

Does IFRS Adoption Influence Quality of Reporting?: An Empirical Evidence from Large Canadian Banks

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Abstract

This study is a comparative study between the Canadian GAAP and IFRS, to understand the extent and nature of impact on financial reporting in the nine largest Canadian banks. The quantitative research method is adopted for this empirical study. The research question of this research study is: Does IFRS adoption in the Canadian financial institutions improve financial reporting quality?. This research finds that under IFRS, increase in earnings quality due to increase in value relevance (earnings influence to market price); increase in persistency and predictability in earnings and cash flows; and increase in earnings to shareholder value. However, it also finds that, decrease in accruals and timeliness loss of recognition (reduce in income smoothing), and decrease in the accounting valuation usefulness (earnings to book value per share).

Keywords: IFRS, Canadian GAAP, accounting quality, Canadian banks, organizational performance, income smoothness, and accruals

I. Introduction

Over the past decade, the International Financial Reporting Standards (IFRS) has emerged as the dominant reference for financial reporting in most countries around the world due to the influence of investors/shareholders demand, cost minimization in financial reporting, security listings requirements, foreign investments, free trade, and global competition. In the case of the United States, the home of the leading global stock indexes, NYSE and NASDAQ, the Securities and Exchange Commission has publicly expressed its interest or in transition towards adopting the IFRS from the U.S. GAAP.

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While there is extensive research worldwide on the impact of adopting IFRS, I believe that examining at the Canadian experience (recently adopted IFRS in 2011) focusing on large Canadian banks (financial institutions) may provide relevant information based on its culture and capital market, as previous studies did when the European countries adopted IFRS in 2005. It is also believed that this study results will provide relevant information to the United States accounting scholars and the standard setters, such as FASB, as both countries GAAPs are comparable and the respective capital markets are similar in nature. That is, research findings will provide some useful hints as to what the U.S. firms and markets will expect from the adoption of the IFRS. From 2011, the Canadian public companies are required to report the financial information using the International Financial Reporting Standards (IFRS), a change of reporting culture from the Canadian GAAP. For two decades, Canada's accounting standard setter has a convergence policy towards the U.S. GAAP, primarily adopting the U.S. standards with some modification or reconciliation, primarily in the culture of rule-based standard, a stringent application of accounting regulations.

The purpose of this empirical research on the IFRS, primarily characterized as principal-based standard (difficult to circumvent provision in the form of transaction), to investigate whether the adoption of the IFRS by the Canadian financial institutions enhances accounting reporting quality. To examine this research study, it will adopt a comparative approach. That is, it will compare between Canadian GAAP with the IFRS, to understand the nature and extent of impact on accounting quality (earnings, accruals, persistency, value relevance, predictability, income smoothing, timeliness loss of recognition, and reporting aggressiveness). Previous studies in particular concerning the European countries have shown an increase in earnings management; an increase in income smoothing and no significant change in managing earnings towards a target; decrease in the timeliness of the recognition of large losses and with a contemporaneous increase in the timeliness in recognizing economic losses relative to gains in the reported income; an increase in the combined value relevance of the book value and earnings, in the post-adoption period. (Paglietti, P., 2009).

It is evident that the financial reporting presentation under the IFRS is much more detailed in nature relative to the Canadian GAAP (despite similar principle-based framework) and the United States GAAP (rule-based framework). That is, under the IFRS, statement of operations items are detailed in nature, such as amortization, purchases of materials, transportation costs, employee benefits, advertising costs, cost of sales, and cost of distribution.

It is theoretically believed that the adoption of the IFRS is associated with the earnings becoming timelier, more volatile and more informative, and making their introduction beneficial for investors and shareholders. The two most frequently claimed benefits associated with the IFRS adoption are an increase in information quality and accounting comparability. The highest quality standard indicates a standard that either reduces managerial discretion over accounting choices that are inherently disallowed smoothing or overstatement of earnings. According to Ball (2006) and Choi and Meek (2005), IFRS has the potential to facilitate cross-border comparisons; increase reporting transparency; decrease information costs; reduce information asymmetry (increase the liquidity); and competitiveness and efficiency of the markets.

The properties of the accounting numbers such as earnings smoothness and magnitude of accruals are affected not only by the underlying economic determinants and the exercise of the managerial judgments but also by the nature of the accounting standards. For example, the IFRS permits capitalizing development expenditures that were expensed under many domestic accounting standards. This has the effect on increasing earnings and reducing earnings volatility. Similarly, IFRS requires goodwill impairment rather than systematic amortization. Another example of a potential significant change in accruals is recognition of employee benefit expenses that were not recognized prior to the IFRS adoption. This would reduce accruals and earnings, but potentially increase smoothing. The broader point is that the adoption of certain standards could alter the properties of earnings without necessarily changing the accounting quality. According to Schipper and Vincent (2003), earnings are important to a firm for the reason that they are used as a summary measure of the performance of a firm by a large variety of users. Persistency of the earnings is said to be persistent when they recur over time, or when they are sustainable or permanent. It also refers to the extent to which an innovation (unexpectedness) in the earnings series causes investors to revise their future earnings expectations (Boonlert, 2004). Researchers measure the persistency of earnings by looking at the explanatory power of the past earnings to present earnings. When the past earnings are not associated with the present earnings, the earnings are not persistent or not recurring. Predictability is defined as the ability of current earnings to predict future earnings and cash flows from operations. Current and also previous earnings are the input to forecasting the future earnings/cash flows. Smoothness is measured by the amount of variability of the cash flow and the variability of earnings (Leuz et al., 2003).

Smoothness can be seen as a desirable earning attribute as managers use information about their future income to smooth out momentary fluctuations. This will give more representative reported earnings, as these earnings contain future information. Value relevance is determined by measuring the correlation between the income variables (e.g. EPS) and the market price per share. According to Lang (1991), it is proven that the stock prices can be explained as a multiple of earnings. Market prices follow earnings, i.e. changes in earnings will affect the market prices. The higher the explanatory power of the earnings, the more value relevant the earnings are. Since more value relevant earnings would describe the firm's asset price more accurately, earnings are judged to be of high quality when they are value relevant. Warfield and Wild (1992) suggests that the market returns should lead annual earnings and have a predictive power over the investors. If earnings have a greater predictive power under IFRS they should be anticipated much more before the release of the annual report under IFRS than under Canadian GAAP.

