Macrothink Institute™

International Journal of Accounting and Financial Reporting
ISSN 2162-3082
2017, Vol. 7, No. 1

The Impact of IFRS Adoption on Canadian Firms' Disclosure Levels

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Received: April 28, 2017 Accepted: May 23, 2017 Published: June 2, 2017

doi:10.5296/ijafr.v7i1.11136 URL: https://doi.org/10.5296/ijafr.v7i1.11136

Abstract

This study examines a random sample of Canadian firms listed on the S&P/TSX Composite Index to find out whether disclosures in IFRS financial statements increased compared to disclosures based on the former Canadian generally accepted accounting principles. Results show that IFRS adoption has had a positive impact on the amount of information disclosed in financial statements. We conclude that disclosure levels in financial statements based on IFRS are much higher than formerly under Canadian GAAP.

Keywords: IFRS, Canadian GAAP, disclosure, financial statements, S&P/TSX

1. Introduction

There is a general consensus on the importance of using International Financial Reporting Standards (IFRS). A growing number of countries are embracing IFRS, at least for listed companies, and several studies have highlighted that the standards contribute to improving the quality of financial information (Burnett et al., 2015). Further, IFRS adoption by European Union countries in 2005 gave the standards an unprecedented degree of influence and legitimacy (Burleau and Colasse, 2010; Dicko and Fortin, 2014).

In Canada, transition to IFRS occurred in 2011. The change had several objectives, primarily improvement in the quality, transparency and comparability of accounting and financial information for markets. Accordingly, to conform to the new requirements under IFRS, accounting standards and directives for communications and disclosure were issued or amended by various regulatory bodies including the Chartered Professional Accountants of Canada (CPA Canada), formerly known as the Canadian Institute of Chartered Accountants (CICA), and the Canadian Securities Administrators (CSA).

Studies carried out in various countries show that IFRS adoption can affect a number of factors such as firm accounting choices (Burnett et al., 2015), financial ratios (Blanchette et al., 2013), value relevance of earnings (Cormier, 2013) and other items (Barbu, et al., 2011; Demolli and Dufour, 2007; Gabteni, 2011; De La Bruslerie and Gabteni, 2011; Iatridis, 2012; Glaum, et al., 2013; Miihkinen, 2008; Nordlund, 2010; Tsalavoutas, 2011; Viana, 2008; Warwick Stent and Hooks, 2013; Pfeffer et al., 2012).

Given their very recent adoption in Canada, IFRS have not been extensively researched in terms of their effects on firm disclosure practices, and more importantly, on firm disclosure levels. The question then arises: have disclosure levels changed in the IFRS era? It is generally recognized that IFRS contain so many requirements relating to the information to provide in the notes to financial statements (as compared to ASPE, the Canadian Accounting Standards for Private Enterprises, for example) that they result in information overload and increased complexity (Blanchette et al., 2013). The most salient example is the standards for presentation of financial instruments, which also entail a great deal of information in the notes. However, given that ASPE are said to be aligned with IFRS (Blanchette et al., 2013), we wish to examine these apparently conflicting notions by looking at the concrete impact of IFRS adoption on the mandatory financial disclosure practices of Canadian public companies.

We believe that the rationale behind IFRS rests in part on concepts that contradict some national standards; in this particular case, the former standards known as Canadian GAAP, or CGAAP (after the adoption of IFRS, CGAAP was converged to IFRS and was replaced, for private companies only, by ASPE). For example, IFRS and CGAAP diverge in the way they account for the needs of various financial information users, with the former prescribing a number of differences such as its method for recognizing and measuring provisions, including environmental liabilities.

Given the recent introduction of IFRS, few studies have compared the extent of financial disclosure in financial statements prepared according to IFRS with those produced under CGAAP. The current body of research has rather looked at the quality of the disclosed information (Cormier, 2013; Blanchette et al., 2013; Khan et al., 2014; and Gibson, 2014). Our study is one of the first to tackle the topic of disclosure levels by attempting to answer the following research question: Did the shift to IFRS lead Canadian public companies to increase their financial disclosure?

The importance of information disclosure by companies is widely accepted. Most of the financial scandals and crises that have occurred in recent decades were due in part to problems stemming from inadequate or misleading disclosures. Based on these occurrences,

IFRS are often presented as highly transparent financial standards (Blanchette et al., 2013; Cormier. 2013). Given the differences between IFRS requirements for disclosure quantity compared to instructions under CGAAP, it follows that the information produced following IFRS adoption should be quantitatively different from that produced under CGAAP.

The main aim of this study is thus to examine whether financial disclosure by public companies increased after IFRS adoption compared to the amount these same companies produced in the pre-adoption period. Note that the financial disclosure in question is the information found in financial statements as well as in the notes, both sources being considered mandatory information.

2. Conceptual Background

Most studies on financial and non-financial disclosure are based on agency theory and the related concept of information asymmetry. IFRS are entirely consistent with the underpinnings of this theory. Given that its main proposition is the separation of property and management, agency theory therefore pertains to shareholding companies, where managers are not the main owners. Agency theory also puts forward some secondary premises such as individuals being rational, innately selfish, opportunistic and antisocial, and having purely economic motives (maximization of utility).

The separation of property and management is embodied in an agency relationship in which the principal, i.e. the shareholder, hires the agent, i.e. the manager, to manage the enterprise on the principal's behalf. This relationship implies the delegation of decision-making power to the agent (Jensen and Meckling, 1976). As one of agency theory's main propositions is that individuals have a selfish and opportunistic nature, it is assumed that each party (shareholders and managers) seeks to maximize its own interests, likely to the detriment of those of the other party. However, given that shareholders are not present during the daily management of their enterprise, they give free rein to managers, who then act in their own interests. This state of affairs results in a conflict of interests that can be very costly (agency costs) for shareholders. It can also lead to information asymmetry, given that managers always know more about the enterprise's daily affairs than the shareholders do.

