Does IFRS Improve Financial Reporting Quality of CMS Firms in Canada

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Abstract

Purpose: The objective of this study is to examine whether controlling-minority structures (CMS) affect financial reporting quality of Canadian firms under International Financial Reporting Standards (IFRS).

Design/methodology/approach: We test our research hypothesis using the price model of Ohlson 1995, and the returns model as defined by Kothari and Zimmerman (1995) on a sample of 810 Canadian firm-year observations, over pre and post-IFRS periods from 2008 to 2013.

Findings: Our results indicate that IFRS adoption contributes in improving financial reporting quality of Canadian listed firms. As for CMS specifically, we find that the adoption of IFRS has a positive effect on the earnings quality but a negative effect on the value relevance of the book value of equity.

Originality/value: Our research aims to provide additional evidence on the effectiveness of the mandatory adoption of IFRS in order to improve financial reporting quality. In this study, we focus on controlling-minority structures (CMS) which are widespread in most countries around the world.

Key words: Controlling-minority structures (CMS); IFRS; value-relevance.

Introduction

In 2014, Deloitte Global Services Limited (2014) reports that at least 103 countries already mandated the adoption of International Financial Reporting Standards (IFRS) for some or all of the companies under their respective jurisdictions. The idea behind global accounting standards is to push convergence toward more comparable information as to improve the quality of decision making, enabling investors to make more sound investments globally and locally (Ball, 2006). At the local level, IFRS are introduced to provide more relevant, comparable and informative accounting information to investors and other capital providers in order to decrease asymmetry of information existing between management and shareholders and to improve market efficiency.

A growing number of studies have tested the association between IFRS adoption and accounting quality, using different dimensions of accounting quality such as analysts' forecast accuracy, comparability, earning informativeness, value relevance, conservatism and earnings management.

Results are generally mixed and tend to vary across countries and even for firms within a given country (Barth et al., 2008; Jeanjean and Stolowy, 2008; Chen et al., 2010; Yip and Young, 2012; Horton et al., 2013; Ahmed et al., 2013). Some scholars argue that the effect of IFRS on accounting quality also depends on other factors including the differences between former local GAAP and IFRS, the regulatory environment of the adopting country, and the incentives of the adopting firm to be more transparent (Renders and Gaeremynck, 2007; Jeanjean and Stolowy, 2008; Daske et al., 2008; Hail et al., 2010). In order for IFRS to affect on the quality of accounting information within a given country, it must differ from former local GAAP and larger differences should lead to greater economic and quality effects (Daske et al.,2008). Furthermore, Ball et al. (2003) argue that concentrating on accounting standards as the primary determinants of accounting quality is not effective because financial reporting quality highly depends on the incentives of those disclosing such information. Firms' incentive to disclose quality information is driven by a trade-off between better costs of external equity financing and insiders' benefits of keeping the advantages provided by private information (Dyck and Zingales, 2004; Renders and Gaeremynck, 2007; Wang, 2006). Indeed, ownership structures appear to be a central issue in understanding firms' incentives to disclose quality information (Ali et al. 2007; Attig et al., 2006; Francis et al., 2005; Hind and Sabri, 2011; Liu and Lu, 2007).

The aim of this study is to re-explore the link between IFRS adoption and accounting quality, focusing on a particular type of concentrated firms, namely Controlling Minority Structures (CMS, hereafter) as per Bebchuk et al. (2000). CMS are firms characterized by the existence of an ultimate shareholder who controls the company while detaining a relatively low portion of cash flow rights. The wedge created between voting rights and cash-flow rights provides the ultimate shareholder with high incentives to expropriate other shareholders (Bebchuk et al. 2000). Moreover, CMS are generally seen as having low incentives to disclose high quality information (Attig et al., 2006). In the case of IFRS, few studies have examined whether the new accounting system prevails over the financial incentives that pushes statement preparers to lack transparency. We believe that Canada offers an interesting setting for our study for many reasons. First, although IFRS and former Canadian GAAP are both principles-based and have similar conceptual frameworks, reporting under IFRS displays several differences (Chlala and Lavingne, 2009), and the value relevance of accounting numbers under the two standard systems are significantly different (Cormier and Magnan, 2016). Second, as in the U.S. and most Anglo-Saxon countries, Canada displays a strong legal enforcement environment, which is essential to the implementation of new accounting standards. Third, Canada has a wide variety of ownership structures and the CMS prominently, which contrasts notably with the United States (La Porta et al., 1999; Bozec and Laurin, 2008). Taking into consideration the particular characteristics of the Canadian environment and the recent findings on IFRS adoption, our research aims to provide additional evidence on the effectiveness of the mandatory adoption of IFRS.

While we expect the adoption of IFRS in Canada to increase the quality of the accounting information in general, we hypothesize that the benefits are significantly lower for CMS, as the incentives of ultimate owners to report low quality information will outpace the positive effect of IFRS. We assess the value relevance of accounting numbers under IFRS by applying two value relevance models: the Ohlson (1995) price model, and the return model as used by Warfield et al. (1995). Our sample is composed of 810 firm-year observations from companies listed on the S&P TSX Composite index between 2008 and 2013. Our results indicate that the adoption of IFRS in Canada generally improves the quality of financial reporting. However, our findings on CMS are contrasting. Our results do not firmly support that the quality of the accounting information for CMS decreases with the adoption of IFRS. Indeed, we find that while the value relevance of book values decreases for CMS with the adoption of IFRS, the value relevance of earnings of CMS seems to somewhat improve.

The rest of the paper is organized as followed. Section 2 presents the literature and our main research hypothesis. Our methodology and research models are described in section 3 followed by the analysis of the results in section 4. Finally, in the last section, we present our conclusion, the contributions and limits of this study as well as our suggestions for future research.

2. Literature review and Hypothesis

2.1 IFRS and accounting quality

It is argued that IFRS can improve information transparency, enhance within-country and cross-country comparability, lower information cost and asymmetry, and lead to better market competitiveness and efficiency (Horton, Serafeim and al., 2013).

Ball (2006) contends that IFRS should transmit the true economic performance of the firm, limit earnings management, and enable the disclosure of accounting numbers in a timely manner using conservatism in the recognition of good and bad news to enable effective decision-making. Many scholars have tested the effect of IFRS adoption on the quality of the accounting information. Overall, the results are mixed and tend to vary across countries, across proxies for accounting quality and even sometimes for companies within the same country (Barth et al., 2008; Jeanjean and Stolowy, 2008; Chen et al., 2010; Yip and Young, 2012; Horton et al,. 2013; Ahmed et al., 2013).