II. Literature Review

2.1 Quality of Earnings in IFRS Reporting

According to Penman (2002), who stated that, the quality of the earnings is based on the earnings persistency and predictive ability of the earnings. They view that earnings are to be of high quality when the firm's past earnings are strongly associated with its future earnings. Other researchers view earnings to be of higher quality when earnings are value relevant, for example, the earnings are strongly associated with the security's price (Francis and Schipper, 1999). Voulgaris, Stathopoulos, and Walker (2011) believed that IFRS adds noise to accounting numbers that makes reported earnings less useful for evaluating managerial performance. This is mainly due to the adoption of the fair value accounting, which potentially makes accounting numbers more value-relevant, but also more volatile and sensitive to market movements. In addition, they believed that whilst the IFRS may have made accounting earnings more useful for stock market valuation purposes, this may have been achieved at the expense of other purposes that accounting serves, i.e., stewardship/performance contracting. In other words, as accounting numbers are designed to conform more and more closely with market values, the less they are able to provide information over what is complementary to market values for evaluating performance.

Similarly, Kim and Suh (1993) believed that if accounting numbers become more sensitive to market movements than the accounting related signals, provides little additional information about managing performance, as they no longer screen out market related noise. Moreover, the move to fair value accounting makes accounting earnings figures more volatile (Barth et al. 2011). If the increase in earnings volatility is driven by events almost entirely outside the control of management then this also reduces the attractiveness of the earnings, as a basis for performance-based contracts. Ball (2006) and Choi and Meek (2005) believed that the IFRS has the potential to facilitate cross border comparability, increase reporting transparency, decrease information costs, reduce information asymmetry and thereby increase the liquidity, competition and efficiency of markets. In addition, Ball (2006) notes that the fair value orientation of the IFRS could add volatility to the financial statements in the form of both good and bad information. The latter consisting of noise which arises from inherent estimation error and possible managerial manipulation.

Ahmed, Neel, and Wang (2012) states that, the effects of the mandatory IFRS adoption on the accounting quality critically depend upon whether the IFRS is of higher or lower quality than domestic GAAP and how they affect the efficacy of enforcement mechanisms. By a higher quality standard they mean a standard that either reduces managerial discretion over accounting choices or inherently disallows smoothing or overstatement of earnings. If IFRS is of higher quality than domestic GAAP, and they are appropriately enforced, then we expect mandatory adoption of IFRS to improve accounting quality. On the other hand, if IFRS are of lower quality than domestic GAAP or if IFRS weaken enforcement (for example, because of increased discretion or flexibility), then it would expect to reduce accounting quality. Thus, the impact of IFRS on the accounting quality is an empirical question. This is supported by Leuz, Nanda, and Wysocki (2003), Barth, Landsman, and Lang (2008), Christenson, Lee, and Walker (2008), and Chen, Tang, Jiang, and Lin (2010), who believed that accounting choices that result in greater income smoothing, greater management of earnings to meet a target, and overstatement of earnings (or delayed recognition of losses) as compromising faithful representation of the underlying economics therefore, reduce accounting quality. Similarly, Barth et al. (2008) presents three reasons why the adoption of the IFRS could lead to improvements in the accounting quality. First, the IFRS eliminates certain accounting alternatives, thereby reducing managerial discretion.

This could reduce the extent of opportunistic earnings management and thus improve accounting quality (Ewert and Wagenhofer, 2005). Second, IFRS is viewed as principles-based standards and thus are potentially more difficult to circumvent. For example, under a principles-based standard it should be more difficult to avoid recognition of a liability through transaction structuring. Third, IFRS permits measurements such as, use of fair value accounting, which may better reflect the underlying economics than domestic standards. At the same time, Barth et al. (2008) also note two reasons why the adoption of IFRS may reduce accounting quality. First, IFRS could eliminate accounting alternatives that are most appropriate for communicating the underlying economics of a business, thus forcing managers of these firms to use less appropriate alternatives thus resulting in a reduction in accounting quality. Second, because IFRS is principles-based, they inherently lacked detailed implementation guidance and thus afford managers greater flexibility (Langmead and Soroosh, 2009). For some important areas such as revenue recognition for multiple deliverables, the absence of implementation guidance would significantly increase discretion and allowable treatments, depending upon how they are interpreted and implemented. Given managers' incentives to exploit accounting discretion to their advantage documented in prior studies such as Leuz et al. (2003), the increase in discretion due to lack of implementation guidance is likely to lead to more earnings management and thus lower accounting quality, *ceteris paribus*. In addition, Leuz et al. (2003) states that, even with the high quality standards such as IFRS, there is still a risk of relatively lower quality accounting, if firms have incentives and opportunities to manipulate.

Horton and Serafeim (2010) finds that the IFRS reconciliations provide new information to investors even for firms that have already reported their performance under a high quality accounting regime (UK GAAP). Ashbaugh and Pincus (2001) finds that voluntarily switching to IFRS typically increases the firm's level of disclosure and reduces the absolute forecast errors. However, the effect of mandatory IFRS adoption on information quality is questionable if the firms' reporting incentives do not change to align with transparency. A stream of research argues that the firms' reporting incentives and not accounting standards is the primary factor that determines the informativeness of accounting statements (Ball et al., 2000, and Ball and Shivakumar, 2005). Consistent with the importance of reporting incentives, Christensen et al. (2009) finds that incentives dominate standards in determining accounting quality around the mandatory IFRS adoption. Moreover, various studies have failed to find strong evidence that the IFRS improves the information set of investors and find limited or no capital market benefits for mandatory adopters.

Ball and Shivakumar (2005) suggests that managers do exercise their discretion and judgment opportunistically.