To avoid this situation, a number of mechanisms are implemented within the enterprise (board of directors, compensation, manager shares) to align managers' interests with those of shareholders and thereby minimize agency costs. In the same vein, additional measures are implemented to nudge managers into keeping shareholders apprised of goings on in the enterprise, including its financial situation and performance; hence companies' obligation to publish their financial statements. The requirement to disclose financial information should reduce information asymmetry between managers, who are present in the company every day, and investors or shareholders, who follow the markets but are not up to date on the daily affairs of their company. This asymmetry is harmful to the company to the extent that it can lead to higher financing costs (Healy and Palepu, 2001) because it makes investors spend more to obtain the information they need for their decision making. As a result, it can be asserted that IFRS fall well within the logic underlying agency theory and the concept of information asymmetry because their conceptual framework stipulates that information should be aimed

primarily at investors, lenders and other creditors to aid them in their decisions to buy, hold or sell securities. Information should therefore be clearly formulated in order to reduce information asymmetry between companies and the markets (shareholders and creditors).

3. Literature Review and Hypothesis

Numerous studies have examined the impact of IFRS adoption on firm financial disclosure, both mandatory and voluntary (Cormier, 2013; Barbu, et *al.*, 2011; Demolli and Dufour, 2007; Gabteni, 2011; De La Bruslerie and Gabteni, 2011; Iatridis, 2012; Glaum, et *al.*, 2013; Miihkinen, 2008; Nordlund, 2010; Tsalavoutas, 2011; Viana, 2008; Warwick Stent and Hooks, 2013; Pfeffer et *al.*, 2012; Blanchette et *al.*, 2013; Khan et *al.*, 2014; Gibson, 2014 ; Liu and Sun, 2015; Thornton, 2015). Most of this research was conducted in the European context and led to the conclusion that firm financial disclosures have improved with the implementation of IFRS in adopting countries. This positive impact was measured either by the quantity or the quality of the disclosed information.

Concerning quantity of information, the results of a study led in France by De La Bruslerie and Gabteni (2011) highlight a quantitative increase in the disclosure of voluntary information during the pre/post IFRS period. In addition, the authors note changes in the pattern of the information produced by the firms they studied.

Studies have also confirmed an increase in financial disclosures in other European countries after the introduction of IFRS. Tsalavoutas (2011) examined conformity with IFRS mandatory disclosure requirements by 153 listed companies in Greece during the 2005 transition year and found that conformity with mandatory disclosure requirements during the first year of IFRS adoption could be explained by the fact that IFRS implementation allows for changes in shareholders' equity and net income. The study concludes that such conformity could be explained not only by the financial measures and other firm characteristics identified in the literature as factors in IFRS compliance, but also by the major change in fundamental financial measures brought about by the new standards.

However, it is important to recall that there are differences between the European and the North American settings. Conditions in the former were non-homogeneous because of variations in accounting standards from country to country. No doubt IFRS introduction had a positive effect because of the various accounting conceptual frameworks that differed from the IFRS.

In the case of Canada, the rare studies conducted so far have yielded mixed results. Some of these investigations analyzed the quality and properties of financial information in Canada under IFRS (Cormier, 2013; Liu and Sun, 2015), while others compared ratios and numbers between the pre-IFRS and IFRS periods (Blanchette et *al.*, 2013; Khan et *al.*, 2014). Other researchers addressed the subject in regard to a specific industry, as Gibson (2014) did in her article investigating the impact of IFRS conversion on Canadian public banking enterprises. Burnett et al. (2015) sought to understand why Canadian companies listed on the U.S. markets chose IFRS over U.S. GAAP. Likewise, we are searching for proof and evidence on the impacts of IFRS adoption in Canada. However, our study diverges from previous work by

focusing on information quantity in examining financial information disclosed by Canadian public enterprises after IFRS adoption.

The foregoing discussion leads to the following single hypothesis:

> *Hypothesis: Canadian public companies disclose more mandatory financial information after the introduction of IFRS than during the pre-IFRS period.*

4. Methodology

4.1 Sample and Research Data

This study uses a random sample of S&P/TSX firms, from which financial institutions and insurance companies were excluded. The index contained 293 listed companies at the time of selection. From this list, we eliminated the financial sector (banks and trusts, insurance, investment funds, savings and loans, and other investment companies) because of its specific accounting methods. We totaled the enterprises by industry and excluded four further industries representing less than 1% of the total. From this last list, we conducted quota sampling, using industry as the criterion for obtaining a representative sample.

In the end, the selection procedure yielded a sample of 30 firms representing 100% of the S&P/TSX index both in terms of industry as well as size (total assets was used as the measure of size).

Table 1 outlines the composition of the final sample. The *Other* category lists all the industries not included in the final sample, representing only a fraction of the S&P/TSX. Also excluded from the sample are all the firms for which financial reports were unavailable for 2010 and 2013 on the Sedar.com database.

