**Relevance of Financial Reporting and Disclosure for Financial Markets
under IFRS: Some Canadian Evidence**

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Abstract

This paper investigates the properties of financial reporting and disclosure in Canada under IFRS. This paper provides some evidence that moving from Canadian GAAP to IFRS has reduced the information gap between managers and investors. More specifically, results suggest that compared with Canadian GAAP, under IFRS: (1) the value relevance of earnings is enhanced; (2) Non-GAAP measures have a greater impact on the value relevance of earnings; (3) Financial statement notes have a greater impact on the value relevance of earnings; (4) earnings have a greater impact on the cost of finance; (4) stock markets' capacity to anticipate future earnings is enhanced, and (5), a slight decrease in earnings management is observed under IFRS. Overall, results suggest that IFRS self-proclaimed goal of providing investors with relevant information is achieved in the Canadian context.

Key words: IFRS, non-GAAP, reliability, predictability, value relevance.

**Pertinence de l'information financière en IFRS pour les marchés boursiers :
Le cas du Canada**

Cet article étudie les propriétés de l'information financière au Canada en vertu des IFRS. Les résultats de la présente étude laissent à penser que le passage des PCGR canadiens aux IFRS a réduit l'écart informationnel entre les gestionnaires et les investisseurs. Plus précisément, les résultats tendent à montrer que, comparativement aux PCGR du Canada, en vertu des IFRS: (1) la pertinence des résultats pour la valorisation boursière est renforcée; (2) Les mesures non-GAAP ont plus d'impact sur la pertinence des résultats; (3) les notes afférentes aux états financiers ont un plus grand impact sur la pertinence des résultats; (4) le résultat comptable a un impact plus important sur le coût de financement; (4) la capacité de marchés boursiers à anticiper les résultats futurs est améliorée, et (5), une légère diminution de la gestion des résultats est observé en vertu des IFRS. Dans l'ensemble, les résultats laissent à penser que l'objectif autoproclamé du référentiel IFRS de fournir aux investisseurs des informations pertinentes est réalisé dans le contexte canadien.

Mots clés : Fiabilité, IFRS, non-GAAP, valorisation boursière, valeur prédictive.

Introduction

The advent of global economies requires stock market participants to compare firms across countries. To achieve that goal, financial statements remain a key source of information for financial analysts and investors. In that regard, the perceived need for harmonization and comparability in financial statements has led to the emergence of International Financial Reporting Standards (IFRS) as the dominant reference for financial reporting in most countries around the world. Canada has joined those countries in 2011for organizations that are publicly accountable.

IFRS adoption raises some questions. For instance, do IFRS meet their stated goals with respect to financial statements such as improving their relevance, quality, and comparability? The move toward IFRS confirms the primacy of financial markets in the determination of accounting standards, with the relevance of financial statements being mostly defined in terms of how useful they are to equity investors. Stewardship, or the use of accounting information for contractual purposes, is now relegated to a secondary role in the determination of accounting standards (Cormier *et al.*, 2007).

The relevance of accounting information can be evaluated through various measures such as its impact on stock prices, on the accuracy of analyst forecasts, the cost of finance, analyst following, investment strategies, etc. First, with respect to stock prices, it appears that IFRS-based financial statements map into how investors assess a firm's stock market value. For instance, there is evidence that the IFRS adjustments reported by French firms for 2004 are useful to investors' in their assessment of a firm's stock market value (financial statements prior to 2005 prepared according to domestic standards needed to be reconciled with IFRS). Moreover, in the United Kingdom, firms

reporting IFRS earnings that were lower than those computed according to UK GAAP were penalized by the stock market (Cormier *et al*., 2009; Horton and Sarafeim, 2010).

Second, there is some evidence that a switch from domestic standards to IFRS has a modest positive impact on market liquidity and the cost of equity capital, most likely resulting from the reduction in information asymmetry between investors and managers following the implementation of IFRS (Daske *et al*., 2008; Bruggermann et al., 2909). However, firms that voluntarily adopt IFRS ahead of the mandated year of adoption experience a stronger improvement in the liquidity of their stock and in their cost of capital than firms that only adopt IFRS at the required date. Therefore, it is unlikely that IFRS adoption in itself drives the improvement in the information set that is available to investors: other regulatory or institutional changes probably take precedence.

Third, the use of IFRS information allows firms to improve their coverage by foreign financial analysts as well as the accuracy of their forecasts, especially in countries with high investor protection (Byard et al., 2011). This increase in relevance for stock markets is observed for firms highly followed by analysts.

Fourth, investors react to the release to IFRS information by rebalancing their portfolios. Investors who rely more extensively on fundamental analysis or accounting data (foreign investors, value investors) use IFRS-derived financial statements to sell or buy specific securities, much more so than when just domestic standards were used and, on average, increase equity ownership in these firms after IFRS adoption (Florou and Pope, 2012).

Finally, the level of details in financial reporting under IFRS is higher than under local GAAP including Canadian GAAP. Under IFRS, income statement items are detailed in terms of nature (depreciation, purchases of materials, transport costs, employee benefits, and advertising costs) and function (cost of sales, cost of distribution). We also observe more notes and more detailed notes under IFRS. This should provide additional relevant information to market participants.

Overall, we infer that IFRS financial statements do offer relevant information to investors, thus providing some potentially useful hints as to what Canadian firms and markets may expect from IFRS adoption. However, it is difficult also to disseminate the information contained in the accounting numbers themselves from the additional information provided in the notes or other financial disclosure: is the IFRS effect driven by better measurement or better disclosure? This is why we will confront earnings figure with non-GAAP measures and the details in financial statement notes under IFRS.

