CORPORATE ACCOUNTING REGIME AND EARNINGS MANAGEMENT: EVIDENCE FROM VIETNAM

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Abstract
Following the adoption of new corporate accounting regime which brings Vietnamese accounting standards closer to International Financial Reporting Standards (IFRS) in Vietnam as of January 1, 2015, this study examines its impact on earnings management of Vietnamese listed firms. The sample comprises of top 100 listed firms in Vietnam. Specifically, financial statement figures of pre-adoption period and post-adoption are utilized. Descriptive statistics and least square regression are conducted to analyse the effect of new corporate accounting regime adoption on earnings management. To examine earnings management from the perspective of managing earnings toward a positive target, this study pools all observations for the pre-adoption and the post-adoption periods to measure the frequency of small positive earnings. The finding suggests that there has been an improvement to accounting quality after Vietnamese listed firms moved to new corporate accounting regime. In particular, the result indicates that the pervasiveness of earnings management by way of smoothing has reduced post-adoption.

Key words: new corporate accounting regime adoption, earnings management, Vietnam

JEL Code: M41, M48

Introduction
In 2015, Vietnamese government formalized their decision to adopt new corporate accounting regime mandatorily as of January 1, 2015. This brings Vietnamese accounting standards closer to International Financial Reporting Standards (IFRS) in Vietnam. As a result, many capital market participants are becoming increasingly concerned whether accounting quality had been significantly affected by the transition. To address this question, this study examines the association between new corporate accounting regime adoption and earnings management in the context of the Vietnamese capital market. Specifically, earnings management is compared before and after the mandatory introduction of new corporate accounting regime in Vietnam to determine its effect on accounting quality.
Overall, inferences based on a sample of 348 firm-year observations for Top 100 Vietnamese listed firms provide support that the adoption of new corporate accounting regime in Vietnam has made an improvement to accounting quality. Specifically, the study finds evidence that following the mandatory adoption of new corporate accounting regime, Top 100 Vietnamese listed firms engage in less earnings management by way of income smoothing.

The primary contribution is that this paper exclusively examines the impact of new corporate accounting regime on earnings management as this regime go through revisions and take Vietnamese accounting standards to IFRS. No study, to my knowledge, has empirically examined this issue. Our second contribution is that the findings in this paper are particularly relevant to the Ministry of Finance of Vietnam and other standard setters. The research findings provide feedback on whether the change to corporate accounting regime has improved accounting quality. This research will also be of vital interest to standard setters, regulators, researchers, policy-makers and other stakeholders.

The remainder of the paper is organized as follows. The next section develops the hypotheses and section 3 explains data and research design. Section 4 presents the results. Section 5 offers a summary and concluding remarks.

**Hypothesis Development**

The findings on the effects of IFRS adoption on accounting quality are mixed in prior studies. Some studies show that the change to IFRS positively impacts accounting quality (Chen et al., 2010; Kargin, 2013; Lin & Chen, 2005; Vijitha & Nimalathasan, 2014). There are also some instances where a negative impact has been found on accounting quality in the recent mandatory environment (Ahmed et al., 2013; Hou et al., 2016; Miah, 2012). Yet others find no conclusive evidence (Callao et al., 2007; Doukakis, 2014; Tsalavoutas et al., 2012).

For example, on the one hand, Chen et al. (2010) demonstrate that a majority of accounting quality measures, including those based on accrual characteristics commonly adopted in the literature, show improvement in their sample of 15 European countries after mandatory IFRS adoption in 2005. On the other hand, in a study comparing firms from 20 countries that have adopted IFRS (most of which are in the European union) with those from non-adopting countries, Ahmed et al. (2013) find that IFRS adoption has a negative impact on accounting quality in countries of strong enforcement but little impact in countries of weak enforcement. Doukakis (2014) finds that mandatory IFRS adoption had no significant impact on either real or accrual-based earnings management practices in 22 European countries.
As a consequence, these mixed findings do not provide a clear prediction about the impact on accounting quality in the context of the new corporate accounting regime adoption in Vietnam. However, the benefit of improved accounting quality following the new corporate accounting regime adoption is also likely to eventuate in the Vietnamese environment where both legal enforcement and investor protection are being strong. This study therefore proposes the following research hypothesis:

**H: Accounting quality in Vietnamese listed firms is higher in the new corporate accounting regime adoption period than in the pre-adoption period.**

### Sample and Research Design

#### Sample

The sample consists of top 100 Vietnamese listed firms from 2012-2013 as the pre-adoption period and 2015-2016 as the adoption period. The study excludes 2014 to ensure transition effects in the year prior to the year of the mandatory adoption of the new corporate accounting regime do not drive the results (Wali & Boujelbene, 2017). The observations for which data are missing or which are extreme are eliminated. Subsequently, the final sample consists of 348 observations.