Table 1. Composition of Initial Sample—S&P/TSX Companies

Industry	S&P/TSX Companies (1)	% of Industries, out of Total (2)	Sample (3)	Large	Medium-sized	Small
Mining, quarrying and oil and gas extraction	110	43.3%	12	4	4	4
Manufacturing	40	15.7%	5	2	2	1
Real estate and rental and leasing	26	10.2%	3	1	1	1
Information and cultural industries	19	7.5%	2	1	1	
Retail trade	15	5.9%	2		1	1

Public administration	13	5.1%	2	1		1
Transportation and warehousing	12	4.7%	1			1
Wholesale trade	8	3.1%	1		1	
Construction	6	2.4%	1	1		
Professional, scientific and technical services	5	2.0%	1			1
	Total		30	10	10	10
Accommodation and food services	2					
Administrative and support, waste management and remediation services	2					
Arts, entertainment and recreation	2					
Health care and social assistance	2					
Finance and insurance	31					
General total	293					
Total (excluding finance and other industries)	254					

(1) Number of TSX companies

(2) Weighting of industry in total number of listed companies (excluding finance and others)

(3) Number of companies in sample

For the purposes of this study, which concerns mandatory disclosures, we analyze the sample's audited annual financial statements, including the related notes. Not only are these documents the only mandatory vehicle prescribed for financial disclosure, they are also considered by the literature to be the most exhaustive source of corporate communication (Guyot, 2013).

The study covers the years 2010 and 2013 (respectively the years before and after the adoption of IFRS). These particular years were chosen for two main reasons: 1) we wanted to

compare the amount of information disclosed in the financial statements prepared according to the former standards (CGAAP) to that produced in accordance with IFRS; since the latter took effect in January 2011, the year 2010 is therefore considered to be associated with CGAAP financial statements, and 2) given that Canadian enterprises prior to the introduction of IFRS period had the option of making their fiscal year different from the calendar year, the transition year for some companies could overlap between 2011 and 2012. We therefore decided not to take those two years into account since we considered them to be a transition period. In addition, the measures adopted during the transition period were generally discontinued in subsequent years.

The list of S&P/TSX firms and their financial data was downloaded from the COMPUSTAT database.

4.2 Variables, Measures and General Analysis Model

In this study, the main variable is the amount of disclosure produced by enterprises under CGAAP compared to the amount produced under IFRS. As this variable is not given, it must be constructed.

4.2.1 Measurement of Financial Disclosure Score

A number of researchers around the world developed indices and scores to quantify firm voluntary or mandatory disclosures. The first study to address a methodology for voluntary disclosure scores was carried out in the U.S. in the early 1960s (Cerf, 1961). Buzby (1974) constructed a list of 38 items of financial and nonfinancial information that could appear in an annual report. Wiseman (1982) used a social and environmental disclosure index similar to Buzby's (1974). From that point on, numerous studies on disclosure have used indices based on Wiseman (1982).

For the current study, we opted to construct a disclosure score also based on Wiseman (1982) and consisting in drawing up a list of items and then comparing it with financial statements to locate each item. If an item was found, it was scored 1, and 0 otherwise. The total score is the sum of scores coded 1.

Given the magnitude of disclosure requirements under IFRS, we decided to focus on those pertaining to firm assets because on one hand, a great number of the changes relate to methods for measuring and recognizing assets and the information to disclose in relation to these items, and on the other hand, it would be too complex to analyze all the requirements for disclosure under IFRS in detail. Following is the list of IFRS selected to build our index, those that are related to assets disclosure requirements:

IFRS 5 Non-current Assets Held for Sale and Discontinued Operations;

IFRS 6 Exploration for and Evaluation of Mineral Resources;

IFRS 7 Financial Instruments: Disclosures;

IAS 2 Inventories;

IAS 7 Statement of Cash Flows;

IAS 16 Property, Plant and Equipment;

IAS 17 Leases;

IAS 20 Accounting for Government Grants and Disclosure of Government Assistance;

IAS 23 Borrowing Costs;

IAS 36 Impairment of Assets;

IAS 37 Provisions, Contingent Liabilities and Contingent Assets;

IAS 38 Intangible Assets;

IAS 40 Investment Property.

Note that approximately 500 disclosure requirements are associated with the foregoing standards.

4.2.2 Word Counts in Financial Statements

To reinforce the results of the first test, we use a second method to measure the extent of financial disclosure in financial statements, consisting in simply counting the number of words in the financial statements of the sample firms before and after the introduction of IFRS. This test is frequently used to quantify narrative disclosures, as in social and environmental reports. By applying it to the measurement of mandatory financial disclosure, we aim to better capture the impact of IFRS on the information provided in the notes to the financial statements, where the data is presented mainly in narrative form.

4.2.3 Other Variables

The financial information we are examining is prescribed by mandatory standards, but we also want to find whether it is influenced by other factors as well. We therefore selected the following four variables, which operate as independent variables in the regression analyses presented in the next section:

- Firm size: measured by the natural logarithm of total revenue. Agency theory indicates that agency costs are higher in large firms, therefore financial statement users tend to require detailed information when the enterprise is large;
- Industry: this dummy variable coded 1 to 19 corresponds to categories in the North American Industry Classification System (NAICS). This variable was selected because disclosure levels typically vary by industry;
- Debt: measured by total long-term debt to total equity. According to the literature, enterprises with a high level of indebtedness are required to supply additional information to meet the specific needs of their creditors. Long-term creditors require more comprehensive financial information than shareholders do (Wallace et al., 1994) ;

- Cross-listing: this dichotomous variable is coded 1 if the enterprise is listed on a foreign market as well as in Canada, or 0 if listed only in Canada. To attract more investors, companies listed in several countries tend to disclose a greater amount of information. They may also be subject to stricter transparency requirements.