A few studies compare the levels of discretionary accruals pre- and post-IFRS adoption for different countries (e.g. Garcia *et al*., 2009). Overall, it can be inferred that at both the country and firm levels, the adoption of IFRS does not translate into an improvement of the quality of financial reporting, as measured by discretionary accruals. Effective enforcement by institutional and market forces is necessary to ensure that IFRS adoption leads to an improvement in the quality of financial statements. Post-IFRS, the rankings of these countries do not substantially change, with earnings quality at the aggregate level not varying substantially. Therefore, while, in appearance, firms from different countries present their financial statements in a format that looks comparable, the numbers reported in these financial statements are not necessarily more comparable

than they were prior to the adoption of IFRS: major differences in measurement, recognition, audit and market monitoring practices still remain post-IFRS. Hence, beyond IFRS adoption, its actual implementation and the enforcement of such implementation play a critical role in ensuring that informational benefits from IFRS flow to investors and other market participants. In this paper, we compare the level of earnings management under Canadian GAAP and IFRS without predictions.

Our main results are the following. First, compared with Canadian GAAP, under IFRS, the value relevance of earnings is enhanced and earnings have a greater impact on the cost of finance. Second, Non-GAAP measures and the detail in financial statement notes have a greater impact on the value relevance of earnings. Third, as for stock markets' capacity to anticipate future earnings, our results suggest that, under IFRS, current earnings are more in tune with economic performance as reflected by stock returns (current and lag). There is a better link between prior stock returns and current earnings. Finally, we observe a slight decrease in earnings management under IFRS. The degree of details warranted under IFRS could refrain managers from accrual management. Overall, results suggest that IFRS self-proclaimed goal of providing investors with relevant information is achieved in the Canadian context.

Our paper contributes to the literature in capital markets and IFRS in the following ways. First, as far as we know, this study is the first to assess the value relevance of earnings under IFRS considering other disclosure measures such as non-GAAP. Second, this paper is also the first to discriminate earnings numbers and the detail in financial statement notes in assessing the value relevance of earnings under IFRS. Third, including in the sample firms that are not affected by a change in the set of GAAP ensure that our

results are not altered by some economic factors affecting the periods of investigation. Overall, we feel that this study contributes to the debate on the merits and disadvantages of IFRS for stock market participants.

The remainder of the paper is organized as follows. Section 2 presents the theoretical background and the development of hypotheses. The study's method is described in section 3. Results are presented in section while section 5 provides a discussion of the potential implications of the results.

2.   Background and hypotheses

There is some evidence that a shift from domestic GAAP to IFRS has a modest positive effect on the market liquidity and the cost of equity capital. Such improvement results from a reduction in information asymmetry between managers and investors following the adoption of IFRS. This reduction in asymmetry is attributable to higher quality financial reporting, higher analyst following and greater oversight by auditors and directors from the use of a common reference in accounting (Daske *et al*., 2008; Bruggerman *et al*., 2009; Li, 2010). For example, in the UK, at the transition to IFRS, firms reporting IFRS earnings lower than earnings computed according to UK GAAP were penalized by the stock market (Horton and Serafeim, 2010). In the context of Australia, another country categorized by strong enforcement, using a longitudinal study that covers pre-IFRS and post-IFRS periods during 1990 to 2008, Chalmers et *al*.'s (2011) findings show an increase in the value relevance of earnings under IFRS. Their study suggests that even for a country categorized by strong investor protection and high-

quality financial reporting and enforcement, IFRS adoption affects the associations between accounting information and stock market value.

In the French context, Cormier *et al*. (2009) show that IFRS mandatory equity adjustments at the adoption date are more valued than French GAAP equity, suggesting that the first-time adoption of IFRS by French firms is perceived as a signal of increase in the quality of their financial statements. In the case of earnings reconciliation adjustment following IFRS adoption, Platikanova (2009) shows that the bid/ask spread has decreased in France, but, not in Germany, Sweden, and in the UK.

Armstrong *et al.* (2010) study European stock market reactions to specific events associated with the adoption of IFRS by 18 countries. Based on a three-day market-adjusted return centered on 16 events, they find an incrementally positive reaction for firms with lower pre-adoption accounting disclosure quality, and with higher pre-adoption information asymmetry. This is consistent with investors expecting net information quality benefits from IFRS adoption. They also find an incrementally negative reaction for firms in code law countries, consistent with investors' concerns over enforcement of IFRS in those countries compared with common law countries.

IFRS confer accounting discretion in financial reporting, especially with the introduction of fair value accounting. Jeanjean and Stolowy (2008) analyze the effect of the mandatory introduction of IFRS standards on earnings management for three countries: Australia, France, and the UK. They find that the pervasiveness of earnings management did not decline after the introduction of IFRS, and, in fact, increased in

France. Their findings suggest that management incentives and national institutional factors play an important role in framing financial reporting characteristics.

Chen *et al.* (2010) compare the accounting quality of publicly listed firms in 15 member states of the European Union before and after the full adoption of IFRS in 2005. They use five indicators as proxies for accounting quality, namely, earnings smoothing, earnings management toward targets, the magnitude of absolute discretionary accruals, accruals quality, and timely loss recognition. Their results are mixed. They find that the majority of accounting quality indicators improved after IFRS adoption in the European Union. However, they find that firms engage in more earnings smoothing and recognize large losses in a less timely manner in post-IFRS periods.

