incorporated in the local legislation. This was demonstrated by Bauman (2013), who examined the significant differences in fixed asset disclosure requirements under previous and current GAAP and under IFRS in the United States. Before 1994, the

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SEC required publicly traded, capital-intensive companies to prepare supplemental information detailing fixed asset account activity. Although this reporting requirement was eliminated in the United States, companies reporting under IFRS were subject to disclosure requirements similar to those required by the SEC prior to the adjustments to local regulations, so IFRS contributed to the disclosure of more information in this budget item, compared to what was required for this economic segment by the current local regulations.

In addition, Colombia's economic composition is characterized by significant participation of the financial and industrial sectors. Of every $1,000 created in the country, approximately $200 was contributed by financial institutions, $100 by the industrial sector, and $60 by the agricultural sector (¿Cómo está compuesta la economía colombiana? 2015). Similarly, the National Administrative Department of Statistics (DANE, 2017) showed that the economic sector with the highest growth for 2016 was the industrial sector, which achieved 3% growth, higher than the general growth (2.0%) of the entire Colombian economy.

As they are registered in the national securities registry, these companies must apply the IFRS issued by the IASB as the new standards. From these companies, their financial statements as of December 31, 2014, and 2015 were obtained, i.e., the official reports before and after the application of the new accounting standards in order to make a comparison between periods and thus demonstrate the changes brought about by the application of the new regulations. Barth, Landsman, and Lang (2008) applied this form of comparison to determine whether new guidelines have had an impact on better accounting practices in companies after their application.

Although the 2014 IFRS were not mandatory for the preparation of official financial statements, it may happen that in the implementation process initiated by these companies it was decided to voluntarily disclose some matters that applied to the financial situation and results reported. This practice can signal to their stakeholders that they generate information with better conditions of disclosure and demonstrate their interest in meeting the new regulation's requirements (Christensen, Lee, Walker, & Zeng, 2015). Therefore, the disclosure requirements outlined in IFRS are assumed as a comparison parameter for the two periods.

This type of analysis has been carried out in the Colombian context by Católico, Cely, and Pulido (2013), who, prior to the mandatory adoption of IFRS, evaluated the degree of disclosure of information on property, plant, and equipment of 59 industrial companies listed on the Colombian Stock Exchange. Faced with the changes in disclosure requirements that IFRS could potentially bring about, it was found that only one of the companies exceeded 50% of the disclosure requirements in its notes to the financial statements and that the remaining 58 companies had a disclosure level between 48% and 22%,

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which showed unfavorable results. Therefore, a wider range of information would be expected to be disclosed once the IFRS implementation processes have formally begun.

Variables and hypothesis testing methods

Dependent variable

To solve H1, a descriptive approach to information disclosure practices is considered. For this purpose, an unweighted disclosure index (*RI*) was designed, as used in previous research (Mnif & Znazen, 2020; Hellman, Carenys, & Moya, 2018; Ioana, Tirón, & Pali, 2014; Bravo, Abad, & Trombetta, 2009), based on 37 disclosure requirements outlined in IFRS for inventories (IAS 2) and property, plant, and equipment (IAS 16). Information on compliance with disclosure requirements was obtained from a content analysis of the notes to the financial statements of the selected companies for the years 2014 and 2015. The formalization of this index is shown below.

$$IR = \sum_{1}^{n} Ai/n \tag{1}$$

Where Ai are the requirements effectively disclosed and "n" is the total number of requirements expected to be disclosed, which in the case of inventories = 10 and property, plant, and equipment = 27, for a total of 37 requirements.

These two accounting items are studied specifically since the relative importance of their nature and amount in these types of companies makes them the main assets with which they operate. For 2014, inventories represented, on average, 6.73% and property, plant, and equipment 43.71% of total assets for the companies analyzed. For 2015, this share was 8.13% and 43.57%, respectively.

Additionally, it has been detected that once IFRS have been applied, these items show significant variations in their value. The Superintendence of Companies (2014, 2015) demonstrated that, both at the time of applying IFRS for the first time in listed companies in Colombia and one year later—that is, on January 1, 2014—and the close of the same year, the greatest impact on their assets was represented by an increase in property, plant, and equipment, as a result of the application of the revalued value as deemed cost.

