Three Essays on Corporate Governance

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Abstract

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This thesis is comprised of three essays on corporate governance issues. The first essay focuses on how board members' geographical diversity relates to financial reporting quality. In principle, it is often argued that diversity has a positive impact on a group's decision-making and monitoring abilities. In governance matters, while the attention has recently been placed on gender diversity, diversity is in fact multi-dimensional and encompasses attributes such as gender but also experience, expertise, independence and origins. The results show that a local board is more successful in monitoring financial reporting quality. The first essay provides evidence that although regulators are encouraging the diversity of boards of directors in all aspects, they may not be aware that each dimension of diversity may have a different impact on the performance of directors.

The second essay ponders how the presence of foreign directors on audit committees affects their effectiveness. The rules-based approach of Canadian regulators with respect to audit committee membership has caused many Canadian firms to nominate foreign directors on their audit committees, especially from the U.S. The second essay provides evidence that the nomination of foreign directors to a monitoring committee, mainly due to the requirements regarding audit committee membership, may have reverse outcomes on the quality of financial reporting, even though these directors may share many similarities with directors from the country in which they are sitting on a board and to which they are geographically close.

The last essay looks at the effects of the adoption of a new set of accounting standards within a single national context, Canada, with different legal regimes (common law outside Quebec, code law within Quebec). The third essay offers evidence that the introduction of a new set of accounting standards may even result in a different level of financial reporting quality between firms, dependent on firm- and country- level governance mechanisms.

Key words, Board of Directors, Geographical Diversity, Earnings Quality, Audit Committee, Foreign Directors, IFRS, Firm- level governance mechanisms, Country – Level Governance Mechanisms

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I dedicate this thesis to my parents ….

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Chapter 1 – Introduction

In several countries around the world, financial scandals in the late 1990s and early 2000s have raised concerns about financial reporting. In reaction to these events, regulators have mainly used two ways to improve the quality of financial reporting. First, they have enacted policies to reinforce corporate governance mechanisms, especially boards of directors and audit committees. These policies focus on board or committee membership, the ultimate goal being an increase in the level of monitoring over the decision-making of managers. Second, in many countries, including Canada, they have pursued a strategy of raising the bar for financial reporting quality. Such efforts are illustrated by a complete restructuring of the governance of the former International Accounting Standards Committee (IASC), which has evolved into the International Accounting Standards Board (IASB). Enhanced oversights by the international community as well as greater transparency have made the IASB, and its output, International Financial Reporting Standards (IFRS), much more credible as a source of relevant financial information for investors. As a result, several countries, most notably the European Union (2005) and Canada (2011) have adopted IFRS as their financial reporting framework. [1]

There is extensive research on whether these regulations have been successful in increasing the confidence of stakeholders in the financial information environment and also on their anticipated and unanticipated consequences. This dissertation intends to shed some light into the potential implications from these policies on financial reporting quality. In addition, it focuses on how these two mechanisms, i.e., board governance and accounting standards, interact with each other. The three essays in the dissertation concentrate on three interrelated issues in

[1] While countries like the United States, China, Japan and India have not formally adopted IFRS, their standard-setters and regulators have engaged into a dialogue with the International Accounting Standards Board (IASB) and, in theory, pursue a goal of standard convergence, albeit with some missteps along the way.

this regard. The first essay focuses on how board members' geographical diversity relates to financial reporting quality. In principal, it is often argued that diversity has a positive impact on a group's decision-making and monitoring abilities. In governance matters, while the attention has recently been put on gender diversity, diversity is in fact multi-dimensional and encompasses attributes such as gender but also experience, expertise, independence and origins. However, less is known about how director diversity, especially geographical diversity, affects the performance of directors. The second essay ponders how the presence of foreign directors on audit committees affects its effectiveness. The rules-based approach of Canadian regulators with respect to audit committee membership has caused many Canadian firms to nominate foreign directors on their audit committees, especially from the U.S. But, the effects on a firm's performance are not clear yet. The last essay looks at the effects of adoption of a new set of accounting standards within a single national context, Canada, with different legal regimes (common law outside Quebec, code law within Quebec). It examines the interaction between adopting IFRS and governance mechanism at firm- and country- levels.

As a whole, this dissertation covers issues regarding governance mechanisms at the firm- and country- levels as well as new accounting standards and also the interaction between them. Specifically, the three essays address the following research questions:

1. Whether a board of directors' geographical diversity matters for financial reporting quality?
2. Whether nominating foreign directors on the audit committee to meet the requirements of regulations contributes to financial reporting quality?
3. How country- and firm- level governance mechanisms affect how the adoption of a new set of accounting standards influences financial reporting quality?

In the first essay, we give attention to the board of directors' diversity that is attracting significant attention from regulators and institutional investors. Regulators are encouraging firms to increase diversity in their board-rooms in all aspects such as gender, ethnicity and geography. Some countries such as Norway and France have gone one step further and have adopted policies to increase gender diversity in board-rooms. However, less is known about the impact of each dimension of diversity on the performance of directors, especially regarding the monitoring of the quality of financial reporting. In this essay, we focus on a dimension of diversity, geography, which has been explored in very few studies due to the lack of credible data for the residential addresses of directors (e.g. Alam, Chen, Ciccotello and Ryan, 2012, 2014). We argue that the distance between directors and firm headquarters affects directors' monitoring power over managers' decision-making. The results show that directors who live close to a company are more effective in monitoring managers' decision-making regarding the quality of financial reporting. Hence, the effects of diversity may vary across its various dimensions and regulators may need to consider this if they encourage firms to increase diversity in all aspects.

In the second essay, we concentrate on a specific class of directors, foreign directors, and their monitoring power over the decision-making of managers. Foreign directors are becoming prevalent among firms all over the world due to globalization and improvements in technology and transportation (Alam et al, 2012, Masulis, Wang and Xie, 2012). However, evidence on their effects on a firm's performance is mixed so far. The Canadian setting, with a rules-based approach to audit committee membership, provides a good environment in which to investigate how the nomination of foreign directors to fulfill the requirements of regulations may affect the performance of directors. The results show that many Canadian firms rely on the U.S. directors' market to fill their audit committees. In addition, firms with a higher percentage of foreign

directors on their audit committee have a lower quality of financial reporting. The findings are interesting since previous research shows that hiring directors from countries with many similarities and from those which are geographically close will have positive effects on firm performance. Nonetheless, it seems that when they are nominated to fulfill regulatory requirements, then their impact might be different.

The third essay focuses on the consequences of adopting a new set of accounting standards to improve the quality of financial reporting. It also explores how governance mechanisms at the firm- and country- levels affect the adoption process. Canada provides a unique setting in examining the effects of country- level governance mechanisms on the adoption of the IFRS, since in Canada itself, the province of Quebec is governed by French civil law and the rest of Canada is governed by common law. International studies so far provide mixed results as to the effects of country- level governance mechanisms on the adoption of the IFRS, which may be due to omitted correlated variables which are difficult to control for in an international setting. The findings show that, in general, IFRS have not improved financial reporting quality in Canada. However, the impact of the IFRS is slightly different for firms located in Quebec compared with the rest of Canada. For firms in Quebec, there is a slight decrease in earnings management that is not statistically significant. Yet, the value relevance of earnings has decreased in Quebec after the adoption, although it has not changed significantly for firms in the other provinces.

In sum, this dissertation provides evidence that enacting policies may have unanticipated consequences that may impair the primary goal of the adoption in the first place. The first essay provides evidence that although regulators are encouraging the diversity of board of directors in all aspects, they may not be aware that each dimension of diversity may have a different impact

on the performance of directors. The second essay provides evidence that the nomination of foreign directors to a monitoring committee, mainly due to the requirements regarding audit committee membership, may have reverse outcomes on the quality of financial reporting, even though these directors may share many similarities with directors from the country in which they are sitting on a board and to which they are geographically close. Finally, the third essay offers evidence that introducing a new set of accounting standards may even result in a different level of financial reporting quality between firms, dependent on firm- and country- level governance mechanisms. Even in a single country setting, the introduction of a new set of accounting standards may not meet the anticipated goals. Overall, the results of this dissertation provide evidence for Canadian regulators in their policy making regarding governance mechanisms and also the setting of standards as well.

The dissertation is organized as follows. The next three chapters present the three essays. The fifth chapter covers the conclusion and discussion.

Chapter 2: Board of Directors' Geographical Diversity and Earnings Quality

Abstract

The diversity of boards of directors (or lack of thereof) is currently attracting significant attention from regulators and institutional investors. For example, the Ontario Securities Commission has recently issued for comment a policy statement on the issue. However, in this context, diversity is often constrained to gender or ethnic diversity, which are but two facets of the concept. Furthermore, irrespective of the diversity definition being used, there is a lack of evidence and consensus as to the effects of directors' demographic diversity on several aspects of corporate performance, especially regarding earnings quality. Relying on the conceptual perspective that boards essentially perform two duties, i.e., the monitoring of management and providing resources to management (e.g., Adams, Hermalin and Weisbach, 2010; Armstrong, Guay and Weber, 2010), we investigate how geographical diversity, -- directors' geographical location relative to corporate headquarters-- affects firms' earnings quality. We focus on a sample of Canadian firms, a large country with a wide range of board geographical diversity. The study takes advantage of the fact that Canadian securities regulations mandate that corporations disclose their directors' personal residence locations. Our results indicate that directors of firms located in Quebec and Alberta are drawn from a concentrated geographical area. In contrast, firms located in the rest of Canada exhibit board of directors with more geographical diversity. Second, results show that earnings quality, as measured by the level of abnormal accruals and earnings informativeness, is less for firms with independent directors who are geographically spread out. In addition, firms with more geographically diversified audit committee members have lower earnings quality. These findings suggest that firm-specific effects from board diversity do differ and are conditional upon the facet of the diversity being

considered. Our results also indicate that Canadian regulators may need to take a more comprehensive approach if they push for board diversity.

2.1. Introduction

In recent years, there have been calls by several stakeholders (regulators, social or ethical investors and academics) for greater diversity in the boards of directors of publicly-traded organizations. Such demands are consistent with the path taken by several countries which have established quotas for female representation on their boards (e.g., Norway, France and Spain).

Australia, Belgium and France have adopted policies mandating that publicly- traded firms disclose their diversity programs or, if such a policy does not exist, provide justification for its absence. Similarly, the U.S. adopted a policy in 2010 mandating public firms to disclose their diversity policies. Following the U.S, Canadian firms are facing increasing demands to adopt a similar policy to encourage board diversity. For instance, the Ontario Securities Commission recently issued a policy document for comment that would require board of directors to increase gender diversity.

The underpinnings of such trends usually rest on two arguments. On the one hand, most Western societies have enacted charters and laws stating that men and women have equal rights and opportunities and that any discrimination on the basis of gender is thus prohibited (e.g. Article 119 of the European Economic Community Treaty, 1957). It then follows that boards of directors, the critical governance mechanism in most private sector organizations, should reflect surrounding societal values and promote the status of women. On the other hand, there is extensive research in management and psychology which suggests that diverse teams tend to be more effective and better performing (e.g. Erhardt, Werbel and Shrader, 2003). Such evidence is then transposed to gender and ethnic diversity at the board level.

However, before taking any regulatory actions regarding board diversity, there are at least two issues that need to be considered. First, board diversity is a multi-faceted reality and

accordingly, its definition often depends upon the perspective being considered. So far, diversity has been defined mostly in terms of gender or ethnicity. However, diversity has a wider meaning, as is reflected in Pamela Jeffery's opinion, founder of the Canadian Board Diversity Council, "the findings suggest directors do not understand what constitutes diversity on a board. Having a single female director, she argues, does not make a board diverse:" (The Globe and Mail, Oct. 21, 2010). The institute of corporate directors recognizes and actually encourages consideration of diversity in a comprehensive manner by stating that board diversity "defined as gender, ethnicity, age, business experience, and geographic background, can contribute to better corporate governance:" (Institute of Corporate Directors' website, Canada, July 2013).

Secondly, board diversity encompasses both "statutory" and "demographic" diversity. Statutory diversity "is mandated by law or best practices." (Ben-Amar, Francoeur, Hafsi and Labelle, 2013, P 85). However, demographic diversity deals with directors' characteristics that may affect their statutory diversity and as a result their performance (Ben-Amar et al. 2013). There is extensive research on statutory diversity, which mainly investigates board structure in terms of the directors' independence from the management team (e.g. Klein, 2002b). However, research on demographic diversity is still in its infancy and limited to gender and ethnicity.

Research on board demographic diversity provides evidence that the gender and ethnicity facets of diversity affect directors' decision-making and as a result firm performance (e.g. Adams and Ferreira, 2009, Srinidhi, Gul and Tsui, 2011). However, less is known about a dimension of diversity which may be even more important than gender and ethnicity; geographical diversity. The importance of this dimension originates from at least two reasons: first, there are increasing numbers of firms nominating directors from other geographical areas due to the improvement in technology and transportation in the last decades, which helps the

directors who are living far from firms to perform their duties more easily than before (Alam et al., 2012). Moreover, directors may not even need to travel and attend meetings; they can simply participate in board meetings by conference calls. Secondly, geographic diversity may affect other dimensions of diversity as well. Having a female or minority member on the board, who lives close to the firm, may have a different effect on firm performance than if one lives further away. Therefore, investigating the impact of geographic diversity on directors' decision-making will shed light on at least two questions: whether geographic diversity actually affects directors' decision-making and their performance? And, whether regulatory bodies need to consider any specific measures regarding mandating geographical diversity?

Among the demographic diversity dimensions, there are few studies investigating geographic diversity and its effect on firm performance due to the lack of data about the residential addresses of directors (e.g. Alam et al., 2012, 2014). However, Canadian firms disclose the residential addresses of their directors in proxy circulars. This data availability provides an opportunity to investigate the geographic diversity of directors and how it impacts firm performance.

Moreover, a Canadian setting is appropriate for this study since Canadian firms are more geographically diversified, measured by their business addresses, than U.S. firms. While U.S. firms nominate directors regionally, Canadian firms nominate board members intra-regionally. This is mainly due to a less-developed directors' market in Canada than in the U.S. (O'Hagan and Green, 2004). O'Hagan, Rice and Green (2008) also find that Canadian firms hire board members from more geographically diverse areas, as measured by the university attended by board members, than U.S. firms that prefer to nominate board members who graduated from universities located in their regional areas. In addition, as the French language is the formal

language of Quebec, this may affect the board geographic diversity of Quebec firms. Along the same lines, firms located in Alberta may have a different board composition since almost all Canadian oil and gas companies are located there and therefore there is a rich pool of potential directors available for firms from which to choose. Thus, the Canadian setting is an appropriate choice for this study because of the availability of data and also the high variation in board geographical diversity.

Empirical evidence regarding the impact of board geographic diversity on directors' ability to perform their monitoring and advising roles is rare and the results are so far mixed. In this vein, Wan (2008) shows that directors living in close proximity to the firm they represent have access to more information which is reflected in their trading activities; however, they are not effective monitors of managers. Similarly, Alam et al. (2012) document that firms nominate non-local directors, when directors need less access to firm specific information. Moreover, Alam et al. (2014) find that after Sarbanes-Oxley Act (SOX) the average distance between directors' location and firm headquarters has increased and this in turn has caused directors to rely more on public information in their decision-making which is reflected in relying more on equity-based compensation. They argue that this in turn, gives managers more incentive to manage earnings which is shown in higher discretionary accruals. Masulis et al. (2012) investigate the presence of foreign directors in U.S. firms and provide evidence that firms with foreign directors exhibit lower performance. In addition, these firms are more likely to restate their earnings. The results of the study conducted by Wan (2008) is based on the idea that non-local directors are more independent from managers and that they therefore do a better job of monitoring managers' decision-making. Nonetheless, according to Masulis et al. 2012, in

assessing firm performance, it is difficult to distinguish the effect of directors' geographical location from the impact of their non-familiarity with U.S regulations and business environment.

Analyzing the effects of geography of directors on firms' disclosure policies is even more complicated, since the impact of board geographic diversity on disclosure quality may be positive or negative. On the one hand, the geography literature documents that access to information is an advantage for local investors, creditors and analysts (e.g. Ayers, Ramalingegowd and Yeung, 2011, Arena and Dewally, 2012, Tan and O'Brien, 2013). Due to proximity, local stakeholders have a lower cost in acquiring information about a firm, which helps them in their decision-making. Similarly, local directors have access to local information, which in turn helps them perform their monitoring and advising roles more effectively (Alam et al. 2012). Local directors also have the opportunity to acquire information about a firm from channels such as the local media and face-to-face communication with employees, suppliers and executives (Coval and Moskwitz, 1999, 2001., Wan, 2008). But, for non-local directors, the cost of acquiring information is greater because of the higher cost of attending meetings and visiting firms' locations (Masulis et al., 2012). Based on this explanation, a diversified board in terms of geography may not be able to monitor managers' disclosure policies since directors who are far from firms do not have access to enough information.

On the other hand, a diversified board may contribute to better disclosure quality for the following reasons. Non-local directors might be more independent from managers since they do not have day-to-day interactions and social connections with the management team (Coval and Moskwitz, 1999, 2001., Masulis et al. 2012). Therefore, they may better monitor managers' disclosure' policies. In addition, for a diversified board, access to information is costly, and as

such, they rely more on public disclosure (Armstrong et al, 2010). Thus, firms with a diversified board may have better disclosure quality to fulfill directors' demand for information.

To investigate the geographic diversity of directors and its effect on earnings quality, we use a sample of Canadian firms from the 2010 and 2011 fiscal years. The final sample contains 528 firms for which data is available on Compustat and proxy circulars. Descriptive statistics show that firms located in Quebec and Alberta draw directors from a more concentrated geographic area than other Canadian firms. We use three measures for board geographic diversity: the percentage of audit committee members living in the same province where the headquarters are located, the percentage of directors living in the same province where the headquarters are located and the percentage of independent directors living in the same province where the headquarters are located. Based on all geographic diversity measures, there is a significant difference between the board geographic location of firms in Quebec and Alberta and the rest of the firms in the sample. This variation within a financial market with common institutional features provides an appropriate setting to investigate the effects of geographic diversity on earnings quality.

In the next step, we measure earnings quality using the modified Jones model (Jones, 1991) and earnings informativeness. Results of the multivariate analysis show that there is a negative relationship between the proportion of independent directors (audit committee members) who live in the same province where the headquarters are located and absolute abnormal accruals. In addition, the relationship between annual returns and earnings is higher for firms with a higher percentage of independent local directors (local audit committee members). These results provide support for a less diversified board in terms of geography and support the

argument that directors who live close to a firm's headquarters end up being more effective at monitoring of their managers' decision-making regarding earnings quality.

The study contributes to three streams of research. First, this study provides evidence regarding a new dimension of board diversity which has rarely been explored before, i.e., geographic diversity (Alam et al., 2012, 2014, Masulis et al., 2012). So far, the effect of gender diversity on disclosure quality has been investigated (e.g. Srinidhi, Gul and Tsui, 2011, Gul, Hutchinson and Lai, 2013). Yet, board diversity is not solely limited to gender diversity. Our study adds to the board diversity literature by providing evidence that the effects of different aspects of board diversity on earnings quality are not the same and regulators may need to take this in to consideration when they push for diversity. Our study also contributes to the literature that investigates the relationship between board composition and corporate transparency (e.g. Armstrong et al. 2010). This line of the literature mainly focuses on the statutory diversity of directors (directors' independence) and its effects on the information environment. Our study contributes to this literature by investigating a new dimension of demographic diversity, location of directors, and its impact on earnings quality. Finally, it adds to the geography literature and its effects on stakeholders' decision-making by providing evidence that proximate directors do a better job at monitoring managers, similar to proximate institutional investors and proximate analysts (e.g. Ayers et al, 2011, Tan and O'Brien, 2013).

2.2. Literature Review and Hypothesis Development

2.2.1. Diversity a Multi-Dimensional Reality

Board of directors play an important role in monitoring and advising managers and aligning their interests with the interests of shareholders (e.g. Armstrong et al, 2010). To

understand the factors that affect directors' ability to perform these roles, there is a handful of research investigating directors' characteristics that may affect their performance (e.g. Armstrong et al, 2010). These studies investigate differences in directors' characteristics in terms of what is mandated by law, such as independence, and what is not mandated such as age, experience and gender. More research has been done regarding mandated facets of board diversity such as independence (e.g. Klein, 2002). However, less is known about the effects of demographic diversity on directors' performance.

A comprehensive definition of diversity, as provided by U.S. Securities and Exchange Commissioner, Luis A. Aguilar, state that "there still remains a need to highlight the importance of diversity in the boardroom. Diversity can mean variety of thoughts, geography, age, career experience as well as the more traditional categories of gender and ethnicity": (SEC Commissioner, Luis A. Aguilar, 2010). Considering the board of directors as a group of people working together, most of the studies rely mainly on research in psychology and management that show that a diversified board may work better and make better decisions due to different personal characteristics and backgrounds (e.g. Erhardt et al, 2003).

Among the dimensions of demographic diversity, more research has been done about the traditional categories of gender and ethnicity (e.g. Adams and Ferreira, 2009). However, the geography dimension has been explored in few studies probably due to a lack of data for the location of directors (e.g. Wan, 2008, Alam et al, 2012, 2014). This aspect may be even more important than gender and ethnicity since it is becoming more prevalent among board members, due to an improvement in technology and transportation, which in turn help directors to perform their jobs even if they do not live in the proximity of a firm (Alam et al, 2012). Secondly, geographic diversity may affect other dimensions of diversity such as gender and ethnicity. The

reason is that this dimension is directly related to information accessible to directors, which in turn may affect their performance when it comes to monitoring and advising managers (Alam et al, 2012). Even a female director or a minority member's effectiveness on the board is directly based on how much information they have access to and how independent they are. These two key factors are directly related to the distance from a firm (Alam et al, 2012).

Boards of directors, as corporate governance mechanisms affect managers' decision-making regarding different aspects of a firm's performance such as financial reporting (Srinidhi et al, 2011). For example, firms with a higher percentage of independent directors have a superior earnings quality and a better information environment (e.g. Armstrong et al, 2010). Besides the traditional measure of diversity, independence, demographic diversity also affects firms' disclosure quality. For example, firms with female directors have higher earnings quality and analysts issue more precise forecasts for such firms (e.g. Srinidhi et al, 2011, Gul et al, 2013). As for geographic diversity, the effects on earnings quality are not clear since geography may have a positive, negative or no effect on directors' ability to perform their roles. Therefore, investigating the effects of board geographic diversity on earnings quality will shed light on whether such a facet of diversity will contribute to a firm's performance and what position regulators should take regarding this dimension.

2.2.2. Geographical Diversity and Decision-Making by Market Participants

In contrast to prior research in corporate governance which completely disregards the geographic diversity's potential influence on board' effectiveness and actions, geography is an important factor underlying decision-making by important stakeholder groups such as investors and analysts. For instance, investors typically prefer to invest in local firms and, on average, earn

higher returns from such investments compared with investments in non-local firms (Ivkovic and Weisbenner, 2005). Mutual funds invest more in local firms as well and earn abnormal returns especially when investing in local small and leveraged firms (Coval and Moskwitz, 1999, 2001). The documented local bias is due to the information advantage that local investors hold against non-local investors. Local investors have the opportunity to acquire information directly from employees, managers and suppliers and they may have social ties with executives that give them an information advantage over non-local investors (Coval and Moskwitz, 1999, 2001).