Horton *et al.* (2013), also for a European sample, and Tan *et al.* (2011), for an international sample, find an improvement in the information environment during the mandatory transition period to IFRS. More specifically, investors can be better at detecting earnings management as a result of a change in the information environment following IFRS adoption, *i.e.* more financial analysts following a firm and lower forecast errors. Prior findings in the UK suggest that IFRS adoption has increased the amount of information available to investors but, at the same time, has created more uncertainty among financial analysts about earnings forecasts. In this vein, Iatridis (2010) shows that due to the fair value orientation of IFRS, the transition to IFRS appeared to introduce volatility in British earnings figures. Prior research suggests that the benefits of IFRS

adoption primarily accrue to countries with strong enforcement, being a key component

of success in the implementation of a new reporting regime (e.g. Byard *et al*., 2011).[1]

Byard *et al.* (2011), based on a European sample, find that analysts' absolute

forecast errors and forecast dispersion decrease relative to a control sample only for those

mandatory IFRS adopters domiciled in countries with both strong enforcement regimes

and domestic accounting standards that differ significantly from IFRS.[2] Considering that

Canada is a country with a strong enforcement, IFRS should lead to positive outcomes for

investors.

Concerning non-GAAP measures, the International Accounting Standards Board (IASB)

have tried to deal with the issue of non-GAAP measures by issuing regulations which require

entities to clearly label these numbers as non-GAAP, setting requirements to present them outside

the financial statements (in MD&A) and requiring reconciliation of the non-GAAP numbers to

reported GAAP numbers (Key points from the January 2012 IFRS Discussion Group). However,

how and to what extent regulators have issued regulations on this differs between jurisdictions.

In the Canadian context, and prior to IFRS adoption, Cormier et al. (2011) focus

on a non-GAAP performance measure labeled distributable cash, which purports to

represent the amount of cash a flow-through entity such as a REIT (Real Estate Income

Trusts) is capable of distributing to its investors on a sustaining basis. They find that

distributable cash is deemed to be value relevant by investors, relegating audited GAAP

earnings to a secondary role. However, distributable cash's measurement is subject to

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[1] Based on a sample of European countries that adopted IFRS, Li (2010) finds that the reduction
in the cost of equity capital following the adoption of IFRS is present only in countries with
strong legal enforcement.
[2] Byard *et al*. (2011) document a score of 1.6 for Law enforcement in France versus 1.3 in the UK
(the median sample countries' score is 1.6) and 12 differences between domestic accounting
standards and IFRS in France versus 1 difference in the UK.

extensive managerial discretion, is unaudited and is unverifiable by investors. In this regard, the authors document that reported levels of distributable cash exhibit a smoothing pattern, thus ensuring stable cash distributions to investors. They show also that managerial incentives (stock option holdings) and corporate governance (board and ownership) variables affect the level of reported distributable cash. They infer that investors, lacking details about underlying measurement assumptions, do not seem able to see through managerial opportunism and seem to focus on distributable cash as reported, discretionary or non-discretionary.

In that regard, we anticipate that IFRS make non-GAAP more reliable and thus should increase their impact on earnings valuation by market participants. We anticipate the same relation for financial statement notes given the higher degree of details under IFRS.

Finally, if earnings have a greater predictive power for investors under IFRS, they should be anticipated much before the release of the annual report under IFRS than under Canadian GAAP.

This gives rise to the following hypotheses:

Hypothesis 1: The value relevance of earnings is greater under IFRS than under Canadian GAAP.

Hypothesis 2: Non-GAAP measures have a greater impact on the value relevance of earnings under IFRS than under Canadian GAAP.

Hypothesis 3: Financial statement notes have a greater impact on the value relevance of earnings under IFRS than under Canadian GAAP.

Hypothesis 4: Earnings under IFRS have a greater impact on the cost of finance under IFRS than under Canadian GAAP.

Hypothesis 5: Stock markets' capacity to anticipate future earnings is greater under IFRS than under Canadian GAAP.

3.   Method

3.1   Sample

The sample is based on Canadian firms composing S&P/TSX index of the Toronto stock exchange for years 2009 (Canadian GAAP) and 2011 (IFRS). The index comprises 233 firms. From this sample, there are missing data for 13firms (data not available for both years). From the sample of 220 firms, we have missing data for forecast dispersion, forecast error and cost of debt. From the sample of 220 firms, 33 firms use the same set of GAAP for 2009 and 2011 (so-called no-change firms): 17 firms are complying with US-GAAP and 16 firms have a year-end after April 30 or IFRS adoption is postponed for different reasons (e.g. regulated industries). For firms with year-end after April, the data in Compustat database are for 2009 and 2010, i.e. prior to IFRS adoption. The sample for the purpose of comparison between Canadian GAAP and IFRS is 187 firms (210 – 33).

For year 2010, Canadian firms must report earnings and balance sheet reconciliations between Canadian GAAP and IFRS. However, financial statement

numbers are still presented in Canadian GAAP. We decided not to include year 2010 to
avoid confusion and to focus on clear Canadian GAAP and IFRS years.