#### Earnings Management measure

To examine earnings management from the perspective of managing earnings toward a positive target, this study pools all observations for the pre-adoption and the post-adoption periods to measure the frequency of small positive earnings (SPOS). Following prior research (Barth et al., 2008; Chua et al., 2012), this study uses a dummy variable for small positive earnings (SPOS) that sets to 1 for observations for which annual net income (scaled by total assets) is between 0 and 0.01, and sets to 0 otherwise. The binary variable of POST with the binary variable of SPOS is the dependent variable for the logit regression. This paper examines whether the probability of firms reporting small positive earnings (SPOS) has changed after firms transited to the new corporate accounting regime (POST), together with the control variables used in previous measures, by interpreting the coefficient \( \alpha_1 \) from a logit model as follows:

\[
SPOS_i = \alpha_0 + \alpha_1 POST_i + \sum \gamma_j control\ variables_i + \epsilon_i
\]

Where:

SPOS = dummy variable that equals 1 if net income scaled by total assets is between 0 and 0.01, and 0 otherwise;
POST = dummy variable that equals 1 if observations are in the post-adoption period, and 0 otherwise;
Control variables including:
TURN = sales divided by total assets;
LEV = total liabilities divided by equity book value;
DISSUE = percentage change in total liabilities;
GROWTH = percentage change in sales;
CFO = annual net cash flow from operating activities divided by total assets.

A significant negative coefficient on POST (i.e., \( \alpha_1 < 0 \)) demonstrates that firms managed earnings toward small positive amounts more frequently in the pre-adoption period than they did in the adoption period, which should indicate higher accounting quality in the adoption period.

**Results**

**Descriptive Statistics**

Table 1 presents the descriptive statistics for both the test variable (SPOS) and control variables across the pre-adoption and the post-adoption periods. A comparison between the periods reveals that the mean or median values of the test variable are significantly different. Similarly, the sample firms experienced significant changes in variability (standard deviation) of the test variable in the post-adoption period than in the pre-adoption period. They suggest that firms during the post-adoption periods are less likely than firms the pre-adoption periods to manage earnings towards a positive target.

| Tab. 1: Descriptive Statistics Relating to Variables Used in Analyses |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                | Pre (n = 174) | Post (n = 174) |
|                                | Mean | Median | Std.dev. | Mean | Median | Std.dev. |
| **Test variables**             |      |        |         |      |        |         |
| SPOS                           | 0.1379 | 0.0000 | 0.3458 ** | 0.0575 ** | 0.0000 ** | 0.2334 ** |
| **Control variables**          |      |        |         |      |        |         |
| TURN                           | 1.0390 | 0.7604 | 1.0226 | 1.0028 | 0.6846 | 1.0389 |
| LEV                            | 0.4608 | 0.4724 | 0.1912 | 0.4465 | 0.4587 | 0.2017 |
| DISSUE                         | 0.1933 | 0.0878 | 0.7141 | 0.2103 | 0.0993 | 0.5117 |
| GROWTH                         | 0.4422 | 0.1037 | 2.5435 | 0.2436 | 0.0769 | 0.6243 |
| CFO                            | 0.0971 | 0.0762 | 0.1543 | 0.0706 | 0.0687 | 0.1675 |

Source: Author’s calculation

*, **, *** Represent significant difference between the pre-adoption and the post-adoption periods at the 10%, 5%, and 1% levels, respectively (two-tailed).

Definition of variables:
**SPOS** is an indicator variable that equals one if net income scaled by total assets is between 0 and 0.01; **TURN** is sales divided by end-of-year total assets; **LEV** is end of year total liabilities divided by end of year total equity book value; **DISSUE** is percentage change in total liabilities; **GROWTH** is percentage change in sales; **CFO** is annual net cash flow from operating activities divided by total assets.

Table 2 reports a correlation matrix for the independent and control variables used in the regression, with correlations for the pre-adoption period being shown in Panel A and the post-adoption period being shown in Panel B. Overall, correlations between the variables in both periods are modest, in which correlation between **LEV** and **CFO** is the highest in the pre-adoption period (-0.40 significant at 1 percent), which indicates a low probability of multicollinearity.