In addition, local investors, due to their information advantage over non-local investors are able to fulfill their monitoring role over management more effectively. Ayers et al. (2011), using a sample of firms covering the 1996-2008 period, document that local institutional investors are better monitors than non-local ones. More specifically, firms with a higher percentage of local institutional investors have less financial reporting discretion, measured by abnormal accruals. Ayers et al. (2011) attribute this finding to the cost of acquiring information, which is lower for local institutional investors. Local institutional investors attenuate managers' propensity to engage in opportunistic financial reporting, especially for firms with more investment opportunities. Similarly, Chhaochharia, Kumar and Niessen-Ruenzi (2012), find that firms with high local institutional ownership have better corporate governance. They are more profitable, have more independent directors, less earnings management and less option backdating. Also, they are less likely to be a target of class action lawsuits. Local institutional investors are more effective in monitoring management through mechanisms such as introducing shareholder proposals, reducing CEO compensation and increasing CEO turnover. The monitoring power of local institutional investors arises from their access to more private

information through formal and informal daily interactions with employees and managers (Chhaochharia et al., 2012).

A similar local information advantage also exists for equity analysts. Tan and O'Brien (2013) provide evidence that analysts are 60% more likely to cover a local firm in IPO settings. In addition, local analysts begin to cover local firms one to three weeks earlier than non-local ones. This early attention increases analysts' coverage and institutional investment as it reduces the information asymmetry between the firm and markets, which is typically fairly high in the context of an IPO. Molloy (2005) documents that earnings forecasts issued by local analysts are more precise and have a higher impact on the market, especially for firms located in remote areas. Hence, it does appear that proximate analysts have an information advantage over other analysts.

Local information advantage also has an effect on creditors' decisions. Arena and Dewally (2012) find that firms located in rural areas and small cities have a higher cost of debt and are less able to attract large underwriters and lending banks. Consequently, rural firms borrow from the same local banks repeatedly because of this information disadvantage. In sum, stakeholders located in proximity to a firm have access to information through channels which are not accessible to stakeholders who are located far from a firm.

2.2.3. Geographical Diversity and Corporate Governance

As for the geography of directors, due to a lack of data for the residential addresses of directors there are few studies that examine the effects of the geographical diversity of directors on their performance. Therefore, it is not clear whether board geographical diversity has a negative or positive impact on firms' earnings quality.

Evidence provided by Wan (2008) shows that local directors hold an information advantage over non-local ones as reflected in their trading behaviors. However, it appears that they are not effective monitors on managers. The data has been collected for the locations of directors using the Thomson Reuters Insider Database (Form 144), but this database only provides the addresses of directors who have traded, and in most of the cases the addresses happen to be their business addresses. Alam et al. (2012), using the residential addresses of more than 4000 directors in the U.S., investigate the determinants of nominating non-local directors. They document that firms have more non-local independent directors when board members need less of the firm's specific information in their decision-making. Alam et al (2014) investigate the effect of the SOX on the distance between directors and firm headquarters. They find that after the SOX, the average distance between directors sitting on monitoring committees and firm headquarters has increased and this in turn, has caused directors to rely more on public information which is evident in higher level of equity- based compensation. They argue that this in turn, may give managers incentives to manage earnings, which is reflected in higher discretionary accruals. In the same vein, Masulis et al. (2012) examine the effects of foreign directors on U.S. firms. They find that firms with foreign directors exhibit lower performance and are more likely to have earnings restatements. Nevertheless, the result of the Masulis et al. (2012) study is hard to interpret when it comes to geography, as foreign directors may not be effective monitors either because they are located far away (geography-based information advantage argument) or because of their non-familiarity with U.S. regulations and the business environment.

2.2.4. Geographic Diversity of Directors and the Quality of Earnings

The impact of board geographical diversity on a firm's earnings quality is complex. On the one hand, a diversified board may be associated with better earnings quality. The reason for this is that non-local directors may be more independent, due to their direct and indirect rare interactions in daily life with managers (Coval and Moskwitz, 1999, 2001., Masulis et al. 2012). Such distance may help them to monitor managers' decision-making, including disclosure policies, more soundly. In addition, due to the higher cost of gathering information for non-local directors they may rely more on public disclosure to fulfill their monitoring and advising roles (Armstrong et al, 2010). Therefore, they have a higher demand for transparency which may lead to better earnings quality:

H1a: There is a positive relationship between board geographic diversity and the earnings quality of firms

On the other hand, a geographically diversified board may have a negative effect on earnings quality. Directors may not be able to acquire information about a firm because of their diversified locations, since they do not have the day-to-day social interactions with the local community to acquire soft information about the firm (Coval and Moskwitz, 1999, 2001). In addition, attending meetings and visiting a firm's location are costly for them (Masulis et al. 2012). Therefore, they may not be able to monitor disclosure policies due to a lack of information. Thus, the relationship between board geographic diversity and earnings quality may be negative:

H1b: There is a negative relationship between board geographic diversity and the earnings quality of firms

2.3. Focus on a Canadian Setting

Three reasons underlie the decision to choose Canadian firms to investigate board geographic diversity and its effect on firms' disclosure quality.

First, Canadian firms disclose the residential addresses of their directors in proxy circulars, as it is mandated by securities markets regulators. Secondly, the geography of Canada is unique: Canada is a wide country and being a neighbor to the U.S. provides a rich pool of directors for Canadian firms to choose from, as both countries share a common language (English) and similar business practices. As a result, Canadian firms have access to both Canadian and American pools of directors. This in turn, helps Canadian firms have a geographically diversified board. For example, O'Hagan and Green (2004) document that Canadian boards are more diversified than U.S. boards. U.S. firms nominate directors regionally, but Canadian firms nominate directors intra-regionally. In the same vein, O'Hagan et al. (2008) document that Canadian firms are more geographically diversified than U.S. firms, measured by the university attended by directors.

Third, within Canada is the province of Quebec, where French is the primary language of business. The language may contribute to the decision by Quebec firms not to nominate board members from outside Quebec due to language distance. Previous research shows that firms nominate outside directors when information asymmetry between insiders and outsiders is low (Armstrong et al. 2010). Therefore, Quebec firms may prefer to nominate directors from Quebec because of information asymmetry associated with language. Also, due to this information

asymmetry, non-Quebec directors may not be willing to sit on the board of Quebec firms since information asymmetry associated with language reduces their access to information. Therefore, firms located in Quebec may have a different geographic diversity than firms located in the rest of Canada. In addition, Alberta is the location for almost all oil and gas firms in Canada which provides a unique pool of directors for firms located in Alberta from which to choose. This variation provides an appropriate setting to investigate the effects of geographic diversity on the earnings quality of firms.

2.4. Research Design

2.4.1. Sample and data

The sample is based on Canadian firms in Compustat for the fiscal years ending 2010 and 2011. We start with Canadian firms in Compustat for the fiscal year 2010. Then, we eliminate firms in financial industries (SIC-Code 6021-6999), incorporated outside Canada and firms with headquarters outside Canada. We also exclude firms on the Venture Toronto Stock Exchange since they are small and are subject to different filing requirements. We also eliminate investment trusts since they have different tax and dividend regulations. Also, 481 observations are removed due to a lack of data for financial variables in Compustat. Small firms (with market capital below $10 million) are excluded too. Eleven firms with negative equity are excluded as well. Finally, 141 firms are excluded as there are fewer than six observations in their industries for which to calculate abnormal accruals.

Next, we collect governance data from proxy statements. Data from Annual information forms and proxy circulars filled by Canadian companies are from SEDAR. For missing information we use 'The Directory of Directors' which is a database including the personal information of directors in Canada. For 26 firms, the data from proxy circulars is not complete;

therefore we eliminate them from the sample. Lastly, there are 290 firms for year end 2010 with complete data.

Then we collect the data for these firms in 2011. We have 238 firms for the year 2011 with complete data, because of delisting and missing variables in Compustat and proxy circulars. In total, sample consists of 528 firm-year observations. Table 1 panel A shows the sample selection process.

To investigate earnings informativeness, we collect stock price data from the CFMRC database. Stock price data are missing for 34 firms. Therefore, the final sample for earnings informativeness consists of 494 firm-year observations.

[INSERT TABLE 1 PANEL A ABOUT HERE]

Table 2 panel A shows the distribution of the sample based on industry and location. In a few cases where the headquarters and executive office of a firm are located in different cities, we choose the executive office, since board meetings are usually held in the executive office. While the headquarters of 34% of the firms are located in Ontario, 28% are located in Alberta; British Colombia and Quebec have 18% and 15% of the firms respectively. The remaining 5% of the firms are located in Manitoba, Nova Scotia, New Brunswick and Saskatchewan. As for industry distribution, 24% of the firms are in the oil and gas industry from which 90% are located in Calgary. Twenty-three percent of the firms are in the metal mining industry from which 45% are located in Ontario and 36% are located in British Colombia.

[INSERT TABLE 2 PANEL A ABOUT HERE]

2.4.2. Measurement of Board Geographic Diversity

The variable of interest for board composition is based on the residential addresses of directors. For each firm, we calculate the proportion of audit committee members who live in the same province where the headquarters are located. This measure is a better proxy of the geographical diversity of directors for this study, since we investigate the effects of board composition on earnings quality, an outcome for which the audit committee plays an important role. The second measure is the proportion of independent directors who live inside the province and the last measure is the proportion of directors who live inside the province in which the headquarters is located.

2.4.3. Measurement of Abnormal Accruals

To measure earnings quality, we use the modified Jones model (Jones, 1991) as presented by Dechow et al. (1995):

$$\frac{\mathrm{TA_{ij}}}{\mathrm{ASSET_{ijt-1}}} = \beta_1 \frac{1}{\mathrm{ASSET_{ijt-1}}} + \beta_2 \frac{\Delta \mathrm{REV_{ij}}}{\mathrm{ASSET_{ijt-1}}} + \beta_3 \frac{\mathrm{PPE_{ij}}}{\mathrm{ASSET_{ijt-1}}} + \beta_4 BM_{ij} + \beta_5 \frac{CFO_{ij}}{ASSET_{ijt-1}} + \varepsilon_{\mathrm{ij}}$$

Where TA_{ij} is the firm's total accruals in industry two-digit code, measured as net income before extraordinary items minus operating cash flow. $ASSET_{ijt-1}$ is the firm's i total assets in year t-1 and two-digit SIC code j. $AREV_{ij}$ is the change in revenue from the previous year for firm i in two-digit SIC code j. PPE_{ij} is the gross property, plant and equipment for firm i in two-digit SIC code j. BM_{ij} is the book value to market value of equity for firm i in two-digit SIC code and CFO_{ij} is cash flow from the operating activity for firm i in two-digit SIC code. We estimate the parameters of the above model to estimate the normal accruals for firms in the sample

$$NA=\beta_1 \frac{1}{ASSET_{ijt-1}} + \beta_2 \frac{\Delta REV_{ij} - \Delta AR_{ij}}{ASSET_{ijt-1}} + \beta_3 \frac{PPE_{ij}}{ASSET_{ijt-1}} \beta_4 BM_{ij} + \beta_5 \frac{CFO_{ij}}{ASSET_{ijt-1}}$$

Where ΔAR_{ij} is the change in accounts receivables from the previous year for firm i in two-digit SIC code j. The measure for discretionary accrual is the absolute value of the difference between total accruals and predicted normal accruals. We winsorize all the variables entering these two models at the 1st and 99th percentiles to prevent the effect of outliers.

2.4.4. Measurement of Earnings Informativeness

Using accrual quality as a measure of earnings quality may not take in to account the costing method used in the oil, gas and mining industries, considering almost half of the sample firms are in these industries. As a consequence, we also use a market measure for earnings quality to make sure my results are robust vis-à-vis an alternate measure. Moreover, it provides evidence on how market participants perceive the effects of board geographical diversity on the performance of directors. If local directors are perceived to have more monitoring power on managers' decision-making about disclosure quality then we expect to find higher earnings informativeness for firms with greater percentage of local directors.

To measure earning informativness we estimate the following model

$$RETURN = \alpha_0 + \alpha_1 EPS + \alpha_2 SPROV + \alpha_3 EPS * SPROV + \alpha_4 SIZE + \alpha_5 LEV + \alpha_6 BM + \alpha_7 GOV + \alpha_{81} LOSS$$

Return is the 12-months' stock return of firm i in period t, starting nine months prior to the fiscal year-end and ends three months after the fiscal year-end. EPS is the earnings per share of firm i in period t divided by the stock price nine months before the fiscal year-end. We also control for other factors which may affect the association between return and earnings. We include firm size, leverage, book to market, the factor analysis of governance variables and a dummy variable for loss. α_3 measures differential earnings informativeness based on the geographical diversity of directors.

2.5. Results

2.5.1. Descriptive Statistics

Table 3 panel A presents the descriptive statistics for the whole sample and is also based on each province.

[INSERT TABLE 3 PANEL A ABOUT HERE]

Since 95% of the firms in our sample are located in Alberta, Ontario, British Colombia and Quebec, we present the comparison between these four provinces here. The mean of board size is 7.85 in the sample which is almost the same across the four provinces except for Quebec which has an average of 8.43. The percentage of shares owned by institutional investors has a mean of 11.34%. British Colombia has a minimum average of 7.52% among the provinces and Quebec has the highest mean at 14.42%. The percentage of local institutional investors has a mean of 4.41%. British Colombia, with 0.87% local institutional investors, has the minimum average and Quebec with 7.97% has the maximum average of local institutional investors among

the provinces. The mean of the percentage of the shares owned by family members or individuals is 9.79%. Again, Quebec has the highest percentage of family ownership (17.18%) and Alberta has the minimum average among the provinces (5.81%). The mean of the number of directors on the audit committee has an average of 3.48 which is similar across all provinces. CEO tenure has an average of 8.79 years. The CEOs of Quebec firms have the highest tenure (10.64) and the CEOs of firms in Alberta have the lowest tenure among the provinces (7.53). The average of the number of other directorships is 1.34. However, directors in Alberta have an average of 1.58 and firms in Quebec have a minimum average of 1.02 among the four provinces. The mean of board tenure is 7.56 years. Quebec directors have the highest tenure, 9.33 years, and Alberta directors have the lowest at 6.60. The mean of the fraction of independent directors is equal to 0.74 of the board size which is almost similar among the four provinces. In 22% of the firms, the CEO is also the chairman and the average is almost similar across the provinces. On average 8% of the sample firms have dual class shares, but, Quebec firms have the highest percentage of firms with dual class shares (20%) and firms in British Colombia have the lowest percentage at 2%. Six percent of the directors are female and Quebec has the highest female representation (9%) on the board and Alberta has the lowest (4%). Finally, 91% of the firms are audited by the BIG4.

As for geography variables, in general, 65% of the directors of the sample firms live in the same province where the headquarters are located. Alberta and Quebec have the highest percentage of directors in the same province (75% and 76% respectively). Ontario and British Colombia with 62% and 52% respectively fall after Quebec and Alberta.

Fourteen percent of the directors of the sample firms live in a province other than where their headquarters are located. It ranges from Alberta with the lowest percentage at 10 to British Colombia and Quebec with the highest percentage at 14. Fourteen percent of the directors live in

the U.S. Seven percent of the directors of firms in Quebec live in the U.S. and 22% of the directors of firms in British Colombia are located in the U.S. Finally, 7% of the directors live outside of Canada. Similarly, Quebec with 3% and British Colombia with 12% have the lowest and highest percentage of foreign directors (other than the U.S.) among the four provinces, respectively.

Sixty-one percent of the independent directors live in the same province as where the headquarters are located. Among the four provinces, Quebec and Alberta, with 73% and 71% have the highest percentage of independent directors living in the same province as where the headquarters are located and British Colombia has the lowest percentage (47%). Ontario falls in between with 60%. Eighteen percent of the independent directors live in another province than where the headquarters are located. Alberta has the lowest representation of independent directors from other provinces (13%) and British Colombia has the highest representation (18%). Fifteen percent of the independent directors live in the U.S. Quebec firms have the lowest percentage of independent directors from the U.S. (9%) and British Colombia has the highest percentage of independent directors from the U.S. (23%). Finally, 6% of the independent directors live outside of Canada (other than the U.S.). However, only 2% of the independent directors in Quebec live outside of Canada, whereas that figure is 12% of the directors of firms located in British Colombia.

The average percentage of audit committee members living in the same province where their headquarters are located is 63%. Alberta and Quebec have the highest percentage among provinces (72% and 78% respectively) and British Colombia with 48% has the minimum average among provinces. Ontario with 62% is close to the average of the sample.

As for firm characteristics, Twenty-five percent of the firms are cross-listed in the U.S. Quebec and Alberta have 16% and 18% of the firms cross-listed in the U.S. and British Colombia and Ontario with 42% and 27% respectively follow suit. Firm size proxied by logarithm of total assets is 2.56 equivalents to around $363 million. Firms in Alberta are larger than firms in other provinces (2.72). The mean of leverage (LEV) as measured by total liabilities divided by total assets is 0.37. The mean of performance (ROA) proxied by net income divided by total assets is -0.005. In the same vein, 37% of the sample firms have reported a loss. The average of the absolute abnormal accruals calculated based on the Modified Jones model is 0.05. Quebec has the minimum (0.036) and British Colombia has the maximum (0.065) amount of abnormal accruals. The average annual return for the sample is 0.10. Lastly, the average of the earnings per share scaled by the lagged stock price is -0.006.

Table 4 panel A shows the correlation between governance and geography variables and panel B presents the correlation between variables that will enter in to the regression of accruals quality. The earnings quality (ACCRUAL) is negatively correlated with measures of the geographical diversity which is significant at 5% and 10%. The governance factor is negatively correlated with the abnormal accruals and is significant at 1%. Size and leverage are negatively correlated with abnormal accruals. Having loss is positively correlated with abnormal accruals and ROA is also negatively correlated with abnormal accruals.

[INSERT TABLE 4 PANEL A ABOUT HERE]

[INSERT TABLE 4 PANEL B ABOUT HERE]

2.5.2. Multivariate Analysis

2.5.2.1. Accrual Quality

In the first multivariate analysis, we regress the earnings quality, as measured by the abnormal accruals, on board geographic diversity measures and control variables. We control for firms' characteristics that are associated with earnings quality, according to prior research: firm size, leverage, change in revenues, reporting of a loss, change in cash flow from operating activities and change in net income. We also control for incorporation law, since Filip et al. (2014) show that firms incorporated under Quebec incorporation law and located in Quebec have better earnings quality than firms incorporated under the Canadian Business Corporation Act (CBCA). We also control for governance variables at the firm level. Based on a factor analysis on governance variables we use the first factor which has the most explanatory power with an eigenvalue higher than 1. Table 5 panel A shows the loading components of the factors loaded on the first factor.

[INSERT TABLE 5 PANEL A ABOUT HERE]

Table 6 provides results from the regression analysis using three measures of board geographic diversity. The first regression shows results based on the proportion of directors living inside the province. This variable has a negative relationship with abnormal accruals but is not significant (-0.014). The second regression presents the results for the proportion of independent directors living in the same province which is negative and significant (-0.020, p-value < 0.05). The third regression shows the findings for the proportion of audit committee members living in the same province, and the coefficient is statistically significant (-0.014, p-

value < 0.05). For the control variables, the effects of size, change in cash flow from operating activity and ROA are significant and in line with previous studies.

[INSERT TABLE 6 ABOUT HERE]

2.5.2.2. Earnings Informativeness

In next step, we calculate earnings informativeness by regressing the annual return on earnings per share and the geography variables. Table 4 panel C shows the correlation table for the variables that enter into this model. The correlation between the annual returns and the interaction between the EPS and geography variables are positive and significant at 1%.

[INSERT TABLE 4 PANEL C ABOUT HERE]

Table 7 shows the results for earnings informativeness model.

The relationship between the annual returns and earnings is stronger for firms with a higher percentage of directors living in the same province where the headquarters are located (1.994, P-value <0.10). In addition, firms with a higher percentage of independent directors living in the same province where the headquarters are located have a greater earnings response coefficient (2.24, P-Value <0.05). The results for the audit committee members are positive and significant too (1.56, P-Value <0.05).

[INSERT TABLE 7 ABOUT HERE]

Overall, the results are consistent with the idea that a less diversified board in terms of geography has better monitoring power over managers' decision-making regarding earnings quality.

2.6. Robustness Analysis

There are some concerns regarding my findings in terms of methodological and conceptual issues. First of all, the findings support the existence of a relationship between earnings quality and directors' geographic diversity and not a causal relationship. Two common ways to deal with endogeneity problem are change analysis and using instrumental variables. Using change analysis is not appropriate for my sample, since it covers two consecutive years and geography variables are almost constant throughout this period. Furthermore, finding the right instrument which is correlated with geographic diversity and not with earnings quality is difficult. We have used several variables such as foreign operations, cross-listing, intangible assets and ownership as instrument, but they do not meet the conditions for an appropriate instrument. Therefore, one limitation of this study is that we cannot establish a causal relationship between earnings quality and board of directors' geographical diversity at this stage.

The question arises then as to what point does it make sense to localize a board. Does having full board members from the same area make a board efficient in monitoring managers or is there a threshold for that? To test for this possibility (non-linear relationship) we add a quadratic form to the regressions and we do not find any non-linear relationship between the board of directors' geographic diversity and earnings quality.

The next concern has to do with the governance factor analysis. Since this variable is very aggregate, there exists the possibility that what we capture are the effects of some

governance variables such as ownership that are highly correlated with the board of directors' geographic diversity. To address this issue we add governance variables to the regression instead of using factor analysis. The geography variables are still significant in all regressions: the percentage of directors living in the same province is negative and significant (-0.017, p-value <0.10). The percentage of independent local directors and audit committee members are also significant (-0.025, p-value <0.01, -0.018, p-value <0.05). In earning informativeness regressions the results are still valid as well (p-value <0.01, p-value <0.01, p-value <0.01 respectively).

We also control for location of the firms. Firms located in rural areas may have lower percentage of local directors due to less availability of directors to choose from and at the same time they may have higher disclosure quality to attract non-local investors (Urcan, 2007). We use a dummy variable which is equal to 0 for firms located in Quebec, Ontario, Alberta and British Colombia and 1 otherwise. The results still hold after controlling for firms' locations and this dummy variable is negative and significant in the regressions of accruals quality.

As another sensitivity analysis we run the regression for the discretionary accruals for the subsamples of positive and negative accruals. For the percentage of independent directors who live in the same province where the headquarters is located, the results hold for both subsamples (-0.015, p-value <0.1 for positive accruals and -0.024, p-value <0.1 for negative accruals). As for the percentage of audit committee members who live in the same province where the headquarters is located the results hold for positive discretionary accruals (-0.016, p-value<0.05 for positive accruals). As another robustness check, we use a factor analysis of the three measures for geographical diversity. The results are still significant for both models (-0.005, p-value <0.05, 0.639, p-value <0.05).