3.2   Empirical models

The empirical models are the following:

(1) Relevance of earnings

Price =
EqPS + EPS + EPS*2011 +EPS*NCHANGE + EPS*NCHANGE*2011 + NCHANGE +
NCHANGE*2011 + 2011 (1)

(2) Impact of Non-GAAP on the relevance of earnings

Price =
EqPS + EPS + EPS*2011 +EPS*NCHANGE + EPS*NCHANGE*2011 +
NCHANGE +NCHANGE*2011 + EPS*NUMNGAAP + EPS*NUMNGAAP*2011 +
EPS*PAGESNGAAP + EPS*PAGESNGAAP*2011 + NUMNGAAP +
NUMNGAAP*2011 + PAGESNGAAP + PAGESNGAAP*2011 + 2011 (2)

(3) Impact of Non-GAAP and notes to financial statements on the relevance of
earnings

Price =
EqPS + EPS + EPS*2011 +EPS*NCHANGE + EPS*NCHANGE*2011 +
NCHANGE +NCHANGE*2011 + EPS*NUMNGAAP + EPS*NUMNGAAP*2011 +
EPS*PAGESNGAAP + EPS*PAGESNGAAP*2011 + EPS*NUMNOTES +
EPS*NUMNOTES*2011 + EPS*PAGESNOTES + EPS*PAGESNPTES*2011+
NUMNGAAP + NUMNGAAP*2011 + PAGESNGAAP + PAGESNGAAP*2011
+NUMNOTES + NUMNOTES*2011 + PAGESNOTES + PAGESNOTES*2011+ 2011
(3)

(4) Cost of finance

IMPCC =
ANFOLL + LEV +ROA +ROA*2011 +ROA-NCHANGE +ROA-NCHANGE*2011 +
NCHANGE +NCHANGE*2011 +2011(4)

COSTDEBT =
ANFOLL + LEV +ROA +ROA*2011 +ROA-NCHANGE +ROA-NCHANGE*2011 + NCHANGE +NCHANGE*2011 +2011 (5)

(5) Stock markets' anticipation of earnings

ROE =
Ri t + Ri t-1 + Ri t-2 (6)

Where:

ANFOLL: Number of financial analysts; *EPS:* Earnings per share; *NCHANGE:* Year with no change in the set of GAAP; *LEV:* Leverage (financial debt/total assets); *ROE:* Return on equity; *ROA:* Return on assets; *NUMNONGAAP:* Number of Non-GAAP; *PAGESNONGAAP:* Number of pages of Non-GAAP in MD&A: *IFRS:* Year for financial reporting under IFRS; *Ri:* Stock market return.

The variable *NCHANGE* allows controlling for economic factors beyond the change in the set of GAAP that could affect the stock market valuation of earnings between 2009 and 2011.

Concerning the model of stock market anticipation of earnings, Warfield and Wild (1992) suggest that three periods are sufficient to capture the effect of market leading annual earnings. Our tests are based on the comparison of the estimated coefficients across regressions. Higher estimated coefficients for the return variables would be consistent with greater recognition of earnings by the market in the year indicated. If earnings have a predictive power for investors, they should be anticipated much before the release of the annual report.

3.3   *Definition of variables*

*Implied cost of capital (IMPCC).*The implied or ex ante cost of equity is a widely used to estimate cost of equity. This measure is computed as the discount rate at which financial analysts' predicted cash flows of the firm equal stock price, hereby capturing long-term information asymmetry. Prior studies such Easton (2004) apply an implied cost of equity based on estimates of financial analysts. The cost of capital is measured as the inverse of the price-earnings-growth ratio (PEG), calculated as the square root of the difference between the average analysts' earnings per share forecasts for year t+1 and year t scaled by stock price at t. This model requires EPS_t and EPS_{t+1} to be positive and $EPS_t < EPS_{t+1}$(positive growth). Therefore, we lose 119 observations for a total sample of 105 firms. The PEG-method concentrates on earnings growth of the firm, but it assumes that there is no growth in abnormal returns after the forecast horizon. Cost of equity is measured as follows:

$$IMPCC = \sqrt{\frac{EPS_{t+1} - EPS_t}{P_t}}$$

Where:

IMPCC: ex ante implied cost of equity

EPS_{t+1} = mean analysts' earnings per share forecasts of year t+1

EPS_1 = mean analysts' earnings per share forecasts of year t

P_t = share price at the end of period t

Cost of debt. We measure cost of debt as the ratio of the interest expense to the sum of long and short term financial debt at the beginning of the period. This proxy is similar to the study of Francis et al. (2005).

4.   Results

4.1   Descriptive statistics

Table 1 provides some descriptive statistics about sample firms' financial variables under Canadian GAAP versus IFRS. It appears that information asymmetry decreases under IFRS. Hence, forecast dispersion, forecast error, cost of debt, cost of capital, and bid-ask spreads are lower under IFRS compared with Canadian GAAP. Moreover, consistent with prior research, firms are followed by more analysts under IFRS than under local GAAP. We also document more details about Non-GAAP measures as expressed by the number of pages Non-GAAP. This might be due to the fact that IFRS require reconciliation between Non-GAAP measures with GAAP. Finally, as expected, the level of details, as expressed by the number of notes and pages of notes to financial statements is higher under IFRS.

Table 1

Descriptive statistics

	Canadian GAAP (2009)		IFRS (2011)	
N: 187	Mean	Median	Mean	Median
EqPS	14.61	10.70	13.11	10.83
EPS	1.10	0.57	1.49	1.02
Ri	0.059	0.058	-0.016	-0.012
ANFOLL	6.79	6	8.68	8
PE	20.78	15.20	11.56	11.84
ROE	0.05	0.06	0.11	0.10
ROA	0.02	0.02	0.05	0.05
NUMNGAAP	2.32	2	2.5	2
PAGESNGAAP	12.28	7	15.06	9.50
NUMNOTES	23.39	24	28.04	28
PAGESNOTES	33.48	30	47.56	43
FORDIS (1)	0.43	0.16	0.55	0.14
FORDIS (2)	0.010	0.026	0.008	0.011
FOREEROR (1)	1.182	0.457	1.027	0.300
FORERROR (2)	0.085	0.028	0.031	0.014
COSTDEBT	0.052	0.037	0.049	0.036
IMPCC (N: 105)	0.148	0.128	0.110	0.103
BAsk	0.686	0.444	0.386	0.258