Some studies observe an improvement in the quality of accounting information under IFRS. Horton et al. (2013), using a sample of more than 120 countries including Canada, find a positive relationship between analysts' forecast accuracy and IFRS financial reporting as compared to non-IFRS financial reporting. Glaum et al. (2013) find that IFRS reduces analysts' forecast error as a result of better financial information disclosure in Germany. In the same perspective, Daske and Gebhardt (2006) show that the mandatory adoption of IFRS improves the quality of financial disclosure according to experts in Germany, Austria and Switzerland. However, because IFRS are principles based, some argue that they may, in practice, give more room for managerial discretion through the use of fair value accounting, for example (Blanchette et al., 2011). Jeanjean and Stolowy (2008) do not find evidence of any decrease in earnings management following the mandatory adoption of IFRS for firms in UK and Australia. In fact, they report an increase in managerial discretion for firms in France. Atwood et al. (2011), on the other hand, find no evidence of any improvements in earnings persistence on a sample of firms from 33 countries. Ahmed et al. (2013) report evidence of more income smoothing and earnings management on a panel of 20 countries after the mandatory adoption of IFRS. Their results are even stronger for countries with effective law enforcement, thereby suggesting that strong regulatory environments may not be sufficient to offset the broader discretion allowed under IFRS.

One possible reason for the lack of consistant results is the fact that other factors may affect the relationship between IFRS and accounting quality. One of them is the extent of the differences between former local GAAP and IFRS. Indeed, changes in financial quality can only be expected if accounting standards themselves differ. Larger differences between local GAAP and IFRS lead to greater economic impacts (Daske et al., 2008). Other moderating factors may be the regulatory framework of the adopting country and the reporting incentives of the adopting firm (Jeanjean and Stolowy, 2008; Daske et al., 2008; Hail et al., 2010). Accordingly, Daske et al. (2008), find that in strongly enforced legal environment, IFRS adoption is beneficial to firms as it is positively associated to corporate performance while negatively associated to their cost of capital. Furthermore, quality accounting standards alone fail to give expected positive benefits when not accompanied by adequat disclosure incentives (Renders and Gaeremynck, 2007). Ball et al. (2003) argue that focusing solely on accounting standards as the primary determinants of accounting quality is not effective because financial reporting quality highly depends on the incentives of those disclosing such information. Firms' incentive to disclose quality information is driven by a trade-off between better costs of external equity financing and insiders' benefits of keeping the advantages provided by private information (Dyck and Zingales, 2004; Renders and Gaeremynck, 2007; Wang, 2006). Hence, ownership structure appears to be a key issue.

2.2 CMS and accounting quality

In a typical Controlling Minority Structure (CMS), the ultimate shareholder controls a large block of voting rights while detaining a small portion of the cash-flow rights. Agency costs occur because of the agency conflicts between the ultimate shareholder, who control the firm's assets, and minority shareholders, who provide financing but run the risk of expropriation (Bebchuk et al., 2000). When voting rights are concentrated in the hands of an ultimate shareholder, typical governance mechanisms, such as the board of director or the market for corporate control, may not be effective. Once entrenched, ultimate shareholders are in a position to derive private control benefits from the firm at the expense of minority shareholders (Shleifer and Vishny, 1997). Hence, ownership concentration may hinder value-enhancing decisions (Di Vito et al., 2010; Weiss and Hilger, 2012; Muller- Kahle, 2015). The extraction of private benefits depends to a certain extent on the level of the ultimate shareholder's ownership interest. A better alignment of ultimate and minority shareholders' interests is associated with a concentration of cash flow rights, which serves to reduce the risk of expropriation. However, in a CMS, the combination of high voting rights and low cash flow rights in the hands of the ultimate shareholder is likely to exacerbate the risk of minority shareholders expropriation.

Therefore, in a CMS, the ultimate shareholder is in a position to enjoy all of the private benefits of control while internalizing only a small fraction of the costs resulting from their decisions (Bebchuk et al. 2000)[i]. When an ultimate shareholder controls a large block of voting rights, he can use his power to dictate the rules governing the production of accounting information and reporting policies. Because in CMS the ultimate shareholders (most often families) typically hold top management or board positions in the firm (La Porta et al. 1999), they have a privileged access to relevant internal information. In this context, ultimate shareholders already have sufficient information on the company's economic picture and lack the incentive to communicate proper information to minority shareholders. Proper disclosure can be costly and ultimate shareholders may be reluctant to bear costs associated with it (Healy and Palepu, 2001). Furthermore, Dyck and Zingales (2004) argue that private information about the firm which are not disclosed by ultimate shareholders may represent opportunities that can be exploited, without bringing benefits to minority shareholders. Indeed, the information asymmetry between the ultimate shareholder and minority shareholders facilitates the extraction of private benefits of control. Thus, it can be argued that the higher the risk of   expropriation, the higher the incentive of the ultimate shareholder to maintain an opaque structure and the weak monitoring controls that will facilitate expropriation.

On the one hand, because rational investors may suspect that the earnings reported by these companies are being manipulated to mask dysfunctional and opportunistic behaviour on the part of the ultimate shareholder, they will undermine the credibility of reported earnings and, therefore, the informativeness of those earnings (Fan and Wong, 2002). Hence, because the ultimate shareholders may have the incentives to supply poor accounting information, capital markets are likely to demand higher quality information to compensate for lower corporate governance practices (Wang, 2006). Therefore, whether or not CMS are associated with reduced financial reporting quality is an empirical question. Accordingly, many studies provide empirical evidence on the negative impact of ownership concentration on earnings quality (Liu and Lu, 2007; Ali et al., 2007; Francis et al.,2005, etc.).

Liu and Lu (2007) report a positive relationship between the size of private benefits of control and earnings management on a sample of Chinese CMS. Ali et al. (2007) find that U.S. family firms whose control is enhanced by dual-class shares exhibit lower quality corporate disclosure as compared to other family firms. Francis et al. (2005) report that earnings of firms with dual-class shares are less relevant than firms with single-class shares. Fan and Wong (2002), on a sample of 977 companies from seven East Asian economies, find that as the largest shareholder's voting rights increase, the quality of reported earnings decreases, reflecting the agency costs associated with managerial entrenchment. The authors also observe that as the wedge between voting and cash-flow rights increases, earnings become less and less informative. These findings suggest that, when the voting rights of an ultimate shareholder are well in excess of his cash-flow rights, the agency conflict between the ultimate shareholder and minority shareholders is exacerbated. Corroborating evidence are also found in the Canadian context. For instance, Attig et al. (2006) make the assumption that incentives to disclose lower quality information can be captured by the level of bid-ask spreads. They argue and empirically show that as the wedge between voting and cash flow rights increases, the asymmetry of information between the ultimate shareholders and minority shareholders is larger, as reflected by higher bid-ask spreads. Bozec (2006, 2008) report a positive (negative) relationship between Canadian CMS and earnings management (earnings informativeness).