2.2 Accounting Quality under IFRS

Ahmed, Neel, and Wang (2012) stated that previous studies focused on a number of institutional factors that have impacted accounting quality. The evidence in previous studies suggests that the accounting quality is generally higher in strong enforcement countries relative to weak enforcement countries. This in turn suggests that there may be systematic differences in the effects of the IFRS adoption in strong enforcement versus weak enforcement countries. However, it is very difficult to make definitive predictions because the change in accounting quality from the pre-IFRS periods to the post-IFRS periods depends upon: (i) whether the IFRS is of higher or lower quality than the domestic GAAP, for example, whether they increase or decrease overall managerial discretion; and (ii) on the efficacy of enforcement mechanisms. For strong enforcement countries, if IFRS is of higher quality than domestic GAAP and they are appropriately enforced, expect an improvement in accounting quality. For example, if IFRS eliminates accounting alternatives that were opportunistically used by the managers, elimination of these alternatives would improve the accounting quality. They also believed that strong enforcement partition has a significantly higher average rule of law score.

That is, firms in the strong enforcement partition have lower (higher) average total assets, book-to-market, growth rates, and leverage (market values) relative to the weak enforcement partition. In addition, they believed that if the IFRS are of lower quality than domestic GAAP in the sense that they increase managerial discretion, accounting quality would decline even in strong enforcement countries given that managers have incentives to exercise their discretion in their own interests. Furthermore, the accounting quality may decline after the mandatory IFRS adoption because principles-based standards are looser, on average, than domestic standards and thus, more difficult to enforce. Nelson (2003) concludes that aggressiveness of reporting decisions increases with the imprecision of the relevant reporting standard, based on a survey-based research. In addition, they believed that even in strong enforcement countries, relatively loose standards can result in more opportunistic choices.

This is supported by Paananen and Lin (2008), who find that evidence of a decline in accounting quality in Germany, strong enforcement country, after the mandatory IFRS adoption. Ball (2006) believes that in the absence of suitable enforcement mechanisms, real convergence and harmonization is infeasible, resulting in diminished comparability. Collectively, these studies suggest that loose standards can lead to a decline in accounting quality even in strong enforcement countries. On the other hand, in the weak enforcement countries, previous research studies such as of Leuz et al. (2003), Burgstahler et al. (2006), Holthausen (2009), and Hope (2003) argue that rules or standards are generally not effective, that is, without adequate enforcement, even the best accounting standards will be inconsequential. Extending this logic, even if the IFRS is of a higher quality than a domestic GAAP, they are unlikely to result in improvements in accounting quality in weak enforcement countries because they are unlikely to be properly enforced. Therefore, do not expect a change in accounting quality after the mandatory IFRS adoption for firms in weak enforcement countries. Armstrong et al. (2009) and Soderstrom and Sun (2007) believed that cultural, political and business differences may also continue to impose significant obstacles in the progress towards this single global financial communication system, since a single set of accounting standards cannot reflect the differences in the national business practices arising from differences in the institutions and cultures.

2.3 Variables Affected Financial Reporting under IFRS

Ahmed, Neel, and Wang (2012) also finds in their study that there is an increase in income smoothing for the IFRS firms relative to benchmark firms after the mandatory IFRS adoption. Specifically, they find a significant decrease in the volatility of net income, the volatility of net income relative to the volatility of cash flows, and the correlation between cash flows and accruals for the IFRS firms relative to benchmark firms. Second, they find evidence of a significant increase in aggressive reporting of accruals for the IFRS firms relative to benchmark firms. Third, they find evidence of a significant reduction in timeliness of loss recognition for the IFRS firms relative to benchmark firms consistent with the increase in reporting aggressiveness suggested by the accrual tests. Finally, they believed that their evidence is consistent with meeting or beating earnings targets after controlling for variable, management, in benchmark firms. In addition, they stated that while the evidence is not fully consistent across all proxies, taken together, the results suggest that the accounting quality decreased after the mandatory IFRS adoption.

Ball et al. (2000) finds that timeliness of loss recognition decreases significantly after the mandatory IFRS adoption relative to benchmark firms. Similarly, Paananen (2008) and Paananen and Lin (2008) find in their results that there is a decrease in financial reporting quality, an increase in earnings management, and a reduction in timeliness of loss recognition in Germany, following mandatory IFRS. Jeanjean and Stolowy (2008) finds no decline in the pervasiveness of the earnings management in Austria and UK but an increase in France. Christensen et al. (2008) finds that the incentives dominate standards in determining accounting quality around mandatory IFRS adoption. Daske et al. (2008) shows that the capital market benefits around the mandatory adoption of the IFRS are unlikely to exist primarily because of IFRS adoption. Daske (2006) finds no evidence that the IFRS adoption decreases a firm's cost of capital. Atwood et al. (2010) finds that the earnings reported under the IFRS are no more or less persistent and are no more or less associated with the future cash flows than earnings reported under the local GAAP. In addition, they suggest that the documented increase in analyst forecast accuracy following the IFRS is not the result of the differences in the underlying persistence of those earnings. Barth et al. (2008) shows that the voluntary adoption of the IFRS is associated with less earnings management (i.e. less earnings smoothing), timelier loss recognition and higher value relevance of accounting earnings. Hung and Subramanyam (2007) reaches similar conclusions about accounting quality for German voluntary adopters between 1998 and 2002. Horton, Serafeim, and Serafeim (2012) finds that forecast accuracy improves significantly after the mandatory IFRS adoption relative to firms that do not adopt IFRS. In addition, the larger the difference between IFRS and local GAAP earnings the larger is the improvement in forecast accuracy, increasing the confidence that it is the IFRS adoption that causes the improvement in the information environment. Forecast accuracy improves more for analyst-firm pairs that are affected by either information or comparability benefits. Overall, they find that the increase in forecast accuracy is driven by manipulation.

III. Research Methodology

This research is an empirical comparative study between Canadian GAAP and IFRS to understand the nature and extent of the accounting quality after IFRS adoption in the large Canadian financial institutions.

Fielding and Fielding (1986, pp. 34) stated that: "what is important is to choose at least one method which is specifically suited to explore structural aspects of the problem and at least one which can capture the essential elements of its meaning". This research study requires collecting, counting, and classifying data, and performing analyses on statistical findings. It requires a process to include a method of deductive reasoning by the use of the measurement tools to collect the relevant data. In addition, it requires only establishing associations among variables using effect statistics such as correlations. As such, the quantitative research method will be selected for this research study. Bryman (1989) explained that the quantitative research method tests hypotheses and identifies patterns in variables, whereas the qualitative method validates corporate information and informs some of the methodological decisions. With its origins in the scientific empirical tradition, the quantitative approach relies on the numerical evidence to draw conclusions, to test hypotheses or theory, and is concerned with: measurement, causality, generalization, and replication. Burns (2000) believed that the quantitative research method is infused with positivism and is based on a collection of quantifiable observations, which permits deduction of the laws and the establishment of relationships. In addition, Creswell (2009) stated that if problem calls for identification of factors that influence an outcome, the utility of an intervention, or understanding clear outcomes, then a quantitative approach is most suitable.