(1) Scaled by mean forecast in absolute value (2) Scaled by lag Price

*EqPS:*Equity per share; *EPS:* Earnings per share; *Ri:* Stock market return; *ANFOLL:* Number of financial analysts; *PE:* Price/earnings ratio; *NCHANGE:* Year with no change in the set of GAAP; *LEV:* Leverage (financial debt/total assets); *ROE:* Return on equity; *ROA:* Return on assets; *NUMNGAAP:* Number of Non-GAAP; *PAGESNGAAP:* Number of pages of Non-GAAP in MD&A: *IFRS:* Year for financial reporting under IFRS; *FORDIS:* Forecast dispersion; *FORERROR*: Forecast error; *COSTDEBT:* Cost of financial debt; *IMPCC*: Implied cost of capital*; BAsk:* Bid-Ask spread.

4.2   Multivariate results

We estimate regressions using OLS with robust estimators since the test of Breusch-

Pagan / Cook-Weisberg shows the presence of heteroscedasticity. Durbin-Watson tests

do not reveal problems of autocorrelation (statistic close to 2.0 in all regressions).

Moreover, multicollinearity is not an issue in any regressions since the highest variance

of inflation factor is 4.0. Finally, we exclude from regressions all observations with standardized residuals exceeding two.

Table 2 reports ordinary-least-square regressions with robust estimators on the relation between earnings and stock market valuation. Consistent with hypothesis 1, results suggest that the relevance of earnings is greater under IFRS since the coefficient on the interaction term *EPS*2011* (1.266; $p < 0.05$) is positive and significant. The variable *EPS-NCHANGE* controls for firms that apply the same set of GAAP for 2009 and 2011. It seems that, for the same period, the impact of earnings on stock pricing is higher for no-change firms in 2009 (1.984 + 1.944 = 3.983 versus 1.984) and lower in 2011 (1.984 + 1.266 + 1.944 – 2.257 = 2.937) compared with under IFRS (1.984 + 1.266 = 3.250). However, this difference is not statistically significant since the coefficient on coefficient difference *EPS*NCHANGE* and *EPS*NCHANGE*2011* is not different from zero (F = 0.07; $p < 0.793$).[3] Results from Table 2 show that earnings are more valued under Canadian GAAP for firms cross-listed in a U.S. stock exchange since the coefficient on *EPS*USLISTED* (1.517; $p < 0.05$) is positive and significant. Finally, this situation remains under IFRS. Prior research document that, compared to Canadian and most other national stock markets, the U.S. stock market is the most efficient in the way information is collected and analyzed, the most liquid and the most transparent in matters of corporate disclosure (e.g. Saudaragan and Biddle, 1992; Saudaragan and Meek, 1997). Hence, it is not surprising to observe a higher earnings multiple for U.S. cross-listed firms. However, we must keep in mind that, even for Canadian U.S. cross-listed firms,

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[3] Since No-Change firms are composed of US-GAAP compliers to a significant proportion (17 out of 33 firms), this result could indicate that IFRS equals US-GAAP for stock market valuation of earnings. However, given the small sample size of US-GAAP complying firms and given the group of No-Change also comprises Canadian GAAP compliers, this result must be interpreted cautiously.

which must comply with SEC regulations, we observe an enhancement in the value

relevance of earnings following IFRS adoption.

Table 2
OLS Regressions – Robust estimators
Relevance of earnings for stock price valuation

		Coefficient		Controlling for U.S. Cross-Listing Coefficient	
		Unstandardized	Standardized	Unstandardized	Standardized
EQPS	+	***0.839	0.704	***0.861	0.723
EQPS*2011	?	-0.073	-0.030	-0.087	-0.036
EPS	+	***1.984	0.219	***1.756	0.194
EPS*2011	+	**1.266	0.080	**1.235	0.078
EPS-NCHANGE	?	**1.944	0.079	**1.285	0.053
EPS-NCHANGE*2011	?	*-2.257	-0.072	**-1.826	-0.058
NCHANGE	?	***5.658	0.084	***6.713	0.098
NCHANGE*2011	?	1.994	0.021	1.576	0.017
EPS-USLISTED	?			**1.517	0.067
EPS-USLISTED*2011	?			-0.533	-0.019
USLISTED	?			0.045	-0.000
USLISTED*2011	?			-0.492	-0.007
2011	?	-1.035	-0.020	**-0.587	-0.011
R-Square		84.9%		85.2%	
F Statistic		158.9(0.000)		185.4(0.000)	
N		440		440	
Durbin Watson		1.97		1.98	

EQPS: Equity per share*; Earnings per share; NCHANGE:* Year with no change in the set of GAAP;
USLISTED: U.S. cross-listed.

A non-GAAP financial measure is not presented in financial statements, whereas,

an additional GAAP measure is presented in financial statements. There is some

flexibility around what non-GAAP measures companies can present as IFRS does not

prohibit additional measures in the financial statements. Indeed that IASB acknowledges

that additional earnings measures may be useful and, when included in the financial

statements, it wants them to be explained and reconciled to GAAP numbers.