2.7. Conclusion and Discussion

Boards of directors play an important role in monitoring and advising managers, ensuring that their interests align with the interests of shareholders. Therefore, there are actually a handful of studies that investigate the determinants of board composition, which in turn help directors to fulfill their monitoring and advising roles (Armstrong et al. 2010). The common dimension of board structure is based on their relationship with the firm: independent and non-independent. Independent directors are considered effective monitors of managers since they do not have ties to the firms. But, because of their limited ability to access a firm's specific information, they may not be able to perform their monitoring and advising roles effectively (Armstrong et al. 2010).

However, less is known about the demographic composition of boards, especially the location of directors, due to a lack of data. In this study, using a unique Canadian setting, we find a negative relationship between board geographic diversity and earnings quality, i.e. firms with boards exhibiting less geographic diversity (more local directors) have higher earnings quality.

The results of this study contribute to the board diversity literature by examining a new dimension of diversity; the location of directors. The geography dimension of diversity has a negative effect on directors monitoring over managers' decision-making regarding earnings quality. Also, the results contribute to the stream of literature investigating the relationship between board composition and disclosure quality (e.g. Armstrong et al. 2010), by shedding light on a facet of demographic diversity which has been explored in few studies before (Alam et al, 2012, 2014). Finally, it contributes to the literature related to the impact of geography on decision-making by different stakeholders. Proximate directors do a better job in monitoring

managers, similar to proximate creditors, institutional investors and analysts (e.g. Ayers et al, 2011, Tan and O'Brien, 2013).

Chapter 3: Do Foreign Directors on Audit Committees Enhance Financial Reporting Quality?

Abstract

With many firms expanding the global scope of their operations, the appointment of foreign directors certainly appears to be a positive governance development as it enhances a board diversity in terms of expertise, experiences and backgrounds. However, a potential drawback is that they also are far removed from the information networks emanating from a firm's headquarters and main operations. In this study, we investigate how foreign directors on the audit committee perform when it comes to monitoring the decisions made by managers regarding financial reporting. We rely on the unique context provided by Canada in which companies have access to a large pool of U.S. directors, a country with which it shares many similarities and is geographically close. Results show that 45% of sample firms have at least one foreign director on the audit committee, with 69% of these firms nominating directors residing in the U.S. In addition, firms with foreign directors on their audit committee have lower earnings quality, both in terms of accruals and informativeness. In this regard, U.S. directors play a major role as the presence of non-U.S. foreign directors does not seem to relate to earnings quality. Our study contributes to the current literature on foreign directors by providing evidence that having directors from a country with many similarities may not necessarily compensate for foreign directors being far from a firm and not being able to monitor the decision-making of managers. This finding is in contrast to studies that find that foreign directors from countries with similarities will do a better job on boards in comparison to other foreign directors. Moreover, the rules-based approach of Canada with respect to audit committee membership may also contribute to the high presence of foreign directors on the audit committee, and in turn, to its negative

consequences on their performance. Firms may nominate foreign directors for the purpose of legitimacy and not for their oversight over managers.

3.1. Introduction

The appointment of foreign directors is a current trend among firms from all over the world. For instance, according to the Spencer Stuart Board Index report, the percentage of foreign directors in U.S. companies has increased from 6.4% in 2008 to almost 9% in 2012. In Canada, the percentage has risen from 18% in 2008 to 22% in the year 2012. Additionally, in 2013, more than half of the 200 firms in the S&P 500 had at least one foreign director. During the same year, 34% of the newly appointed directors in Canada were from outside the country, many of them from the U.S.[2], a level that is almost twice as high as the 18% reached in 2008. (Spencer Stuart Board Index, the U.S. and Canada, 2008, 2012, 2013).

Despite the globalization of boards of directors, there are few studies that investigate if and how foreign directors contribute to a firm's performance or other outcomes. Among the studies that do investigate this relationship, results are so far mixed. On the one hand, Oxelheim and Randoy (2003) find that firms located in Norway and Sweden with Anglo-American directors exhibit higher firm value. They argue that the enhancement in firm value is due to exposure to the Anglo-American governance system. On the other hand, Masulis, Wang and Xie (2012) find that for firms located in the U.S., having foreign directors is associated with lower firm performance. However, foreign directors contribute to the board in specific cases such as advising on mergers and acquisitions in the home country of the foreign directors. Along the same lines, Miletkov, Poulsen and Wintoki (2013) find similar results by using a sample of non-U.S. firms. Yet, Miletkov et al. argue that as the language, culture and physical distance between

[2] "Going outside Canada for director talent has played a significant part in the renewal and succession strategies of the boards of many leading Canadian companies. To a significant degree, boards have been fulfilling a range of their needs (e.g. CEO experience plus relevant industry background and/or "on the ground" market knowledge; functional experience or diversity) by going beyond our borders. On average, close to 30% of all CSSBI100 directors appointed during the past six years have been individuals residing outside Canada." (Canadian Spencer Stuart Board Index, 2010, p 5)

foreign directors and the firm decreases, the negative effects consequently subside. They also find that when foreign directors come from a country with developed capital markets and strong legal institutions, then negative effects on the corporation's performance decline.

Oxelheim, Gregoric, Randoy and Thomsen (2013) argue that the mixed findings regarding the effects of foreign directors on firm performance can be investigated further by looking one step back and by examining how prevalent the presence of foreign directors is in companies and the various reasons behind nominating them. Moreover, as Miletkov et al. (2013) argue, due to a rich pool of directors in the U.S. and the high quality of governance mechanisms, U.S. firms may not need to rely on directors from outside of the U.S. Therefore, any generalization of the study on U.S. firms to other countries may not be appropriate.

In fact, the prevalence and composition of foreign directors do differ in countries around the world. For instance, in the U.S. in 2012, the U.K., Canada and India provide 16%, 14% and 12% of the foreign directors respectively and the rest are from more than ten other countries (The Spencer Stuart Board Index, The U.S., 2012). However, in Canada, the composition is completely different: 76% are from the U.S., 7% from the U.K., 6% from Europe and the rest from Asia, Latin America and Australia (The Spencer Stuart Board Index Canada, 2012). This unique composition makes the Canadian setting appropriate enough in investigating how the nomination of directors from a country with similarities in many respects such as economic development, financial markets, culture and language impact the performance of directors.

A board of directors, as a corporate governance mechanism, performs two main duties in firms: monitoring and advising managers' decision-making, most notably in terms of financial reporting (Armstrong, Guay and Weber, 2010). In this regard, a board's audit committee is directly responsible for monitoring the financial reporting quality of firms. "An audit committee

is a committee of a board of directors to which the board delegates its responsibilities for oversight of the financial reporting process." (Canadian Securities Administrators, Multilateral Instrument 52-110, p. 13) In Canada, a rules–based approach has been taken regarding the membership of an audit committee in 2004. Independence and financial expertise are the two main requirements indicated in MI-52-110 for audit committee members. These requirements may force Canadian firms to seek beyond Canada's borders to find qualified audit committee members in terms of independence and expertise. Thus, how the presence of foreign directors on an audit committee may impact its monitoring performance is an empirical question.

On the one hand, due to the fact that they are likely less hindered by issues such as distance, cost of travelling or non-familiarity with the rules and regulations (Masulis et al, 2012), American directors may be able to perform their monitoring role more effectively than their colleagues from other countries when serving on Canadian boards. On the other hand, although U.S. directors evolve in an environment that shares many similarities with Canada, board members are typically busy individuals who often have principal occupations (Armstrong et al. 2010). Moreover, when directors reside far from a firm, they do not have access to soft information, which in turn, may impair their monitoring power over managers (Coval and Moskwitz, 1999, 2001). For this reason, even being in the U.S. may not help them in effectively monitoring managers' decision-making regarding disclosure quality, although they may have financial expertise. Also, research in psychology provides evidence that a diverse group has a better performance, due to the different expertise, talents and characteristics of the group members (e.g. Erhardt, Werbel and Shrader, 2003). When we apply this to the audit committee, having foreign members from a country like the U.S. which shares many similarities with

Canada, does not necessarily contribute to board performance. Thus, U.S. directors may not do a better job on the audit committee than their colleagues from other countries.

Based on a sample of Canadian firms in the 2010 and 2011 fiscal years, we investigate the relation between the presence of foreign directors on the audit committee and earnings quality. We find that, on average, 45% of Canadian firms in the sample have at least one foreign director, with 69% of these firms nominating directors from the U.S. In the next stage, we investigate the monitoring performance of foreign directors on the audit committee through earnings quality. Firms with foreign directors on the audit committee have lower earnings quality, as measured by the absolute value of abnormal accruals and earnings informativeness. This result is in line with previous studies that find a negative relationship between firm performance and the presence of foreign independent directors (Masulis et al, 2012, Miletkov et al. 2013). However, when we separate the foreign directors into U.S. directors and non-U.S. foreign directors, we find that only the presence of directors residing in the U.S. relates with lower earnings quality. These findings undermine the argument that hiring directors from countries with many similarities will mitigate the downside risk of foreign directors, at least regarding monitoring disclosure quality.

This study contributes to the literature regarding the impact of foreign directors on the performance of boards (Masulis et al. 2012). Primarily, considering the extent of foreign ownership and foreign presence on boards, this is the first Canadian evidence on how the presence of foreign directors relates with firm performance, as reflected by earnings quality. Secondly, our study is the first to investigate how the presence of foreign directors on the audit committee potentially affects its monitoring performance regarding earnings quality. Thirdly, it contributes to the board diversity literature, by providing evidence that hiring foreign directors

with many similarities may not necessarily contribute to enhance a board's performance (e.g. Srinidhi, Gul and Tsui, 2011). Lastly, it provides insight about the limitations of rule-driven board diversity regulations (both statutory and demographic diversities). Firms may go beyond borders to meet the demographic and statutory diversities indicated in the regulations, but these in turn, may have negative effects on the performance of directors.

3.2. Literature Review and Hypothesis Development

3.2.1. Foreign Directors and Firm Performance

Foreign directors, as an important class of directors, are getting much attention in the academic and business communities. The uniqueness of this class of directors comes from their ties to another country that in turn may bring new knowledge and expertise to the board (Masulis et al. 2012). However, there are costs associated with their presence such as travelling expenses, distance and their non-familiarity with the country in which they are sitting on a board (Masulis et al. 2012, Miletkov et al. 2013). Therefore, the impact of having them on a board is so far not clear.

A few studies that do investigate the impact of foreign directors on firm performance provide mixed results to date. Oxelheim and Randoy, 2003, investigate the presence of Anglo-American directors on the boards of firms in Norway and Sweden. They find that firms with outside Anglo-American directors have a higher performance as measured by Tobin's Q. They argue that this improvement comes as a result of exposing to "Anglo-American corporate governance" system.

Masulis et al. (2012) investigate the presence of foreign directors in U.S. firms during the period from 1998-2006. They argue that foreign directors may do a good job in advising

managers. Nevertheless, they may not be beneficial in monitoring the decision-making of managers. Consistent with this notion, they find that foreign directors provide favourable advisory roles for companies that have mergers and acquisitions in the home country of the foreign director. But, they are not useful monitors over the decision-making of managers, as measured by earnings restatement (fraud), managers' compensation and CEO turn-over. They find that the net impact of foreign directors on firm performance is negative as well; meaning that overall, their negative effects offset their positive contributions to the board.

Masulis et al. (2012) separate Canadian directors in U.S. firms from other foreign directors and find that Canadian directors have the same attendance as U.S. directors and that the coefficient for the presence of Canadian directors is not significant in their regressions; meaning that they do not have a negative impact on the performance of firms and are not distinguishable from their American colleagues. This finding provides support to the argument that when foreign directors are from a country with similarities in terms of culture, language and economic development and are close geographically, then they do a better job in monitoring managers (Miletkov et al. 2013). However, the presence of Canadian directors in U.S. firms is not as prevalent as American directors in Canada. Canadian firms have more incentives to choose U.S. directors, due to a less developed directors' market and also the cross-listing of firms.

Miletkov et al. (2013) investigate foreign directors in non-U.S. firms during the period running from 2001-2011. Firms with foreign operations, or those that intend to expand their operations, tend to have more foreign directors. In addition, they find that larger firms with foreign operations are more likely to have foreign directors on their boards. When the directors' market is not developed, then firms are more likely to hire foreign directors as well. Another reason for this state is to attract foreign investors. They also find that firms with foreign directors

have a lower performance. However, for firms with foreign sales, the negative relationship is lower. Yet, when foreign directors live close to a firm and are from a country with similarities such as culture and language, then the negative impact is mitigated. When a foreign director comes from a country with a more developed capital market and higher quality legal institutions, then the negative relationship is lower as well.

Oxelheim et al. (2013) argue that the mixed findings regarding the impact of foreign directors so far can be investigated further by looking one step back; by examining how important the presence of foreign directors is in companies and the various reasons behind nominating foreign directors. Their sample covers Nordic firms during the years 2001-2008. In their sample, 61.55% of firms have at least one foreign director. The percentage of foreign directors changes from 7.8% to 13.6% in their sample period. One reason behind this increase is the representation of female directors, which has increased from 5% to 19% from 2001 to 2008. The board members come from other Nordic countries, the U.S and the U.K. They find that firms that are financially internationalized tend to nominate foreign directors. These firms prefer to nominate directors with the same nationality as the owners and also from the country in which the firm is cross-listed. They show that firms choose foreign directors mainly due to 'financial internationalization' other than 'commercial internationalization'. In sum, they find that firms with foreign sales, foreign ownership and cross-listing tend to nominate more foreign directors. They find a positive relationship between performance (ROA) and foreign ownership only when foreign directors are sitting on the board.

Oxelheim et al. (2013) argue that their findings may thus far reconcile the mixed evidence regarding foreign directors: first of all, the Masulis et al. 2012 study investigates the U.S. which is less internationalized than Nordic firms. Secondly, ownership is more concentrated

in the Nordic countries than in the U.S., and due to this ownership, agency problems are lower and the monitoring role of foreign directors might not be a big issue for them. In addition, they argue that Anglo-American board members care more about shareholder value as opposed to non-Anglo-American directors who might care about a wider range of stakeholders. Due to these differences, Anglo-American directors are associated with firm value in Nordic countries.

Van Veen, Sahib and Anageenburg, (2014) investigate the presence of foreign directors in fifteen European countries during 2005-2007 and find that firms nominate foreign directors from countries with lower cultural, institutional and geographical distance. They also find that when there are more historical ties between two countries, one is more likely to nominate directors from there even though they are geographically far.

In summary, based on this literature, the impact of foreign directors on firm performance is dependent on their prevalence and origins and also on the governance mechanisms at the firm and country level. Therefore, the generalization of the findings in a country to the others may not be appropriate.

3.2.2. The Audit Committee and Financial Reporting Quality

Previous research shows that audit committee characteristics affect the quality of financial reporting. Mainly, these studies investigate how audit committee characteristics mandated by rules and regulations, independence and expertise, affect the performance of directors. The independence and expertise of audit committee members are required under both U.S. and Canadian regulations. For firms listed on the Toronto Stock Exchange under Multilateral Instrument 52-110 – Audit Committees, an audit committee must be comprised of at least three independent members who are financial experts or will acquire such knowledge

within a reasonable time period.

Studies show that financial expertise on an audit committee translates into higher quality financial reporting. For instance Dhaliwal, Naiker and Navissi (2010) find that the presence of accounting financial experts on an audit committee is associated with higher accrual quality. Farber (2005) finds that firms with financial experts on their audit committee are less likely to commit fraud. Abernathy, Herman, Kang and Krishnan (2013) find a positive relationship between the presence of accounting financial experts on an audit committee and analysts' earnings forecasts and how precise they are.

As for, the independence of audit committee members and its impact on the quality of financial reporting, Klein (2002) finds a positive relationship between audit committee independence and earnings quality, as measured by abnormal accruals. She finds that a decrease in board or audit committee independence leads to an increase in abnormal accruals. In the same line, Abbott, Parker and Peters (2004) find that the occurrence of a restatement is less likely for firms with independent audit committee members.

However, less has been done about the demography of audit committee members and its impact on their performance. For example, Thiruvadi and Huang (2011) investigate the presence of female directors on the audit committee of the S&P Small Cap 600 and find a negative relationship between the presence of female directors on the audit committee and earnings management, as measured by discretionary accruals. Bruynseels and Cardinaels (2014) document that social ties ('friendship') between a CEO and audit committee members is positively associated with earnings management and negatively associated with the likelihood of auditors to issue a going –concern opinion for financially distressed firms. However, when these ties are more formal, then there is not any negative impact on audit committee performance.

In this study, we investigate another dimension of audit committee demography, their nationality, and how having foreign directors impacts an audit committee's performance. The context we choose for that investigation is Canada.

3.2.3. Why Canada?

In this study, we investigate the presence of foreign directors on the boards of Canadian firms and their effects on the quality of earnings. We have chosen Canada due to its unique characteristics. As discussed by Masulis et al. (2012) in detail, Canada has the U.S. as its neighbour, a country with a developed directors' market, providing a fine pool of potential directors from which Canadian firms can choose. In addition, Canada and the U.S. are very similar in many respects such as economic development, language, culture and accounting practices. As large Canadian companies are cross-listed in the U.S., this may justify the need to have an American director on their boards. There is also no visa issue in travelling between Canada and the U.S. Canadian regulations regarding the independence and expertise of audit committee members may force Canadian firms to nominate qualified directors from outside of Canada, and the U.S. is probably the first option they take. Consequently, considering U.S. directors as other foreign directors may not be appropriate in this case, since they are close to Canada and share many economic and cultural values with Canadians. Thus, downsides components associated with foreign directors such as language distance, cultural distance, non-familiarity with Canadian accounting standards and regulations and physical distance, might not be significant issues for them.

3.2.4. Foreign Directors on Audit Committees

Having a foreigner on an audit committee potentially has two effects on its oversight or monitoring role. On the one hand, as Oxelheim et al. (2013) argue, when directors are different in terms of demography, such as being a foreign director, then they may be more independent with respect to management's monitoring. This effect can arise especially when foreign directors come from a country with high governance mechanisms such as the U.S. As a by-product, having a foreign director on the audit committee may lead to higher independence, and as a result, more effective monitoring of managers. On the other hand, although foreign directors may contribute to board decision-making by bringing new knowledge and diversity, they may diminish board performance due to differences in terms of culture, language and physical distance (Miletkov et al. 2013). In addition, as Masulis et al. (2012) argue, CEOs may tend to nominate foreign directors due to the distance involved and an expected lower level of monitoring over them. For that reason, the presence of foreign directors on an audit committee may result in a lower level of monitoring over managers. Hence, the two alternative hypotheses that we put forward:

H1a: There is a positive relationship between the presence of foreign directors on an audit committee and earnings quality.

H1b: There is a negative relationship between the presence of foreign directors on an audit committee and earnings quality.

Due to a unique combination of foreign directors in Canada, the next question is whether U.S. directors differ in monitoring managers from directors from other countries. On the one hand, firms prefer to nominate foreign directors from countries with similarities in terms of culture, institutions and distance (Van Veen et al. 2013). In addition, when the differences

between the foreign directors' home country and the firm location are lower in terms of distance, culture and language, they then do a better job in advising and monitoring managers (Miletkov et al. 2013). Based on this line of reasoning, U.S. directors may do a better job than other foreign directors, due to similarities between the two countries and proximity to Canada.

On the other hand, even though U.S. directors have many similarities with Canadians, they still live far from firms' headquarters or main operations, preventing them from gaining access to soft information through daily and face-to-face interaction with employees, managers and suppliers (Coval and Moskwitz, 1999, 2001). Moreover, based on the geography literature, local stakeholders do a better job in monitoring managers' decision-making (e.g. Ayers, Ramalingegowd and Yeung, 2011). Therefore, even living in the U.S. may not compensate for lower access to soft information which is available for locals. Moreover, Beasley, Carcello, Hermanson and Neal (2009) provide evidence that in some firms, audit committee members are selected for legitimacy and to meet requirements set out in regulations other than their monitoring over managers. Hence, we put forward the following hypothesis, which is framed in null form:

H2: There is not a significant difference between U.S directors and other foreign directors in Canada regarding the monitoring of the quality of financial reporting.

3.3. Research Design

3.3.1. Sample and data

To construct the sample, we follow the same procedure as described in essay 1 (see Table 1 panel A). In sum, the sample consists of 528 firm-year observations for the accruals quality test and 494 observations for earnings informativeness test.

Table 2 panel B shows the distribution of the sample based on industry and year. As for industry distribution, 23% of the firms are in the oil-and-gas industry and 24% percent of the firms are in the metal mining sector. Fifty-five percent of the firms are from 2010 and 45% from 2011.

Table 2 panel C presents the distribution of the sample based on the presence of foreign audit committee members in each industry. Firms in chemicals and allied product manufacturing, electronic and other electrical equipment manufacturing, electric gas and sanitary services and metal mining have the highest percentage of foreign audit committee members: 60%, 60%, 53% and 51% respectively. Firms in industrial and commercial machinery manufacturing with 8%, communications with 31% and oil and gas with 38% have the lowest foreign director representation on audit committees.

Table 2 panel D presents the distribution of the sample for the presence of foreign independent directors: 60.8% of firms have at least one foreign director in the sample from which 59% of the firms nominate directors only from the U.S., 16% have board members from countries other than the U.S. and the rest of the 26% nominate a mix of directors from the U.S. and non-U.S. countries. Table 2 panel E presents the distribution of the sample for the presence of foreign directors on the audit committee. For 46% of the firms, there is at least one foreign director sitting on the audit committee from which 69% of the firms nominate directors from the U.S. 19% have audit committee members from countries other than the U.S. Lastly, 11% have members from the U.S. and other countries. Therefore, the U.S. provides most of the foreign directors sitting on the audit committee of Canadian firms.

[INSERT TABLE 2 PANEL B ABOUT HERE]

[INSERT TABLE 2 PANEL C ABOUT HERE]

[INSERT TABLE 2 PANEL D ABOUT HERE]

[INSERT TABLE 2 PANEL E ABOUT HERE]

3.3.2. Measurement of Abnormal Accruals

To measure earnings quality, we use Modified Jones Model (1995) as described in essay 1.

3.3.3. Measurement of Earnings Informativeness

To measure earning informativeness we estimate the following model

$$RETURN = \alpha_0 + \alpha_1\, EPS + \alpha_2 FDAC + \alpha_3 EPS * FDAC + \alpha_4 SIZE + \alpha_5 LEV + \alpha_6 BM + \alpha_7 GOV + \alpha_8 LOSS + \alpha_9 CL + \alpha_{10} FT$$

Return is the 12-months' stock return of firm i in period t, starting nine months prior to the fiscal year-end and ends three months following the fiscal year-end. EPS is the earnings per share of firm i in period t divided by the stock price nine months before the fiscal year-end. We also control for other factors which may affect the association between the return and earnings. We include firm size, leverage, book to market, the factor analysis of governance variables and a dummy variable for loss, cross-listing and foreign transaction. α_3 measures differential earnings informativeness, based on the presence of foreign directors.