2.3 The Canadian context

The mandatory adoption of financial reporting under the International Financial Reporting Standards in Canada started in January 2011. Although IFRS and Canadian GAAP are both principles based and have similar conceptual frameworks, reporting under IFRS displays several differences. Those are mainly linked to the use of fair value accounting (Blanchette et al., 2011).

Fair value accounting in IFRS which differs from asset historical accounting in Canadian GAAP is intended to provide more relevant information to the capital market. However, fair value accounting also allows more discretion to preparers as the re-evaluation of assets to market value may be subject to judgment (Blanchette et al., 2011). As a result, it is argued that the largest differences between IFRS and Canadian GAAP lie in the use of fair value accounting that affects assets re-evaluations, impairment and securitization. In fact, the conservative essence of Canadian GAAP only authorizes the re-evaluation of assets when their market value declines (Blanchette et al., 2013). The use of fair value under IFRS also causes major differences when accounting for business combinations, especially in the valuation of assets and liabilities for consolidated financial statements, as well as in the value of minority interests (Bozec and Rakoto, 2014).

Preliminary research suggests that the introduction of IFRS in Canada has an increasing effect on earnings, and leads to an overall higher volatility of numbers and ratios (Blanchette et al. 2011).

In this regard, Canadian studies on the earnings quality under IFRS tend to show, overall, that IFRS adoption enhances accounting informativeness and reduces the asymmetry of information between insiders and outsiders (Cormier, 2013; Cormier and Magnan, 2016; Liu and Siu, 2014; Okafor et al., 2016). For instance, Cormier (2013) finds that cost of capital better grasps the information contained in earnings after IFRS adoption. He also reports a weak but still significant decrease in earnings management under IFRS. Liu and Sun (2014) report less opportunistic use of discretionary accruals and more persistent earnings post-IFRS. None of these studies however have addressed the issue of the quality of accounting information under IFRS of Controlling Minority Structures. Our study fills the gap in the literature.

2.4 Research hypothesis

The Canadian context is unique. On the one hand, just like other Anglo-Saxon countries whose legal regime is Common Law, Canada offers investors strong protection against expropriation (La Porta et al., 1998) and the level of earnings management is relatively low (Leuz et al., 2003). On the other hand, unlike those Anglo-Saxon countries, CMS are widespread in Canada and these companies generally disclose financial information of lesser quality. Thus, since we expect insiders in CMS to use accounting standards in an opportunistic manner, we suggest that the adoption of IFRS in Canada may not improve the quality of financial reporting for those firms. We support our assumption by the premise that IFRS give some latitude and discretion to preparers as compared to Canadian GAAP as a result of the introduction of fair value accounting (Blanchette et al., 2011). If CMS use the latitude given by IFRS in an opportunistic manner, then the adoption of IFRS will most likely not generate the expected increase in the quality of financial reporting. At the same time, the use of fair value accounting may reduce users' confidence about earnings relevance. Indeed, rational investors may expect insiders in CMS to use IFRS opportunistically. Accordingly, we posit the following hypothesis:

H1:   The adoption of IFRS in Canada does not increase the financial reporting quality of CMS.

3.   Sample selection and research model

3.1 Sample selection

To construct our sample of Canadian firms, we initially select the 244 firms listed on the TSX/ S&P Composite Index in May 2014. These companies represent more than 70% of the total market value of all the companies listed on the Toronto Stock exchange. We then exclude the firms for which the financial and accounting information were not entirely available between 2008 and 2013 on the Stock Guide database. Similar to other studies examining financial reporting quality (Van der Meulen, et al.,2007; Gabrielsen et al.,2002; and Jeanjean and Stolowy, 2008), we also exclude all the firms in the financial sector as those are subject to specific accounting rules, which makes their reported financial information lack homogeneity when compared to companies in other sectors. Because companies registered with the American Security Exchange Commission have the ability to use American Generally Accepted Accounting Principles instead of Canadian GAAP or IFRS (Burnett and Jorgensen, 2013), we exclude all the companies that used US GAAP in any year between 2008 and 2013, and the companies that converted to IFRS prior to 2008. We also exclude firms which have abnormal returns by windsorizing the returns at the 99% percentile. Our final sample consists of 135 Canadian firms with financial data from 2008 to 2013 (810 firm-year observations) for which we manually gather the information on ownership concentration by determining the voting rights of the ultimate shareholder. To identify the different types of firms according to the ultimate shareholder's identity, we use the same methodology as La Porta et al. (1999) and focus on «ultimate» rather than «immediate» ownership and control. We also assume that ownership concentration is constant between 2008 and 2010 and between 2011 and 2013, as ownership structures tend to be constant or to vary very slightly over time. We suppose that a firm is closely held if the ultimate shareholder possesses 10% or more voting rights and/or cash flow rights in the company, otherwise, the company is categorised as widely held. We assume that a company is a CMS firm when the firm is closely held and there is a wedge between the ultimate shareholder's cash flow and voting rights.

3.2 Research model

In order to test our assumptions and research hypothesis, we use the price model of Ohlson 1995, and the returns model as defined by Kothari and Zimmerman (1995).

These two regression models have been widely used in the accounting literature in order to test for the value relevance of accounting figures (Barth et al., 2008; Fan and Wong, 2002; Kothari and Zimmerman, 1995; Warfield et al., 1995). We adapted these models following the literature on IFRS adoption, CMS' earnings quality, as well as the Canadian economic environment and we selected appropriate independent and control variables.

3.2.1 The price model

We run 3 series of regressions based on the price model of Ohlson (1995) used by Barth et al. (2008) and Van der Meulen et al. (2007). The description of the dependent and independent variables used across the 3 models is detailed below. We expect positive and significant relationships between stock prices and current earnings.