In Table 3, we present OLS regression results including non-GAAP measures, i.e.

the number of non-GAAP measures reported and the number of pages of non-GAAP

reported. Consistent with hypothesis 2, results show that the number of non-GAAP measures and number of pages of non-GAAP increase the association between earnings and stock price under IFRS. Hence, interaction terms on *EPS*NUMNGAAP*2011* (0.788; p < 0.01) and *EPS*PAGESNGAAP*2011* (0.034; p < 0.10) are positively associated with stock price. We also observe that the details of non-GAAP measures under Canadian GAAP is associated negatively associated with stock pricing *EPS*NUMNGAAP* (-0.465; p < 0.01) suggesting that non-GAAP are perceived as less reliable under Canadian GAAP.

From our descriptive statistics, we observe that the level of details in financial statements increases significantly under IFRS. The mean score of the number of notes increase from 23 to 28 while the number of pages went from 33 to 48. In column 4 of Table 3, we present results adding the number of notes and number of pages of notes to financial statements. Results show that the number of pages of notes decrease the relationship between earnings and stock market valuation under Canadian GAAP since the coefficient on the interaction term *EPS*PAGESNOTES* (-0.083; p 0.01) is negative and significant. For example, for an EPS of 1 dollar and for 30 pages of notes, the valuation of EPS would be 1.709 in 2009 (4.199 – 0.083 X 30) and 4.049 under IFRS (4.199 – 0.083 X 30 + 0.078 X 30).[4] This is consistent with hypothesis 3.

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[4] Under IFRS, results (not tabulated) also show significant negative correlations between the implied cost of capital and *NUMNGAAP* (-0.20), *PAGESNGAAP* (-0.27), *NUMNOTES* (-0.09) and *PAGESNOTES* (-0.18) while, except for NUMNGAAP (-0.13), non-significant positive correlations are observed under Canadian GAAP.

Table 3
OLS Regressions – Robust estimators
Relevance of earnings for stock price valuation - Controlling for Non-GAAP and Notes

		Controlling for Non-GAAP		Controlling for Non-GAAP and notes to financial statements	
		Coefficient		Coefficient	
		Unstandardized	Standardized	Unstandardized	Standardized
EQPS	+	***0.886	0.743	***1.087	0.918
EQPS*2011	?	-0.145	-0.059	***-0473	-0.191
EPS	+	***2.944	0.334	***4.606	0.507
EPS*2011	+	-1.547	-0.106	0.371	0.023
EPS-NCHANGE	?	***2.521	0.103	**2.064	0.084
EPS-NCHANGE*2011	?	**-2.642	-0.085	**-2.537	-0.081
NCHANGE	?	***5.024	0.075	***5.842	0.085
NCHANGE*2011	?	1.992	0.022	2.361	0.025
EPS* NUMNGAAP	-	***-0.465	-0.191	**-0.364	-0.149
EPS*NUMNGAAP*2011	+	***0.788	0.209	***0.589	0.155
EPS*PAGESNGAAP	-	-0.001	-0.001	*-0.032	-0.065
EPS*PAGESNGAAP*2011	+	*0.034	0.053	***0.066	0.102
NUMGAPP	?	***0.918	0.092	**0.607	0.061
NUMNGAAP*2011	?	**-1.114	-0.097	-0.703	-0.060
PAGESNGAAP	?	-0.042	-0.026	-0.046	-0.028
PAGESNGAAP*2011	?	0.033	0.051	0.013	0.006
EPS*NUMNOTES				0.088	0.245
EPS*NUMNOTES*2011				-0.152	-0.284
EPS*PAGESNOTES				***-0.083	-0.594
EPS*PAGESNOTES*2011				***0.078	0.295
NUMNOTES				-0.232	-0.052
NUMNOTES*2011				0.262	0.144
PAGESNOTES				0.090	0.062
PAGESNOTES*2011				0.028	0.029
2011		2.393	0.047	-1.444	-0.027
R-Square		84.9%		87.3%	
F Statistic		93.5(0.000)		138.9(0.000)	
N		440		440	
Durbin Watson		1.98		1.99	

EQPS: Equity per share*; EPS:* Earnings per share; *NCHANGE:* Year with no change in the set of GAAP;
NUMNGAAP: Number of non-GAAP measures; *PAGESNGAAP:* Pages of non-GAAP measures;
USLISTED: U.S. cross-listed.

Table 4 reports OLS regressions on the relation between earnings and cost of finance. Results suggest that the earnings has a greater effect on implied cost of capital (-0.143; $p < 0.05$) and cost of debt (-0.045; $p < 0.05$) under IFRS since the coefficient on the interaction term *ROA*2011* is negative and significant under IFRS. For non-change firms, the impact on the cost of debt remains relatively stable between the two periods at -0.073, which is higher than IFRS firms (-0.045). The training process that faces investors to understand IFRS might explain this result. As for the cost of capital, non-change firms do not seem to differ from those that switched to IFRS. This result must be interpreted cautiously since we have only 18 firms classified as no-change for the computation of the cost of capital.

Table 4
OLS Regression – Robust estimators
Impact of earnings on the cost of finance

		IMPCC		COSTDEBT	
		Coefficient		Coefficient	
		Unstandardized	Standardized	Unstandardized	Standardized
LEV	+			***0.013	0.124
ANFOLL	-	-0.001	-0.066	--	
ROA	-	0.051	0.091	-0.008	-0.031
ROA*2011	-	**-0.143	-0.243	**-0.045	-0.141
ROA-NCHANGE	?	-0.162	-0.141	**-0.073	-0.117
ROA-NCHANGE*2011	?	0.371	0.272	0.022	0.002
NCHANGE	?	0.008	0.096	-0.003	-0.060
NCHANGE*2011	?	-0.021	-0.189	-0.001	-0.018
2011	?	-0.012	-0.175	***0.006	0.136
R-Square		12.4%		7.8%	
F Statistic		2.90(0.000)		4.42(0.000)	
N (219 firms)		210		440	
Durbin Watson		1.85		1.92	

IMPCC: Implied cost of capital*; COSTDEBT:* Cost of financial debt; *ANFOLL:* Number of financial analysts; *NCHANGE:* Year with no change in the set of GAAP; *LEV:* Leverage (financial debt/total assets); *ROA:* Return on assets.