We selected the above variables because most studies on voluntary or mandatory disclosure highlight their influence on financial or nonfinancial disclosure levels. Based on the conclusions of the studies we have cited, we believe that these variables are determinants of levels of disclosure, whether mandatory or voluntary. To illustrate, the larger the enterprise, the greater its obligation to comply with all the accounting standards and regulations in effect, and even to surpass them to meet the requirements of various financial statement users. Debt leverage has a similar effect: the more indebted the firm, the greater its propensity to disclose information in an effort to comply with legislation and lenders' requirements.

Accordingly, we construct the following general analysis model:

Disclosure score = Constant + Size + Industry + Debt + Cross-listing + Error

4.3 Statistical Analyses and Detailed Models

To meet our research objective, we conduct the following statistical analyses:

- Mean comparison tests (Student's t-test) to determine whether there is a significant difference between 2010 disclosure scores (CGAAP) and 2013 scores (IFRS) in terms of the amount of financial information in the financial statements as well as in the notes;
- bivariate correlation analyses to measure the links between the different variables of the study, i.e. disclosure scores and the four control variables;
- and lastly, linear regressions to analyze the impact of the selected independent variables on disclosure levels.

Accordingly, the foregoing general model breaks down into three models, as follows:

Model for GAAP scores (2010):

$$\text{CGAAP score} = \alpha + \beta_1 \text{Size} + \beta_2 \text{Debt} + \beta_3 \text{Industry} + \beta_4 \text{Cross-listing} + \varepsilon \quad (1)$$

Model for IFRS scores (2013):

$$\text{IFRS score} = \alpha + \beta 1 \text{Size} + \beta 2 \text{Debt} + \beta 3 \text{Industry} + \beta 4 \text{Cross-listing} + \varepsilon (2)$$

IFRS and CGAAP score comparison model:

$$\text{IFRS score} - \text{CGAAP score} = \alpha + \beta 1 \text{Size} + \beta 2 \text{Debt} + \beta 3 \text{Industry} + \beta 4 \text{Cross-listing} + \varepsilon \quad (3)$$

Where:

- Size is measured by the log of assets;

- Debt is measured by debt leverage;

- Industry represents the industry control variable;

- Cross-listing represents the cross-listing variable;

- α is a constant;

- ε is the error term;

- β 1 is the coefficient of the size variable;

- β 2 is the coefficient of the debt variable;

- β 3 is the coefficient of the industry variable;

- β 4 is the coefficient of the cross-listing variable.

As for the test on the word counts of the financial statements, we use the same method as for the test on disclosure scores, as well as the same independent variables, but the dependent variables for the three models are the following:

- Model for the number of CGAAP words (2010): No. CGAAP words (1)

- Model for the number of IFRS words (2013): No. IFRS words (2)

- Model comparing the number of IFRS and CGAAP words: No. IFRS words – No. CGAAP words (3)

5. Statistical Results

5.1 Descriptive Statistics

Table 2 summarizes descriptive data regarding the main study variables. The mean disclosure score of 68.68% obtained for the sample Canadian firms under CGAAP for fiscal 2010 is statistically lower than the score of 80.84% obtained for 2013 under IFRS. Similarly, the median score for the IFRS year is also higher than for the CGAAP year, at 80.7% versus 68.9% respectively. In addition, the maximum disclosure score under IFRS is clearly higher than the score under CGAAP, at 90.8% versus 84.1%. Further, the minimum disclosure score is 53.8% for the 2010 CGAAP year, lower than the score of 65.5% obtained for the IFRS year.

Also in Table 2, the same trend for means and medians is apparent in terms of words published in CGAAP financial statements versus IFRS statements, the former containing a mean of 14,093.63 words, and the latter resulting in a mean of 18,543.33 words. The median for CGAAP is 13,241.00 words, in contrast to 19,641.50 words for IFRS. Similarly, the maximum number of words that appear in financial statements under IFRS exceeds the number under CGAAP, at 28,729.00 words versus 27,046.00 words respectively. The minimum number of words in the financial statements during the CGAAP application year is lower than in the IFRS year, or 6117.00 words in 2010 versus a much higher 9161.00 words in 2013.

These descriptive data are in the direction of our research hypothesis. Mean comparative tests will reveal whether these differences are significant or not.

Table 2. Descriptive Statistics for Variables

Variable	Median	Mean	Std. Dev.	Minimum	Maximum
Disclosure scores					
-CGAAP score[a]	0.689	0.68678	0.070115	0.538	0.841
-IFRS score[b]	0.807	0.80839	0.058208	0.655	0.908
Number of words in financial statements					
-No. CGAAP_words[c]	13241.00	14093.63	5552.114	6117.00	27046.00
-No. IFRS_words[d]	19641.50	18543.33	5699.582	9161.00	28729.00
CGAAP					
-Size[e]	19.191	18.34447	3.817463	10.053	23.296
-Debt[f]	0.507	0.51007	0.224876	0.027	1.117
IFRS					
-Size[g]	17.523	17.67935	3.939783	10.301	23.695
-Debt[h]	0.478	0.50166	0.244757	0.026	1.148

[a]- Mandatory disclosure score for financial statements published in 2010

[b]- Mandatory disclosure score for financial statements published in 2013

[c-] Word count of financial statements published in 2010

[d-] Word count of financial statements published in 2013

[e-] Firm size represented by the log of total assets in 2010

[f-] Firm debt ratio in 2010

[g-] Firm size represented by the log of total assets in 2013

[h-] Firm debt ratio in 2013

5.2 Results of Mean Comparison Tests

5.2.1 Comparison of CGAAP versus IFRS Disclosure Scores

As reported in Table 3, the Student's t value, which is the critical value of the t-test, is 10.611, therefore exceeding the value in the Student's t-test table. We therefore conclude that the mean of the sample disclosure scores computed on the pre-IFRS disclosures is significantly different from the mean of IFRS disclosures at $p<0.01$.