Model (1) tests the relationship between accounting quality and IFRS in Canada. Here previous research such as Liu and Sun (2014), Okafor et al. (2016) and Cormier (2013), show that the quality of accounting figures improves with the use of IFRS for Canadian firms. In Model (1) if IFRS adoption improves the value relevance of accounting figures as reported by the studies cited above, then we expect $\beta 3$ to be positive and significant.

$$Pit = a + \beta 1 \ EPSit + \beta 2 \ BVSsit + \beta 3 \ BVSit*IFRSit + \gamma 1 \ Sizeit + \gamma 2 \ Levit + \gamma 3 \ Growthit + \gamma 4$$

$$Lossit + \gamma 5 \ Cross \ US + \gamma 6 \ Ind + \gamma 7 \ Year + \varepsilon t \tag{1}$$

Model (2) tests the relationship between earnings and prices for CMS. BVSit*CMSit enables us to assess if earnings are less relevant for CMS as reported in other researches (Francis et al., 2005; Ali et al., 2007; Liu and Lu, 2007; Sabri and Hind, 2011). In Canada, Attig, Fong, Gadhoum and Lang (2006) and Bozec (2008) report that everything else held equal, CMS have lower accounting quality. We expect our results to be in line with previous studies. Thus we expect $\beta 3$ to be negative and significant.

$$Pit = a + \beta 1 \ EPSit + \beta 2 \ BVSsit + \beta 3 \ BVSit*CMSit + \beta 4 \ BVSit*IFRSit + \gamma 1 \ Sizeit + \gamma 2 \ Levit$$

$$+ \gamma 3 \ Growthit + \gamma 4 \ Lossit + \gamma 5 \ Cross \ US + \gamma 6 \ Ind + \gamma 7 \ Year + \varepsilon t \tag{2}$$

Model (3) assesses the relationship between CMS firm and earnings quality before and after IFRS adoption. We expect our results to show a decrease in the value relevance of the accounting figures post-IFRS adoption for CMS. Here we are interested in the significance and sign of $\beta 5$ that we expect to be significant and negative.

$$Pit = a + \beta 1 \ EPSit + \beta 2 \ BVSsit + \beta 3 \ BVSit*CMSit + \beta 4 \ BVSit*IFRSit + \beta 5 \ BVSit*CMSit*IFRSit + \gamma 1 \ Sizeit + \gamma 2 \ Levit + \gamma 3 \ Growthit + \gamma 4 \ Lossit + \gamma 5 \ Cross \ US + \gamma 6 \ Ind + \gamma 7 \ Year + \varepsilon t$$

$$\tag{3}$$

3.2.2 The return model

The return model regresses firm annual returns on earnings. We lag earnings per share by stock prices at the beginning of the period as Warfield et al. (1995). We use yearly return as our dependent variable. The return model is used by many scholars to test the relationship between earnings value relevance and ownership structures (Warfield et al., 1995; Fan and Wong, 2002; Francis et al., 2005), and earnings value relevance and IFRS adoption (Van der Meulen et al.,2007). We use a very similar regression model as Francis et al. (2005) who study the relationship between CMS and value relevance. We expect similar results from the 3 following pooled cross-sectional regressions as for the price model, where Rit represents firm's i annual return and $EPSit$ represents earnings per share deflated by firm's stock price at t-1. The description of the dependent and independent variables used across the 3 models is detailed below.

Returns and IFRS

$$Rit = a + \beta 1 \ EPSit + \beta 2 \ EPSit*IFRSit + \gamma 1 \ Sizeit + \gamma 2 \ Levit + \gamma 3 \ Growthit + \gamma 4 \ Lossit + \gamma 5$$

$$Cross \ US + \gamma 6 \ Ind + \gamma 7 \ Year + \varepsilon t \tag{4}$$

$$Rit = a + \beta 1 \ EPSit + \beta 2 \ EPSit*CMSit + \beta 3 \ EPSit*IFRSit + \gamma 1 \ Sizeit + \gamma 2 \ Levit + \gamma 3 \ Growthit$$

$$+ \gamma 4 \ Lossit + \gamma 5 \ Cross \ US + \gamma 6 \ Ind + \gamma 7 \ Year + \varepsilon t \tag{5}$$

Rit=   a + β1 EPSit + β2 EPSit*CMSit + β3 EPSit*IFRSit + β4EPSit*CMSit*IFRSit + γ1

Sizeit +γ2 Levit + γ3 Growthit + γ4 Lossit + γ5 Cross US+ γ6 Ind + γ7 Year + ε*t*   (6)

3.2.2.1 Dependant variables

Price (Pit): Stock prices reflect closing prices for firm i at the end of the first   quarter following the end of the fiscal year t. Indeed, we assume that stock prices at the time of the release of the financial statements will better grasp the value relevance of earnings as done by Francis et al. (2005).

Returns (Rit): Returns are calculated as (Pit-Pit-1+Dit)/Pit-1, where Pit is firm i's closing price at the end of the first quarter following the end of the fiscal year t, Pit-1 is firm's closing price nine months before the end of fiscal year t, and Dit are dividends per share for firm i at t. We calculate stock returns following Van Der Meulen et al. (2007), Francis et al. (2005) and Warfield et al. (1995).

3.2.2.2 Independent variables

Book value per share (BVSit): We use book value per share of company i at time t   as did Barth et al. (2008).

Earnings per share (EPSit): We use earnings per share for company i at time t to capture the informativeness of earnings to stock prices as applied by Warfield et al. (1995) and Van Der Meulen et al. (2007). We use per share data following Van Der Meulen et al. (2007) and Kothari and Zimmerman (1995) in order to reduce the risk of heteroscedasticity.

CMS: The dummy variable CMS is equal to 1 when there is a positive non-zero difference between the proportion of voting and cash flow rights held by the ultimate owner, otherwise it equals to 0.

IFRS adoption (IFRSit): IFRSit is a dummy variable that takes the value of 1 if firm iuses IFRS at year t.

3.2.2.3 Control variables

The choice of our control variables is guided by the literature on CMS and value relevance, on recent studies on IFRS and value relevance, and takes into account the specificities of the Canadian economic environment.

Size: Firm i's size is calculated as the natural logarithm of assets at year t (Bozec, 2006; Francis et al., 2005). We do not have a definite position on the predicted sign of Size. Indeed, Francis et all (2005) explain that although firm's size affect returns (and prices) the sign of the association tend to vary across studies.

Leverage: Firm i's leverage (LEV) is calculated as the ratio of long-term debt to   total assets at year t (Bozec, 2006; Francis et al., 2005). We do not have a definite position on the predicted sign of Leverage. Indeed, Niu (2006) predicts that Leverage negatively affects returns (and prices) as high leverage means high risk. However, Leverage can also improve prices and returns when perceived as a governance mechanism (Bebchuck et al., 2000).