3.4. Results

3.4.1. *Descriptive Statistics*

Table 3 panel B presents descriptive statistics for the presence of independent foreign directors on the boards of the firms. The mean percentage of foreign independent directors on the boards is 22%. Fifteen percent of the independent directors are from the U.S. and 6% from other countries. Panel B also shows that 19% of audit committee members are foreign directors: 14% reside in the U.S. and the remaining of 5% are from other countries. In comparison with studies that have been done in the U.S. and Europe, the presence of foreign directors is more prevalent in this sample. This may be partly attributable to different time periods and the fact that this sample covers more recent data. However, the proximity of the U.S. to Canada might contribute to having a good pool of directors to choose from for Canadian firms.

[INSERT TABLE 3 PANEL B ABOUT HERE]

Table 3 panel C shows the descriptive statistics for the governance variables at firm level for firms with and without foreign audit committee members. Firms with foreign audit committee members have larger boards (8.23 v-s. 7.53), a lower percentage of local institutional investors (2.79% v-s.5.79%), larger audit committees (3.72 v-s. 3.26), a lower number of other directorships (1.24 v-s. 1.42) and lastly, a higher representation of female directors (6% v-s 5%).

Table 3 panel C also shows the descriptive statistics and bivariate analysis for sample firm characteristics. Firms with a presence of foreign audit committee members have higher absolute abnormal accruals (0.054 v-s. 0.047), are larger (2.62 v-s. 2.50), have a lower change in cash flow from operating activities (0.003 v-s. 0.030) and have a lower change in sales revenues

(0.09 v-s. 0.12). Firms located in Quebec and incorporated under Quebec law are less likely to nominate foreign directors (0.02 v-s. 0.08). Fifty-five percent of firms with foreign audit committee members have foreign operations as opposed to 45% of firms without foreign audit committee members. Forty-two percent of firms with foreign directors on the audit committee are cross-listed versus 18.6% of firms without foreign directors on the audit committee. These firms have a lower stock return (0.04 v-s. 0.15) and earnings per share deflated by stock price (-0.022 v-s. 0.007).

[INSERT TABLE 3 PANEL C ABOUT HERE]

Table 4 panel D shows the correlation table for governance variables and foreign directors' representation on the audit committee. The percentage of foreign directors on the audit committee is positively correlated with board size and audit committee size, but negatively correlated with local institutional ownership, family ownership, CEO and board tenure. Table 4 panel E presents the correlation for the variables that enter into the regression for accrual quality. Absolute abnormal accruals are positively correlated with the percentage of foreign directors on the audit committee (0.101, p-value <0.05), and with the percentage of U.S. directors on the audit committee (0.11, p-value <0.05).

[INSERT TABLE 4 PANEL D ABOUT HERE]

[INSERT TABLE 4 PANEL E ABOUT HERE]

3.4.2. Multivariate Analysis – Abnormal Accruals

In the first multivariate analysis, we regress earnings quality, as measured by abnormal accruals, on foreign directors' measures and control variables. We control for the firms' characteristics that are associated with earnings quality, according to prior research: firm size, leverage, change in revenue, reporting of a loss, change in cash flow from operating activities, change in net income, cross-listing, having foreign operations and ROA. We also control for incorporation law, since Filip, Labelle and Rousseau (2014) show that firms incorporated under Quebec law and located in Quebec have better earnings quality than firms incorporated under the Canadian Business Corporation Act (CBCA) and Provincial laws. We also control for governance variables at the firm level. Based on a factor analysis of governance variables, we use the first factor which has the most explanatory power with an eigenvalue higher than 1. Table 5 panel A shows the loading components of the factors loaded on the first factor.

[INSERT TABLE 5 PANEL A ABOUT HERE]

Table 8 shows the results for accrual quality. Absolute abnormal accruals are positively associated with the percentage of foreign audit committee members (0.029, p-value <0.05). In the third model, when we separate U.S. directors from other foreign directors, we find that only the percentage of U.S. directors on the audit committee is associated with higher absolute abnormal accruals (0.036, p-value <0.05). The percentage of foreign directors from countries other than the U.S. does not have a significant effect on accrual quality. This finding provides support for the first hypothesis that the presence of foreign directors on the audit committee impairs their monitoring of managers. In addition, and contrary to previous studies, our finding

shows that directors from a country with many similarities, such as the U.S., do not appear to be successful in monitoring managers' decision-making regarding earnings quality.

[INSERT TABLE 8 ABOUT HERE]

3.4.3. Multivariate Analysis - Earnings Informativeness

In next step, we calculate earnings informativeness by regressing the annual return on earnings per share and the foreign directors' presence on the audit committee. Table 4 panel F shows the correlation table for the variables that enter into this model. The correlation between the annual returns and the interaction between EPS and the percentage of foreign directors on the audit committee and the percentage of U.S. directors on the audit committee are negative and significant at 1%.

[INSERT TABLE 4 PANEL F ABOUT HERE]

Table 9 presents the results of the multivariate analysis of earnings informativeness. The percentage of foreign directors on the audit committee negatively impacts the relationship between returns and earnings (-2.493, p-value <0.01). When we separate the percentage of U.S directors from other foreign directors, then only the coefficient for U.S. directors is significant (-2.679, p-value <0.01).

[INSERT TABLE 9 ABOUT HERE]

Overall, multivariate results provide evidence that, in general, having foreign directors on the audit committee is negatively associated with earnings quality and nominating foreign directors from a country with many similarities does not compensate for their inability to oversee managers' disclosure qualities.

3.5. Robustness Analysis

The first concern regarding the robustness of the results is endogeneity. Reverse causality may be an issue; in firms with lower earnings quality, firms may choose to nominate foreign directors to enjoy a quiet life. Alternatively, an omitted correlated variable may drive our results. Following Oxelheim et al. (2013), to address this concern, we add firm fixed effect to the regressions. Untabulated results are still significant using this model. In the accrual model, the dummy variable for having a foreign director on the audit committee, the percentage of foreign directors on the audit committee and the percentage of U.S. directors on the audit committee are significant at 5%, 1% and 1% respectively. In the earnings informativeness regression, the coefficient for the interaction between EPS and the percentage of U.S. directors on the audit committee remains significant at 1%.

As another robustness check for endogeneity problem, we use two-stage Heckman procedure (1976). In first stage, we calculate the Inverse Mills ratio from a probit model. As Oxelheim et al. (2013) argue firms with financial and commercial internationalization tend to nominate foreign directors, therefore, we control for cross-listing and having foreign transactions. We also control for ownership structure by the percentage of local institutional ownership and percentage of institutional ownership. We also control for board size since, Oxelheim et al. (2013) argue that larger boards probably have a larger network and as a results

are more likely to find foreign directors to nominate. We also control for firm size, leverage, performance, change in sales and presence of female directors on the board.

Results of the first stage in table 10 show that cross-listed firms, with institutional ownership and firms with foreign transactions tend to nominate foreign audit committee members. In additions, firms with local institutional investors are less likely to hire foreign directors on the audit committee. The model is significant with a likelihood ratio of 70.162 and Pseudo R^2 statistic of 0.16.

[INSERT TABLE 10 ABOUT HERE]

In the next stage, we use the Inverse Mills ratio, calculated at first stage, to control for the endogeneity problem. Results of the accrual quality model in table 11 are still significant (0.018, p-value <0.05). Table 12 shows the results for earnings informativeness using Invers Mills ratio. The coefficient for the interaction between EPS and the dummy variable for the presence of foreign audit committee member is still negative and significant at 1%.

[INSERT TABLE 11 ABOUT HERE]

[INSERT TABLE 12 ABOUT HERE]

Another concern regarding the findings is that firms with 100% foreign audit committee members may drive our results. However, there are only seven observations in the sample with 100% foreign directors on the audit committee and dropping them does not change the results.

An alternative explanation for this finding may be the social connections between the CEO and other board members and foreign directors, that may prevent them from monitoring managers effectively. Prior research shows that social ties mitigate directors' independence (Bruynseels and Cardinaels, 2014). Nevertheless, it is less likely that foreign directors have more social ties with the CEO than non-foreign directors, those who reside closer to the firm.

We also run a robustness check for signed accruals. The results of the second stage show that for positive accruals (income increasing), the coefficient for the dummy variable (presence of a foreign director on the audit committee) is significant (0.015, p-value <0.01), but for negative accruals (income decreasing), the effect of having foreign directors on the audit committee is not significant. We also interact the governance variable with foreign directors' measures to check if strong corporate governance would prevent CEOs from intentionally nominating foreign directors. However, the coefficient for the interaction term is not significant. An alternate explanation for not finding any significant effect for non-U.S. foreign directors might be that they are from specific countries. Nevertheless, they are not clusters in any geographical area (there are 75 observations in the sample with non-U.S. foreign directors)

3.6. Conclusion and Discussion

In this study, we investigate the presence of foreign directors on the audit committee and its impact on their performance. The audit committee is considered the hallmark of boards in monitoring managers' decisions regarding financial disclosure. Therefore, audit committee members seem more related to monitoring disclosure quality. In Canada, the governance system is considered principle-based as opposed to the U.S. which is rules-based. However, when it comes to the audit committee members, Canada has a rules-based approach mandating the

presence of independent financial experts on the audit committee. This may in turn force companies to go beyond Canadian borders to fulfill these requirements, considering there is not a developed directors' market in Canada. Using a sample of Canadian firms for 2010-2011, we find a negative relationship between the percentage of foreign audit committee members and earnings quality. In addition, firms with U.S. members on the audit committee have a lower earnings quality than other firms in the sample. In sum, our results provide evidence that having foreign directors, even at the highest level of similarities between the two countries, may not contribute to their performance, at least regarding monitoring disclosure quality.

This study contributes to three streams of research: First of all, our study is the first that investigate the presence of foreign directors on the audit committee and its impact on earnings quality. Previous research has focused on foreign directors at the board level and firm performance [3](e.g. Masulis et al. 2012). Our results provide evidence that is in line with previous studies that foreign directors have a negative effect on firm performance. However, our results are in contrast with the finding by Miletkov et al. (2013) that when foreign directors come from a country with many similarities then they do a better job in monitoring and advising managers. Secondly, our results contribute to the literature about the demography of foreign directors (e.g. Bruynseels and Cardinaels, 2014) by providing evidence that independent and expert audit committee members who reside in another country are not able to fulfill their duties regarding monitoring managers. Lastly, it provides insights for regulatory bodies that mandating diversity (both statutory and demographic) may result in firms going outside to meet these requirements, and this in turn may have unanticipated consequences. In addition, even an audit committee that meets regulatory requirements may still not be effective in monitoring managers, since other aspects such as demographic diversity may affect their performance.

[3] Masulis et al. (2012) find that firms with foreign audit committee members are more likely to restate their earnings.

Chapter 4: Mandatory Adoption of IFRS in Canada

Abstract

Previous research using an international setting provides evidence that country-and firm-level governance mechanisms matter for financial reporting quality. Country-and firm-level governance mechanisms are receiving even more attention than before, since the adoption of International Financial Reporting Standards (IFRS). However, the findings are mixed so far. In this study using the unique Canadian setting in which the province of Quebec is governed by French civil law and the rest of Canada is governed by common law, we investigate whether the adoption of IFRS has different effects on Quebec firms compared with the rest of the firms in Canada. Using a sample of Canadian firms from 2009 to 2012, we find that first, after the adoption of IFRS, the absolute value of discretionary accruals has increased, but that the increase is mainly due to a rise in income decreasing accruals (negative accruals). Secondly, for firms located in Quebec (governed by French civil law), the absolute value of discretionary accruals has decreased, although the reduction is not significant. In addition, for Quebec firms, the reduction is mainly due to a decline in income decreasing accruals. Thirdly, using earnings informativeness as an alternate measure of earnings quality, we find that earnings informativeness has not changed significantly after the adoption of IFRS. However, for firms located in Quebec, earnings informativeness has decreased. The results hold after controlling for governance mechanisms at the firm level.

The results provide slight evidence that in Quebec earnings management has decreased after the adoption of IFRS, although the perception of investors seems to be the opposite. Moreover, the results show that even in a single country setting with many similarities, the effects of IFRS

might not be homogenous and are dependent on governance mechanisms that affect the adoption process.

4.1. Introduction

Previous research has documented that country specific characteristics matter for the quality of financial reporting. Firms in countries with high investor protection are associated with higher financial reporting quality (e.g. La Porta et al, 1997, 1998, Leuz, Nanda and Wysocki, 2003). Country-level governance mechanisms are receiving even more attention than before since the adoption of IFRS. These studies investigate how country-level governance mechanisms enforce the adoption of IFRS and how they may help to ease the adoption process (e.g. Houqe, Zijl, Dunstan and Karim, 2012).

In most previous studies, common law countries, by providing high investor protection, are associated with higher financial reporting quality than French civil law countries (e.g. Defond, Hung and Trezevant, 2007). However, Filip, Labelle and Rousseau (2014) find that, in Canada, Quebec firms incorporated based on the Quebec Corporation Act (QCA) have higher earnings quality than the rest of the Canadian firms. Quebec is governed by French civil law and the rest of Canada is governed by common law. They argue that this is due to higher legal liabilities for auditors and directors based on previous cases. Their study is unique since it doesn't suffer from the issue in international studies in which the findings might be due to other country characteristics for which it is difficult to control. Nevertheless, they do not control for governance mechanisms at the firm level which seems to be different between Quebec and the rest of the firms in Canada.

The IFRS studies that look at the effects of legal regimes on the adoption process provide mixed results so far. While, there is evidence that the effects of IFRS are higher in countries with high legal enforcement (e.g. Houqe et al, 2012, Byard, Li and Yu, 2011), there is also evidence that in code law countries IFRS improves the information environment (Houqe, Easton and Zijl,

2014, Ahmed, Chalmers and Khlif, 2013). The documented mixed results might be due to omitted correlated variables that are difficult to control for in international studies.

Canada has adopted IFRS for the financial year beginning in 2011. Previous research investigates the adoption in an international setting. But, the Canadian setting is unique since two legal regimes (civil and code law) co-exist in Canada. This provides a unique setting in investigating how country-level governance mechanisms affect the adoption of IFRS in a single and clean setting.

Based on a sample of Canadian firms from 2009-2012, we find that after the adoption of IFRS, the absolute value of discretionary accrual has significantly risen in Canada and this growth is due to an increase in income decreasing (negative) discretionary accruals. Yet, the effects are different in Quebec when compared with the other provinces. In Quebec, following the adoption of IFRS, the absolute value of discretionary accruals has decreased although the reduction is not significant. The decrease in absolute value of discretionary accruals in Quebec is due to a lessening in negative accruals. In addition, using earnings informativeness as an alternate measure for earnings quality, we find that there is a positive but insignificant effect on earnings informativeness in general. In Quebec, earnings informativeness has decreased significantly, even though Quebec firms have a higher earnings response coefficient than the rest of the firms in Canada before the adoption of IFRS.

Our study contributes to three streams of literature. First, Filip et al (2014) find that Quebec firms incorporated based on Quebec Corporation Act have lower absolute value of discretionary accruals for the period of 1998-2008. However, our results show that before the adoption of IFRS (2009 and 2010) there is not a significant difference between the absolute value of discretionary accruals of firms in Quebec and the rest of Canada. The difference in the

findings might be due to not controlling for governance mechanism at firms level in Filip et al (2014) study, or due to the fact that we cover different periods. In the period that we cover Quebec has adopted a new Corporation law in 2009, which is similar to Canadian Business Corporation Act and this in turn may have decreased the difference in discretionary accruals between Quebec and the rest of the provinces. In addition, it's possible that our small sample for Quebec firms may cause the model not to have enough power to capture the difference.

Secondly, our results contribute to the IFRS literature by providing evidence that in general IFRS seems to decrease earnings quality in Canada. The absolute value of discretionary accruals has increased after the adoption of IFRS and also there is no improvement in earnings informativeness. In addition, the effect of IFRS is not homogenous across Canada. The effect of IFRS seems different on Quebec firms than the rest of the firms in Canada. The findings provide evidence that even in a country with many similarities the adoption of IFRS is contingent upon the governance mechanisms that enforce the adoption process.

Thirdly, it also contributes to the literature that investigates country-level governance mechanisms and financial reporting quality. There is weak evidence that Quebec firms have lower earnings management than the rest of the firms in Canada after the adoption of IFRS, after controlling for firm-level governance mechanisms. This provides evidence in contrast to the previous studies that find in common law countries the adoption of IFRS is more effective. It is noteworthy that the perception of investors seems to be the opposite, which is reflected in lower earnings informativeness in Quebec firms.

The mixed findings may also be due to the fact that 2011 and 2012 are the first years of the adoption in Canada and that it may take some time to see the real impact of IFRS on the financial reporting quality of Canadian firms.

4.2. Literature Review and Hypothesis Development

4.2.1. IFRS Adoption

More than one hundred countries around the world have adopted IFRS in past years and there is still an ongoing trend of adoption in other countries. On the one hand, proponents of IFRS argue that it will decrease managers' opportunistic behaviour due to its having more requirements for disclosure compared with domestic GAAPs (Barth, Landsman and Lang, 2008, Ahmed et al, 2013). On the other hand, opponents believe that it will give managers more opportunities to manage earnings due to its being principle-based (Barth et al, 2008).

Since the adoption of IFRS, there have been numerous studies on the effects of IFRS on quality of financial reporting. The research at the early stages focuses on the voluntary adoption of IFRS (e.g. Harris and Muller, 1999). The studies that ensue focus mainly on the mandatory adoption of IFRS (e.g. Byard et al., 2011). However, in using different settings, methodologies and measures the results are mixed so far.

Following a review of the literature on the effects of the voluntary adoption of IFRS, Soderstorm and Sun (2007) argue that the mixed findings in the IFRS adoption studies might be a result of selection bias. The adopting firms may have different attributes that drive their decisions to voluntarily adopt IFRS.

In a review paper of IFRS studies, Ahmed et al (2013) categorize them into three groups. First, there are studies that investigate the value relevance of financial information, secondly, we have research on the effects of IFRS on discretionary accruals and thirdly, there are the effects on analyst forecasts. The results of the three groups are mixed so far:

On the one hand, there are studies that find that after the mandatory adoption of IFRS, financial reporting quality has not improved. For instance, Callao and Jarne (2010) investigate

the effects of the mandatory adoption of IFRS on the discretionary accruals in 11 European countries from 2003-2006. They find an increase in the discretionary accruals after the adoption of IFRS. Clarkson, Hanna, Richardson and Thompson (2011) investigate the value relevance of earnings in European countries and Australia and do not find a significant change in the value relevance of earnings. Jansson, Jonsson and Koch (2012) investigate analysts' forecasts after the adoption of IFRS in five European countries. They find that except for U.K firms, in the rest of the countries, there is no significant improvement in analysts' earnings forecasts.

On the other hand, there is evidence of improvement in the quality of financial reporting in some studies. For example, Chen, Tang, Jiang and Lin (2010) find a decrease in the discretionary accruals for firms in European countries from 2000-2007, however, there is evidence of earnings smoothing after the adoption of IFRS. Byard et al (2011) find that analysts' earnings forecasts have improved after the adoption of IFRS in European countries. In addition, Devalle, Onali and Magarini (2010) document improvement in the value relevance of earnings for firms in the U.K., Germany and France after the adoption of IFRS.

4.2.2. Country-level governance Mechanism and the Quality of Financial Reporting

Previous research documents the effects of country-level governance mechanisms in the financial markets and the quality of financial reporting (La Porta et al, 1997, 1998). Research in this area considers common law countries to have a higher financial reporting quality, due to higher investor protection (e.g. Daske, Hail, Leuz and Verdi, 2008). For example, Leuz et al (2003) find that earnings management as measured by the quality of accruals and loss avoidance is lower in countries with strong investor protection and legal regimes. Francis and Wang (2007)

find that in countries with high investor protection, audit quality is associated with earnings quality. In countries with weak investor protection, they find no association.

Fillip et al, 2013 investigate the effects of legal regimes (common versus civil law) on the quality of financial reporting. Using the unique Canadian setting, they find that firms located in Quebec and incorporated under the Quebec Corporation Act have a higher earnings quality than the rest of the firms in Canada. Their results provide support for the civil code law being seen as more effective in decreasing earnings management.

Since the adoption of IFRS, researchers have paid more attention to country-level governance mechanisms. As Soderstorm and Sun (2007) argue, changing only the accounting standards may not result in better financial reporting quality, since other than IFRS, factors such as legal regimes and incentives are contributors to a better accounting system.

Jeanjean and Stolowy (2008) investigate the effects of the mandatory adoption of IFRS on earnings management in Australia, France and the U.K., countries that are considered as early adopters. They find that in France, a code law country, earnings management increases and in the U.K. and Australia there is no effect on earnings management, as measured by loss avoidance.

Houqe et al (2012) using a sample of 46 countries from 1998-2007 find that in countries with higher investors' protection, the mandatory adoption of IFRS leads to greater financial reporting quality, as measured by discretionary accruals.

Byard et al (2011) investigate the effects of the mandatory adoption of IFRS on firms in the European Union. They find that analyst forecast error and dispersion decrease only for firms located in countries with high legal regimes and when the difference between IFRS and local GAAP is high. For firms located in a weak legal environment and high differences between IFRS

and local GAAP, companies with high firm-level motivation see a decrease in their forecast errors.

In contrast, Houqe et al (2014) find that in France, Germany and Sweden, countries characterised by civil law and low investor protection, firms have better forecast accuracy and precision after the mandatory adoption of IFRS.

Ahmed, Neel and Wang, 2012 probe into the effects of the mandatory adoption of IFRS on income smoothing, reporting aggressiveness and meeting or beating a target. They match IFRS firms from 20 countries with companies that have not adopted IFRS based on industry, size, book-to-market, performance and legal regimes. They find an increase in net income volatility after the adoption of IFRS. They also find a rise in accruals and a decrease in conservatism. But they do not find any evidence of earnings management through meeting or beating benchmarks. Their results hold for firms in countries with high legal enforcement. As Nelson (2003), argues due to the fact of being principle based, IFRS give managers more discretion over financial reporting and even strong legal enforcement may not be able to control that.

Ahmed et al (2013), using meta-analysis examine the effects of IFRS on the value relevance of earnings, the level of discretionary accruals and analysts' forecast error and precision. They find that discretionary accruals have not decreased after IFRS and the adoption of IFRS is not associated with accruals. Nonetheless, the value relevance of earnings has increased after IFRS. They also find improvement in analyst forecast accuracy after IFRS. They argue that previous studies that report mixed results regarding the effects of IFRS on accruals are due to the use of different models. They contend that their results are the same, after controlling for differences in legal regimes.

In sum, previous research provides mixed evidence on the effects of country-level governance mechanisms as to the effects of the adoption of IFRS.