It can therefore be confirmed that there are highly significant differences in the foregoing disclosure scores at $p<0.01$, which leads us to assert that IFRS require greater disclosure from firms than CGAAP, although there does not appear to be any substantive difference between the two accounting systems.

Table 3. Student's t-test Results: Paired Samples

	N	Correlation	Sig.	Paired Differences	t	ddl	Sig. (2-tailed)
CGAAP[a] vs IFRS[b] score	30	.535	.002	-.098174	-10.611	29	.000
No. CGAAP_words vs No. IFRS_words[d]	30	.847	.000	-3286.2865	-7.822	29	.000

N indicates number of observations.

[a]- Mandatory disclosure score for financial statements published in 2010

[b]- Mandatory disclosure score for financial statements published in 2013

[c-] Word count of financial statements published in 2010

[d-] Word count of financial statements published in 2013

5.2.2 Comparison of CGAAP and IFRS Word Counts

The results of the second test, also reported in Table 3, confirm those obtained for the first test. At 7.822, the Student's t value is high as well, exceeding the value in the table. This result leads to the same conclusion as above, i.e. that the mean word count in the pre-IFRS sample is highly and significantly different from the word count for the IFRS period ($p<0.01$).

It can therefore be concluded that there is a significant difference between the number of words published under CGAAP and those published under IFRS ($p<0.01$).

In conclusion, regarding the Student's t-test phase, we can say that the results of both tests confirm a significant shift in the means of the two variables (disclosure score and word count) during the IFRS period: for the same sample, the means for the disclosure score and the word count for the IFRS year are statistically and significantly different from the values noted for the CGAAP (pre-IFRS) period. In addition, there are significant statistical differences in the medians of the pre-IFRS and IFRS periods. The introduction of IFRS therefore brought about positive change in the actions of firms as regards the extent of their mandatory financial disclosure, as the sample firms disclosed a great deal more mandatory financial information in

their financial statements after the introduction of IFRS, thus confirming our research hypothesis.

5.3 Correlation Test Results

5.3.1 Correlation Test for Disclosure Scores

As noted in Table 4, results indicate that the Pearson's correlation coefficient is low for all control variables, whether in relation to disclosure scores obtained for 2010 under CGAAP or for those obtained for 2013 under IFRS. The same observation is made for the difference test (between disclosures scores before and after IFRS). None of the results is significant at $p \leq 0.05$. However, at $p<0.1$, we observe a 34% correlation coefficient between IFRS score and cross-listing. Therefore, Canadian firms also listed in the U.S. appear to make more extensive disclosures in their financial statements.

Table 4. Results of Pearson Correlation Tests on Disclosure Score

	Debt	Cross-listing	Industry	Size (Log Assets)
CGAAP_Scores				
Pearson correlation	.059	.251	-.067	-.050
Sig. (2-tailed)	.756	.182	.725	.791
Sum of squares and cross products	.027	.193	-.363	-.392
Covariance:	.001	.007	-.013	-.014
N	30	30	30	30
IFRS_Scores				
Pearson correlation	.239	.346	-.011	.167
Sig. (2-tailed)	.203	.061	.955	.378
Sum of squares and cross products	.099	.221	-.048	1.111
Covariance	.003	.008	-.002	.038
N	30	30	30	30
Difference_Scores				
Pearson correlation	.223	.041	.065	.188
Sig. (2-tailed)	.237	.830	.733	.320
Sum of squares and cross products	.091	.028	.315	1.318
Covariance	.003	.001	.011	.045
N	30	30	30	30

5.3.2 Word Count Correlation Test

The results of the three correlation tests between word counts and control variables largely confirm the results discussed in the preceding section. In fact, the results reported in Table 5 indicate that the Pearson's correlation coefficient is low for most of the control variables in regard to the disclosure scores obtained for 2010 under CGAAP standards and for 2013 under IFRS, as well as for the difference test (between disclosure scores before and after IFRS). Most

of the variables cannot be considered to be in a linear and significant relationship with the word count variable, except industry, which is positively and significantly (at $p<0.5$) associated with the word count both under CGAAP and IFRS. This result confirms the initial argument we presented in the methodology section—that disclosure varies by industry.

Table 5. Results of Pearson Correlation Tests on Word Counts

	Debt	Cross-listing	Industry	Size (Log Assets)
CGAAP_Words				
Pearson correlation	.297	.215	.349	-.204
Sig. (2-tailed)	.111	.254	.059	.279
Sum of squares and cross products	10753.956	13123.833	149646.833	-125589.675
Covariance	370.826	452.546	5160.236	-4330.678
N	30	30	30	30
IFRS_Words				
Pearson correlation	.316	.129	.361*	-.263
Sig. (2-tailed)	.089	.496	.050	.161
Sum of squares and cross products	12790.703	8095.333	159286.333	-171039.397
Covariance	441.059	279.149	5492.632	-5897.910
N	30	30	30	30
Difference_Words				
Pearson correlation	.065	-.147	.040	.071
Sig. (2-tailed)	.731	.439	.834	.710
Sum of squares and cross products	1324.153	-5028.500	9639.500	24613.961
Covariance	45.660	-173.397	332.397	848.757
N	30	30	30	30

5.4 Results of Linear Regressions

A series of six regressions were conducted in accordance with the models presented in the methodology section, i.e. with disclosure scores as dependent variables, with word counts as dependent variables, for 2010 (CGAAP) and for 2013 (IFRS), and with the difference test

models (difference between CGAAP and IFRS disclosures scores and between word counts under CGAAP and under IFRS).