Growth: Firm i's growth is calculated as the ratio of the market value to the book value of equity at year t (J. R. Francis et al., 2005; Warfield et al., 1995). We expect the coefficient on Growth to be positively associated with returns and prices, since a firm with high growth opportunities is expected to have increasing earnings in the future (Niu, 2006).

Loss: Loss is a dummy variable equal to 1 if firm i's net income is negative at year t, otherwise it equals to zero. It accounts for negative net incomes, as did Francis et al. (2005) who explain that coefficients on losses tend to take lower values.

Cross US We control for firms that are cross-listed in the United States as other research that study the association between the adoption of IFRS and the value relevance of earnings (Daske et al., 2008). We expect firms cross-listed in the US to be more disciplined than other firms and to have more   relevant accounting figures everything else being equal (Cormier, 2013).

Industry: We include dummy variables to account for industry effects, especially because the materials and energy sectors account for 480 out 810 observations in our sample. Among others, Fan and Wong (2002) and Bozec (2006) control for industry effects.

Year: As Fan and Wong (2002) we also control for years fixed effects using dummy variables.

4. Results

4.1 Descriptive statistics

Our sample is composed of 810 firm-year observations pertaining to 135 Canadian companies and covering the period 2008 to 2013. Tables 2 and 3 report descriptive statistics of our sample. Table 1 presents statistics on our continuous variables and Table 2 reports frequencies on our binary variables. As shown in Table 1, the average returns our sample firms is 17%, despite the negative market trends of 2008. The average size of our sample firms as measured by the natural logarithm of total assets is 21.602. The average debt to total assets ratio is 17.4%, which suggests that, on average, the firms in our sample are not highly indebted. The average growth ratio is 2.177, which suggests that in general firms in our sample have relatively high growth opportunities. Finally, the average earnings per share is 0.974 and the mean book value of equity per share is 21.739. These statistics are in line with previous studies in Canadian samples such as Di Vito, Bozec and Laurin (2010), Bozec and Laurin (2008) and King and Santor (2008).

Table 1: Descriptive Statistics (continuous variables)

	N	Min	Max	Mean	Std. Dev
Price	810	0.610	107.730	21.739	17.572
Return	810	-0.906	2.355	0.170	0.516
Size	810	19.557	23.859	21.602	1.211
Leverage	810	0.000	0.414	0.174	0.130
Growth	810	0.597	5.366	2.177	1.277
EPS	810	-1.533	3.771	0.974	1.320
BVS	810	0.371	134.221	10.738	10.390

Table 1 presents descriptive statistics of our sample by providing the means, the standard deviations, the minimum and maximum values of the main variables used in this study. (Price), represents the share price. (Return) represents the stock returns of our sample firms. (Size) represents the log value of our sample firms' total assets. (Leverage) is calculated by ratio of long term debt over the total assets. (Growth) is measured by the Price to Book ratio. EPS, is the yearly earnings per share ratio and BVS is the book value of shares.

Table 2 reports the frequencies Cross US, CMS and Loss. Out of 810 firm-years observations, 300 are "cross listed in the US" (50 out of 135 firms), which represents 37% of our total observations. 174 observations are CMS, which represent 20.4% of sample. Finally, during the sample period, 157 (19.4%) observations reported negative earnings.

Table 2: Descriptive Statistics (dummy variables)

	Frequency	Percentage
Cross US	300	37%
CMS	165	20.40%
Loss	157	19.40%

Table 2 presents descriptive statistics of our key binary variables by providing the frequency (number of observations) as well the percentage of observations for which the value of the binary variable is equal to 1. The binary variables are Cross US, CMS and Loss. Cross US is equal to 1 when a firm is cross-listed in the U.S., and 0 otherwise. CMS is equal to 1 when a firm is a controlling minority structure, and 0 otherwise. Loss is equal to 1 when a firm has incurred losses in a given fiscal year, and 0 otherwise.

4.2   Univariate analysis

We perform univariate correlation analysis on all the variables of our study. Multivariate analyses

We perform a series of pooled cross-sectional regression analyses on both dependent variables stock price and stock returns. For each dependent variable, we run 3 regression models. The first model (Eq.1 and Eq.4) tests the impact of IFRS adoption on earnings quality without specifying the impact of CMS ownership structures.

The second model (Eq.2 and Eq.5) test the impact of CMS on financial reporting quality by introducing interactive variables BVS*CMS and EPS*CMS in our regression model. Here we do not distinguish the effect of CMS structures on financial reporting quality according to different accounting frameworks whether it be Canadian GAAP or IFRS; this is examined in our last regression model. Accordingly, in equations Eq.3 and Eq.6, our third regression model, we introduce additional interactive variables BVS*CMS*IFRS and EPS'*CMS*IFRS to allow us to examine whether the relationship between CMS structures and financial reporting quality differs with IFRS. The results of these regression analyses are presented in Table 3.

Table 3: Full sample OLS regression analyses using the Price and Return models

		Price model			Return model		
	Expected sign	**Eq (1)**	**Eq (2)**	**Eq (3)**	**Eq (4)**	**Eq (5)**	**Eq (6)**
Intercept		**-**	**-55.733*****	**-53.021*****	**1.281*****	**1.272*****	**1.281*****
		(-8.195)	*(-8.137)*	*(-7.870)*	*(4.224)*	*(4.179)*	*(4.221)*
BVS	+	**.557*****	**.585*****	**.541*****			
		(14.301)	*(14.53)*	*(13.457)*			
EPS	+	**5.348*****	**5.474*****	**5.187*****	**0.531**	**0.573**	**.791****
		(14.79)	*(15.058)*	*(14.395)*	*(1.467)*	*(1.491)*	*(2.015)*
BVS*IFRS	+	**.642*****	**.669*****	**.909*****			
		(10.86)	*(11.185)*	*(12.525)*			
BVS*CMS	-		**-.133*****	**.110***			
			(-2.604)	*(1.67)*			
BVS*CMS* IFRS	**-**			**-.510*****			
				(-5.621)			
EPS'*IFRS	+				**.935****	**.919****	**0.483**
					(2.451)	*(2.39)*	*(1.149)*
EPS'*CMS	-				**-0.137**	**-.843***
					(-.327)	*(-1.679)*
EPS'*CMS* IFRS	**-**						**2.116****
							(2.529)
Size	+/-	**2.617*****	**2.586*****	**2.453*****	**-.046*****	**-.046*****	**-.046*****
		(8.117)	*(8.042)*	*(7.756)*	*(-3.299)*	*(-3.263)*	*(-3.274)*
Leverage	+/-	**-4.289**	**-3.449**	**-3.333**	**0.105**	**0.105**	**0.074**
		(-1.465)	*(-1.175)*	*(-1.157)*	*(0.802)*	*(0.8)*	*(0.564)*
Growth	+	**5.382*****	**5.309*****	**5.417*****	**.043*****	**.043*****	**.042*****
		(19.651)	*(19.354)*	*(20.076)*	*(3.683)*	*(3.678)*	*(3.618)*
Loss	-	**6.085*****	**6.204*****	**5.868*****	**.115***	**.117***	**.118***
		(5.738)	*(5.866)*	*(5.645)*	*(1.798)*	*(1.811)*	*(1.845)*
Cross US	+	**-0.27**	**-0.575**	**-0.591**	**-.074****	**-.074****	**-.073****
		(-.365)	*(-.769)*	*(-.805)*	*(-2.229)*	*(-2.238)*	*(-2.210)*
R2		*.766****	*.768****	*.777****	*.457****	*.457****	*.462****
N		810	810	810	810	810	810