From table 5, we show results from regressions on the stock market anticipation of earnings. Consistent with hypothesis 5, the stock market anticipation of earnings under IFRS appears to be greater than under Canadian GAAP. Under IFRS, stock markets

appear to anticipate earnings three years before its publication (0.381; $p < 0.01$). It is the case under Canadian GAAP to a lesser extent considering the size of the coefficient (0.051; $p < 0.05$). Both sets of standards offer the same relationship between current stock return and current earnings (coefficient of 0.301 versus 0.281). Our results suggest that earnings have a predictive power for investors and are better anticipated under IFRS.

Table 5
OLS regressions – with robust estimators
Stock markets' capacity to anticipate future earnings

		ROE 2009		ROE - IFRS	
		Coefficient		Coefficient	
		Unstandardized	Standardized	Unstandardized	Standardized
Ri t	+	***0.301	0.280	***0.281	0.246
Ri t-1	+	*-0.031	-0.101	**0.249	0.210
Ri t-2	+	**0.051	0.164	***0.381	0.313
N		175		175	
R-square		16.4%		19.4%	
F Statistic		11.4(0.000)		9.9(0.000)	

IFRS confer accounting discretion in financial reporting, especially with the introduction of fair value accounting. Jeanjean and Stolowy (2008) analyze the effect of the mandatory introduction of IFRS standards on earnings management for three countries: Australia, France, and the UK. They find that the pervasiveness of earnings management did not decline after the introduction of IFRS, and, in fact increased in France. Their findings suggest that management incentives and national institutional factors play an important role in framing financial reporting characteristics. As a last analysis, we compare the level of earnings management under Canadian GAAP and IFRS without predictions.

Leuz *et al*. (2003) developed different country-level measures of earnings management that capture various dimensions along which insiders can exercise their discretion to manage reported earnings. We will refer to three of these measures. The first measure of a country-level earnings management uses the standard deviation of earnings divided by the standard deviation of cash flow from operations. A low ratio implies a higher level of earnings management. The second measure of uses the magnitude of accruals as a proxy for the extent to which managers exercise discretion in reporting earnings. It is computed as a country's median of the absolute value of firms' accruals scaled by the absolute value of firms' cash flow from operations. A high ratio suggests a high level of earnings management. The third measure is the ratio of ''small profits'' to ''small losses'', using net earnings scaled by total assets. Small losses are defined to be in the range [-0.01, 0.00] and small profits are defined to be in the range [0.00, 0.01]. This last measure is qualified as an earnings-smoothing measure by Leuz *et al*. (2003).

From table 6, we observe that earnings management does vary in Canada under IFRS compared to domestic GAAP. The first and second measures exhibit lower earnings management under IFRS. The level of details warranted under IFRS could refrain managers from accruals management. However, we observe a slightly larger earnings smoothing under IFRS since, under Canadian GAAP, our sample firms exhibit a proportion of 2.625 small profits compared small losses compared to 2.80 under IFRS. However, considering the small sample (21/8 versus 14/5), this results must be interpreted cautiously.

Table 6
Earnings management measures

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1) σ Earnings / σ CFO (scaled by total assets)	(-)
Canadian GAAP (2009)	0.849
IFRS (2011)	1.179

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2) |Acc|/|CFO| (scaled by total assets)	(+)
Canadian GAAP (2009)	0.697
IFRS (2011)	0.598

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3) # small profits / # Small losses (ROA<0.01 and > -0.01) (+)	
Canadian GAAP (2009)	2.625 (21/8)
IFRS (2011)	2.800 (14/5)

5. Conclusion

This aim of this paper was to investigate the properties of financial reporting in Canada under IFRS. We bring some evidence that moving from Canadian GAAP to IFRS provides investors with more relevant information to investors by reducing the information gap between managers and investors. More specifically, results suggest that compared with Canadian GAAP, under IFRS: (1) the value relevance of earnings is enhanced; (2) Non-GAAP measures have a greater impact on the value relevance of earnings; (3) Financial statement notes have a greater impact on the value relevance of earnings; (4) earnings have a greater impact on the cost of finance; (4) stock markets'

capacity to anticipate future earnings is enhanced, and (5) we observe a slight decrease in earnings management under IFRS. Overall, results suggest that IFRS self-proclaimed goal of providing investors with relevant information is achieved in the Canadian context.

In general, we infer that IFRS financial statements provide relevant information to Canadian investors beyond Canadian GAAP. However, since it is difficult also to tease out the information contained in the accounting numbers themselves from the additional information provided in the notes or by non-GAAP measure, we have put in interaction earnings figure with non-GAAP measures and the details in notes under IFRS. This allows for a more integrated understanding of the incidence of financial reporting and disclosure for stock market valuation.