Besides the country-level governance mechanism, previous research underscores the importance of the firm level governance mechanism on the financial reporting quality. Gaio 2010, using a sample of firms in 38 countries from 1990-2003, finds that firm-level characteristics also explain earnings quality, after controlling for country-level characteristics. Firms with more insider ownership, larger firms and firms with more investment opportunities are associated with higher earnings quality. Firm-level characteristics are more important in countries with high investor protection. They argue that through time the importance of firm-level characteristics gains in intensity due to globalization.

Bonetti, Parbonetti and Magnan (2013) investigate the joint effects of the country-and firm-level governance mechanism on the adoption of IFRS in European countries. They find that in countries with weak legal enforcement, firm-level governance mechanisms, board and audit committee characteristics, act as a substitute, and in countries with high legal enforcement firm-level governance mechanisms play a complementary role for country-level governance mechanisms.

4.2.3. IFRS Adoption in Canada

There are a few studies that investigate the effects of IFRS in Canada:

Cormier and Magnan (2013) explore the effects of IFRS on the value relevance of earnings in Canada. They compare the value relevance of earnings between 2009 and 2011, finding that after the adoption of IFRS, the value relevance of earnings has increased, but earnings smoothing has risen as well.

Liu and Sun (2014), using a sample of Canadian companies from 2009-2012, find that after IFRS, positive discretionary accruals have decreased. Also, small positive earnings are lower after the adoption of IFRS. They do not find any differences in term of earnings response coefficient after the adoption of IFRS. They also find that earnings are more persistent after the adoption of IFRS.

Canada adopted the IFRS beginning in 2011. Liu and Sun (2014) claim that the effects of the IFRS on Canadian firms might be different for two reasons. First, most of the Canadian companies are concentrated in a few industries. And secondly, accounting standards in Canada are different from the countries that have been investigated in previous studies. Moreover, Cormier and Magnan (2013) maintain that since Canadian accounting standards are similar to the U.S. (due to the convergence policy of Canadian GAAP to U.S. GAAP), the findings in the Canadian setting may provide insight for U.S. regulators in their decision to adopt IFRS.

In addition, the province of Quebec is governed by French civil law and rest of Canada is governed by common law. In Quebec, firms can incorporate under the Quebec Corporation Act (QCA) or the Canadian Business Corporation Act (CBCA). QCA is different from CBCA in terms of investor protection. However, in 2009 Quebec adopted a new law which provides similar protection to minority shareholders and is similar to CBCA. The new law became mandatory in February 2011. This change will help to isolate the effects of incorporation law from civil law in Quebec.

Filip et al (2014) document that firms located in Quebec and incorporated based on QCA have a higher earnings quality than firms located in Quebec and incorporated based on CBCA and other provinces. This discrepancy might be the result of differences in incorporation law,

different legal regimes or both. If civil code is associated with higher earnings quality, then adoption of IFRS may result in higher earning quality in Quebec. Therefore, in this study of the Canadian setting we investigate two questions:

1. Whether the adoption of the IFRS has any effects on financial reporting quality of Canadian firms?
2. Whether IFRS have different effects on firms located in Quebec compared with the rest of the firms in Canada

Hypothesis

H1: The adoption of IFRS has no effect on the financial reporting quality in Canada

H2: The effects of the adoption of IFRS are not different in Quebec firms when compared to the rest of the firms in Canada

4.3. Research Design

4.3.1. Sample and Data

The sample is based on Canadian firms in Compustat for the fiscal years ending 2009 to 2012. We start with Canadian firms in Compustat for the fiscal year 2010. Then, we eliminate firms from the financial industries (SIC-Code 6021-6999), incorporated outside Canada, and firms with headquarters outside of Canada. We also exclude firms on the Venture Toronto Stock Exchange, since they are small and are subject to different filing requirements. We also exclude investment trusts because they have different tax and dividend regulations. In addition, 506

observations are removed due to lack of data for financial variables in Compustat. Small firms -- with market capitalization below $10 million -- are disregarded too. Eleven firms with negative equity are excluded as well. Finally, 141 firms are omitted as there are fewer than six observations in their industries for which to calculate abnormal accruals.

Next, we collect governance data from proxy statements. Data from annual information forms and proxy circulars filled by Canadian companies are from SEDAR. For missing information, we use "The Directory of Directors" which is a database including the personal information of directors in Canada. For 26 firms, the data from proxy circulars is not complete; therefore we eliminate them from the sample. Lastly, there are 265 firms for year-end 2010 with complete data.

Afterwards, we collect the data for these firms for 2009, 2011 and 2012. We have 245 firms for the year 2009, 237 for 2011 and 191 for 2012 with complete data, because of delisting and missing variables in Compustat and proxy circulars. In total, the sample consists of 938 firm-year observations. Table 1 panel B shows the sample selection process.

To investigate earnings informativeness, we collect stock price data from the CFMRC database. Yet, stock price data is missing for 174 firms. Therefore, the final sample for earnings informativeness consists of 764 firm-year observations.

[INSERT TABLE 1 PANEL B ABOUT HERE]

Table 2 panel F shows the distribution of the sample based on industry and year. As for industry distribution, 24.2% of the firms are in the oil-and-gas industry and 23% percent of the firms are in the metal mining sector. Table 2 panel G presents the distribution of the sample

based on industry and location. A total of 14.5 % of the firms in the sample are located in Quebec and 85.5 % are located in rest of the provinces of Canada.

[INSERT TABLE 2 PANEL F ABOUT HERE]

[INSERT TABLE 2 PANEL G ABOUT HERE]

4.3.2. Measurement of Abnormal Accruals

To measure the earnings quality, we follow the model used by Filip et al (2014) which is based on the Modified Jones Model (Jones, 1991), as presented by Dechow et al. (1995) and modified for performance (Kothari, Leone and Wasley, 2005)

$$\frac{\mathrm{TA_{ij}}}{\mathrm{ASSET_{ijt-1}}} = \beta_1 \frac{1}{\mathrm{ASSET_{ijt-1}}} + \beta_2 \frac{\Delta \mathrm{REV_{ij}}}{\mathrm{ASSET_{ijt-1}}} + \beta_3 \frac{\mathrm{PPE_{ij}}}{\mathrm{ASSET_{ijt-1}}} + \beta_4 BM_{ij} + \beta_5 \frac{CFO_{ij}}{ASSET_{ijt-1}} + \beta_6 \frac{ROA_{ij}}{ASSET_{ijt-1}} + \varepsilon_{ij}$$

Where TA_{ij} is the firm's total accruals in industry two-digit code, measured as change in non-cash current assets minus change in current liabilities adjusted for the current portion of long-term debt minus the depreciation and amortization expense. $ASSET_{ijt-1}$ is the firms'i total assets in year t-1 and two-digit SIC code j. $AREV_{ij}$ is the change in revenue from the previous year for firm i in two-digit SIC code j. PPE_{ij} is the gross property, plant and equipment for firm i in two-digit SIC code j. BM_{ij} is the book value to market value of equity for firm i in two-digit SIC code, and CFO_{ij} is the cash flow from the operating activity for firm i in two-digit SIC code. ROA_{ij} is return on assets for firm i in two-digit SIC code. we estimate the parameters of the above model to estimate the normal accruals for the firms in the sample

$$NA=\beta_1 \frac{1}{ASSET_{ijt-1}} + \beta_2 \frac{\Delta REV_{ij}-\Delta AR_{ij}}{ASSET_{ijt-1}} + \beta_3 \frac{PPE_{ij}}{ASSET_{ijt-1}} \beta_4 BM_{ij} + \beta_5 \frac{CFO_{ij}}{ASSET_{ijt-1}} + \beta_6 \frac{ROA_{ij}}{ASSET_{ijt-1}}$$

Where ΔAR_{ij} is the change in accounts receivables from the previous year for firm i in two-digit SIC code j. The measure for discretionary accrual is the absolute value of the difference between total accruals and predicted normal accruals. we winsorize all the variables entering these two models at the 1st and 99th percentiles to prevent the effect of outliers.

The second measure of accruals is also similar to the model that has been used by Filip et al (2014) which is based on the Dechow and Dichev (2002) model and modified by McNichols (2002).

$$\frac{TA_{ij}}{ASSET_{ijt-1}} = \beta_0 + \beta_1 \frac{CFO_{it-1}}{ASSET_{ijt-1}} + \beta_2 \frac{CFO_{it}}{ASSET_{ijt-1}} + \beta_3 \frac{CFO_{it+1}}{ASSET_{ijt-1}} + \beta_4 \frac{\Delta REV_{ij}}{ASSET_{ijt-1}} + \beta_3 \frac{PPE_{ij}}{ASSET_{ijt-1}} + \varepsilon_{ij}$$

Where TA_{ij} is the firm's total accruals in industry two-digit code, measured as change in non-cash current assets minus change in current liabilities, adjusted for the current portion of long-term debt minus the depreciation and amortization expense. $ASSET_{ijt-1}$ is the firms'i total assets in year t-1 and two-digit SIC code j. $AREV_{ij}$ is the change in revenue from the previous year for firm i in two-digit SIC code j. PPE_{ij} is the gross property, plant and equipment for firm i in two-digit SIC code j. CFO_{it} is the cash flow from the operating activity for firm i in year t. The residuals from the above model measure discretionary accruals.

4.3.3. Measurement of Earnings Informativeness

We use a market measure for earnings quality as well to ensure the results are robust vis-à-vis an alternate measure of earnings quality. It additionally provides evidence on how market participants perceive the adoption of IFRS and their effects on financial reporting quality.

To measure earnings informativeness we estimate the following model

$$RETURN = \alpha_0 + \alpha_1 EPS + \alpha_2 IFRS + \alpha_3 QC + \alpha_4 EPS * IFRS + \alpha_5 EPS * QC + \alpha_6 IFRS * QC + \alpha_7 EPS * IFRS * QC + \alpha_8 SIZE + \alpha_9 LEV + \alpha_{10} BM + \alpha_{11} GOV + \alpha_{12} LOSS + \alpha_{13} CLUS + INDUSTRY\ DUMMY$$

Return is the 12-months' stock return of firm i in period t, starting nine months prior to the fiscal year-end and ends three months following the fiscal year-end. EPS is the earnings per share of firm i in period t divided by the stock price nine months before the fiscal year-end. We control for other factors too which may affect the association between the return and earnings. We include firm size, leverage, book-to-market, the factor analysis of governance variables and a dummy variable for loss and cross-listing in the U.S.

4.4. Results

4.4.1. Descriptive Statistics

Table 3 panel D presents the descriptive statistics: The mean of the absolute value of the discretionary accruals calculated based on the Modified Jones Model is 0.038. However, for Quebec firms, the mean is 0.028 and for the rest of the firms in Canada it is 0.040. Based on the

Dechow and Dichev model, the mean of the absolute value of the discretionary accrual is 0.043. Again, Quebec has a lower mean of 0.032 than the rest of Canada with a mean of 0.045. A total of 14.5% of the firms in the sample are located in Quebec and the rest are located in the other provinces of Canada. The mean of the logarithm of the assets is 2.58, but Quebec has a mean size of 2.54 and slightly smaller firms than the rest of the firms in Canada. In general, 27 percent of the firms in the sample are cross-listed in the U.S. In Quebec, this percentage is 18.4, and in the rest of the provinces the percentage is 28.8. The mean of the leverage is 0.37. Quebec firms are more leveraged than the rest of the firms in Canada (0.41 versus 0.37). The mean of the ROA is -0.010 which is higher for Quebec firms (-0.002 versus -0.011). Forty percent of the firms in the sample have reported a loss which is 33 percent for Quebec firms and 42 percent for the rest of Canada. The mean of change in net income scaled by total assets is 0.02 which is 0.018 for Quebec versus 0.022 for the rest of the firms. The mean of change in cash flow scaled by total assets is 0.019, 0.018 for Quebec and 0.020 for the rest of the firms. The mean of change in revenues is 0.053 which is almost similar between Quebec and the rest of Canada (0.052 versus 0.054). The mean of book-to-market ratio is 0.76. Quebec firms have a mean of 0.67 versus 0.77 for the rest of Canada. The average annual return is 0.05, which is 0.09 for Quebec and 0.04 for the rest of the firms. Finally, earnings per share have a mean of -0.013, however Quebec has a positive mean of 0.016 and the rest of Canada has a mean of -0.019.

The descriptive statistics for the governance variables show that Board size has a mean of 7.83. Quebec boards are larger (8.46 versus 7.73). The mean of the percentage of shares hold by institutional investors is 10.36. The percentage is slightly higher for Quebec firms (12.417 versus 10.01). The mean of the percentage of shares hold by local institutional investors is 3.68 percent. Quebec firms have a higher percentage of 6.57 versus 3.19 for the rest of the firms. The mean of

the percentage of shares hold by a family member or individual is 10.6 percent. In Quebec, the mean is 18.8 percent versus 9 percent in the rest of Canada. The mean of the audit committee size is 3.49 which is almost similar between Quebec and the rest of Canada. The mean of CEO tenure is 8.44. Still, CEOs of Quebec firms have a longer tenure (10.71 years) than the rest of Canada (8.04). The average of the number of other directorships is 1.37. For Quebec firms it is 1.08 and 1.42 for the rest. The mean of board tenure for the sample is 7.62. Board tenure for Quebec firms is higher than the rest of Canada (9.46 versus 7.31 years). Seventy–three percent of directors are independent, but in Quebec the percentage is higher (76% versus 73%). In twenty-one percent of the firms the roles of the CEO and chairman are the same (22.8 versus 20.9). Eight percent of firms have dual-class shares. Nevertheless, 22.8 percent of firms in Quebec have dual-class shares versus six percent in the rest of Canada. On average 5% percent of directors are female. The average is higher in Quebec (8% versus 5% percent). Ninety-one percent of the firms are audited by Big 4. Finally, 60% percent of the independent directors live in the same province where the headquarters is located. Seventy percent of the independent directors of Quebec firms are local versus 58 percent of the independent directors in the rest of Canada.

[INSERT TABLE 3 PANEL D ABOUT HERE]

Table 4 panel G shows the correlation table for the variable that will enter into the regression of the discretionary accruals. Both measures of the discretionary accruals are positively associated with the IFRS dummy and negatively associated with the Quebec dummy (QC). The factor analysis of the governance variables is negatively and significantly associated

with discretionary accruals. Also, size and ROA are negatively and significantly correlated with discretionary accruals. Finally, loss is positively correlated with discretionary accruals.

[INSERT TABLE 4 PANEL G ABOUT HERE]

4.4.2. Multivariate Analysis – Abnormal Accruals

In the first multivariate analysis, we regress the earnings quality, as measured by the abnormal accruals, on the IFRS dummy and the Quebec dummy, which is a dummy variable that captures the difference in the legal regimes of Canada. We control for the firms' characteristics that are associated with earnings quality, according to prior research: firm size, leverage, change in revenue, reporting of a loss, change in cash flow from operating activities, change in net income, cross-listing in the U.S. and ROA. We also control for the governance variables at the firm level. Based on a factor analysis of the governance variables, we use the first factor which has the most explanatory power with an eigen value higher than 1. Table 5 panel B shows the loading components of the factors loaded onto the first factor.

[INSERT TABLE 5 PANEL B ABOUT HERE]

Table 13 shows the results for the accrual quality. In the first model, the absolute abnormal accruals calculated based on the Modified Jones Model are positively associated with the IFRS dummy. (0.007, p-value <0.05). However, the effects of the IFRS on Quebec firms are negative and significant (-0.009, p-value <0.10). When we calculate F-test for the contrast between the effect of IFRS in Quebec and the rest of Canada, the F-test is not significant.

Houqe et al (2012) and Francis and Wang (2008) argue that using signed accruals is a better measure for earnings quality since the overstatement of earnings is more of a concern than understatement. In the next step, when we use signed accruals, for positive accruals (income increasing accruals) the IFRS dummy becomes insignificant and the interaction between the IFRS and Quebec becomes insignificant too. When we run the regression for negative discretionary accruals (income decreasing), then the coefficient for the IFRS dummy becomes positively significant (0.008, p-value < 0.10) and consequently the effects of the IFRS on Quebec firms become negatively significant (-0.017, p-value < -0.05). Although, the F-test for the contrast is not significant. Therefore, based on the Modified Jones Model, the adoption of the IFRS has increased the absolute value of discretionary accruals, however, this is mainly due to an increase in negative accruals (income decreasing).

In the second model, we calculate the discretionary accruals based on the Dechow and Dichev (2002) model. The IFRS dummy is positively associated with the absolute value of the discretionary accruals (0.009, p-value <0.01). The effects of the IFRS on Quebec firms are negative but not significant. When we run the regression for the positive discretionary accruals, then the IFRS dummy is positively significant at 10 percent (0.007, p-value <0.10), but the effects of the IFRS on Quebec firms are negative but not significant. For the negative accruals, the results show that the IFRS is positively associated with income-decreasing accruals (0.010, p-value <0.05). Nonetheless, the effects of the IFRS on Quebec are negative which is not significant. When we calculate contrast test (F-test) then the difference between the effect of IFRS on Quebec and the rest of the firms in Canada is not significant.

Overall, based on the Dechow and Dichev (2002) model, there is also an increase in the absolute value of the accruals, but this increase is mainly due to rise in the income decreasing accruals. The effects of the IFRS on Quebec firms are negative, but not significant.

[INSERT TABLE 13 ABOUT HERE]

4.4.3. Multivariate Analysis - Earnings Informativeness

In the next step, we calculate earnings informativeness, by regressing the annual return on earnings per share and the IFRS and Quebec dummies. Table 4 panel H shows the correlation table for the variables that enter into this model. The return is positively associated with the interaction between the IFRS and EPS (0.14, p-value< 0.01). The return is positively correlated as well with the interaction between the Quebec dummy and EPS (0.13, p-value <0.01).

[INSERT TABLE 4 PANEL H ABOUT HERE]

Table 14 presents the results of the multivariate analysis of the earnings informativeness.

In model 2, we regress the return on EPS, the IFRS dummy and the interaction between IFRS and EPS. The coefficient of the interaction term is positive, but not significant. In model 3, we control for size, leverage, book-to-market, governance mechanisms at the firm level, loss and cross-listing in the U.S. After controlling for these variables, the coefficient for the interaction term becomes negative but not significant.

In model 4, we add a dummy variable for the effects of the IFRS on the earnings informativeness of the Quebec firms. In general, the earnings informativeness of the Quebec

firms is higher (0.76, p-value < 0.01) before the adoption of IFRS, yet, after the adoption of the IFRS, it has decreased (-0.92, p-value <0.10). The result of the contrast test (F-test) for comparison between the effect of IFRS on earnings informativness of Quebec firms versus the rest of the firms in Canada is significant (p-value<0.084). In model 5, after controlling for the firm characteristics and the governance mechanisms at the firm level, the results still hold and also the contrast test is significant (p-value < 0.072).

[INSERT TABLE 14 ABOUT HERE]

On the whole, it seems that the IFRS do not have any effects on earnings informativeness. However, for Quebec firms, the earnings informativeness has decreased, even though, earnings informativeness in Quebec was higher than the rest of the firms in Canada before the adoption of IFRS.

4.5. Conclusion and Discussion

There is extensive research on the adoption of the IFRS. Still, the results are mixed so far. In this study, we scrutinize the effects of the mandatory adoption of the IFRS on Canadian firms. The Canadian setting is worth investigating due to the different legal regimes that coexist (French versus common law).

We find that, in general, IFRS have increased the absolute value of the discretionary accruals, but that the increase is mainly due to a rise in income decreasing accruals. The effects of the IFRS in Quebec seem slightly different from the rest of Canada although it's not significant. The absolute value of the discretionary accruals in Quebec has decreased and is

predominantly due to decrease in income decreasing accruals. As for the value relevance of earnings, the IFRS do not significantly affect the earnings response coefficient. Nevertheless, the IFRS have decreased earnings informativeness in Quebec.

This study contributes to three lines of research. First, our findings are in contrast to the findings by Filip et al (2014). They find that discretionary accruals are lower for firms located in Quebec and incorporated based on QCA compare to the rest of Canada, however our findings show that before the adoption of IFRS there is not a significant difference between absolute value of discretionary accruals of Quebec firms and the rest of Canada. In addition, after the adoption of IFRS it seems that there is a widening gap between the two. Secondly, our study adds to the IFRS literature by providing evidence that in general, IFRS has not improved earnings quality in Canada, however the effect is not homogenous across the country. The insignificant improvement in financial reporting quality might be due to small differences between the Canadian GAAP and IFRS. Thirdly, our findings add to the literature of country-level governance mechanisms and financial reporting quality by providing evidence that code law legal regime is associated with lower earnings management after the adoption of IFRS. Although, investors perceive the adoption of the IFRS in Quebec negatively.

Chapter 5: Conclusion and Discussion

This dissertation focuses mainly on two mechanisms that are considered a means of improving the quality of financial information: Governance mechanisms --at both the firm and country levels -- and adoption of a new set of accounting standards.

The first essay centers it attention on the dimension of a board of directors' diversity, which has received attention by regulators. However, less is known about its consequences on the performance of directors (e.g. Alam et al, 2012, 2014). Using the unique Canadian setting in which firms must disclose the residential addresses of their directors, the results provide support that a local board is more effective when it comes to monitoring managers' decisions regarding the quality of financial reporting. Local directors are able to do their monitoring job better than those who live far from firms, because they have access to local information (Coval and Moskwitz, 1999, 2001). The results are in line with Alam et al (2014) who find that after Sarbanes-Oxley Act, the average distance between directors and firm headquarters has increased and this has caused directors to rely more on public information, which is shown in CEO compensation being more associated with stock price. They argue that this in turn has increased discretionary accruals. Our study establishes a direct link between the geographic diversity of directors and the quality of financial reporting.

The second essay probes into a special class of directors: foreign directors. Canada has a rules-based approach to audit committee membership. This has resulted in having many U.S. directors sitting on the audit committee of Canadian firms. However, upshot of their members of the audit committee on improving the quality of financial reporting is not clear yet. Results of the second essay show that having U.S. directors on the audit committee is associated with a lower level of financial reporting quality. The results are interesting since American directors share many similarities with Canadians and are close to Canada geographically. Yet, they still

contribute negatively to firm performance; this might be due to the undesirable consequences of new regulations. Even having foreign directors from a country with many similarities will result in their not being good monitors of managers, if they are nominated solely to meet the requirements of the regulations.

The last essay is centered on two issues: First, whether the adoption of the IFRS has any effects on the quality of financial reporting in Canada, and secondly the interaction between the adoption of new accounting standards and governance mechanisms as well at the firm and country levels. The results provide evidence that the adoption of IFRS has not improved the quality of financial reporting in Canada in general. Nonetheless, the impact of IFRS seems different on Quebec and non-Quebec firms. The findings add to the IFRS literature, by providing evidence that in a Canadian setting the IFRS have not improved the quality of financial reporting. Secondly, it adds to the research on legal regimes and the quality of financial reporting, by providing evidence that in a civil law regime, the IFRS show a slight decrease in earnings management.