Within a quantitative research method framework, longitudinal survey method will be adopted to collect five years of data from 2008 to 2012. According to Zanaida and Fernando (2000), longitudinal design is seldom used in social science research; however, it is typically within financial investigations that have adopted positivist research philosophy. Buck et al. (2003) and McKnight and Tomkins (2004) believed that financial research is very typical for a positivist investigation. This is supported by Main & Johnson (1993), who believed that companies' annual reports are a common resource tool when examining archival data. Accordingly, this study will collect financial data of companies from highly credible SEDAR (represents the Canadian Securities Commission) database. The Canadian GAAP data will be from 2008 to 2010 and the IFRS data will be from 2011 to 2012. The sample will consist of nine largest Canadian Banks (represents 70% of the Canadian financial industry) from the TSX/S&P index. The random sample method will be selected for this research study to avoid selection bias, as it is the purest form of probability sampling. Yates (2008, p. 27) believed that an unbiased random selection of individuals is important so that in the long run sample represents the population.

The surveys are believed to be useful when a researcher wants to collect data on phenomena that cannot be directly observed. It is a non-experimental, descriptive research method. Groves et al. (2004, pp. 4) stated: "survey is a systematic method for gathering information from (a sample of) entities for the purpose of constructing quantitative descriptors". As such, this research study will use the survey method. The use of the regression models is a technique used for the modeling and analysis of the numerical data consisting of values of a dependent variable (or response variable) and independent variables predictor or explanatory variable). The regression models will be used for statistical analyses, as it is a technique used for the modeling and analysis of the numerical data consisting of values of a dependent variable (or response variable) and independent variables predictor or explanatory variable. The five percent confidence interval or alpha will be assigned in this empirical research.

Statistical Models

This research study will try to understand the accounting quality in two approaches.

1) Statement of Financial Position (Balance Sheet) approach:

$$\Delta NI/\Delta TA = \Delta NI/\Delta OCF + \Delta OCF/\Delta Accruals + \Delta OCF/\Delta TA + \Delta NI/\Delta Accruals + \Delta EPS/\Delta MP + \Delta NI/\Delta BVPS.$$

2) Statement of Operations (Income Statement or Profit/Loss) approach:

$$\Delta NI = \Delta EPS + \Delta BVPS + \Delta MP + \Delta OCF + \Delta Accruals.$$

Where:

NI=Net income; TA=Total Assets; OCF=Operating Cash Flow; EPS=Earnings per share; BVPS=Book value per share; MP=Market price.

Regression Model 1 (Statement of Financial Position approach):

$$Y_1 = c + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + \epsilon$$

$Y_1 = \Delta NI / \Delta TA$; c = constant predictor; B_1 = influential factor for $\Delta NI / \Delta OCF$; B_2 = influential factor for $\Delta OCF / \Delta Accruals$; B_3 = influential factor for $\Delta OCF / \Delta TA$; B_4 = influential factor for $\Delta NI / \Delta Accruals$; B_5 = influential factor for $\Delta EPS / \Delta MP$; B_6 = influential factor $\Delta NI / \Delta BVPS$; ϵ = error; X_1 = value of $\Delta NI / \Delta OCF$; X_2 = value of $\Delta OCF / \Delta Accruals$; X_3 = value of $\Delta OCF / \Delta TA$; X_4 = value of $\Delta NI / \Delta Accruals$; X_5 = value of $\Delta EPS / \Delta MP$; and X_6 = value of $\Delta NI / \Delta BVPS$. Confidence level (α) was set at 5 percent.

$\Delta NI / \Delta TA$ is a dependent variable in the statement of financial position approach. It represents as an accounting quality. Δ in NI represents the equity component, and Δ in TA represents one component of the statement of financial position as such, the combination of these components represents added value for the statement of financial position. $\Delta NI / \Delta OCF$ represents operating capabilities and predictability and $\Delta OCF / \Delta Accruals$ are an independent variable and represents the ratios between the operating cash flows and accruals and have an indirect impact on the accounting quality in terms of cash and non-cash transactions. $\Delta OCF / \Delta TA$ is an independent variable and represents liquidity and future earnings.

$\Delta NI / \Delta Accruals$ is a dependent variable and represents reporting aggressiveness and timeliness of loss recognition. $\Delta EPS / \Delta MP$ is a dependent variable and represents the earnings value relevance (earnings sensitivity or usefulness to market price). $\Delta NI / \Delta BVPS$ is a dependent variable and represents earnings sensitivity to book value per share.

Regression Model 2 (Statement of Operations approach)

$$Y_2 = c + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + \epsilon$$

$Y_2 = \Delta NI$; c = constant predictor; B_1 = influential factor for ΔEPS ; B_2 = influential factor for $\Delta BVPS$; B_3 = influential factor for ΔMP ; B_4 = influential factor for ΔOCF ; B_5 = influential factor $\Delta Accruals$; ϵ = error; X_1 = value of ΔEPS ; X_2 = value of $\Delta BVPS$; X_3 = value of ΔMP ; X_4 = value of ΔOCF ; and X_5 = value of $\Delta Accruals$. Confidence level (α) was set at 5 percent.

Δ in NI is a dependent variable and represents the macro effect or added value to equity component. Δ in EPS is an independent variable and represents earnings persistency and predictability through net income and shares outstanding, provided shares does not change materially to influence EPS. Δ in BVPS is an independent variable and represents the accounting value for the shareholders. Δ in MP is an independent variable and represents a fair value measurement of the firm.

Δ in OCF is an independent variable and represents operating capabilities and future cash earnings. Δ in Accruals is an independent variable and represents reporting aggressiveness and income smoothing.