Table 3 presents results obtained by OLS regression analyses on the Price and Return dependent variables. Equations 1, 2 and 3 are performed on Price. (Price), represents the share price. Equations 4, 5 and 6 are performed on Return. (Return) represents the stock returns of our sample firms. (EPS) is the yearly earnings per share ratio. . BVS is the book value of shares. BVS*IFRS is equal to the BVS of a firm in the periods where the firm is using IFRS, and 0 otherwise BVS*CMS is equal to the BVS of a firm when the firm is a controlling minority structure, and 0 otherwise. BVS*CMS*IFRS is equal to the BVS of CMS firms in the periods where they are applying IFRS, and 0 otherwise. EPS*IFRS is equal to the EPS of a firm in the periods where the firm is using IFRS, and 0 otherwise. EPS*CMS is equal to the EPS of a firm when the firm is a controlling minority structure, and 0 otherwise. EPS*CMS*IFRS is equal to the EPS of CMS firms in the periods where they are applying IFRS, and 0 otherwise.(Size) represents the log value of our sample firms' total assets. (Leverage) is calculated by ratio of long term debt over the total assets. (Growth) is measured by the Price to Book ratio. (Loss) is equal to 1 when a firm has incurred losses in a given fiscal year, and 0 otherwise. (Cross US) is equal to 1 when a firm is cross-listed in the U.S., and 0 otherwise.

The first 3 regressions (Eq.1, 2 and 3) of Table 3 are performed on Stock Price while the last 3 (Eq. 4, 5 and 6) are performed on Stock returns In Eq.1, our results indicate that the coefficients of EPS and BVS (equal to 5.348 and .642 respectively) are both significant and positive (α=0.01). The coefficient of BVS*IFRS is highly significant and positive (α=0.01) with $\beta 3$ equal to .642. This result suggests that the value relevance of book values improves with the adoption of IFRS for the firms in our sample. We conduct further tests substituting BVS*IFRS with EPS*IFRS. The results, not reported here, show an increase in earnings value relevance as well. In fact, the coefficient on EPS*IFRS is positive (equal to 2.613) and significant (α=0.01).

With regards to the control variables, Loss has a significantly positive impact on share prices ($\gamma 4$=6.01), which goes against our predictions. However, Leverage and Cross US have no significant impact on stock prices

Our second regression model, Eq (2) tests the relationship between CMS and value relevance. The adjusted-R^2 is equal to 76.8%, which is slightly higher than in Model (1) (equal to 76.6%). The coefficients of EPS and BVS are positive and significant (α=0.01) and larger than in Model (1) (from 5.35 to 5.47 for $\beta 1$ and from .56 to .59 for $\beta 2$). The association between BVS*IFRS is positive and highly significant as in Model (1). The coefficient on the interaction term BVS*CMS is negative and significant (α=0.01). This implies that, in the context of CMS, BVS has loses its value relevance, This finding is in line with previous research such as Attig, Fong, Gadhoum and Lang (2006) and Bozec (2006) who argue that CMS report accounting numbers of lower quality.

In our third model (displayed in Eq.3), we add the interactive variable BVS*CMS*IFRS to examine the incremental value relevance of BVS relevance for CMS under IFRS. The coefficients of EPS and BVS are positive and significant (α=0.01), and very similar in values to the coefficients from Model (2) (equal to 5.19 and .54). The association between BVS*IFRS and prices is significant (α=0.01) and positive. This relationship holds for all the specifications we have tested so far. The coefficient on BVS*CMS is positive and significant (α=0.1) which contradicts Eq.2's results where the coefficient on BVS*CMS is negative and highly significant (α=0.01). However, this coefficient has to be interpreted cautiously. Indeed, its association with prices is affected by the inclusion of the interaction term BVS*IFRS*CMS, and thus it has to be interpreted compared to this term. The coefficient on BVS*IFRS*CMS is negative and highly significant (α=0.01), indicating that book values of CMS are less relevant under IFRS. Based on this result we support that the quality of book values decreases for CMS with the adoption of IFRS in Canada, which confirms our conclusion from Model (2).

The next 3 regressions of Table 3 are performed on stock returns. Our first model presented in Eq.4 examines the relationship between returns and earnings per share under IFRS. The adjusted-R^2 in Eq.4 is equal to 45.7%, which indicates a relatively strong association between our independent variables and returns. The interaction term EPS'*IFRS is positive (equal to .935) and significant (α=0.05) suggesting that the adoption of IFRS positively affects earnings value relevance. This result is in line with the conclusions drawn with the price model Eq.1.

Consistent with previous studies (see Niu, 2006), Size is significant and negative, similar to Niu (2006). The coefficient on Cross US is significant and negative, which suggests that for our sample firms and period, cross listing in the United States negatively affects returns.

When running our second model testing the value relevance of earnings of CMS on stock returns, as presented in Eq.5 of Table 3, the adjusted-R^2 is once again at 45.7% which is identical to Eq. 4. As such, including the interactive variable EPS'*CMS does not seem to add any explanatory power to the model. While the coefficient of EPS is not statistically significant, the coefficient of EPS'*IFRS is. Here again, we see that the quality of earnings improves with IFRS. The coefficient on EPS'*CMS, although negative, is insignificant, suggesting that there is no difference in the value relevance of earnings between CMS and non-CMS in our sample.