5.4.1 Regressions with Disclosure Scores

The linear regression we used to test the relationship between the disclosure score dependent variable and the four explanatory variables (debt, size, cross-listing and industry) had three variations: model one, to test this relationship for the CGAAP data, model two, for the IFRS data, and model three, to test the CGAAP and IFRS disclosure comparison as a dependent variable.

The results of the tests using the three models are reported in Table 6. They show non-significant differences between the R_2s obtained for the sample's IFRS period and the CGAAP period, respectively 0.226 and 0.077. However, R_2 values are low for both of the periods under study, indicating that the model's explanatory power is weak.

Table 6. Results of Linear Regressions

Dependent Variable: Disclosure Score

	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Standard Error	Beta		
Model 1					
(Constant)	.691	.078		8.894	.000
Cross-listing	.043	.036	.234	1.189	.246
Industry	-.004	.007	-.142	-.552	.586
Size (Log Assets)	-.001	.004	-.049	-.254	.802
Debt	.033	.082	.106	.404	.690
R_2 = .077					
Adjusted R_2 = -.071					
Sig. = .721					
Model 2					
(Constant)	.728	.055		13.280	.000
Cross-listing	.047	.027	.309	1.732	.096
Industry	-.005	.005	-.220	-.902	.376

Size (Log Assets)	.002	.003	.168	.928	.363
Debt	.088	.057	.370	1.537	.137
R_2 = .226					
Adjusted R_2 = .102					
Sig. = .156					
Model 3					
(Constant)	.020	.067		.299	.767
Cross-listing	-.002	.032	-.011	-.056	.955
Industry	-.004	.006	-.166	-.625	.538
Size (Log Assets)	.003	.003	.210	1.103	.281
Debt	.102	.075	.362	1.347	.190
R_2 = .109					
Adjusted R_2 = -.034					
Sig. = .559					
a. Dependent variables:					
Model1: Disclosure score _CGAAP; Model2: Disclosure score _IFRS; Model3: Disclosure score _Difference					

Table 6 shows that the F-statistics obtained for the three models are weak. None of the values of the three models is significant, indicating that we cannot conclude that the variables used help predict the firms' disclosure scores. Lastly, the beta values are weak and none is significant.

5.4.2 Regressions with Word Count

The second set of linear regression models testing the relationship between the word count variable and the four independent variables (debt, size, cross-listing and industry) also used three variations. Models one and two tested these relationships for the CGAAP and IFRS periods respectively, and model three was used to compare word counts under CGAAP and under IFRS.

Table 7 summarizes the results of the three models and shows that there are no significant differences between the R_2 values obtained for the IFRS sample versus the CGAAP period: the R_2 value for the IFRS period is 0.187, a result very close to that for the CGAAP period, which is 0.20. The values are low for both periods and are not significant.

Table 7. Results of Linear Regressions

Dependent Variable: Word Count

	Non-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Standard Error	Beta		
Model 1					
(Constant)	15871.723	5729.243		2.770	.010
Cross-listing	3080.351	2686.595	.210	1.147	.262
Industry	652.077	499.101	.313	1.307	.203
Size (Log Asset)	-258.590	263.162	-.178	-.983	.335
Debt	759.306	6049.226	.031	.126	.901
R_2 = .200					
Adjusted R_2 = .072					
Sig. = .216					
Model 2					
(Constant)	20081.578	5497.186		3.653	.001
Cross-listing	1603.999	2747.196	.107	.584	.565
Industry	494.656	534.749	.231	.925	.364
Size (Log Asset)	-274.066	269.204	-.189	-1.018	.318
Debt	2936.919	5737.659	.126	.512	.613
R_2 = .187					
Adjusted R_2 = .057					
Sig. = .251					
Model 3					
(Constant)	2756.746	3445.050		.800	.431
Cross-listing	-1354.232	1647.769	-.165	-.822	.419
Industry	-44.397	322.861	-.038	-.138	.892
Size (Log Asset)	64.026	159.786	.079	.401	.692
Debt	1738.054	3890.939	.125	.447	.659
R_2 = .036					
Adjusted R_2 = -.118					
Sig. = .915					

a. Dependent variables:
Model1: No. CGAAP_Words; Model2: No. IFRS_Words; Model3: Word Count_Difference

Table 7 confirms our findings in relation to the linear regression on the disclosure scores. F-statistics obtained for both models are low and not significant. The null hypothesis stating there is no relationship between the word count variable and the predictive variables (debt, size, cross listing and industry) cannot be rejected. In other words, the variables used do not help predict the disclosure word count in financial statements. Beta values are low and not significant, thereby confirming the foregoing results.

In conclusion, the results of applying the linear regression models suggest that the disclosure and word count scores for both the CGAAP and the IFRS documents do not exhibit a significant linear relationship with the selected explanatory variables. In our view, this result is unsurprising given that mandatory, not voluntary, disclosure is involved. The numerous prior studies that found a relationship between disclosure scores and predictive variables (Botosan, 1997; Ben Amar and Zéghal, 2006; Cormier and Ben Rhouma, 2007) focused on voluntary disclosures. Our findings confirm the idea that mandatory financial disclosures are not influenced by industry, size, cross-listing or firm indebtedness. Rather, firms disclose mandatory information in order to conform to laws and regulations.