In general, the results of these essays supply insight to regulators regarding board diversity and also financial reporting standards. Forcing firms to follow a specific regime may have unanticipated consequences. Due to the financial scandals of the past two decades, there have been many regulations forced into action, such as the SOX and the equivalent corporate governance reforms in Canada, which are aimed at increasing the financial reporting quality and to protect investors' wealth. However, the results of this dissertation provide evidence that these regulations may have unanticipated side effects that may impair their primary goal of the adoption. The results of the dissertation are in line with the work of this year's Nobel Prize winner in economics on regulations; that the effects of the regulations might be different depend

on the context in which they are implemented. Therefore, the approach of "one size fits all" may not work for all firms, even in a single country setting. Our results show that even in a single country setting such as Canada, with many similarities and in the same capital markets, imposing new rules may widen the gap between the financial reporting quality of firms, depend on the context.

The results of this dissertation also provide evidence that we may need to revisit our understanding about the finding by La Porta et al, 1997 and 1998, who document that common law countries are associated with higher investor protection and financial reporting quality. The results of the third essay provide slight support that a civil code law regime is more successful in mitigating earnings management.

Finally, institutional and legitimacy theories may help to interpret the results. Firms may follow corporate governance best practices for the purposes of legitimacy, and this may justify why following corporate governance best practices may not necessarily lead to a better financial reporting quality.

Using different econometric methods, we have tried to mitigate concerns about the endogeneity problem; however it's not possible to completely eliminate this issue. As for the first essay, the case may be that firms with a better quality of financial reporting have the power to hire more local directors and therefore the causality might be reversed. In the second essay, it may be that firms that hire foreign directors on the audit committee are the ones that have a lower quality of financial reporting in the first place, and are looking for directors who are not close to the firm. As far as the last essay is concerned, it's possible that other differences between Quebec and rest of Canada might drive our results and not the difference in legal

regimes. For example, since public firms in Quebec are smaller than the rest of the firms in Canada, consequently, the adoption of the IFRS might not be that complex in Quebec and, therefore, the IFRS have no negative effects on the discretionary accruals of Quebec firms.

In this dissertation we concentrate mainly on mandatory disclosure, however it would be interesting to look at the effects of the board of directors' geographical diversity on voluntary disclosure of firms. Firms that hire non-local directors may increase their voluntary disclosure to provide more information to non-local directors. As Armstrong et al (2010) argue, directors are busy people and may focus mainly on public disclosure in their decision-making. For instance, the impact on management earnings forecasts can be investigated.

Regarding the adoption of the IFRS, it would be interesting to focus on their adoption by the oil and gas and mining industries, since Canada 's industries are mainly concentrated in these two areas; the use of accrual models may not capture the earnings quality of these firms, due to differences in the costing method for exploration expenses.

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Table 1: Sample Selection

Panel A: Sample Selection for the First and Second Essays

	Number of Firms

Canadian firms in Compustat for fiscal year 2010	1971
Exclude:	
Headquartered outside Canada	123
Financial Firms (Code 6021-6999)	489
Match with 2009 data	224
Small firms (market cap below 10 Million)	307
Financial variables missing	257
Firms in Venture Toronto Stock Exchange	56
Trusts	47
Less than 6 observations in the industry (SIC 2-digit)	141
Firms with negative equity	11
Incomplete data from proxy circulars	26
2010 Sample	290
Firms with available data for fiscal year 2011	238
Final sample (for accrual quality)	528
Missing data for stock price	(34)
Final sample (for earnings informativeness)	494

Table 1 (continued)

Panel B: Sample Selection for the Third Essay

	Number of Firms
Canadian firms in Compustat for fiscal year 2010	1971
Exclude:	
Headquartered outside Canada	123
Financial Firms (Code 6021-6999)	489
Match with 2009 data	224
Small firms (market cap below 10 Million)	307
Financial variables missing	282
Firms in Venture Toronto Stock Exchange	56
Trusts	47
Less than 6 observations in the industry (SIC 2-digit)	141
Firms with negative equity	11
Incomplete data from proxy circulars	26
2010 Sample	265
Firms with available data for fiscal year 2009	245
Firms with available data for fiscal year 2011	237
Firms with available data for fiscal year 2012	191
Final sample (for accrual quality)	938
Missing data for stock price	(174)
Final sample (for earnings informativeness)	764

Table 2: Distribution of the Sample

Panel A: Distribution of the Sample for the First Essay (Industry-Location)

Industry	Province									
	AB	**BC**	**MB**	**NB**	**NS**	**ON**	**QC**	**SK**	**Total**	**%**
Metal mining	2	43	2	2	0	54	13	4	120	22.73
Oil and gas	115	3	0	0	2	8	0	0	128	24.24
Food & Kindred Products Manufacturing	0	5	0	0	2	15	4	0	26	4.92
Chemicals & Allied Prods Manufacturing	1	8	2	0	0	21	9	2	43	8.14
Industrial & Commercial Machinery Manufacturing	1	0	2	0	0	6	4	0	13	2.46
Electronic & Other Electrical Equipment Manufacturing	0	11	0	0	0	26	5	0	42	7.95
Transportation Equipment Manufacturers	0	5	2	0	0	9	4	0	20	3.79
Measuring & Analyzing Instruments Manufacturers	1	2	2	0	0	0	8	0	13	2.46
Communications	2	4	2	0	2	9	10	0	29	5.49
Electric Gas & Sanitary Services	14	5	0	0	2	5	4	0	30	5.68
Wholesale Trade - Durable Goods	1	2	0	0	0	6	6	0	15	2.84
Business Services	7	6	0	0	0	22	13	1	49	9.28
Total	144	94	12	2	8	181	80	7	528	100.00
%	27.22	17.77	2.27	0.38	1.51	34.28	15.12	1.32	100	

Table 2 (Continued)
Panel B: Distribution of the Sample for the Second Essay (Industry-Year)

Industry	**Year**			
	2010	**2011**	**Total**	**%**
Metal mining	65	55	120	22.73%
Oil and gas	72	56	128	24.24%
Food & Kindred Products Manufacturing	14	12	26	4.92%
Chemicals & Allied Products Manufacturing	23	20	43	8.14%
Industrial & Commercial Machinery Manufacturing	7	6	13	2.46%
Electronic & Other Electrical Equipment Manufacturing	24	18	42	7.95%
Transportation Equipment Manufacturers	11	9	20	3.79%
Measuring & Analyzing Instruments Manufacturers	7	6	13	2.46%
Communications	15	14	29	5.49%
Electric Gas & Sanitary Services	16	14	30	5.68%
Wholesale Trade - Durable Goods	8	7	15	2.84%
Business Services	28	21	49	9.28%
Total	290	238	528	100
%	54.9	45.1	100	

Panel C: Distribution of the Sample for the Second Essay (Industry – Foreign Audit Committee Member)

Industry	**Foreign audit committee member**			
	0	**1**	**Total**	**%**
Metal mining	59	61	120	0.51
Oil and gas	79	49	128	0.38
Food & Kindred Products Manufacturing	15	11	26	0.42
Chemicals & Allied Products Manufacturing	17	26	43	0.60
Industrial & Commercial Machinery Manufacturing	12	1	13	0.08
Electronic & Other Electrical Equipment Manufacturing	17	25	42	0.60
Transportation Equipment Manufacturers	11	9	20	0.45
Measuring & Analyzing Instruments Manufacturers	7	6	13	0.46
Communications	20	9	29	0.31
Electric Gas & Sanitary Services	14	16	30	0.53
Wholesale Trade - Durable Goods	9	6	15	0.40
Business Services	25	24	49	0.49
Total	285	243	528	
%	53.98	46.02	100	

Table 2 (Continued)

Panel D: Distribution of the Sample for the Second Essay: Foreign Independent Directors on the Board

YEAR	# OF FIRMS	# OF FIRMS WITH AT LEAST ONE FOREIGN DIRECTOR	% OF FIRMS WITH AT LEAST ONE FOREIGN DIRECTOR	# OF FIRMS WITH US DIRECTORS	# OF FIRMS WITH NON-US FOREIGN DIRECTORS	# OF FIRMS WITH BOTH US AND NON-US FOREIGN DIRECTORS
2010	290	174	60%	104	29	41
2011	238	147	61.76%	84	22	41
TOTAL	528	321	60.80%	188	51	82

Panel E: Distribution of the Sample for the Second Essay: Foreign independent directors on the audit committee

YEAR	# OF FIRMS	# OF FIRMS WITH AT LEAST ONE FOREIGN DIRECTOR	% OF FIRMS WITH AT LEAST ONE FOREIGN DIRECTOR	# OF FIRMS WITH US DIRECTORS	# OF FIRMS WITH NON-US FOREIGN DIRECTORS	# OF FIRMS WITH BOTH US AND NON-US FOREIGN DIRECTORS
2010	290	133	45.86%	92	27	14
2011	238	110	46.22%	76	20	14
TOTAL	528	243	46.02%	168	47	28

Table 2 (Continued)

Panel F: Distribution of the Sample for the Third Essay (Industry-Year)

Industry	Year					
	2009	**2010**	**2011**	**2012**	**Total**	**%**
Metal mining	55	62	55	44	216	23.03
Oil and gas	57	67	56	47	227	24.20
Food & Kindred Products Manufacturing	13	13	12	8	46	4.90
Chemicals & Allied Products Manufacturing	20	20	20	14	74	7.89
Industrial & Commercial Machinery Manufacturing	6	7	6	4	23	2.45
Electronic & Other Electrical Equipment Manufacturing	21	20	18	13	72	7.68
Transportation Equipment Manufacturers	10	10	9	9	38	4.05
Measuring & Analyzing Instruments Manufacturers	6	6	5	4	21	2.24
Communications	13	15	14	12	54	5.76
Electric Gas & Sanitary Services	12	14	14	12	52	5.54
Wholesale Trade - Durable Goods	7	8	7	5	27	2.88
Business Services	25	23	21	19	88	9.38
Total	245	265	237	191	938	100.00
%	26.12	28.25	25.27	20.36	100	

Panel G: Distribution of the Sample for the Third Essay (Industry-Location)

Industry	Location		
	Rest of Canada	**Quebec**	**Total**
Metal mining	193	23	216
Oil and gas	227	0	227
Food & Kindred Products Manufacturing	39	7	46
Chemicals & Allied Products Manufacturing	58	16	74
Industrial & Commercial Machinery Manufacturing	17	6	23
Electronic & Other Electrical Equipment Manufacturing	64	8	72
Transportation Equipment Manufacturers	32	6	38
Measuring & Analyzing Instruments Manufacturers	10	11	21
Communications	34	20	54
Electric Gas & Sanitary Services	45	7	52
Wholesale Trade - Durable Goods	17	10	27
Business Services	66	22	88
Total	802	136	938
%	85.5	14.5	100

Table 3: Descriptive Statistics

Panel A: Descriptive Statistics for the First Essay. (All variables are defined in Appendix 1)

Variable (N=528)	Mean	Median	STD	Min	Max	AB	BC	MB	NB	NS	ON	QC	SK
A. Governance Variables													
Board size	7.85	7.00	2.21	4.00	18.00	7.74	7.26	8.00	8.50	9.13	7.87	8.43	9.29
Institutional Investors	11.34	0.00	16.43	0.00	90.90	10.97	7.52	7.00	16.80	28.78	12.07	14.42	2.06
Local Institutional Investors	4.41	0.00	12.09	0.00	90.90	3.89	0.87	2.20	0.00	5.09	5.44	7.97	0.00
Family or Individuals	9.79	0.00	20.22	0.00	94.08	6.23	5.81	10.92	0.00	11.73	11.75	17.18	0.00
Audit Committee Size	3.48	3.00	0.90	2.00	8.00	3.39	3.38	3.83	3.50	4.63	3.49	3.48	4.29
CEO Tenure	8.79	7.00	7.81	1.00	57.00	7.53	8.40	5.83	11.00	12.50	8.94	10.64	14.86
Number of other Directorships	1.34	1.14	1.08	0.00	7.42	1.58	1.57	1.02	2.21	1.56	1.19	1.02	0.84
Board Tenure	7.56	7.00	3.97	1.00	29.83	6.60	7.07	7.25	6.46	11.06	7.58	9.33	9.71
Independent Directors	0.74	0.75	0.13	0.29	1.00	0.74	0.74	0.69	0.88	0.78	0.72	0.76	0.78
CEO Chairman	0.22	0.00	0.41	0.00	1.00	0.20	0.23	0.17	0.00	0.00	0.24	0.24	0.00
Dual Class	0.08	0.00	0.28	0.00	1.00	0.03	0.02	0.00	0.00	0.38	0.10	0.20	0.00
Female Director	0.06	0.00	0.09	0.00	0.50	0.04	0.06	0.07	0.24	0.11	0.05	0.09	0.14
Audit	0.91	1.00	0.29	0.00	1.00	0.99	0.90	0.83	1.00	0.88	0.85	0.93	1.00
GOV	0.00	-0.26	1.00	-1.48	3.59	-0.32	-0.34	-0.07	-0.33	0.90	0.12	0.63	-0.06
B. Geography variables													
SPROV	0.65	0.67	0.27	0.00	1.00	0.75	0.52	0.32	0.12	0.40	0.62	0.76	0.51
OTHPROV	0.14	0.11	0.18	0.00	1.00	0.10	0.14	0.47	0.65	0.44	0.13	0.14	0.31
US	0.14	0.10	0.17	0.00	0.80	0.10	0.22	0.11	0.12	0.12	0.15	0.07	0.12
OTHC	0.07	0.00	0.15	0.00	0.89	0.04	0.12	0.10	0.12	0.04	0.10	0.03	0.06
SPROVI	0.61	0.61	0.30	0.00	1.00	0.71	0.47	0.32	0.00	0.30	0.60	0.73	0.38
OTHPROVI	0.18	0.13	0.22	0.00	1.00	0.13	0.18	0.49	0.73	0.54	0.17	0.16	0.42
FIDUS	0.15	0.10	0.19	0.00	1.00	0.12	0.23	0.16	0.13	0.12	0.16	0.09	0.17
FIDOTHER	0.06	0.00	0.13	0.00	0.83	0.04	0.12	0.03	0.13	0.05	0.08	0.02	0.04
ACSPROV	0.63	0.67	0.33	0.00	1.00	0.72	0.48	0.35	0.00	0.34	0.62	0.78	0.45

Table 3 (Continued)

Panel A: Descriptive Statistics for the First Essay. (All variables are defined in Appendix 1)

Variable	Mean	Median	STD	Min	Max	AB	BC	MB	NB	NS	ON	QC	SK	N
C. Firm Characteristics														
ACCRUAL	0.050	0.033	0.057	0.000	0.500	0.050	0.065	0.016	0.053	0.040	0.053	0.036	0.029	528
CLUS	0.258	0.000	0.438	0.000	1.000	0.181	0.426	0.167	0.000	0.000	0.276	0.163	0.714	528
SIZE	2.560	2.503	0.825	1.090	4.594	2.728	2.462	2.679	2.760	2.811	2.451	2.514	3.213	528
LEV	0.376	0.354	0.203	0.029	0.926	0.393	0.342	0.366	0.294	0.491	0.355	0.422	0.415	528
ROA	-0.005	0.030	0.168	-0.749	0.351	0.000	-0.023	0.005	0.126	0.007	-0.013	0.013	0.077	528
CNI	0.025	0.013	0.131	-0.372	0.488	0.021	0.021	-0.002	0.098	-0.028	0.031	0.030	0.015	528
CCFO	0.017	0.017	0.131	-0.547	0.446	0.037	0.014	-0.015	0.102	-0.010	0.013	0.001	0.024	528
CSALE	0.111	0.067	0.206	-0.422	0.918	0.137	0.092	0.022	0.537	0.031	0.113	0.101	0.044	528
LOSS	0.379	0.000	0.486	0.000	1.000	0.479	0.426	0.333	0.000	0.250	0.343	0.288	0.000	528
QCA_QC	0.057	0.000	0.232	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	528
RETURN	0.104	0.010	0.607	-0.807	3.017	0.068	0.119	-0.106	-0.344	0.079	0.157	0.089	0.068	494
EPS	-0.006	0.031	0.159	-0.974	0.456	-0.006	-0.060	0.028	0.049	0.022	0.004	0.026	0.041	494

When we drop outliers for institutional investors (11.17), local institutional investors (4.15), family or individual (8.82), CEO tenure (8.29) and board tenure (7.28) the mean does not change significantly.

Table 3 (Continued)

Panel B: Foreign Independent Directors on the Board. (All variables are defined in Appendix 1)

Variable	Mean	SD	Median	MIN	MAX
%FID	22%	23%	20%	0%	100%
% FIDUS	15%	19%	10%	0%	100%
%FIDOTHER	6%	13%	0%	0%	83%

Foreign Independent Directors on Audit Committee

Variable	Mean	SD	Median	MIN	MAX
%FDAC	19%	24%	0%	0%	100%
% FDACUS	14%	21%	0%	0%	100%
%FDACOTHER	5%	13%	0%	0%	75%
FIDONLY	15%	35%	0%	0	1

Table 3 (Continued)

Panel C: Descriptive Statistics for the Second Essay. (All variables are defined in Appendix 1)

	Firms without foreign audit committee member N=285				Firms with foreign audit committee member N=243				DIFFRNCE		
Variable	**Mean**	**SD**	**MIN**	**MAX**	**Mean**	**SD**	**MIN**	**MAX**	**DIFF**	**T-VALUE**	**P-VALUE**
Board size	7.530	1.889	4.000	15.000	8.235	2.493	4.000	18.000	0.705	-3.610	0.000
Institutional Investors	11.548	16.317	0.000	75.900	11.097	16.586	0.000	90.900	-0.450	0.310	0.754
Local Institutional Investors	5.794	12.925	0.000	75.900	2.793	10.823	0.000	90.900	-3.001	2.900	0.004
Family or Individuals	10.998	20.595	0.000	92.140	8.382	19.714	0.000	94.080	-2.616	1.480	0.139
Audit Committee Size	3.267	0.655	2.000	7.000	3.720	1.074	2.000	8.000	0.453	-5.740	<.0001
CEO Tenure	8.983	7.833	1.000	40.000	8.562	7.784	1.000	57.000	-0.422	0.620	0.537
Number of other Directorships	1.420	1.178	0.000	7.420	1.246	0.935	0.000	4.330	-0.174	1.900	0.059
Board Tenure	7.802	4.399	1.200	29.830	7.268	3.396	1.000	25.200	-0.534	1.570	0.116
Independent Directors	0.738	0.126	0.286	1.000	0.734	0.132	0.286	1.000	-0.005	0.410	0.681
CEO Chairman	0.207	0.406	0.000	1.000	0.230	0.422	0.000	1.000	0.023	-0.650	0.516
Dual Class	0.088	0.283	0.000	1.000	0.078	0.269	0.000	1.000	-0.010	0.390	0.694
Female Director	0.051	0.082	0.000	0.500	0.065	0.095	0.000	0.500	0.014	-1.800	0.072
Audit	0.919	0.273	0.000	1.000	0.897	0.304	0.000	1.000	-0.022	0.870	0.382
FIDONLY	0.277	0.448	0.000	1.000	0.000	0.000	0.000	0.000	-0.277	10.440	<.0001
FDACDUMMY	0.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	1.000		
FDAC	0.000	0.000	0.000	0.000	0.405	0.179	0.167	1.000	0.405	-35.290	<.0001
FDACUS	0.000	0.000	0.000	0.000	0.301	0.212	0.000	1.000	0.301	-22.140	<.0001

Table 3 (Continued)

Panel C: Descriptive Statistics for the Second Essay. (All variables are defined in Appendix 1)

	Firms without foreign audit committee member N=285				Firms with foreign audit committee member N=243				DIFFRNCE		
Variable	**Mean**	**SD**	**MIN**	**MAX**	**Mean**	**SD**	**MIN**	**MAX**	**DIFF**	**T-VALUE**	**P-VALUE**
ACCRUAL	0.047	0.053	0.000	0.344	0.054	0.062	0.000	0.500	0.006	-1.220	0.222
SIZE	2.501	0.731	1.090	4.594	2.629	0.919	1.090	4.594	0.127	1.740	0.082
LEV	0.376	0.183	0.044	0.926	0.377	0.225	0.029	0.926	0.001	-0.050	0.958
CNI	0.028	0.127	-0.372	0.488	0.021	0.136	-0.372	0.488	-0.007	0.620	0.536
CCFO	0.030	0.129	-0.547	0.446	0.003	0.132	-0.547	0.446	-0.027	2.370	0.018
CSALE	0.129	0.213	-0.422	0.918	0.091	0.195	-0.422	0.918	-0.038	2.150	0.032
LOSS	0.396	0.490	0.000	1.000	0.358	0.480	0.000	1.000	-0.038	0.910	0.365
GOV	0.018	1.041	-1.476	3.560	-0.022	0.954	-1.326	3.594	-0.040	0.460	0.645
QCA_QC	0.084	0.278	0.000	1.000	0.025	0.156	0.000	1.000	-0.060	3.090	0.002
FT	0.453	0.499	0.000	1.000	0.556	0.498	0.000	1.000	0.103	-2.370	0.018
ROA	0.000	0.167	-0.749	0.351	-0.011	0.169	-0.749	0.351	-0.011	0.770	0.443
CL	0.186	0.390	0.000	1.000	0.424	0.495	0.000	1.000	0.238	-6.060	<.0001
RETURN	0.156	0.656	-0.807	3.017	0.040	0.537	-0.807	3.017	-0.116	2.160	0.031
EPS	0.007	0.133	-0.700	0.456	-0.022	0.186	-0.974	0.456	-0.029	1.930	0.054

Table 3 (Continued)

Panel D: Descriptive Statistics for the Third Essay. (All variables are defined in Appendix 1)

Variable	**Mean**	**Median**	**SD**	**Q1**	**Q3**	**QC n=136**	**REST n=802**
Board size	7.839	7.000	2.248	6.000	9.000	8.463	7.733
Institutional Investors	10.364	0.000	15.303	0.000	14.930	12.417	10.016
Local Institutional Investors	3.686	0.000	10.277	0.000	0.000	6.575	3.196
Family or Individuals	0.106	0.000	0.213	0.000	0.128	0.188	0.092
Audit Committee Size	3.493	3.000	0.887	3.000	4.000	3.478	3.495
CEO Tenure	8.444	6.000	7.445	3.000	11.000	10.781	8.048
Number of other Directorships	1.372	1.140	1.086	0.660	1.710	1.088	1.421
Board Tenure	7.624	7.045	3.979	4.800	9.660	9.462	7.312
Independent Directors	0.739	0.750	0.127	0.667	0.857	0.760	0.735
CEO Chairman	0.212	0.000	0.409	0.000	0.000	0.228	0.209
Dual Class	0.086	0.000	0.281	0.000	0.000	0.228	0.062
Female Director	0.057	0.000	0.089	0.000	0.125	0.089	0.052
Audit	0.915	1.000	0.279	1.000	1.000	0.926	0.913
Sprovi	0.604	0.600	0.296	0.400	0.833	0.708	0.586

Table 3 (Continued)

Panel D: Descriptive Statistics for the Third Essay. (All variables are defined in Appendix 1)