The worldwide enforcement of IFRS worries many regulators and market participants in the United States. A recent SEC study (2011) analyzing financial statements of public companies prepared in accordance with IFRS, including SEC registrants and not SEC registrants, found financial statements lacking in transparency and clarity to the point that questions were raised about whether some companies financial statements complied with IFRS. The SEC staff also noticed diversity in the application that made it challenging to compare companies. We think that the current paper could be of interest for U.S. regulators since the Canadian context if comparable to the U.S. one in many aspects. We must keep in mind that, even for Canadian U.S. cross-listed firms, which must comply with SEC regulations, we observe an enhancement in the value relevance of earnings following IFRS adoption.

References

Armstrong, C.S., Barth, M.E., and Riedl, E.J. (2010), Market Reaction to the Adoption of IFRS in Europe, *The Accounting Review,* Vol. 85, No.1, pp. 31-61.

Bruggermann, U., Daske, H., Homberg, C., and Pope, P.F. (2009), How Do Individual Investors React to Global IFRS Adoption? Available at SSRN: http://ssrn.com/abstract=1437542

Byard, D., Li, Y. and Yu, Y. (2011), The Effect of Mandated IFRS Adoption on Analyst' Forecast Error, *Journal of Accounting Research,* Vol. 49, No. 1, pp. 69-96.

Chalmers, K., Clinch, G., and Godfrey, J. (2011), Changes in Value Relevance of Accounting Information upon IFRS Adoption: Evidence from Australia, *Australian Journal of Management,* Vol. 36, No. 2, pp.151-173.

Chen, H., Tang, Q., Jiang, Y. and Lin, Z. (2010), The Role of International Financial Reporting Standards and Accounting Quality: Evidence from the European Union, *Journal of International Financial Management& Accounting*, Vol. 21, No. 3, pp. 220-278.

Cormier, D., Demaria, S., Lapointe, P., and Teller, R. (2009), First-Time Adoption of IFRS, Managerial Incentives and Value-Relevance: Some French Evidence, *Journal of International Accounting Research,* 8(2), 20-22.

Cormier, D., Lapointe-Antunes, P., and Magnan, M. (2007), Le référentiel IFRS : nous dirigeons-nous vers une comptabilité au-delà du réel?, Comptabilité-contrôle-audit, December, 43-56.

Cormier, D., Lapointe-Antunes, P., and Magnan, M. (2011), Revisiting the Relevance and Reliability of non-GAAP Reporting: The Case of Income Trusts, *Contemporary Accounting Research*, Vol. 28, No.5, pp. 1585-1609.

Daske, H., Hail, L., Leuz, C., and Verdi, R. (2008), Mandatory IFRS Reporting around the World: Early Evidence on the Economic Consequences, *Journal of Accounting Research,* Vol. 46, No. 5, pp. 1085-1143.

Easton, P. (2004), PE Ratios, PEG Ratios, and Estimating the Implied Expected Rate of Return on Equity Capital, *The Accounting Review*, Vol. 79, No. 1, pp. 73-95

Florou, A., and Pope, P.F. (2012), Mandatory IFRS Adoption and Investor Asset Allocation Decisions, *The Accounting Review*, Vol. 87, No. 6, pp. 1993-2025.

Francis, J., Khurana, I., and Pereira, R. (2005), Disclosure Incentives and Effects on Cost of Capital, *The Accounting Review*, Vol. 80, No. 4, pp. 1125-1162

Garcia, L., Garcia, O., and Pope, P.F. (2009), *Earnings Quality Effects of Mandatory IFRS Adoption,* American Accounting Association, 2009 Annual Meeting Sessions International Accounting.

Horton, J. and Serafeim, G. (2010), Market Reaction & Valuation of IFRS Reconciliation Adjustments: First Evidence from the UK, *Review of Accounting Studies*, Vol. 15, No. 4, pp. 725-751.

Horton, J., Serafeim, G. and Serafeim, I. (2013), Does Mandatory IFRS Adoption Improve the Information Environment?, *Contemporary Accounting Research*, Vol. 30, No. 1, pp. 388-423.

Iatridis, G. (2010), IFRS Adoption and Financial Statement Effects: The UK Case, *International Research Journal of Finance and Economics,* Vol. 38 (April), pp. 165-172.

Leuz, C., Nanda, D., and Wysocki, P.D. (2003), Earnings Management and Investor Protection: An International Comparison, *Journal of Financial Economics,* Vol. 69, No. 3, pp. 505-527.

Li, S. (2010), Does Mandatory Adoption of International Financial Reporting Standards in the European Union reduce the Cost of equity Capital?, *The Accounting Review,* Vol. 85, No. 2, pp. 607-636.

Platikanova, P. (2009), Market Liquidity Effects of the IFRS Introduction in Europe, SSRN: http://ssrn.com/abstract=1005364.

Saudaragan, S., and Biddle, G. (1992), Financial Disclosure Levels and Foreign Stock Exchange Listings, *Journal of International Financial Management and Accounting*, Vol. 4, No. 2, pp. 106–148.

Saudaragan, S., and Meek, G. (1997), A Review of Research on the Relationship between International Capital Markets and Financial Reporting by Multinational Firms, *Journal of Accounting Literature*, Vol. 16, 127–159.

Securities and Exchange commission Staff Paper (SEC) (November 2011), Work Plan for the Consideration of Incorporating International Financial Reporting Standards into the Financial Reporting System for U.S. Issuers An Analysis of IFRS in Practice.

Tan, H., Wang, S. and Welker, M. (2011) 'Analyst Following and Forecast Accuracy After Mandated IFRS Adoptions', *Journal of Accounting Research*, Vol. 49, No. 5, pp. 1307-1357.

Warfield, T., and Wild, J. (1992), Accounting Recognition and the Relevance of Earnings as an Explanatory Variable for Returns, *The Accounting Review,* 67(4), 821-842.