3.1 IFRS Variables from Literature

Paananen (2008) and Paananen and Lin (2008) in their IFRS research have used variables related to financial reporting quality, earnings management, and a timeliness of loss recognition to assess financial reporting quality. Barth et al. (2008) in their IFRS research has used variables of volatility of net income, ratio of volatility of net income to the volatility of cash flows, and the correlation between cash flows and accruals. Ball et. al (2000) in their IFRS research has used timely loss recognition (measured by net income and the asymmetric incorporation of economic gains and losses into the reported income) to assess accounting quality. Beaver (2002) in their IFRS research has used value relevance (statistical association between accounting information and market prices or returns) as a variable to assess accounting quality. Ahmed, Neel, and Wang (2012) in their IFRS research study has used variables related to income smoothing: volatility of net income, volatility of net income relative to volatility of cash flows, correlation between cash flows and accruals.

Research Question

Does IFRS adoption in the large Canadian banks improve financial reporting quality?

Hypotheses:

H_0 : Financial reporting quality has not improved after IFRS adoption in the large Canadian banks.

H₁: Financial reporting quality has improved after IFRS adoption in the large Canadian banks.

IV. Limitations

This study has three important limitations. First, the assumption that if the IFRS adoption has resulted in an increase or decline in accounting quality is conditional on the presumption that the change in the accounting quality measures is driven principally by the changes in managerial discretion or the exercise of judgment rather than by changes in properties of accounting naturally resulting from the new standards. Second, IFRS adoption period results are based only on the two years of data, 2011 and 2012. As such, it is conceivable that over a longer period the effects of this research information may not persist as implementation guidance and preparer familiarity with IFRS standards increase over time and/or there are improvements in the institutional structures of financial reporting in the Canadian banks. Third, Canadian GAAP period results were based on three year period from 2008 to 2012.

V. Results

5.1 Correlations Analysis: Statement of Operations Approach

Statement of Operations Approach: IFRS		Δ NI 08-10	Δ NI 11-12	Δ in EPS 08-10	Δ in EPS 11-12	Δ in BVPS 08-10	Δ in BVPS 11-12	Δ in MP 08-10	Δ in MP 11-12	Δ in OCF 08-10	Δ in OCF 11-12	Δ in Accruals 08-10	Δ in Accruals 11-12
Pearson Correlation	Δ in NI	1.000	1.000	.301	.781	-.116	.059	-.174	-.750	-.834	.993	-.428	-.997
	Δ in EPS	.301	0.781	1.000	1.000	-.141	.000	-.297	-.327	-.267	.704	-.068	-.733
	Δ in BVPS	-.116	.059	-.141	.000	1.000	1.000	.637	-.134	.003	.066	.234	-.064
	Δ in MP	-.174	-.750	-.297	-.327	.637	-.134	1.000	1.000	-.053	-.793	.128	.779
	Δ in OCF	-.834	.993	-.267	.704	.003	.066	-.053	-.793	1.000	1.000	0.573	-.999
	Δ in Accruals	-.428	-.997	-.068	-.733	.234	-.064	.128	.779	.573	-.999	1.000	1.000

The table 1 had shown the correlation results (under statement of operations approach) between the Canadian GAAP and IFRS. Δ in EPS had changed from .301 under Canadian GAAP period to .781 under IFRS period, indicated that differences with respect to the persistency and predictability were found concerning the reported earnings, under the Canadian GAAP and IFRS. Although these results at first sight had shown that under IFRS earnings exhibited higher persistency and predictability, perhaps the use of fair value accounting under had created volatility under IFRS. Therefore, these attributes had shown accounting quality had increased under IFRS.

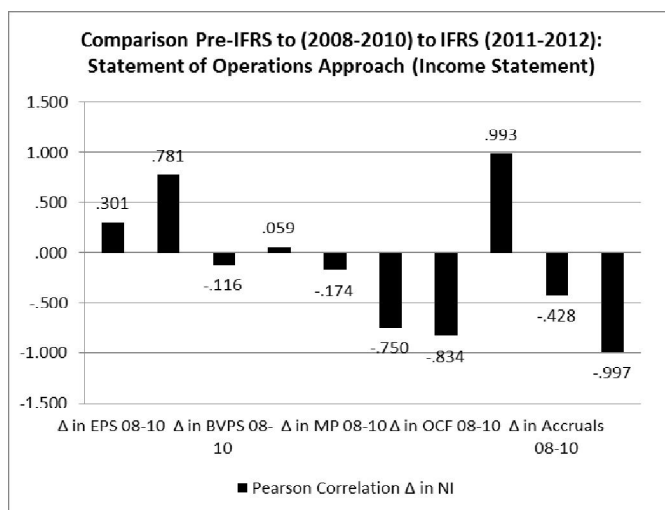
According to Schipper and Vincent (2003), permanent and less transitory earnings are more useful to the valuation process of a company, the earnings are judged to be of high (information) quality when they are highly persistent.

Δ in BVPS had changed from $-.116$ under Canadian GAAP to $.059$ under IFRS, indicated that under IFRS, earnings had positively influenced the book value per share (accounting valuation) for shareholder value; therefore, the quality of accounting had been improved. Δ in MP had changed from $-.174$ under Canadian GAAP to $.750$ under IFRS, indicated that under IFRS, the market price movement is positive and more volatile or sensitive, therefore reported earnings was more useful under IFRS period. Δ in OCF had changed from $.834$ under Canadian GAAP to $.993$ under IFRS, indicated that operating capability and future cash earnings had increased under the IFRS accounting as such, provides healthier cash predictability or financial cash outlook, and perhaps less manipulation of income by the management. Δ in Accruals had changed from $.428$ under Canadian GAAP to $-.997$ under IFRS, indicated that under IFRS, had significantly decreased accruals (decreased income smoothing, less timely loss recognition, and increased certain accounting incentives); therefore, decrease in accounting quality. This result is different from the result found by Ahmed, Neel, and Wang (2012) who stated that, the IFRS firms exhibit significant increases in income smoothing and aggressive reporting of accruals, and a significant decrease in timeliness of loss recognition.