**Tab. 2: Correlation Matrix between Variables for the Pre-Adoption Period and the Post-Adoption Period**

**Panel A: Pre-Adoption Period**

<table>
<thead>
<tr>
<th></th>
<th>SPOS</th>
<th>TURN</th>
<th>LEV</th>
<th>DISSUE</th>
<th>GROWTH</th>
<th>CFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPOS</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TURN</td>
<td>-0.2907***</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>0.3088***</td>
<td>0.0572</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISSUE</td>
<td>-0.1105</td>
<td>0.1941**</td>
<td>-0.0276</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.0209</td>
<td>-0.0218</td>
<td>0.0727</td>
<td>0.0945</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>CFO</td>
<td>-0.2174***</td>
<td>0.3127***</td>
<td>-0.4006***</td>
<td>0.2584***</td>
<td>-0.0454</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Source: Author’s calculation

*, **, *** Represent the 10%, 5% and 1% level of significance in two-tailed tests, respectively.

**Panel B: Post-Adoption Period**

<table>
<thead>
<tr>
<th></th>
<th>SPOS</th>
<th>TURN</th>
<th>LEV</th>
<th>DISSUE</th>
<th>GROWTH</th>
<th>CFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPOS</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TURN</td>
<td>-0.1716**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>-0.0654</td>
<td>0.1515**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISSUE</td>
<td>-0.1045</td>
<td>0.1754**</td>
<td>0.2804****</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.0345</td>
<td>0.0649</td>
<td>0.0633</td>
<td>0.1675**</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>CFO</td>
<td>-0.0771</td>
<td>-0.0095</td>
<td>-0.2619*</td>
<td>-0.1210</td>
<td>-0.2181***</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Source: Author’s calculation

*, **, *** Represent the 10%, 5% and 1% level of significance in two-tailed tests, respectively.
Table 3 presents the logistic regression result of the new corporate accounting regime adoption on managing earnings toward targets. As expected, this study finds a significantly negative association between managing earnings toward small positive amounts (SPOS) and corporate accounting regime adoption (POST) \((z=-1.98, p<0.05)\). The result indicates that firms engage in managing earnings toward targets to a less extent during the adoption period (i.e. higher accounting quality in the adoption period), which is consistent with the hypothesis. This finding is found to be consistent with Chua et al. (2012) which provides support that the mandatory adoption of IFRS has generally improved accounting quality in Australia, especially in the form of less earnings smoothing behavior.

### Tab. 3: Regression Result of the New Corporate Accounting Regime Adoption on Managing Earnings toward Targets

<table>
<thead>
<tr>
<th></th>
<th>(\alpha_0)</th>
<th>POST</th>
<th>TURN</th>
<th>LEV</th>
<th>DISSUE</th>
<th>GROWTH</th>
<th>CFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>-2.1667***</td>
<td>-0.8580**</td>
<td>-2.6203***</td>
<td>3.8262***</td>
<td>-2.3467***</td>
<td>-0.0893</td>
<td>-0.1329</td>
</tr>
<tr>
<td>(z)-statistics</td>
<td>-2.92</td>
<td>-1.98</td>
<td>-3.68</td>
<td>3.04</td>
<td>-2.72</td>
<td>-0.84</td>
<td>-0.06</td>
</tr>
<tr>
<td>p-value</td>
<td>0.0040</td>
<td>0.0480</td>
<td>0.0000</td>
<td>0.0020</td>
<td>0.0060</td>
<td>0.4010</td>
<td>0.9510</td>
</tr>
</tbody>
</table>

Source: Author’s calculation
Pseudo \(R^2 = 0.2880\), the likelihood ratio chi-square of 64.14 with a p-value of 0.0000 and \(N = 348\).
Statistical significance is indicated by ***, **, and * for 1%, 5%, and 10%.

Regarding control variables, the relationship between financial leverage (LEV) and SPOS is significantly positive at 1% level, while both relationships between asset turnover rates (TURN) and SPOS as well as between debt issuing (DISSUE) and SPOS are negative at 1% level.

### Conclusions

This paper examines the impact of new corporate accounting regime adoption on earnings management in Vietnam. Specifically, this paper compares whether there is a change in earnings management before and after the mandatory implementation of new corporate accounting regime as of January 1, 2015.

The result indicates that subsequent to the new corporate accounting regime being implemented, the Vietnamese listed firms exhibit less earnings management. The finding suggests that there has been an improvement to accounting quality after Vietnamese listed firms
moved to the new corporate accounting regime which brings Vietnamese accounting standards closer to IFRS. This supports the Ministry of Finance of Vietnam’s expectation that the adoption by the new corporate accounting regime should enhance the overall quality of the financial reporting system, which is also of great interest to Vietnamese government to move toward to IFRS.

However, this study is not free from its limitations. First, although in the regression model included some variables to control the effect of factors which are exogenous respect to accounting regime, it is acknowledged that there may be other incentives to manage earnings that have not been controlled for. Second, this study only uses a measure (i.e the frequency of small positive earnings) as from the perspective of managing earnings toward a positive target.

References


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