6. Conclusion, Discussion and Research Contributions

The main objective of this study was to examine disclosure levels in financial statements under IFRS compared to the amount disclosed under CGAAP. To that end, we analyzed data on a random sample of 30 S&P/TSX firms for 2010 (CGAAP) and 2013 (IFRS). Empirical results indicate that the adoption of IFRS had a positive impact on the amount of mandatory financial information disclosed by Canadian public companies. The results of the mean comparison tests on the financial disclosure scores are conclusive and were confirmed by the results of the test on word counts. After the adoption of IFRS, substantially more information was disclosed in financial statements than formerly under CGAAP. However, unlike voluntary disclosures, which are typically explained by firm size and industry, mandatory disclosure does not seem to be influenced by the control variables we selected (size, industry, cross-listing and debt).

The main contribution of this research is that it conducts an in-depth examination of the impact of the introduction of IFRS on the amount of financial information disclosed in financial statements. After conducting a survey of the various IFRS dealing with disclosure requirements, we constructed an index to measure disclosure levels. For each individual international standard examined, we extracted all the possible issues on financial disclosure that could help us pinpoint differences with CGAAP. This exercise resulted in over 500 questions related to corporate disclosure. Our index is original because it covers only the financial information required by laws and regulations, unlike most disclosure indices in the literature that pertain to voluntary or mixed disclosures.

This study makes other, more practical, contributions. By requiring extensive detail in the financial statements (and more specifically, in the notes), IFRS standard setters are clearly aiming to fulfill their transparency objective. By examining the amount of disclosure in IFRS versus CGAAP financial statements, we sought to know whether the IASB (International Accounting Standards Board) had reached one of its main objectives in Canada, i.e. greater transparency in financial statements for the benefit of users. Thus, the results of this study will prove highly important to the accounting scientific community because they enrich the literature on the real impact of IFRS adoption in Canada. The accounting community (accounting professionals and others) will most likely consider, based on the results of this study, that firms fully appropriate and apply IFRS standards.

This study has two main limitations: on one hand, the sample is relatively small, and on the

other hand, given the sheer number of IFRS requirements, we limited our investigation to the disclosure requirements regarding assets.

References

Barbu, P. D., N. Feleaga, & L. Feleaga. (2011). Mandatory environmental disclosures by companies complying with IAS/IFRS: The case of France, Germany and the UK. *CERAG working paper*.

Belkaoui, A., & A. L. Kahl. (1978). Corporate financial disclosure in Canada, Canadian Certified General Accountants' Association. *Research Monograph No.1 of the Canadian Certified General Accountants Association, Vancouver*.

Blanchette, M., F-E. Racicot, & K. Sedzro. (2013). L'adoption des IFRS au Canada: une analyse empirique de l'incidence sur les états financiers = IFRS adoption in Canada: an empirical analysis of the impact on financial statements. *Association des comptables généraux accrédités du Canada*.

Burleau, A., & B. Colass. (2010). Normalisation comptable internationale: le retour du Politique? *Comptabilité—Contrôle-Audit*, *16*(3), 153-176.

Burnett, B. M., E. A. Gordon, B. N. Jorgensen, & C. L. Linthicum. (2015). Earnings Quality: Evidence from Canadian Firms' Choice between IFRS and U.S. GAAP. *Accounting Perspectives, 14*(3), 212-249. https://doi.org/10.1111/1911-3838.12051

Buzby, S. L. (1974). Selected items of information and their disclosure in annual reports. *Accounting Review*, 423-435.

Cahan, S. F., A. Rahman, & H. Perera. (2005). Global diversification and corporate disclosure. *Journal of International Accounting Research*, *4*(1), 73-93.

Cerf, A. R. (1961). Corporate reporting and investment decisions. *Public Accounting Research Program, Institute of Business and Economic Research, University of California*.

Chow, C. W., & A. Wong-Boren. (1987). Voluntary Financial Disclosure by Mexican Corporations. The *Accounting Review*, *62*(3), 533-541.

Cooke, T. E. (1989). Voluntary corporate disclosure by Swedish companies. *Journal of International Financial Management & Accounting*, *1*(2), 171-195. https://doi.org/10.1111/j.1467-646X.1989.tb00009.x

Cooke, T. E. (1991). An assessment of voluntary disclosure in the annual reports of Japanese corporations. *The International Journal of Accounting*, *26*(3), 174-189.

Cooke, T. E. (1992). The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese listed corporations. *Accounting and Business Research, 22*(87), 229-237. http://dx.doi.org/10.1080/00014788.1992.9729440

Cormier, D. (2013). Relevance of Financial Reporting and Disclosure for Financial Markets under IFRS: Some Canadian Evidence. *Working paper, cifo.uqam.ca*.

Craswell, A. T., & S. L. Taylor. (1992). Discretionary disclosure of reserves by oil and gas companies: An economic analysis. *Journal of Business Finance & Accounting, 19*(2), 295-308. https://doi.org/10.1111/j.1468-5957.1992.tb00626.x

De La Bruslerie, H. G. (2011). Voluntary financial disclosure, the introduction of IFRS and long-term communication policy: An empirical test on French firms. *Multinational Financial Society MFS*.

Demolli, E et Dufour, D. (2007). Divulgation financière et transition aux IAS/IFRS: contenu et déterminants. *HAL*, vol. 0201, CD Rom.

Dicko, S., & A. Fortin. (2014). IFRS adoption and the opinion of OHADA accountants. *Afro-Asian J. Finance and Accounting*, *4*(2), 141-162. https://doi.org/10.1504/AAJFA.2014.063746

Dumontier, P., & B. Raffournier. (1998). Why firms comply voluntarily with IAS: An empirical analysis with Swiss data. *Journal of international financial management and accounting*, *9*(3), 216-245. https://doi.org/10.1111/1467-646X.00038

Gabteni, H. (2011). Construction d'un score de publication volontaire entendu comme une mesure de la communication financière en période pré/post IFRS. *Économie et société*. May 2011, Montpellier, France. pp.cd-rom, 2011. <hal-00650431>

Gabteni, H. La Bruslerie. (2011). Voluntary financial disclosure, introduction of IFRS and the setting of a communication policy: An empirical test on SBF French firms using a disclosure score. *DRM working paper*, 2010-09.