This was confirmed by Lasso, Vargas, and Ruano (2018), who observed for SMEs in the manufacturing industry in Colombia an increase in assets, in general terms, and, for inventories, reductions in their value, while in property, plant, and equipment, significant increases were found. Therefore, it is

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expected that, given these variations, greater disclosure of information will be made possible so that stakeholders can find justification for the behavior of accounting figures.

Each disclosure requirement is qualified as a dichotomous variable for quantification (Cooke, 1989; Católico, Cely, & Pulido, 2013). Hence, a score of 0 is assigned when the corresponding information is not disclosed and 1 when it is fully disclosed. The linear aggregation of these scores is used to calculate the *RI*.

Independent variables

Understanding that not all companies have the same motivation or incentives to improve information flows, the aim is to identify which company variables determine the greater disclosure of information (hypotheses H2-H7). To this end, the variables justified in the theoretical framework are worked on and measured according to how previous studies have defined them (Table 1).

In addition to these variables, the inclusion of a variable to control the direct effect on the increase in the degree of disclosure of information for 2015, as a result of the adoption of IFRS, is considered. Previous studies have recognized the need to control such effects in the analyses that have been performed as a product of evaluating the impacts generated in financial variables or the auditing processes once the adoption of IFRS has taken place (Wijayana & Gray, 2019; Brochet, Jagolinzer, & Riedl, 2013; Griffin, Lont, & Sun, 2009). These studies have measured this variable dichotomously to represent the adoption or non-adoption of IFRS. With this form of measurement, a variation is made since the companies studied have fully adopted IFRS, so it is considered that it is most appropriate to use, as an approximate measure, the percentage change produced in the degree of disclosure of information between 2014 and 2015 from the adoption of IFRS (Var_IFRS).

Table 1
Independent variables

Variable	Definition
End: Level of indebtedness (+)	Total liabilities to total assets relation
Rent: Profitability (+)	Use of the ROA indicator
CalAudit: Quality of the auditor	1= if the auditor is one of the Big Four; 0= otherwise
Inter: Level of internationalization	1= has sales abroad; 0= does not export
Age (+)	Time in existence as a BVC-listed company
Size: Size (+)	Volume of assets
IFRS_Var	Change % in the degree of disclosure after IFRS adoption

Source: created by the author

To measure the relation between the factors in each of the hypotheses (independent variables) with the *RI* (dependent variable), a multiple regression model by Ordinary Least Squares (OLS) is proposed, a method that has been used in previous studies (Hellman, Carenys & Moya, 2018; Alonso, 2009; Mir, Moreno, & Olmeda, 2006; Liu & Anbumozhi, 2009; Braam, Uit, Hauck, & Huijbregts, 2016) and which is expressed as follows:

$$IR = \beta_0 + \beta_1 End + \beta_2 Rent + \beta_3 CalAudit + \beta_4 Inter + \beta_5 Age + \beta_6 Size + \beta_7 IFRS_{Var} + \varepsilon \quad (3)$$

The data used are cross-sectional and correspond to the financial figures as of December 31, 2015, which coincides with the end of the fiscal year for which the official accounting figures are reported under IFRS, so they are for the 2015 *RI*. The data of the variables listed above are organized in SPSS version 22.0, the statistical program used to perform the proposed analyses.

Study results

Descriptive analysis of the RI

Table 2 shows the results obtained from the *RI* for 2014 and 2015. These, in turn, are shown from the partial result for inventories and property, plant, and equipment. After applying IFRS, the results show an improvement in the average accounting disclosure (*RI* 2014=0.31; *RI* 2015=0.41). In particular, inventories showed a marginal increase from 0.3 in 2014 to 0.36 in 2015. In the case of property, plant, and equipment, there is a substantial improvement in the disclosure of information (2014=0.31; 2015=0.43), showing the presence of a scenario of regulatory change with favorable implications regarding disclosure for listed companies belonging to the industrial sector in Colombia.