Variable	**Mean**	**Median**	**SD**	**Q1**	**Q3**	**QC n=136**	**REST n=802**
ABSACCMJ	0.038	0.025	0.043	0.009	0.053	0.028	0.040
ABSACCRDD	0.043	0.029	0.045	0.013	0.059	0.032	0.045
IFRS	0.385	0.000	0.487	0.000	1.000	0.397	0.383
QC	0.145	0.000	0.352	0.000	0.000	1.000	0.000
SIZE	2.582	2.526	0.836	1.940	3.162	2.547	2.587
CLUS	0.273	0.000	0.446	0.000	1.000	0.184	0.288
LEV	0.377	0.356	0.202	0.213	0.515	0.417	0.370
ROA	-0.010	0.024	0.165	-0.061	0.072	-0.002	-0.011
LOSS	0.409	0.000	0.492	0.000	1.000	0.331	0.423
CNI	0.022	0.006	0.159	-0.043	0.062	0.018	0.022
CCFO	0.019	0.012	0.141	-0.030	0.059	0.018	0.020
CSALE	0.053	0.028	0.219	-0.034	0.130	0.052	0.054
BM	0.761	0.608	0.595	0.387	0.975	0.677	0.776
RETURN	0.051	0.045	0.403	-0.248	0.325	0.096	0.042
EPS	-0.013	0.031	0.168	-0.054	0.070	0.016	-0.019

Table 4: Correlation Tables

Panel A: Correlation Table for Governance and Geography Variables: Pearson (Upper diagonal) and Spearman (lower diagonal) correlations. (All variables are defined in Appendix 1)

VARIABLE	SPROV	SPROVI	ACSPROV	BOARD SIZE	Institutional Investors	Local Institutional Investors	Family or Individual	Audit Committee Size	CEO Tenure	Number of other Directorship	Board Tenure	Independent Directors	CEO Chairman	Dual Class	Female Director	Audit
SPROV	1	0.926***	0.808***	-0.189***	0.025	0.117***	0.147***	-0.178***	0.073*	-0.023	0.108**	0.023	-0.011	0.067	-0.114***	0.048
SPROVI	0.933***	1	0.875***	-0.178***	0.02	0.116***	0.146***	-0.178***	0.011	-0.061	0.063	0.012	-0.052	0.046	-0.142***	0.032
ACSPROV	0.805***	0.863***	1	-0.156***	0.014	0.115***	0.118***	-0.19***	0.014	-0.036	0.038	-0.001	-0.04	0.015	-0.136***	0.024
BOARD SIZE	-0.19***	-0.172***	-0.139***	1	0.059	0.088**	-0.033	0.523***	-0.066	0.108**	0.143***	0.223***	-0.223***	0.259***	0.335***	0.095**
Institutional Investors	0.044	0.031	0.039	0.049	1	0.704***	-0.2***	-0.023	-0.014	-0.035	0.002	0.104**	-0.078*	0.048	-0.056	-0.015
Local Institutional Investors	0.169***	0.165***	0.173***	0.065	0.563***	1	-0.107**	-0.006	-0.051	-0.074*	-0.026	0.041	-0.081*	0.093**	-0.003	0.039
Family or Individual	0.168***	0.167***	0.162***	-0.166***	-0.177***	-0.052	1	-0.002	0.305***	-0.203***	0.351***	-0.133***	0.212***	0.383***	0.043	-0.029
Audit Committee Size	-0.162***	-0.166***	-0.187***	0.494***	-0.032	-0.039	-0.03	1	0.067	0.034	0.096**	0.354***	-0.054	0.168***	0.289***	0.072*
CEO Tenure	0.043	-0.003	0.01	-0.055	-0.019	-0.069	0.291***	0.079*	1	-0.106**	0.587***	-0.063	0.277***	0.097**	0.104**	-0.079*
Number of other Directorship	-0.044	-0.066	-0.049	0.223***	0.013	-0.102**	-0.246***	0.105**	-0.1**	1	-0.074*	0.065	-0.158***	-0.083*	-0.034	0.072*
Board Tenure	0.08*	0.045	0.014	0.156***	-0.034	-0.043	0.281***	0.183***	0.567***	-0.044	1	-0.109**	0.101**	0.24***	0.182***	-0.026
Independent Directors	-0.024	-0.032	-0.044	0.261***	0.144***	0.048	-0.167***	0.359***	-0.018	0.188***	-0.015	1	-0.155***	0.029	0.139***	0.145***
CEO Chairman	-0.016	-0.049	-0.041	-0.225***	-0.07	-0.079*	0.227***	-0.031	0.281***	-0.178***	0.086**	-0.165***	1	0.007	-0.068	-0.089**
Dual Class	0.062	0.04	0.019	0.195***	-0.062	0.038	0.213***	0.193***	0.139***	-0.079*	0.265***	0.033	0.007	1	0.195***	0.048
Female Director	-0.111**	-0.132***	-0.131***	0.368***	-0.06	0	0.007	0.279***	0.112**	0.057	0.234***	0.201***	-0.07	0.206***	1	0.081*
Audit	0.062	0.043	0.028	0.109**	0.045	0.051	-0.057	0.051	-0.037	0.119***	-0.028	0.128***	-0.089**	0.048	0.096**	1

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Table 4 (Continued)
Panel B: Correlation Table-Regression for Accrual Quality – First Essay: Pearson (Upper diagonal) and Spearman (lower diagonal) correlations.
(All variables are defined in Appendix 1)

VARIABLE	ACCRUAL	SPROV	SPROVI	ACSPROV	GOV	LEV	SIZE	CCFO	CSALE	CNI	LOSS	ROA	CLUS	QCA_QC
ACCRUAL	1	-0.084*	-0.107**	-0.07	-0.185***	-0.086**	-0.216***	0.037	0.052	-0.067	0.197***	-0.262***	0.005	-0.066
SPROV	-0.083*	1	0.926***	0.808***	0.1**	-0.012	-0.097**	-0.028	0.053	-0.041	-0.062	0.081*	-0.227***	0.113***
SPROVI	-0.109**	0.933***	1	0.875***	0.077*	0.001	-0.098**	0.028	0.121***	-0.004	-0.061	0.07	-0.205***	0.094**
ACSPROV	-0.079*	0.805***	0.863***	1	0.052	0.009	-0.108**	0.033	0.128***	-0.009	-0.033	0.022	-0.164***	0.116***
GOV	-0.199***	0.04	0.036	0.022	1	0.204***	0.01	-0.094**	-0.071	-0.031	-0.245***	0.129***	-0.114***	0.152***
LEV	-0.137***	0.022	0.017	0.02	0.223***	1	0.268***	-0.015	0.056	-0.034	-0.038	-0.025	0.025	-0.017
SIZE	-0.166***	-0.094**	-0.096**	-0.099**	-0.024	0.284***	1	0.039	0.004	-0.043	-0.387***	0.397***	0.318***	-0.042
CCFO	0.101**	0.019	0.06	0.07	-0.172***	-0.081*	0.02	1	0.373 ***	0.411***	-0.106**	0.246***	-0.015	0.01
CSALE	0.076*	0.078*	0.128***	0.128***	-0.082*	0.043	0.045	0.425***	1	0.31***	-0.162***	0.263***	-0.06	-0.023
CNI	-0.028	-0.015	0.018	0.015	-0.045	-0.074*	-0.024	0.376***	0.37***	1	-0.261***	0.431***	-0.008	0.07
LOSS	0.158***	-0.047	-0.058	-0.033	-0.234***	-0.064	-0.381***	-0.083*	-0.185***	-0.308***	1	-0.7***	-0.085*	-0.057
ROA	-0.087**	0.084*	0.092**	0.065	0.168***	-0.046	0.353***	0.182***	0.338***	0.457***	-0.84***	1	0.039	0.04
CLUS	0.029	-0.247***	-0.226***	-0.178***	-0.128***	0.022	0.279***	-0.03	-0.02	0.01	-0.085*	0.063	1	-0.014
QCA_QC	-0.063	0.119***	0.1**	0.121***	0.16***	-0.011	-0.036	-0.022	-0.0001	0.07	-0.057	0.069	-0.014	1

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Table 4 (Continued)

Panel C: Correlation Table- Regression for Earnings Informativeness – First Essay: Pearson (Upper diagonal) and Spearman (lower diagonal) correlations

VARIABLE	RETURN	EPS	SPROV	SPROVI	ACSPROV	EPS*SPROV	EPS*SPROVI	EPS*ACSPROV	SIZE	LEV	BM	GOV	LOSS
RETURN	1	0.142***	0.056	0.074	0.077*	0.151***	0.177***	0.167***	-0.053	-0.01	-0.245***	0.024	-0.098**
EPS	0.277***	1	0.115**	0.114**	0.07	-0.24***	-0.126***	0.03	0.31***	-0.058	-0.101**	0.216***	-0.619***
SPROV	0.066	0.112**	1	0.929***	0.806***	-0.063	-0.047	-0.005	-0.111**	0.031	0.092**	0.092**	-0.062
SPROVI	0.073	0.137***	0.937***	1	0.871***	-0.04	-0.02	0.028	-0.114**	0.048	0.089**	0.079*	-0.07
ACSPROV	0.081*	0.099**	0.804***	0.861***	1	-0.004	0.029	0.017	-0.124***	0.052	0.052	0.048	-0.035
EPS*SPROV	0.112**	0.099**	0.202***	0.192***	0.203***	1	0.929***	0.704***	-0.172***	0.095**	-0.077*	0	0.064
EPS*SPROVI	0.088**	0.079*	0.18***	0.196***	0.217***	0.909***	1	0.76***	-0.178***	0.077*	-0.054	0.019	0.042
EPS*ACSPROV	0.084*	0.161***	0.193***	0.218***	0.256***	0.757***	0.824***	1	-0.111**	0.022	0.027	0.012	-0.021
SIZE	0.064	0.345***	-0.109**	-0.115**	-0.117***	-0.137***	-0.153***	-0.094**	1	0.289***	-0.039	0.017	-0.379***
LEV	0.067	0.098**	0.06	0.062	0.059	0.034	0.048	-0.021	0.304***	1	-0.095**	0.218***	-0.047
BM	-0.271***	-0.009	0.121***	0.132***	0.082*	-0.063	-0.027	0.023	0.018	-0.056	1	0.051	0.109**
GOV	0.05	0.263***	0.029	0.037	0.014	0.087*	0.106**	0.08*	-0.02	0.229***	-0.002	1	-0.235***
LOSS	-0.166***	-0.824***	-0.045	-0.063	-0.031	-0.041	-0.008	-0.081*	-0.369***	-0.079*	0.054	-0.226***	1

Due to high multicollinearity (VIF>20) all variables that need an interaction term in the model have been centered. EPS, SPROV, SPROVI, ACSPROV are centered.

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Table 4 (Continued)

Panel D: Correlation Table (Pearson)-Governance Variables and Foreign Directors on the Audit Committee-Second Essay. (All variables are defined in Appendix 1)

VARIABLE	Accrual	Return	EPS	FIDONLY	FDACDUMMY	FDAC	FDACUS	FDACOTHER	Board size	Institutional Investors	Local Institutional Investors	Family or Individuals	Audit Committee Size	CEO Tenure	Number of other Directorships	Board Tenure	Independent Directors	CEO Chairman	Dual Class	Female Director	Audit
Accrual	1	-0.027	-0.259***	0.059	0.054	0.101**	0.11**	0.008	-0.17***	-0.022	-0.051	-0.115***	-0.136***	-0.033	0.003	-0.165***	-0.065	-0.045	-0.123***	-0.143***	-0.123***
Return		1	0.142***	-0.034	-0.095**	-0.087*	-0.071	-0.045	-0.03	-0.029	0.025	0.022	0.005	0.078*	-0.032	0.008	-0.028	-0.013	0.029	-0.009	0.083*
EPS			1	-0.04	-0.09**	-0.128***	-0.123***	-0.036	0.18***	-0.04	-0.029	0.183***	0.154***	0.168***	0.03	0.255***	0.038	-0.006	0.076*	0.067	0.115**
FIDONLY				1	-0.387***	-0.332***	-0.28***	-0.159***	0.117***	0.099**	0.097**	-0.101**	-0.021	0.015	0.031	0.021	0.153***	-0.003	-0.03	0.006	-0.034
FDACDUMMY					1	0.857***	0.723***	0.412***	0.159***	-0.014	-0.124***	-0.065	0.251***	-0.027	-0.081*	-0.067	-0.018	0.028	-0.017	0.079*	-0.038
FDAC						1	0.845***	0.476***	0.075*	-0.021	-0.125***	-0.081*	0.124***	-0.073*	-0.068	-0.116***	-0.071	0.054	-0.067	0.001	-0.018
FDACUS							1	-0.068	0.053	0.008	-0.067	-0.024	0.111**	-0.046	-0.091**	-0.053	0.007	0.026	-0.027	0.018	-0.006
FDACOTHER								1	0.053	-0.053	-0.124***	-0.111**	0.05	-0.06	0.024	-0.129***	-0.145***	0.058	-0.082*	-0.027	-0.023
Board size									1	0.059	0.088**	-0.033	0.523***	-0.066	0.108**	0.143***	0.223***	-0.223***	0.259***	0.335***	0.095**
Institutional Investors										1	0.704***	-0.2***	-0.023	-0.014	-0.035	0.002	0.104**	-0.078*	0.048	-0.056	-0.015
Local Institutional Investors											1	-0.107**	-0.006	-0.051	-0.074*	-0.026	0.041	-0.081*	0.093**	-0.003	0.039
Family or Individuals												1	-0.002	0.305***	-0.203***	0.351***	-0.133***	0.212***	0.383***	0.043	-0.029
Audit Committee Size													1	0.067	0.034	0.096**	0.354***	-0.054	0.168***	0.289***	0.072*
CEO Tenure														1	-0.106**	0.587***	-0.063	0.277***	0.097**	0.104**	-0.079*
Number of other Directorships															1	-0.074*	0.065	-0.158***	-0.083*	-0.034	0.072*
Board Tenure																1	-0.109**	0.101**	0.24***	0.182***	-0.026
Independent Directors																	1	-0.155***	0.029	0.139***	0.145***
CEO Chairman																		1	0.007	-0.068	-0.089**
Dual Class																			1	0.195***	0.048
Female Director																				1	0.081*
Audit																					1

*** Significant at 0.01 ** Significant at 0.05 * Significant at 0.1

Table 4 (Continued)

Panel E: Correlation Table (Pearson) –Regression of Accrual Quality- Second Essay. (All variables are defined in Appendix 1)

VARIABLE	ACCRUAL	FIDONLY	FDACDUMMY	FDAC	FDACUS	FDACOTHER	SIZE	LEV	CCFO	CSALE	CNI	GOV	LOSS	CL	FT	ROA	QCA_QC	YEAR DUMMY
ACCRUAL	1	0.059	0.054	0.101**	0.11**	0.008	-0.216***	-0.086**	0.037	0.052	-0.067	-0.185***	0.197***	0.005	-0.141***	-0.262***	-0.066	-0.045
FIDONLY		1	-0.387***	-0.332***	-0.28***	-0.159***	0.052	-0.024	0.036	0.01	0.039	-0.034	0.023	0.101**	0.048	-0.04	0.195***	0.015
FDACDUMMY			1	0.857***	0.723***	0.412***	0.077*	0.002	-0.103**	-0.093**	-0.027	-0.02	-0.04	0.26***	0.103**	-0.033	-0.128***	0.004
FDAC				1	0.845***	0.476***	0.007	-0.025	-0.074*	-0.074*	0.006	-0.075*	0.028	0.26***	0.022	-0.061	-0.131***	-0.008
FDACUS					1	-0.068	-0.037	-0.01	-0.096**	-0.098**	-0.036	-0.018	0.043	0.191***	-0.002	-0.088**	-0.091**	-0.011
FDACOTHER						1	0.074*	-0.03	0.019	0.022	0.07	-0.111**	-0.018	0.172***	0.045	0.031	-0.093**	0.003
SIZE							1	0.268***	0.039	0.004	-0.043	0.01	-0.387***	0.321***	0.31***	0.397***	-0.042	0.068
LEV								1	-0.015	0.056	-0.034	0.204***	-0.038	-0.02	0.257***	-0.025	-0.017	0.02
CCFO									1	0.373***	0.411***	-0.094**	-0.106**	-0.02	0.035	0.246***	0.01	0.045
CSALE										1	0.31***	-0.071	-0.162***	-0.054	0.13***	0.263***	-0.023	-0.008
CNI											1	-0.031	-0.261***	-0.003	0.041	0.431***	0.07	-0.053
GOV												1	-0.245***	-0.144***	0.094**	0.129***	0.152***	0.034
LOSS													1	-0.061	-0.226***	-0.7***	-0.057	-0.064
CL														1	0.017	0.018	-0.033	0.097**
FT															1	0.166***	-0.033	0.114***
ROA																1	0.04	0.051
QCA_QC																	1	0.008
YEARDUMMY																		1

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Table 4 (Continued)

Panel F: Correlation Table (Pearson): Regression for Earnings Informativeness-Second Essay. (All variables are defined in Appendix 1)

VARIABLE	RETURN	EPS	FDACDUMMY	FDAC	FDACUS	FDACOTHER	FIDONLY	EPS* FDACDUMMY	EPS* FDAC	EPS* FDACUS	EPS* FDACOTHER	EPS* FIDONLY	SIZE	LEV	BM	GOV	LOSS	CL	FT
RETURN	1	0.142***	-0.095**	-0.087*	-0.071	-0.045	-0.034	-0.008	-0.121***	-0.119***	-0.002	0.038	-0.053	-0.01	-0.245***	0.024	-0.098**	-0.068	-0.039
EPS		1	-0.09**	-0.128***	-0.123***	-0.036	-0.04	0.786***	0.312***	0.324***	-0.033	0.356***	0.31***	-0.058	-0.101**	0.216***	-0.619***	-0.017	0.194***
FDACDUMMY			1	0.862***	0.725***	0.412***	-0.385***	-0.063	-0.056	-0.053	-0.006	0.037	0.09**	-0.013	-0.073	-0.017	-0.036	0.262***	0.121***
FDAC				1	0.84***	0.481***	-0.332***	-0.119***	-0.165***	-0.167***	0.008	0.032	0.021	-0.041	-0.074*	-0.07	0.043	0.263***	0.034
FDACUS					1	-0.072	-0.279***	-0.12***	-0.192***	-0.229***	0.089**	0.027	-0.018	-0.008	-0.045	-0.009	0.06	0.201***	0.008
FDACOTHER						1	-0.159***	-0.025	0.006	0.064	-0.129***	0.015	0.067	-0.062	-0.063	-0.115**	-0.017	0.157***	0.049
FIDONLY							1	0.024	0.067	0.054	0.029	-0.096**	0.041	-0.014	-0.083*	-0.033	0.033	0.109**	0.033
EPS* FDACDUMMY								1	0.692***	0.627***	0.129***	-0.002	0.245***	-0.105**	-0.11**	0.14***	-0.384***	0.035	0.155***
EPS* FDAC									1	0.901***	0.198***	-0.22***	0.114**	-0.133***	-0.003	0.025	-0.056	0.047	0.063
EPS* FDACUS										1	-0.247***	-0.162***	0.11**	-0.062	-0.014	0.053	-0.067	0.029	0.077*
EPS* FDACOTHER											1	-0.127***	0.007	-0.158***	0.024	-0.065	0.026	0.041	-0.033
EPS* FIDONLY												1	0.195***	-0.022	0.015	0.037	-0.288***	0.002	0.046
SIZE													1	0.289***	-0.039	0.017	-0.379***	0.305***	0.322***
LEV														1	-0.095**	0.218***	-0.047	-0.029	0.261***
BM															1	0.051	0.109**	-0.16***	0.038
GOV																1	-0.235***	-0.145***	0.111**
LOSS																	1	-0.051	-0.252***
CL																		1	-0.001
FT																			1

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Table 4 (Continued)

Panel G: Correlation Table (Pearson): Regression for Accrual Quality- Third Essay. (All variables are defined in Appendix 1)

	ABSACCMJ	ABSACCRDD	IFRS	QC	IFRSQC	GOV	SIZE	LEV	ROA	LOSS	CNI	CCFO	CSALE	BM	CLUS
ABSACCMJ	1.000	0.630***	0.052	-0.101***	-0.066**	-0.144***	-0.181***	0.021	-0.129***	0.134***	0.028	0.047	0.049	-0.069**	0.017
ABSACCRDD		1.000	0.072**	-0.100***	-0.058*	-0.155***	-0.178***	-0.003	-0.117***	0.121***	0.022	-0.025	0.017	-0.039	0.023
IFRS			1.000	0.010	0.312***	0.014	0.088***	0.016	0.105***	-0.119***	-0.068**	0.016	0.109***	0.131***	-0.042
QC				1.000	0.600***	0.223***	-0.017	0.081**	0.021	-0.066**	-0.010	-0.005	-0.003	-0.058*	-0.082**
IFRSQC					1.000	0.154***	0.008	0.100***	0.027	-0.048	-0.028	-0.006	0.013	-0.016	-0.018
GOV						1.000	0.360***	0.297***	0.173***	-0.311***	-0.049	-0.058*	-0.065**	-0.056*	0.148***
SIZE							1.000	0.280***	0.387***	-0.371***	-0.094***	-0.035	-0.031	-0.020	0.334***
LEV								1.000	-0.009	-0.061*	-0.004	0.035	0.050	-0.110***	0.040
ROA									1.000	-0.694***	0.315***	0.229***	0.225***	-0.034	0.036
LOSS										1.000	-0.199***	-0.118***	-0.190***	0.129***	-0.082**
CNI											1.000	0.504***	0.245***	-0.082**	0.004
CCFO												1.000	0.431***	-0.096***	0.001
CSALE													1.000	-0.202***	-0.060*
BM														1.000	-0.146***
CLUS															1.000

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.1

Table 4 (Continued)

Panel H: Correlation Table (Pearson): Regression for Earnings Informativeness- Third Essay. (All variables are defined in Appendix 1)

	RETURN	EPS	IFRS	QC	EPSIFRS	IFRSQC	EPSQC	EPSQCIFRS	SIZE	LEV	BM	GOV	LOSS	CLUS
RETURN	1	0.199***	-0.357***	0.049	0.149***	-0.093***	0.131***	0.028	0.067*	0.067*	-0.268***	0.113***	-0.144***	-0.027
EPS		1.000	0.076**	0.076**	0.624***	0.038	0.324***	0.198***	0.286***	-0.029	-0.263***	0.240***	-0.643***	0.040
IFRS			1.000	-0.017	0.006	0.303***	-0.016	0.025	0.071*	-0.016	0.175***	-0.032	-0.099***	-0.077**
QC				1.000	0.017	0.617***	0.112***	0.051	-0.018	0.081**	-0.055	0.226***	-0.059	-0.092**
EPSIFRS					1.000	0.026	0.193***	0.315***	0.133***	0.022	-0.226***	0.152***	-0.406***	0.016
IFRSQC						1.000	0.041	0.082**	-0.005	0.102***	-0.017	0.151***	-0.031	-0.029
EPSQC							1.000	0.613***	0.147***	0.049	0.007	0.134***	-0.283***	0.023
EPSQCIFRS								1.000	0.089**	0.039	-0.021	0.086**	-0.164***	0.020
SIZE									1.000	0.333***	-0.068*	0.388***	-0.370***	0.321***
LEV										1.000	-0.123***	0.335***	-0.064*	0.046
BM											1.000	-0.119***	0.182***	-0.177***
GOV												1.000	-0.303***	0.145***
LOSS													1.000	-0.050
CLUS														1.000