It is believed that the properties of accounting numbers such as earnings smoothness and magnitude of accruals are affected not only by the underlying economic determinants and exercise of managerial judgments but also by the nature of accounting standards. For example, the IFRS permits capitalizing development expenditures that were expensed under many domestic accounting standards. This has the effect of increasing earnings and reducing earnings volatility. Similarly, the IFRS requires goodwill impairment rather than systematic amortization. Again, this would increase accruals and earnings except during periods when goodwill is impaired. Another example of a potentially significant change in accruals is recognition of employee benefit expenses that were not recognized prior to IFRS adoption. This would reduce accruals and earnings, but potentially increase smoothing. The broader point is that the adoption of certain standards could alter the properties of earnings without necessarily changing accounting quality.

Following figure 1 illustrates comparative correlations results:

Figure 1



5.2 Correlations Analysis: Statement of Financial Position Approach

Table 2: Correlations

Statement of Financial Position Approach		ΔNI to ΔTA 08-10	ΔNI to ΔTA 11-12	ΔNI to ΔOCF 08-10	ΔNI to ΔOCF 11-12	ΔOCF to ΔAccruals 08-10	ΔOCF to ΔAccruals 11-12	ΔOCF to ΔTA 08-10	ΔOCF to ΔTA 11-12	ΔNI to ΔAccruals 08-10	ΔNI to ΔAccruals 11-12	ΔEPS to ΔMP 08-10	ΔEPS to ΔMP 11-12	ΔNI to ΔBV 08-10	ΔNI to ΔBV 11-12
Pearson Correlation	ΔNI to ΔTA	1.000	1.000	-.068	.509	-.787	.413	-.857	-.984	-.217	.718	-.501	.550	.804	-.086
	ΔNI to ΔOCF	-.068	.509	1.000	1.000	-.325	.003	-.092	.431	-.473	.309	-.214	.270	-.254	.434
	ΔOCF to ΔAccruals	-.787	.413	-.325	.003	1.000	1.000	.855	.411	.372	.587	.641	.095	-.505	-.142
	ΔOCF to ΔTA	-.857	.984	-.092	.431	.855	.411	1.000	1.000	.034	.736	.805	.490	-.529	-.096
	ΔNI to ΔAccruals	-.217	.718	-.473	.309	.372	.587	.034	.736	1.000	1.000	-.234	.385	-.274	-.204
	ΔEPS to ΔMP	-.501	.550	-.214	.270	.641	.095	.805	.490	-.234	.385	1.000	1.000	-.156	-.480
	ΔNI to ΔBV	.804	-.086	-.254	.434	-.505	-.142	-.529	-.096	-.274	-.204	-.156	-.480	1.000	1.000

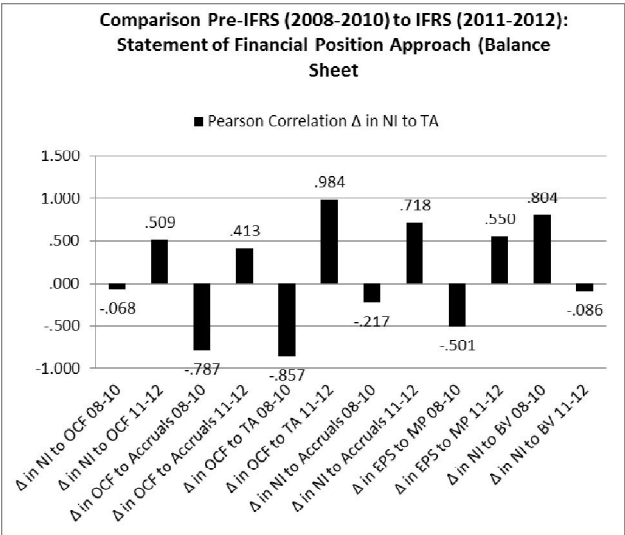
The table 2 had shown the correlation results (statement of financial position approach) for the Canadian GAAP and IFRS. ΔNI to ΔOCF had changed from -.068 under Canadian GAAP to .509 under IFRS, indicated that under IFRS, cash earnings, operating capabilities, and predictability of earnings had increased as such, the earnings are characterized as higher quality under IFRS.

ΔOCF to ΔAccruals had changed from -.787 under Canadian GAAP to .413 under IFRS, indicated that correlations between them had increased, however, no direct effect on accounting quality.

Δ OCF to Δ TA had changed from -.857 under Canadian GAAP to .984 under IFRS, indicated that significant increased was due to fair market valuation of the assets as such, higher accounting quality under IFRS.

Δ NI to Δ Accruals had changed from -.217 under Canadian GAAP to .718 under IFRS, indicated that significant increase in NI was perhaps due to increase in reporting aggressiveness and decrease in timeliness loss recognition, consistent with the earlier finding on Δ in Accruals under statement of operations approach. Therefore, had decreased the quality of accounting, indicated that in the financial institutions the Canadian GAAP reporting is more stringent towards managerial discretion than IFRS. Δ EPS to Δ MP had changed from -.501 under Canadian GAAP to .550 under IFRS, indicated that value relevance (earnings sensitivity or usefulness to market price) had increased under IFRS as such, the accounting quality was higher under IFRS. Δ NI to Δ BVPS had changed from .804 under Canadian GAAP to -.086 under IFRS, indicated that the valuation usefulness of IFRS earnings to book value per share had significantly decreased, therefore, accounting quality had decreased under IFRS. Following figure 2 is the comparative correlations result:

Figure 2



5.3 Statistical Regression Analysis

1) Statement of Operations Approach

$$\text{Canadian GAAP: } Y_{2008-2010} = .306 - .003X_1 + .044X_2 - .454X_3 - .032X_4 + .014X_5$$

(Appendix D table 6)

$$\text{IFRS: } Y_{2011-2012} = -2.062 + 6.552X_1 - .005X_2 + 2.1863X_3 - .073X_4 - 3.563X_5$$

(Appendix D table 6)

2) Statement of Financial Position Approach

$$\text{Canadian GAAP: } Y_{2008-2010} = .071 - .007X_1 - .032X_2 - .24X_3 - .002X_4 + 1.739X_5 - .028X_6$$

(Appendix D table 6)

$$\text{IFRS: } Y_{2011-2012} = -1.030 + 5.241X_1 + 4.932X_2 + 2.043X_3 - 3.535X_4 + 12.273X_5 - .001X_6$$

(Appendix D table 6)