Table 2
Degrees of disclosure for inventories and property, plant, and equipment 2014-2015

Accounting item	2015			2014		
	Inventory	Property, plant, and equipment	Total	Inventory	Property, plant, and equipment	Total
Disclosure requirements	10	27	37	10	27	37
Average	3.6	11.5	15.2	3.0	8.5	11.5
Maximum	7	16	20	5	12	15
Minimum	0	9	10	0	5	5
RI	0.36	0.43	0.41	0.3	0.31	0.31

Source: created by the author

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This result aligns with Iatridis (2010) and Dayanandan, Donker, Ivanof, and Karahan (2016) in European and North American countries, showing an improvement in the quality of disclosed information and a decrease in information skewness. Likewise, this result has been confirmed by Rico, Montoya, Franco, and Laverde (2020), who analyzed the effects of the IFRS convergence in terms of the comparability of the financial information of the companies listed in the Colombian Stock Exchange in the short-term, specifically in the property, plant, and equipment category, showing that there has been a significant increase in the disclosure of financial information under IFRS.

Nonetheless, the result obtained in the two accounting categories is low. When observing the disclosures made by each company, it can be seen that none of the companies disclose all the requirements of the regulation, i.e., although there has been an improvement in the information provided to stakeholders through the financial statements and their notes, there is still room to expand the information. This becomes more evident if the results are compared with previous studies. Hellman, Carenys, and Moya (2018) conclude, after reviewing other research, that the level of disclosure after adopting IFRS, on average, is 65%, with a lower bound on average of 46% in emerging markets and developing countries or regions during 1996-2013, suggesting that the results obtained are far from a reasonable minimum level of compliance based on the experience of other countries.

It should be noted that the latter can be supported by the findings of the International Accounting Standards Board (2017b) on when companies make judgments on materiality that have implications for the guidelines for the recognition, measurement, presentation, and disclosure of information:

An entity is not required to disclose the information specified by an IFRS Regulation if the information from that disclosure is immaterial or relatively unimportant. This is the case even if the Regulation contains a list of specific requirements or describes them as "minimum requirements." Instead, an entity should consider providing information not specified by IFRS Regulations if that information is necessary for primary users to understand the impact of transactions or other events and conditions on the entity's financial position, financial return and cash flows (p. 10).

Conversely, these results can be understood as being due to the lack of incentives in 2014 to voluntarily adopt IFRS (Christensen, Lee, Walker, & Zeng, 2015) and the subsequent improvement in quality after their forced adoption in 2015. It should be borne in mind that the disclosure requirements outlined in Colombian GAAP, which were used as a reference to prepare the 2014 financial statements, were lower than those outlined in IFRS, so it was reasonable for companies, based on the compliance guidelines, not to feel obliged to expand their notes to the financial statements prior to the adoption of IFRS.

Likewise, the application of IFRS entails the revision of the information that is being presented. The information compilers are more aware of what should be explained and disclosed in the notes to the

financial statements because of the new guidelines. Iatridis (2008) argues that companies are inclined to disclose more information to assure market participants that their accounting policies are consistent with the new regulations. Similarly, incentives to obtain financing from the capital and debt markets are reflected in the more general accounting disclosures (García & Sánchez, 2006).

Finally, how IFRSs are learned impacts the lack of full compliance with disclosure requirements. Training in Colombia has focused on studying the recognition, measurement, and presentation of information, leaving aside the analysis and application of the disclosure of information so that the compilers of accounting information, not having full knowledge of the regulations, may miss material issues to be disclosed.

Accordingly, *H1* is accepted in terms of improving the quality of the information disclosed after adopting IFRS. Nevertheless, not achieving full compliance leaves room for improvement, which may ensue in the following years because of the better use of IFRS and the pressures from the regulator and the market.

Descriptive independent variables and correlation analysis

Table 3 shows the descriptive statistics of the independent variables used in this study. It can be seen that the average value of indebtedness is higher than 55%, which means that, in general, companies consider external financing as their main source of resources. This has been a common feature in emerging economies because it attracts resources, mainly from financial lenders or creditors. Despite this, there are cases in which the level of indebtedness exceeds 100% of their assets (maximum=1.75). This is a consequence of the losses incurred by several companies in 2015, making their equity negative. This is reflected in the average level of profitability of -0.018.