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Table 5: Factor Analysis

Panel A: Factor Analysis for the First and Second Essays. (All variables are defined in Appendix 1)

Eigenvalue: 2.62 % of variance: 18% % Cumulative:18%

	Component
	1
Female Director	0.17
Dual Class	0.61
CEO Chairman	0.27
Independent Directors	-0.15
Board Tenure	0.65
Number of Other Directorships	-0.32
CEO Tenure	0.58
Audit Committee Size	0.15
Family or Individuals	0.72
Local Institutional Investors	0.17
Institutional Investors	0.16
Board Size	0.17
Audit	-0.04

N=528

Table 5 (Continued)

Panel B: Factor Analysis for the Third Essay. (All variables are defined in Appendix 1)

Eigenvalue: 2.343	% of variance:17%	% Cumulative:17%
		Component
Board Size		0.22
Institutional Investors		-0.09
Local Institutional Investors		-0.06
Family or Individuals		0.24
Audit Committee Size		0.21
CEO Tenure		0.21
Number of Other Directorships		-0.05
Board Tenure		0.27
Independent Directors		0.03
CEO Chairman		0.048
Dual Class		0.25
Female Director		0.23
Audit		0.04
Sprovi		-0.04

N=938

Table 6: Multivariate Analysis-Accrual Quality- First Essay. (All variables are defined in Appendix 1)

	Dependent variable: discretionary accruals: Modified Jones model – heteroscedasticity-consistent standard errors		
Independent variable			
Intercept	0.086*** (6.76)	0.089*** (7.17)	0.085*** (7.12)
SPROV	-0.014 (-1.6)		
SPROVI		-0.020** (-2.39)	
ACSPROV			-0.014** (-1.99)
GOV	-0.003* (-1.88)	-0.003* (-1.87)	-0.004* (-1.92)
LEV	0.009 (0.68)	0.009 (0.7)	0.009 (0.7)
SIZE	-0.015*** (-4.34)	-0.015*** (-4.4)	-0.015*** (-4.34)
CCFO	0.017 (0.51)	0.018 (0.55)	0.019 (0.56)
CSALE	0.020* (1.7)	0.022* (1.9)	0.022* (1.86)
CNI	-0.025 (-0.81)	-0.026 (-0.84)	-0.025 (-0.79)
LOSS	-0.014 (-1.37)	-0.014 (-1.41)	-0.014 (-1.4)
CLUS	0.007 (1.18)	0.006 (1.09)	0.007 (1.27)
ROA	-0.093* (-1.87)	-0.093* (-1.88)	-0.096* (-1.92)
QCA_QC	-0.006 (-1)	-0.005 (-0.92)	-0.005 (-0.91)
INDUSTRY DUMMIES			
YEAR DUMMY			
N	528	528	528
ADJ. R2	0.142	0.148	0.144

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Table 7: Multivariate Analysis - Earnings Informativeness- First Essay. (All variables are defined in Appendix 1)

	Dependent variable: Return- heteroscedasticity- consistent standard errors						
Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
INTERCEPT	0.104***	0.091***	0.089***	0.096***	0.596***	0.587***	0.619***
	(3.86)	(3.43)	(3.41)	(3.68)	(4.71)	(4.85)	(5.16)
EPS	0.543	0.703**	0.612**	0.507	0.724*	0.619	0.522
	(1.56)	(2.54)	(2.09)	(1.59)	(1.94)	(1.6)	(1.28)
SPROV		0.107			0.104		
		(0.96)			(1)		
SPROVI			0.122			0.14	
			(1.23)			(1.54)	
ACSPROV				0.12			0.126*
				(1.41)			(1.73)
EPS*SPROV		2.68**			1.994*		
		(2.4)			(1.77)		
EPS*SPROVI			2.84***			2.24**	
			(2.6)			(2.11)	
EPS*ACSPROV				2.05***			1.65**
				(2.99)			(2.58)
SIZE[1]					-0.071	-0.061	-0.07*
					(-1.6)	(-1.46)	(-1.87)
LEV					0.079	0.056	0.083
					(0.5)	(0.37)	(0.56)
BM					-0.203***	-0.212***	-0.225***
					(-3.71)	(-3.96)	(-4.35)
GOV					0.014	0.014	0.018
					(0.6)	(0.64)	(0.81)
LOSS					-0.036	-0.044	-0.057
					(-0.51)	(-0.61)	(-0.73)
INDUSTRY DUMMIES							
YEAR DUMMY							
N	494	494	494	494	494	494	494
ADJ R2	0.018	0.053	0.056	0.045	0.271	0.277	0.271

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

1. Adding interaction terms between EPS and firm characteristics will result in high multicollinearity.

Table 8: Multivariate Analysis-Accrual Quality- Second Essay. (All variables are defined in Appendix 1)

Independent variable	Dependent variable: discretionary accruals: Modified Jones model – Heteroscedasticity-consistent standard errors		
Intercept	0.069 *** (7.070)	0.068*** (6.91)	0.067*** (6.91)
FDACDUMMY	0.013** (2.35)		
FDAC		0.029** (2.04)	
FDACUS			0.036** (2.09)
FDACOTHER			0.009 (0.61)
FIDONLY	0.018** (2.190)	0.017** (2.14)	0.017** (2.13)
GOV	-0.004* (-1.93)	-0.003* (-1.84)	-0.004* (-1.88)
LEV	0.013 (0.92)	0.012 (0.87)	0.012 (0.86)
SIZE	-0.014*** (-3.81)	-0.013*** (-3.66)	-0.013*** (-3.61)
CCFO	0.021 (0.630)	0.021 (0.63)	0.021 (0.64)
CSALE	0.022* (1.77)	0.021* (1.78)	0.022* (1.8)
CNI	-0.026 (-0.820)	-0.027 (-0.89)	-0.026 (-0.85)
LOSS	-0.014 (-1.340)	-0.014 (-1.4)	-0.014 (-1.41)
CL	0.002 (0.300)	0.001 (0.21)	0.001 (0.25)
ROA	-0.090* (-1.790)	-0.090* (-1.81)	-0.090* (-1.82)
QCA_QC	-0.010 (-1.530)	-0.009 (-1.49)	-0.010 (-1.52)
FT	-0.007 (-1.330)	-0.005 (-1.19)	-0.005 (-1.15)
YEAR DUMMY	-0.003 (-0.650)	-0.002 (-0.65)	-0.002 (-0.65)
INDUSTRY DUMMIES			
N	528	528	528
ADJ. R2	0.148	0.150	0.151

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Table 9: Multivariate Analysis - Earnings Informativeness- Second Essay. (All variables are defined in Appendix 1)

Dependent variable: Return – Heteroscedasticity-consistent standard errors

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
INTERCEPT	0.104	0.149***	0.102***	0.102***	0.681***	0.627***	0.624***
	(3.86)	(3.21)	(3.41)	(3.43)	(5.45)	(5.08)	(5.11)
EPS	0.543	1.93***	0.887**	0.902**	1.75***	0.875*	0.908**
	(1.56)	(3.69)	(2.29)	(2.39)	(3.11)	(1.86)	(2)
FDACDUMMY		-0.11*			-0.139**		
		(-1.88)			(-2.33)		
FDAC			-0.287**			-0.340***	
			(-2.32)			(-2.78)	
FDACUS				-0.323**			-0.367***
				(-2.41)			(-2.74)
FDACOTHER				-0.208			-0.282
				(-0.95)			(-1.54)
FIDONLY		-0.088	-0.092	-0.094	-0.115*	-0.111*	-0.112*
		(-1.19)	(-1.3)	(-1.32)	(-1.73)	(-1.75)	(-1.77)
EPS* FDACDUMMY		-1.99***			-1.685***		
		(-2.97)			(-2.7)		
EPS* FDAC			-2.94***			-2.493***	
			(-4.35)			(-3.76)	
EPS* FDACUS				-3.11***			-2.679***
				(-4.41)			(-4.02)
EPS* FDACOTHER				-1.738			-0.758
				(-1.11)			(-0.48)
EPS* FIDONLY		-1.55***	-1.049**	-1.029*	-1.236**	-0.813	-0.764
		(-2.67)	(-2)	(-1.93)	(-2.11)	(-1.54)	(-1.42)
SIZE[1]					-0.068	-0.075*	-0.079**
					(-1.62)	(-1.87)	(-1.99)
LEV					0.005	0.012	0.047
					(0.03)	(0.08)	(0.3)
BM					-0.245***	-0.227***	-0.227***
					(-4.58)	(-4.06)	(-4.07)
GOV					0.015	0.015	0.017
					(0.67)	(0.65)	(0.74)
LOSS					-0.010	-0.019	-0.014
					(-0.15)	(-0.25)	(-0.19)
CL					0.025	0.028	0.029
					(0.49)	(0.54)	(0.57)
FT					0.039	0.033	0.034
					(0.73)	(0.62)	(0.64)
YEAR DUMMY					-0.495***	-0.507***	-0.509***
					(-11.57)	(-11.64)	(-11.62)
INDUSTRY DUMMIES							
N	494	494	494	494	494	494	494
ADJ R2	0.018	0.07	0.059	0.057	0.290	0.281	0.282

Table 9 (Continued)

Multivariate Analysis - Earnings Informativeness- Second Essay. (All variables are defined in Appendix 1)

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Due to high multicollinearity (VIF>20) all variables that need an interaction term in the model have been centered. EPS, FDACDUMMY, FDAC, FIDONLY AND FDACOTHER are centered.

All variables are winsorized at 1% and 99%.

1. Adding interaction terms between EPS and firm characteristics will result in high multicollinearity.

Table 10: Robustness Analysis-First stage Analysis - Second Essay. (All variables are defined in Appendix 1)

First-stage analysis - Probit model for the presence of foreign directors on the audit committee

	Dependent Variable: FDACDUMMY	
Independent variable	Coefficient	Chi-square
Intercept	-1.7008	4.3349**
ROA	-0.3426	0.2775
SIZE	-0.2612	2.1077
CSALE	-0.8905	3.092*
CL	1.2324	28.6648***
FT	0.6044	8.3633***
LEV	-0.309	0.3275
Institutional Investors	2.5228	8.919***
Local Institutional Investors	-4.6536	15.1982***
Board size	0.815	2.9083*
Female Director	1.4679	1.4548
YEAR DUMMY	-0.2045	1.1377
INDUSTRY DUMMIES	included	
PSEUDO R2	0.16	
LR STARISTIC	70.1622	
P-VALUE	<0.0001	
N	528	

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.1

Table 11: Robustness Analysis. Second-Stage Analysis-Accrual quality - Second Essay. (All variables are defined in Appendix 1)

Independent variable	Dependent variable: discretionary accruals: Modified Jones model – Heteroscedasticity-consistent standard errors
Intercept	0.066*** (4.24)
FDACDUMMY	0.013** (2.2)
FIDONLY	0.018** (2.16)
GOV	-0.004* (-1.93)
LEV	0.012 (0.9)
SIZE	-0.014*** (-3.75)
CCFO	0.021 (0.63)
CSALE	0.021 (1.57)
CNI	-0.026 (-0.82)
LOSS	-0.013 (-1.34)
CL	0.002 (0.34)
ROA	-0.090* (-1.79)
QCA_QC	-0.010 (-1.49)
FT	-0.006 (-1.03)
Inverse Mills ratio	0.001 (0.13)
YEAR DUMMY	-0.002 (-0.67)
INDUSTRY DUMMIES	included
N	528
ADJ. R2	0.146
F-VALUE	6.67
PROBF	<0.0001

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.1

Table 12: Robustness Analysis. Second –Stage Analysis- Earnings informativeness - Second Essay. (All variables are defined in Appendix 1)

Independent variables	Dependent variable: earnings informativeness– Heteroscedasticity-consistent standard errors
INTERCEPT	0.435**
	(2.36)
EPS	1.711***
	(3.06)
FDACDUMMY	-0.115*
	(-1.81)
FIDONLY	-0.097
	(-1.4)
EPS* FDACDUMMY	-1.663***
	(-2.68)
EPS* FIDONLY	-1.175**
	(-2.02)
SIZE	-0.068
	(-1.61)
LEV	-0.043
	(-0.27)
BM	-0.244***
	(-4.55)
GOV	0.018
	(0.77)
LOSS	0.004
	(0.06)
CL	0.123*
	(1.79)
FT	0.093
	(1.56)
Inverse Mills Ratio	0.215*
	(1.92)
YEAR DUMMY	-0.510***
	(-11.47)
INDUSTRY DUMMIES	INCLUDED
N	494
ADJ R2	0.29
F-VALUE	14.61
PROBF	<0.0001

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.1

Table 13: Multivariate Analysis-Accrual Quality- Third Essay. (All variables are defined in Appendix 1)

	Dependent variable: discretionary accruals: Modified Jones Model – Heteroscedasticity-consistent standard errors			Dependent variable: discretionary accruals: DD Model – Heteroscedasticity-consistent standard errors		
Independent variable	Absolute discretionary accruals	Positive discretionary accruals	Negative discretionary accruals	Absolute discretionary accruals	Positive discretionary accruals	Negative discretionary accruals
Intercept	0.048***	0.046***	0.048***	0.055***	0.059***	0.047***
	(9.78)	(6.95)	(6.59)	(9.81)	(8.37)	(5.4)
IFRS	0.007**	0.006	0.008*	0.009***	0.007*	0.010**
	(2.29)	(1.43)	(1.94)	(2.74)	(1.77)	(2.01)
QC	-0.004	-0.004	-0.004	-0.004	-0.009*	0.0002
	(-1.18)	(-0.66)	(-0.91)	(-1.03)	(-1.8)	(0.04)
IFRSQC	-0.009*	-0.004	-0.017**	-0.009	-0.0005	-0.018
	(-1.71)	(-0.6)	(-2.04)	(-1.39)	(-0.06)	(-1.42)
SIZE	-0.011***	-0.011***	-0.012***	-0.012***	-0.010***	-0.013***
	(-6.03)	(-4.15)	(-4.21)	(-5.45)	(-3.99)	(-3.34)
LEV	0.027***	0.025**	0.030**	0.026***	0.009	0.044***
	(3.22)	(2.07)	(2.41)	(2.85)	(0.88)	(3.02)
ROA	-0.013	-0.029	0.004	-0.009	0.013	-0.030
	(-0.9)	(-1.44)	(0.25)	(-0.58)	(0.7)	(-1.1)
LOSS	0.001	-0.001	0.006	0.000	-0.001	0.001
	(0.35)	(-0.22)	(1.05)	(0.01)	(-0.29)	(0.23)
CNI	0.002	0.016	-0.008	0.012	0.027	0.001
	(0.2)	(0.82)	(-0.65)	(0.89)	(1.51)	(0.08)
CCFO	0.007	-0.012	0.033	-0.021)	-0.024	-0.025
	(0.42)	(-0.47)	(1.42)	(-1.26)	(-1.2)	(-0.88)
CSALE	0.004	0.009	-0.001	0.002	0.003	0.0001
	(0.4)	(0.78)	(-0.17)	(0.29)	(0.28)	(0.01)
CLUS	0.009***	0.010**	0.007	0.010***	0.013***	0.004
	(2.65)	(2.13)	(1.52)	(2.85)	(2.62)	(0.8)
GOV	-0.001	-0.001	-0.001	-0.002	-0.002	-0.001
	(-1.05)	(-0.75)	(-0.61)	(-1.42)	(-1.25)	(-0.74)
INDUSTRY DUMMIES	Included	Included	Included	Included	Included	Included
N	938	475	463	938	497	441
ADJ. R2	0.071	0.067	0.062	0.073	0.056	0.108
F-test IFRSQC=IFRSREST	1.57 (0.21)	0.19 (0.663)	2.23 (0.135)	1.36 (0.244)	0.00 (0.96)	1.82 (0.178)

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Table 14: Multivariate Analysis- Earnings Informativeness- Third Essay. (All variables are defined in Appendix 1)

Dependent variable: Return – Heteroscedasticity-consistent standard errors

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.056***	0.191***	0.238***	0.183***	0.238***
	(4.04)	(10.56)	(4)	(8.93)	(3.92)
EPS	0.476***	0.522***	0.343**	0.433***	0.254
	(5.24)	(4.29)	(2.35)	(3.23)	(1.62)
IFRS		-0.303***	-0.280***	-0.297***	-0.269***
		(-11.8)	(-10.75)	(-10.41)	(-9.19)
EPSIFRS		0.057	-0.002	0.160	0.097
		(0.32)	(-0.01)	(0.84)	(0.52)
QC				0.022	-0.004
				(0.56)	(-0.1)
IFRSQC				-0.001	-0.014
				(-0.02)	(-0.24)
EPSQC				0.768***	0.913***
				(3.25)	(3.81)
EPSQCIFRS				-0.926*	-0.946*
				(-1.67)	(-1.93)
SIZE			0.027		0.029
			(1.33)		(1.38)
LEV			0.025		0.013
			(0.29)		(0.15)
BM			-0.12***		-0.128***
			(-5.25)		(-5.47)
GOV			0.005		0.005
			(0.39)		(0.38)
LOSS			-0.024		-0.013
			(-0.62)		(-0.35)
CLUS			-0.097***		-0.098***
			(-3.2)		(-3.22)
INDUSTRY DUMMIES			included		included
N	764	764	764	764	764
ADJ R2	0.038	0.176	0.206	0.178	0.210
F-test EPSQCIFRS=EPSRESTIFRS				2.98*	3.23*
				(0.084)	(0.072)

*** Significant at 0.01

** Significant at 0.05

* Significant at 0.10

Appendix 1: Variables Definition and Data Sources

Variables	Definition	Data Source
GOV	First factor calculated based on principal factor analysis of the governance variables at firm level	
Board size	Number of directors on the board	Proxy Circular
Institutional Investors	Percentage of shares held by institutional investors	Proxy Circular
Local Institutional Investors	Percentage of shares held by institutional investors located in the same city where the headquarters are located	Proxy Circular
Family or Individuals	Percentage of shares held by a family member or individual	Proxy Circular
Audit Committee Size	Number of directors on the audit committee	Proxy Circular
CEO Tenure	Number of years CEO has been in this position	Proxy Circular
Number of other Directorship	Average number of other directorships held by directors in other public companies	Proxy Circular
Board Tenure	Average number of years that directors have been sitting on the board	Proxy Circular
Independent Directors	Number of independent directors divided by board size	Proxy Circular
CEO Chairman	Dummy variable equals to 1 when CEO is also chairman of the board and 0 otherwise	Proxy Circular
Dual Class	Dummy variable equals to 1 when a firm has dual class shares and 0 otherwise	Proxy Circular
Female Director	Number of female directors on the board divided by board size	Proxy Circular
Audit	Dummy variable equals to 1 when a firm is audited by the BIG4 and 0 otherwise	Compustat
Geography Variables		
SPROV	Number of directors who live inside the province where the headquarters is located divided by board size	Proxy Circular
OTHPROV	Number of directors who live in a province other than where the headquarters are located divided by board size	Proxy Circular
US	Number of directors who live in the U.S. divided by board size	Proxy Circular

Appendix 1 (Continued)

OTHC	Number of directors who live in a country other than Canada and the U.S. divided by board size	Proxy Circular
SPROVI	Number of independent directors who live inside the province where the headquarters are located divided by number of independent directors	Proxy Circular
OTHPROVI	Number of independent directors who live in a province other than where the headquarters are located divided by number of independent directors	Proxy Circular
FIDUS	Number of independent directors who live in the U.S. divided by number of independent directors	Proxy Circular
FIDOTHER	Number of independent directors who live in a country other than Canada and the U.S. divided by number of independent directors	Proxy Circular
ACSPROV	Number of audit committee members who live in the same province where the headquarters are located divided by audit committee size	Proxy Circular
FDACDUMMY	Dummy variable equals to 1 if there is at least one foreign directors on the audit committee and 0 otherwise	Proxy Circular
FDAC	Percentage of audit committee members who reside outside Canada	Proxy Circular
FDACUS	Percentage of audit committee members who live in the U.S.	Proxy Circular
FDACOTHER	Percentage of audit committee members who live in a country other than the U.S. and Canada	Proxy Circular
FID	Number of directors who live in a country other than Canada divided by number of independent directors	Proxy Circular
FIDONLY	Dummy variable equals to 1 if a foreign director is sitting on the board and not on the audit committee and 0 other wise	Proxy Circular
Firm Characteristics		
ACCRUALMJ	Absolute value of discretionary accruals calculated based on Modified Jones Model and balance sheet method	Compustat
ACCRUALDD	Absolute value of discretionary accruals calculated based on Dechow and Dichev and balance sheet method	Compustat

Appendix 1 (Continued)

ACCRUAL	Absolute value of discretionary accruals calculated based on Modified Jones model based on cash flow statement	Compustat
CLUS	Dummy variable equals to 1 when a firm is cross listed in the U.S and 0 otherwise	Annual Information Form
SIZE	Logarithm of total assets	Compustat
CFO	Cash flow from operating activities scaled by lagged total assets	Compustat
LEV	Total liabilities divided by total shareholders' equity	Compustat
ROA	Net income divided by total assets	Compustat
LOSS	Dummy variable equals to 1 when net income is negative and 0 otherwise	Compustat
CNI	Change in net income scaled by lagged total assets	Compustat
CCFO	Change in cash flow scaled by lagged total assets	Compustat
CSALE	Change in sales revenue scaled by lagged total assets	Compustat
QCA_QC	Dummy variable equals to 1 when a firm is located in Quebec and is incorporated under Quebec incorporation law and 0 otherwise	Annual Information Form
BM	Book value to market value of common equity	Compustat
FT	Dummy variable equals to 1 when a firm has non- zero currency transaction adjustment in Compustat, 0 otherwise	Compustat
CL	Dummy variable equals to 1 when a firm is cross listed and 0 otherwise	Annual Information Form
RETURN	Stock return for 12 months (from nine months before and three months after the fiscal year end calculated as $(p_{it} - p_{it-1} + D) / p_{it-1}$	CFMRC
EPS	Earnings per share before extraordinary items of firm i for year t divided by stock price nine months before the fiscal year	Compustat
IFRS	Dummy variable equals to 1 if a firm has adopted IFRS and 0 otherwise	Compustat
QC	Dummy variable equals to 1 if a firm is located in Quebec and 0 otherwise	Compustat
YEAR DUMMY	Year dummies	Compustat
INDUSTRY DUMMY	A dummy variable equals to 1 if a firm is SIC code 10 or 13, and 0 otherwise	Compustat