The last regression presented in Table 3, Eq. 6 examines the effect of CMS and value relevance under IFRS. Here we are interested in the incremental effect of EPS'*CMS*IFRS when compared to EPS'*IFRS and EPS'*CMS. While the coefficient of EPS is positive, the one of EPS'*CMS is significantly negative. Nevertheless, we find a significantly positive relationship between EPS'*CMS*IFRS and Returns. These results suggest that in the context of CMS, as documented in the previous literature, earnings quality is significantly lower than conventional non-CMS firms, but afer adopting IFRS in Canada, the earnings quality of CMS is improved. However, these results do not corroborate with our findings in the price model (Eq. 3) where BVS is significantly less value relevant for CMS under IFRS.

Hence, our findings presented in Table 3 suggest that, in general, the adoption of IFRS in Canada improves the value relevance of BVS (tested with BVS*IFRS) but has no significant incremental effect on the value relevance of earnings (tested with EPS*IFRS). Moreover, our hypothesis is only partially confirmed, as our findings indicate that the value relevance of BVS is significantly negative for CMS. On the contrary, we find that when testing the value relevance of accounting earnings on stock returns, earnings quality of CMS seems to be significantly improved under IFRS.

4.3 Additional tests

Next, we perform additional tests by splitting our sample into 2 subsamples of firm-year observations under Canadian GAAP (pre-adoption period) and under IFRS (post adoption period). Results of these additional analyses are presented in Table 4.

Table 4: OLS regression analyses using the Price and Return models for subsample of pre and post IFRS period firm-year observations

		Price model				Return model			
		Eq (1)		Eq (2)		Eq (4)			
	Exp. sign	Can-GAAP	IFRS	Can-GAAP	IFRS	Can-GAAP	IFRS	Can-GAAP	IFRS
Intercept		-69.250***	-47.349***	-69.936***	-42.760***	1.811***	.681*	1.747***	.708*
		(-7.715)	(-4.805)	(-7.768)	(-4.567)	(3.801)	(1.758)	(3.656)	(1.824)
BVS	+	.470***	1.390***	.460***	.1.656***				
		(11.47)	(20.967)	(10.847)	(22.322)				
EPS'	+					0.708	1.129***	.959*	1.045**
						(1.323)	(2.668)	(1.672)	(2.421)
BVS*CMS	-			0.075	-.462***				
				(1.062)	(-6.696)				
EPS'*CMS	-							-0.716	0.576
								(-1.207)	(0.981)
Size	+/-	3.359***	1.769***	3.432***	1.327***	-.067***	-0.025	-.064***	-0.025
		(7.863)	(3.808)	(8.023)	(2.983)	(-3.055)	(-1.478)	(-2.905)	(-1.519)
Leverage	+/-	-8.288**	-1.083	-8.638**	2.936	-0.106	.360**	-0.133	.339**
		(-2.106)	(-.295)	(-2.181)	(0.749)	(-.511)	(2.347)	(-.636)	(2.194)
Growth	+	4.049***	7.025***	4.202***	6.866***	0.03	.052***	0.029	.052***
		(10.788)	(17.802)	(11.254)	(18.377)	(1.564)	(3.776)	(1.513)	(3.749)
Loss	-	5.447***	6.688***	4.995***	6.368***	0.11	0.097	0.124	0.096
		(3.778)	(4.503)	(3.434)	(4.551)	(1.017)	(1.348)	(1.136)	(1.342)
Cross US	+	-0.688	1.128	-0.757	0.072	-0.08	-0.084	-0.082	-0.082
		(-.668)	(1.116)	(-.728)	(0.074)	(-1.477)	(-2.226)	(-1.505)	(-2.164)
R2		.682***	.838***	.678***	.853***	.528***	.285***	.530***	.287***
N		411	399	411	399	411	399	411	399

Table 4 presents results obtained by OLS regression analyses on the Price and Return dependent variables for subsamples of firm-year observations according to pre and post IFRS adoption periods. Equations 1 and 2 are performed on Price. (Price), represents the share price. Equations 3 and 4 are performed on Return. (Return) represents the stock returns of our sample firms. (EPS) is the yearly earnings per share ratio. . BVS is the book value of shares. BVS*IFRS is equal to the BVS of a firm in the periods where the firm is using IFRS, and 0 otherwise BVS*CMS is equal to the BVS of a firm when the firm is a controlling minority structure, and 0 otherwise. EPS*CMS is equal to the EPS of a firm when the firm is a controlling minority structure, and 0 otherwise. .(Size) represents the log value of our sample firms' total assets. (Leverage) is calculated by ratio of long term debt over the total assets. (Growth) is measured by the Price to Book ratio. (Loss) is equal to 1 when a firm has incurred losses in a given fiscal year, and 0 otherwise. (Cross US) is equal to 1 when a firm is cross-listed in the U.S., and 0 otherwise

The first 2 regressions in Table 4 are performed according to the Price model in which Eq. 1 and 2 are run on each of the two subsamples. The results obtained in Eq (1) of Table 4 corroborate with those of Eq (1) in Table 3, as the adjusted-R^2 under IFRS is higher than the one under Canadian GAAP, with values equal to 83.8% and 68.2% respectively. Our findings suggest that accounting numbers reported using IFRS are more value relevant than accounting numbers reported under Canadian GAAP. These results are in line with previous Canadian studies that conclude that the quality of accounting numbers improves with the adoption of IFRS (Cormier, 2013; Liu and Sun, 2014).

In Eq. 2 of Table 4, we test whether financial reporting quality of CMS changes according to our subsamples. The coefficient on BVS*CMS is not significant under Canadian GAAP which indicates that, for the firms in our sample, the value-relevance of BVS reported by CMS does not differ from the relevance of book values reported by non- CMS. However, we notice that the coefficient on BVS*CMS is negative and highly significant (α=0.01) under IFRS. This shows that BVS is less value-relevant for CMS than for non-CMS under IFRS. These results corroborates with our findings in Table 3, indicating, that overall, CMS' reporting quality significantly decreases when it comes to the book values of equity. Hence, if we compare the coefficients of BVS*CMS between the two sets of standards, we can conclude that the value relevance of book values improves under IFRS only for non-CMS. This conclusion supports our hypothesis that accounting quality decreases for CMS with the adoption of IFRS in Canada.

The last two series of regressions shown on Table 4 are run on stock returns for the subsamples of pre and post

IFRS adoption observations. Note that, in the two regressions of Eq. 4, the adjusted-R^2s do not indicate a decrease in earnings quality with the adoption of IFRS as the coefficients are highly driven by the control variables.