Table 3
Descriptive independent variables

	N	Minimum	Maximum	Mean	Standard deviation
End	31	.2802	1.7502	.550635	.2915638
Rent	31	-1.4102	.1327	-.018090	.2634408
CalAudit	31	0	1	.68	.475
Size	31	27 238	122 995 950	7 313 932.61	22 298 299.020
Inter	31	0	1	.45	.506
Age	31	1	34	22.84	12.496
IFRS_Var	31	-.05	.22	.1010	.07305

Source: created by the author; data obtained from SPSS 22

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Most companies are audited by one of the Big Four, and almost 50% show some level of internationalization. It should be noted that, on average, companies have been in the Colombian capital market for two decades. Nevertheless, it is observed that there is a significant deviation in this variable (12.496), which corresponds to the existence of companies that have recently been listed on the stock exchange (minimum=1) and others that have been actively participating in the stock market for more than thirty years (maximum=34). Finally, the percentage increase in the degree of disclosure between 2014 and 2015 is 10% on average for the set of companies analyzed.

Table 4 shows the Pearson correlation matrix between the independent and dependent variables used in the study. A high correlation between variables could be indicative of a multicollinearity problem. Previous research (Alotaibi & Hussainey, 2016; Liu & Anbumozhi, 2009) indicates that the correlation of a variable is high if it is greater than 0.80. For the variables studied, the Pearson coefficients are below 0.80, indicating no problem of multiple collinearities, which will be confirmed in the verification of the model assumptions shown below. Nevertheless, there is one coefficient that attracts attention, and it is that corresponding to the relation between profitability and indebtedness (-.727). Conceptually, these are variables linked to the financial conditions of the companies, but each one is subject to different circumstances, so issues that may represent similar matters are not considered.

Table 4
Pearson correlation table

		RI 2015	End	Rent	CalAudit	Size	Inter	Age	IFRS_Var
RI2015	Pearson's correlation	1	.030	-.040	.070	-.200	.545**	.268	.731**
	Sig. (bilateral)		.872	.831	.710	.280	.002	.144	.000
	N	31	31	31	31	31	31	31	31
End	Pearson's correlation		1	-.727**	-.233	.124	-.129	-.227	.127
	Sig. (bilateral)			.000	.206	.508	.489	.220	.495
	N		31	31	31	31	31	31	31
Rent	Pearson's correlation			1	.241	-.079	.104	.251	-.058
	Sig. (bilateral)				.192	.674	.577	.174	.756
	N			31	31	31	31	31	31
CalAudit	Pearson's correlation				1	.172	.349	-.267	-.212
	Sig. (bilateral)					.354	.054	.146	.253
	N				31	31	31	31	31
Size	Pearson's correlation					1	.148	-.214	-.235
	Sig. (bilateral)						.426	.249	.203
	N					31	31	31	31
Inter	Pearson's correlation						1	.260	.222
	Sig. (bilateral)							.158	.229
	N						31	31	31
Age	Pearson's correlation							1	.128
	Sig. (bilateral)								.494
	N							31	31

IFRS_Var	Pearson's correlation	1
	Sig. (bilateral)	
	N	31

**. Correlation is significant at the 0.01 level (2-tailed)

Source: created by the author; data obtained from SPSS 22

A positive and significant relation between the independent and dependent variables can be seen between the *RI* measure and the independent variable internationalization (.545) and the *RI* and the *IFRS_Var* (.731). In contrast, the relation with the other variables (indebtedness, profitability, size, auditor quality, and age) are not significant at a level of $p<0.05$.

Verification of the assumptions of the regression model

Statistical tests have been applied to determine normality, multicollinearity, independence of the residuals, and heteroscedasticity based on the model proposed. According to the Kolmogorov-Smirnov (K-S) test, normality is observed in the RI2015 variable, indicating that the p-value (.200) does not permit the rejection of the normality hypothesis, which is confirmed by applying the Shapiro-Wilk test, which yields a p-value of .390.

To confirm the absence of multicollinearity problems among the independent variables, the Variance Inflation Factor (VIF) was calculated: End=2.246; Rent=2.263; CalAudit=1.693; Size=1.219; Inter=1.639; Age=1.543; IFRS_Var=1.303, showing that each of these factors is below 2.5, so there is no evidence of multicollinearity problems among the variables.