Gibson, A. V. (2014). International Financial Reporting Standards Implementation in Canada: The impact of IFRS Conversion on Canadian Public Banking Enterprises. Thesis, *College of Business and Technology*.

Glaum, M., J. Baetge, A. Grothe, & T. Oberdorster. (2013). Introduction of International Accounting Standards, Disclosure Quality and Accuracy of Analysts' Earnings Forecasts. *European Accounting Review, 22*(1), 79-116. http://dx.doi.org/10.1080/09638180.2011.558301

Guyot, M. (2013). Communication financiere volontaire des sociétés françaises sur l'actif immatériel et sa perception par le marché. PhD thesis, *TELECOM & Management SudParis*.

Healy, P. M., & K. G. Palepu. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, *31*(1), 405-440. https://doi.org/10.1016/S0165-4101(01)00018-0

Iatridis, G. E. (2012). Voluntary IFRS disclosures: Evidence from the transition from UK GAAP to IFRSs. *Managerial Auditing Journal, 27*(6), 573-597. http://dx.doi.org/10.1108/02686901211236409

Inchausti, B. G. (1997). The influence of company characteristics and accounting regulation on information disclosed by Spanish firms. *European Accounting Review, 6*(1), 45-68. http://dx.doi.org/10.1080/096381897336863

Jensen, M. C., & W. H. Meckling. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics, 3*(4), 305-360. https://doi.org/10.1016/0304-405X(76)90026-X

Khan, S., M. Anderson, H. Warsame, & M. Wright. (2014). Do IFRS Based Earnings Announcements Have More Information Content than Canadian GAAP Based Earnings Announcements? *Accounting Perspectives, 14*(3), 276–302. https://doi.org/10.1111/1911-3838.12052

Lang, M., & R. Lundholm. (1993). Cross-Sectional Determinants of Analyst Ratings of Corporate Disclosures. *Journal of Accounting Research, 31*(2), 246-271. https://doi.org/10.2307/2491273

Liu, G., & J. Sun. (2015). Did the Mandatory Adoption of IFRS Affect the Earnings Quality of Canadian Firms? *Accounting Perspectives, 14*(3), 250-275. https://doi.org/10.1111/1911-3838.12047

McNally, G. M., L. H. Eng, & C. R. Hasseldine. (1982). Corporate financial reporting in New Zealand: An analysis of user preferences, corporate characteristics and disclosure practices for discretionary information. *Accounting and Business Research, 13*(49), 11-20. http://dx.doi.org/10.1080/00014788.1982.9729725

Meek, G. K., C. B. Roberts, & S. J. Gray. (1995). Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations. *Journal of international business studies, 26*(3), 555-572. https://doi.org/10.1057/palgrave.jibs.8490186

Miihkinen, A. (2008). Efficiency of authoritative disclosure recommendations Evidence from IFRS transition disclosure in Finland. *Journal of Financial Regulation and Compliance, 16*(4), 384-413. https://doi.org/10.1108/13581980810918431

Nordlund, B. (2010). Need for disclosure regarding property valuations in financial reports according to IFRS. *Journal of Property Investment and Finance, 28*(5), 333-353. https://doi.org/10.1108/14635781011069954

Pfeffer, K., A. Jacobs, C. DeLong, & R.Y.W. Tang. (2012). Convergence to IFRS: The Canadian experience. *Journal of Corporate Accounting & Finance, 23*(6), 29-36. https://doi.org/10.1002/jcaf.21796

Riahi-Belkaoui, A. (2003). Intellectual capital and firm performance of US multinational firms: a study of the resource-based and stakeholder views. *Journal of Intellectual capital, 4*(2), 215-226. https://doi.org/10.1108/14691930310472839

Singhvi, S. S., & H. B. Desai. (1971). An empirical analysis of the quality of corporate financial disclosure. *The Accounting Review, 46*(1), 129-138. Retrieved from http://www.jstor.org/stable/243894

Thornton, D. B. (2015). Different Conceptual Accounting Frameworks for Public and Private Enterprises: Commentary on Canada's IFRS Transition and Suggestions for International Empirical. *Accounting Perspectives*, *14*(3), 168-189. https://doi.org/10.1111/1911-3838.12048

Tsalavoutas, I. (2011). Transition to IFRS and compliance with mandatory disclosure requirements: What is the signal? *Advances in Accounting*, *27*(2), 390-405. https://doi.org/10.1016/j.adiac.2011.08.006

Viana, R. C. (2008). The transition to IFRS: disclosures by Portuguese listed companies. *Universidade do Porto, Faculdade de Economia do Porto*, *1*, 1-21.

Wallace, R. S. O., & K. Naser. (1995). Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the stock exchange of Hong Kong. *Journal of Accounting and Public Policy*, *14*(4), 311-368. https://doi.org/10.1016/0278-4254(95)00042-9

Warwick, S., M. Bradbury, & J. Hooks. (2013). What Firms' Discretionary Narrative Disclosures Reveal About the Adoption of International Financial Reporting Standards. *Australian Accounting Review*, *23*(3), 252–263. https://doi.org/10.1111/auar.12002

Wiseman, J. (1982). An evaluation of environmental disclosures made in corporate annual reports. *Accounting, Organizations and Society*, *7*(1), 53-63. Retrieved from http://www.sciencedirect.com/science/article/pii/0361-3682(82)90025-3

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