We run the same split sample regressions with no control variable (not reported in the tables) and the adjusted-R^2 obtained from these regressions is higher for the post-IFRS adoption period than for the pre-IFRS adoption period. These findings corroborate with our conclusion that the quality of earnings improves with the adoption of IFRS. When we look at the coefficients in Eq. 4, we notice that the slope of EPS' in pre-IFRS adoption is not significant (α=0.1), while it becomes highly significant (α=0.01) and is positive under IFRS. This result supports the conclusion we drew in our first model presented in Table 3.(Eq. 4) that the accounting quality improves with the adoption of IFRS.

The last two regression presented in Table 4 (Eq. 5) tests the impact of IFRS adoption on CMS' earnings quality using the returns model. In both regressions (pre and post-IFRS), EPS has a significantly positive impact on stock returns. However, the coefficient of EPS is higher in the post-IFRS subsample, which provides modest evidence that the quality of accounting earnings increases with the adoption of IFRS for Canadian firms. This finding corroborates with previous empirical research. However, we do not observe any significant association between EPS*CMS and stock returns in both pre and post-IFRS subsamples. Accordingly, or findings suggest that earnings quality reported by CMS do not differ from the relevance of earnings reported by non-CMS, even when we split our sample.

We also perform additional tests, comparing subsamples of CMS and non-CMS firms, (not reported on this paper). The results obtained by these analyses are, in essence, similar to our reported findings. Overall, our results seem to suggest that the reporting quality of CMS are significantly reduced only when measuring the book value of equity, partially confirming our research hypothesis. As for the quality of earnings, our results are ambiguous and do not allow us to draw a clear conclusion in corroboration with our research prediction.

Conclusion

This study tests the impact of the mandatory adoption of IFRS in Canada on the quality of accounting figures for CMS firms. We make the assumption that the quality of accounting information may not improve with the adoption of IFRS due to the high agency costs association with CMS. In Canada, many scholars report that the quality of accounting information is lower for CMS when financial reports were disclosed under Canadian GAAP (Attig, Fong, Gadhoum and Lang, 2006; Bozec, 2008).

We test our hypothesis using a sample of 135 Canadians companies from the S&P TSX Composite Index, for the years 2008 to 2013. Our final sample is composed of 810 firm-year observations. We use the price model of Ohlson (1995) and the return model described by Kothari and Zimmerman (1995) to test for the value relevance of accounting numbers post-IFRS adoption.

First, in line with other studies, we find that the adoption of IFRS in Canada generally improves the quality of the accounting information. Indeed, when we do not distinguish between ownership structures, we find robust evidence that the quality of the accounting information improves with the adoption of IFRS. Then, we report evidence that the quality of financial reporting for CMS changes with the adoption of IFRS. However, our results show that while the value relevance of book values decreases for CMS with the adoption of IFRS, the value relevance of earnings improves. Our study contributes to the recent literature on IFRS and value relevance around the world. Indeed, our conclusion that the adoption of IFRS in Canada improves the value relevance of accounting information supports the findings of other studies in other countries (Barth et al, 2008; Daske and Gebhart, 2006; Horton et al., 2013). Our study reinforces the findings of Okafor et al. (2016) and Cormier (2013) in Canada with a sample that includes data up to 2013. Liu and Sun (2014), find that the adoption of IFRS in Canada decreases earnings management but do not find evidence of increased value relevance. Indeed, their test on value relevance is not significant. We report significant and positive associations between value relevance of accounting information and the adoption of IFRS in Canada.

We contribute to the recent literature on IFRS adoption, CMS and the incentives linked to financial disclosure, as we report evidence that the value relevance of accounting information varies between CMS and non-CMS with the adoption of IFRS. Indeed, we find that the relevance of book values decreases for CMS with the adoption of IFRS while it increases for other types of structures. However, we also report that the value relevance of earnings improves for CMS with the adoption of IFRS. We even find evidence that the quality improvement of earnings is higher for CMS than for non-CMS. The decrease in book values relevance supports the assertion of Ball et al., (2003), that the quality of the financial reporting highly depends on the incentives of those disclosing the information. The finding that earnings relevance improves for CMS with the adoption of IFRS follows the reasoning of Pae et al., (2008) who suggest that the improvement in value relevance is greater for firms with previous reputation of weak disclosure quality. Here, they argue that IFRS disciplines those with incentives to disclose low financial reporting and that the magnitude of the quality improvement is higher for such firms than for those who previously disclosed quality information. Our finding show that the value relevance of earnings improves more for CMS with the adoption of IFRS, which supports the conclusions of Pae et al., (2008). On the other hand, Kao and Wei (2014) suggest that accounting quality may not improve for firms characterized with concentrated ownership. However, their studies are conducted in civil law countries while our study is conducted in a common law country, and, in this regard, Jeanjean and Stolowy, (2008) suggest that the institutional and regulatory framework of a country may influence the effect of IFRS adoption. This study is among the first to test the relationship between IFRS adoption and accounting quality for CMS in a highly regulated and market-oriented environment.

The first limitation of our study is linked to the weakness of the results from the return model. Some coefficients in the price model are not robust to heteroscedasticity tests as well. However, the non-robustness of the coefficients of the price model does not affect the conclusions we draw. Then, while many proxies and models can measure accounting quality, we only test for the value relevance of earnings and book values.

Other studies test the effects of the adoption of IFRS using different proxies of earnings quality. For example, Horton et al., (2013) test for accounting quality following IFRS adoption using forecast accuracy, comparability, earning informativeness, conservatism and earnings management. In addition, the sample period includes the year 2008, a year of unusual and poor financial performance. Thus there might be noise in our data due to the effect of the financial crisis. For example, during the period we study, 19.4% of our observations report income losses. Here Francis et al., (2005) explain that coefficients may take lower values on losses.

As avenues for future research, researchers could use other proxies for accounting quality, such as earnings management, and test if the adoption of IFRS in Canada reduces earnings management for CMS. In addition, we support that CMS and non-CMS are affected differently with the adoption of IFRS. Thus we suggest that future research in other countries control or test for the effect of the adoption of IFRS on the quality of accounting information for CMS.

Finally, in this paper, we test the impact of a predominant governance variable, ownership concentration by specifically examining the potential adverse effect of CMS structures on financial reporting quality. We believe that other governance variables such as board composition, independence and size, may provide a better insight on the relationship between CMS and financial reporting quality. We leave this work for future research.

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[i] See, among others, Claessens et al (2002), Mitton (2002), Joh (2003), Villalonga and Amit (2006) and Bozec and Laurin (2008) for supporting evidence.