The Durbin-Watson test was also applied to detect independence in the residuals (Table 5). The test yields a value of 2.447, which, when placed from the interval of 0.950 and 2.018 applicable for a sample of 31 observations at a significance level of 5% and a K=7 (number of regressors of the model), shows that the value is not in the rejection zones (between 0 and dl=0.950; between 4-dl and 4) so that the adjacent observations are not correlated.

To test the model for heteroscedasticity, a graphical test was performed for the standardized residuals and the standardized predicted values, showing a low variability of the residuals vis-à-vis the change in the predicted data of the individuals. In addition, a regression model was run with the dependent variable being the value of the residuals and the independent variables proposed in the model (calculation form for when SPSS is used), which yielded a p-value of .777 using the ANOVA test, which is greater than p=0.05, so there is no significance, and it is concluded that the model does not have problems of heteroscedasticity. Thus, since the model complies with the assumptions evaluated, it is a good predictor for the proposed analysis.

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Regression model analysis

According to the regression analysis, the adjusted R^2 is .650, which means that about 65% of the variations in the *RI* could be explained by the independent variables studied (Table 5).

Table 5
Regression model

Model	R	R square	Adjusted R-squared	Standard error of the estimate	Durbin-Watson
1	.855[a]	.731	.650	.0334565	2.447

a. Predictors: (Constant), IFRS_Var, Rent, Inter, Size, Age, CalAudit, End
b. Dependent variable: RI2015

Source: Data obtained from SPSS 22

Likewise, it is found that the proposed model is explanatory since, according to the ANOVA analysis, it shows a p-value of .000 (Table 6), which at a significance level of $p<0.05$ permits the deduction that it is a good model for predicting RI.

Table 6
Anova test

Model		Sum of squares	gl	Quadratic mean	F	Sig.
1	Regression	.070	7	.010	8.943	.000[b]
	Residue	.026	23	.001		
	Total	.096	30			

a. Dependent variable: RI2015
b. Predictors: (Constant), IFRS_Var, Rent, Inter, Size, Age, CalAudit, End

Source: Data obtained from SPSS 22

According to Table 7, which shows the coefficients of the model, the significant and positive relation that *RI* has with the level of internationalization of the companies is evident, so *H6* is accepted. This means that increased internationalization creates market pressure for companies to be more likely to expand their information. This finding is in line with Tran, Ngo, Phan, Do, and Pham (2020), Skouloudis, Jones, and Malesios (2014) and De Lima, De Lima, De Carvalho, and Lima (2010), who opine that companies operating in an international setting tend to disclose more information according to the rules of the international business system. The need to attract international clients and foreign capital at a lower cost and improve their public image (García & Sánchez, 2006) may be a reasonable justification for the relation observed between greater information disclosure and companies' internationalization level.

Table 7
Model coefficients

	Non-standardized coefficients		Standardized coefficients		
Model	B	Standard error	Beta	t	Sig.
1(Constant)	.317	.029		10.968	.000
End	-.005	.031	-.026	-.158	.876
Rent	-.032	.035	-.147	-.905	.375
CalAudit	.022	.017	.185	1.314	.202
Size	-2.572E-10	.000	-.101	-.850	.404
Inter	.036	.015	.321	2.323	.029
Age	.001	.001	.161	1.199	.243
IFRS_Var	.502	.095	.649	5.261	.000

a. Dependent variable: RI2015
Source: created by the author; data obtained from SPSS 22

Additionally, it is evident that the higher degree of disclosure of information for the year 2015 (RI2015) is significantly and positively explained by the percentage increase in the disclosures occasioned by the adoption of IFRS (Var_IFRS), which coincides with the results of previous research (Hellman, Carenys, & Moya, 2018).

It can help Colombian companies use the best information practices to compete in the business world.

As for the other explanatory variables, it is shown that there is an inverse relation of IR with indebtedness, profitability, and size, but without significance, and positive with auditor quality and age, without significance at a value of $p<0.05$. Therefore, H2, H3, H4, H5 and H7 are rejected.

The latter results are not related to what has been demonstrated by previous studies that have concluded that the size and volume of indebtedness (De Lima, De Lima, De Carvalho, & Lima, 2010; Mir, Moreno, & Olmeda, 2006; Tawiah & Boolaky, 2020), profitability (Zheng & Chen, 2017) and type of auditor (Tawiah & Boolaky, 2020) are factors that determine the improvement in the quality of accounting information.