The empirical coefficients under the statement of operations approach for the IFRS (table 6 appendix D) found that B_1 (Δ in EPS) and B_3 (Δ in MP) were higher relative to the Canadian GAAP indicated that these betas were influential to the regression model, providing much clearer evidence of positive shocks were transitory for the IFRS firms. However, it was found that B_2 (Δ in BVPS), B_4 (Δ in OCF), and B_5 (Δ in Accruals) were lower, a negative transitory shock, relative to the Canadian GAAP. According to Brauer and Westermann (2010), who stated that a negative coefficient on the betas would imply a smooth (non-oscillating) impulse-response pattern. The larger the B, the faster is the reversion to the mean. B_1 (Δ EPS) and B_3 (Δ MP) were > 0 indicated that, positive influence to earnings predictability and shareholder valuation in the IFRS regression model. However, B_2 (Δ BVPS), B_4 (Δ OCF) and B_5 (Δ Accruals) were < 0 indicated that, negative market volatility had been recognized more timely than positive market volatility relating to accounting valuation, operating cash forecasting, and accruals, in the IFRS regression model.

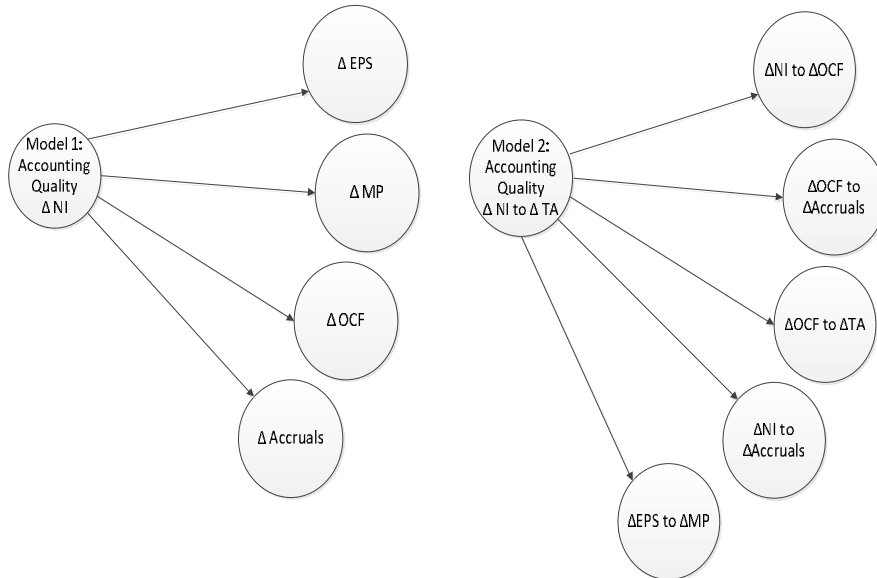
The empirical coefficients under the statement of financial position approach for the IFRS (table 6 appendix D) found that all the betas (B_1 , B_2 , B_3 , B_4 , B_5 , and B_6) were lower relative to the Canadian GAAP, indicated that these betas had significantly less influence in the IFRS regression model. In the IFRS regression model, B_5 (ΔEPS to ΔMP) was > 0 indicated that, positive influence of this beta concerning value relevance would be persistent, in the IFRS regression model.

However, B_1 (ΔNI to ΔOCF), B_2 (ΔOCF to $\Delta\text{Accruals}$), B_3 (ΔOCF to ΔTA), B_4 (ΔNI to $\Delta\text{Accruals}$), and B_6 (ΔNI to ΔBVPS) were < 0 indicated that persistence of negative influence of fair market value of the assets, accruals, cash forecasting, and shareholder value in the IFRS regression model. The F-tests results (large numbers characterized statistical model's usefulness) as provided in the table 5 (appendix C), had shown that the models were consistent under the statements of operations and statement of financial position. That is, the Canadian and IFRS regression models had a similar relationship between independent and independent variables.

The table 3 (appendix A), under the Canadian GAAP, had shown average R^2 (timeliness) of 75.4% relative to average R^2 of 100% under IFRS. The table 4 (appendix B) under the Canadian GAAP, had shown average R^2 of 92.1% relative to average R^2 of 98.5%. Therefore, all these regression models had indicated good persistent earnings, that is, the predictive value of earnings represented by the variance in the persistency of the earnings had a good certainty (low degree of variance) in the future earnings. Beijerink (2008) found in his research that both IFRS and US-GAAP earnings were highly persistent, that is, R^2 of 82.6% for the IFRS pooled sample relative to 65.9% for the US-GAAP pooled sample. In the research of Jennings (2003) the researchers found similar results for the timeliness. However, Francis et al. (2004) found an average R^2 for the timeliness of 21.9% for the sample consisting of a large number of US firms for the period 1975-2001.

5.4 Statistical Models

Following figure 3 illustrates the derived statistical models for the financial reporting in the Canadian largest banks. That is, the accounting quality can be determined through the application of variables in the respective models for accruals (income smoothing and timeliness loss recognition); reporting aggressiveness; earnings persistency; value relevance; predictability; managerial discretion; and enforcement.

Figure 3

VI. Conclusions

Globally, the use of the IFRS in financial reporting is the requirement for many countries, primarily due to the influence of investors/shareholders demand, cost minimization in financial reporting, security listings requirements, foreign investments, free trade, and global competition. However, the question of whether such a global transition towards a single set of accounting standards has been met by the presumed benefits of higher accounting quality and comparability yet remains unanswered. To contribute to our knowledge in this important topic I have investigated whether mandatory IFRS adoption in the nine largest Canadian banks improves quality of the financial reporting. This research finds that under IFRS, increase in earnings quality due to increase in value relevance (earnings influence to market price); increase in persistency and predictability in earnings and cash flows; and increase in earnings to shareholder value. However, it also finds that, decrease in accruals and timeliness loss of recognition (reduce in income smoothing), and decrease in the accounting valuation usefulness (earnings to book value per share). Moreover, this research finds that the results are consistent with both information and comparability effects under the two approaches (statement of operations and the statement of financial position).