Conclusions

Colombia is one of the emerging countries that play an important role in the world economy and has become a potential niche market for different groups of investors from the rest of the world, which leads to improved investment opportunities. Nevertheless, being a country with weak investor protection mechanisms, compared to developed countries, requires the application of international corporate practices to improve trust with its stakeholders.

The generation of high-quality accounting information, based on the disclosure of information, responds to this need by promoting conditions of transparency and comparability that facilitate trade and investment relations in the international context. Accordingly, IFRS are guidelines that favor generating relevant information for informed decision-making by investors, lenders, and other stakeholders. For the IASB, the disclosure of information through the notes to financial statements is essential for decision-making by external users because of the different alternatives for measurement and recognition of accounting items under IFRS; it is necessary to expand the information that narrates and explains the financial situation and performance of companies.

Similarly, this study evaluates the impact these guidelines have had on the disclosure of information in listed companies in Colombia. The results suggest that there has been an improvement in disclosure once IFRS has been applied. Previous research shows no consensus on the favorable impact of IFRS adoption on the quality of information since it seems to have different effects depending on the country or geographical area being evaluated. Therefore, this study provides evidence of the benefits that IFRS has brought to the quality of the information in an emerging country such as Colombia.

Nonetheless, it may be noted that there is still a significant margin for Colombian companies to improve their accounting practices in terms of disclosure of information, as the results obtained have been below the average compliance with disclosure requirements obtained in previous studies. Therefore, it is expected that as the application process progresses and the information compilers increasingly assimilate the requirements of IFRS, a greater breadth of disclosures will occur.

It should be noted that the improvement in the disclosure of information is not only a consequence of the pressure generated by the new accounting regulations. The latter is also driven by market pressure. The latter was justified and reflected through the characteristics of the companies, which were related to the results of the disclosure of information. It was demonstrated that the level of internationalization of the companies has a positive and significant influence on the extent of information available in the notes to the financial statements. This indicates that the presence of companies in foreign markets forces them to disclose more complete information because of the reporting rules of the international business system, so they have a market incentive that improves disclosure and goes beyond the mere obligation to apply IFRS.

On the contrary, no relation was found between IFRS disclosure levels and variables such as size, level of indebtedness, profitability, auditor quality, and age. This means no empirical evidence has been obtained to reinforce what has been theoretically postulated in agency theory and other theories.

It should be noted that issuers globally, such as the Institute of Chartered Accountants of Scotland (ICAS) and the New Zealand Institute of Chartered Accountants (NZICA), have suggested that the disclosures required in IFRS have become too burdensome and should be reduced (Saha, Morris, &

Kang, 2019; Henderson, 2019), which may mean that companies do not fully comply with disclosure requirements and believe that disclosing does not add value. Therefore, results such as those evidenced by the amount and details provided in the notes could give additional elements to regulation issuers, such as the IASB, to contemplate adjustments in their project for IFRS disclosure principles.

Likewise, the results of this study, by showing which disclosure requirements are met and how this is associated with companies' disclosure incentives, are relevant for supervisors, as they serve as a basis for monitoring compliance with the regulations. At the same time, the study is of interest to companies to the extent that, as an external observation, it shows how progress has been made in the IFRS implementation process and the recommendations that can be made.

The study contributes to the expansion of accounting research since most other studies have focused on evaluating the effect of IFRS on the quality of accounting information based on the study of earnings management, the timely recognition of losses, and the valuation relevance (Christensen, Lee, Walker & Zeng, 2015; Cardona, Gómez & Cano, 2019; Eng, Lin, & Neiva, 2019), leaving in the background the informational relevance of analyzing the consequences in the disclosure of information. This issue is not a minor one in the study of accounting regulation since it can be understood as part of the political concerns within organizations to decide what to disclose, which is perhaps different from "measurement issues," which are largely technical and not a political issue (Coy, Fischer, & Gordon, 2001).

Finally, further studies are needed to extend the analysis to other accounting items and different types of companies, such as SMEs and those belonging to the third sector of the economy. At the same time, studies can be carried out to monitor compliance with disclosure requirements over time, especially when the requirements of each of the standards and the global definition of disclosure principles by the IASB are being improved.

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