The potential for the IFRS to increase comparability is questioned by many, because the same accounting standards can be implemented differently. In addition, these results suggest that loose standards can lead to a decline in accounting quality even in strong enforcement countries like Canada and the United States. Following table 7 summarizes and compares the research results on accounting quality between pre and post adoption of IFRS:

Table 7: Summary of Accounting Quality Regression Results under IFRS relative to Canadian GAAP			
Statement of Operations Approach		Statement of Financial Position Approach	
Δ EPS	Higher persistency and predictability in earnings; higher accounting quality under IFRS.	Δ NI to Δ OCF	Increase in operating capability and predictability; increase in quality of reporting under IFRS.
Δ BVPS	Increase in earnings influence to shareholders value; higher accounting quality under IFRS.	Δ NI to Δ BVPS	Decrease in valuation usefulness of earnings to BVPS; lower accounting quality under IFRS.
Δ MP	Earnings provide negative volatility to market price; lower accounting quality under IFRS.	Δ EPS to Δ MP	Increase in value relevance (earnings influence to market price); increased accounting quality under IFRS.
Δ OCF	Positive predictability in cash flow and financial forecasting; higher accounting quality under IFRS.	Δ OCF to Δ TA	Increase in fair market valuation; higher accounting quality under IFRS.
Δ Accruals	Decrease in accruals; lower accounting quality under IFRS.	Δ NI to Δ Accruals	Increase in accruals and timeliness loss of recognition; higher accounting quality under IFRS.
		Δ OCF to Δ Accruals	Increase in correlation; no direct effect on accounting quality under IFRS.

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Appendices

Appendix A

Table 3										
Model Summary ^b Canadian (2008-2010): Statement of Operations Approach										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.868 ^a	.754	.695	.29508	.754	12.877	5	21	.000	1.716
Model Summary ^b IFRS (2011-2012): Statement of Operations Approach										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	1.000 ^a	1.000	1.000	10.69599	1.000	51085.549	5	12	.000	2.843
a. Predictors: (Constant), Δ in Accruals, Δ in BVPS, Δ in MP, Δ in OCF, Δ in EPS										
b. Dependent Variable: Δ in NI										

Appendix B

Table 4										
Model Summary ^b Canadian (2008-2010): Statement of Financial Position Approach										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.959 ^a	.921	.895	.16857	.921	36.687	6	19	.000	1.584
Model Summary ^b IFRS (2011-2012): Statement of Financial Position Approach										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.993 ^a	.985	.977	16.17110	.985	121.633	6	11	.000	1.962
a. Predictors: (Constant), Δ in EPS to MP, Δ in OCF to Accruals, Δ in NI to OCF, Δ in OCF to TA, Δ in NI to Accruals										
b. Dependent Variable: Δ in NI to TA										

Appendix C

ANOVA ^a Canadian GAAP (2008-2010): Statement of Operations Approach						ANOVA ^a IFRS (2011-2012): Statement of Operations Approach					
	Sum of Squares	df	Mean Square	F	Sig.		Sum of Squares	df	Mean Square	F	Sig.
Regression	5.606	5	1.121	12.877	.000 ^b	Regression	29221995.448	5	5844399.090	51085.549	.000 ^b
Residual	1.829	21	.087			Residual	1372.850	12	114.404		
Total	7.435	26				Total	29223368.298	17			

ANOVA ^a Canadian GAAP (2008-2010): Statement of Financial Position Approach						ANOVA ^a IFRS (2011-2012): Statement of Financial Position Approach					
	Sum of Squares	df	Mean Square	F	Sig.		Sum of Squares	df	Mean Square	F	Sig.
Regression	6.255	6	1.043	36.687	.000 ^b	Regression	190845.394	6	31807.566	121.633	.000 ^b
Residual	.540	19	.028			Residual	2876.548	11	261.504		
Total	6.795	25				Total	193721.942	17			

a. Dependent Variable: Δ in NI to TA

b. Predictors: (Constant), Δ in EPS to MP, Δ in OCF to Accruals, Δ in NI to OCF, Δ in OCF to TA, Δ in NI to Accruals

Appendix D

Coefficients: Statement of Operations Approach: Canadian GAAP (2008 - 2010)						Coefficients: Statement of Operations Approach: IFRS (2011 -2012)					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta				B	Std. Error	Beta		
(Constant)	.306	.109		2.799	.011	(Constant)	-2.062	2.989		-.690	.503
Δ in EPS	-.003	.037	-.010	-.079	.938	Δ in EPS	6.552	.580	.105	11.287	.000
Δ in BVPS	.044	.362	.017	.121	.905	Δ in BVPS	.005	.027	.000	.174	.865
Δ in MP	-.454	.265	-.254	-1.712	.102	Δ in MP	2.186	2.358	.004	.927	.372
Δ in OCF	-.032	.005	-.923	-6.476	.000	Δ in OCF	-.073	.746	-.013	-.098	.923
Δ in Accruals	.014	.015	.129	.921	.368	Δ in Accruals	-3.563	.544	-.937	-6.544	.000

a. Dependent Variable: Δ in NI

Coefficients: Statement of Financial Approach: Canadian GAAP (2008 - 2010)						Coefficients: Statement of Financial Approach: IFRS (2010 -2012)					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta				B	Std. Error	Beta		
(Constant)	.071	.059		1.217	.239	(Constant)	-1.030	5.770		-.179	.862
Δ NI to Δ OCF	-.007	.018	-.038	-.376	.711	Δ NI to Δ OCF	5.241	2.420	.121	2.166	.053
Δ OCF to Δ Accruals	-.032	.054	-.101	-.584	.566	Δ OCF to Δ Accruals	4.932	3.558	.066	1.386	.193
Δ OCF to Δ TA	-.024	.007	-.733	-3.618	.002	Δ OCF to Δ TA	2.043	.136	.908	15.017	.000
Δ NI to Δ Accruals	-.002	.012	-.021	-.180	.859	Δ NI to Δ Accruals	-3.535	3.685	-.061	-.959	.358
Δ EPS to Δ MP	1.739	1.310	.200	1.328	.200	Δ EPS to Δ MP	12.273	8.180	.083	1.500	.162
Δ NI to Δ BVPS	.028	.007	.381	3.739	.001	Δ NI to Δ BVPS	-.001	.005	-.015	-.250	.807

a. Dependent Variable: Δ NI to Δ TA