“IFRS adoption and investor perceptions of earnings quality: evidence from Korea”

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IFRS ADOPTION AND INVESTOR PERCEPTIONS OF EARNINGS QUALITY: EVIDENCE FROM KOREA

Abstract

This study examines the consequences of International Financial Reporting Standards (IFRS) adoption in terms of the investor perception of earnings quality in the Korean stock market. Building on evidence from Ecker et al. (2006) suggesting that return-based earnings quality (E-loading), as captured by the sensitivity of stock returns to accounting information risk, accurately represents investor perceptions of earnings information risk, the authors examine whether E-loading is different between the pre- and post-IFRS adoption periods. Using KSE-listed firms from 2006 to 2014, the authors find the evidence that the extent of stock return sensitivity to information risk embedded in financial statements is greater in the period of post-IFRS adoption than in the period of pre-IFRS adoption. This finding indicates that even though accounting-based earnings quality improves after the adoption of IFRS, investors perceive earnings information after the adoption of IFRS as riskier than before. In addition, the difference in investor perception is more pronounced for firms with low accruals quality as captured by discretionary accruals, indicating that the effect of IFRS adoption on return-based earnings quality is distinctive from that on accounting-based earnings quality. The paper contributes to the literature on IFRS by exploring the effect of IFRS adoption through a new perspective on earnings quality in capital market.

Keywords earnings quality, return-based earnings quality, IFRS adoption

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INTRODUCTION

The purpose of this study is to examine the consequences of IFRS adoption in terms of earnings quality that investors perceive from financial statements. A large number of studies argue that financial statements under IFRS provide earnings information with high predictability for future earnings, and thus, the accounting numbers on such financial statements are relatively value-relevant for firm valuation (Barth et al., 2008; Ding et al., 2007; Bellas et al., 2007; Morais & Curto, 2007). However, regarding IFRS adoption, researchers and practitioners consider low reliability in accounting information to be problematic, because the principle-based regulation in IFRS leaves accounting practice choices to the manager's discretion. Concurrently, this regulation leads implicitly to earnings management, which is motivated by managers who have incentives to exploit IFRS regulation (Christensen et al., 2008). Furthermore, the disclosure of consolidated financial statements and the fair value of assets on financial statements necessarily cause accounting numbers to fluctuate between pre- and post-IFRS adoption periods, providing earnings information that is barely connected to the historical financial statement information under non-IFRS (Choi et al., 2011). For these reasons, whether the earnings quality with respect to information reliability improves or worsens after IFRS adoption has been a critical issue in Korea (Lee et al., 2016; Moon, 2016).

While there are several studies reporting the consequences of IFRS adoption for accounting-based earnings quality in Korea, their findings are mostly limited to early adoption (i.e., 2009–2010) or the early period of mandatory adoption (i.e., 2011). Additionally, most of these studies report the positive impacts of the adoption of IFRS with respect to earnings quality as captured by the discretionary accruals (Moon, 2011; Choi & Shon, 2012; Park et al., 2012). Of course, there exists some research that documents the change in earnings quality in the post-IFRS period in terms of value relevance or earnings persistence, but these results are mixed (Choi, 2013; Moon, 2016). Moreover, the economic consequences of IFRS adoption differ by accounting intermediaries, such as accounting practitioners, auditors, and analysts. According to survey results by Lee et al. (2016), while accounting practitioners recognize that accounting numbers in financial statements under IFRS reflect firm performance and financial conditions with more accuracy and faithfulness, neither auditors nor analysts approve them. This implies that accounting information users perceive less improvement in earnings quality.

In this context, we raise the question of whether the adoption of IFRS has improved earnings quality in a way that investors experience meaningfully. It is possible that even though accounting-based earnings quality has been enhanced by the adoption of IFRS, investors may perceive earnings from financial statements under IFRS regulation as relatively risky information because of low earnings persistence or poor cross-sectional consistency in accounting practices among firms after the adoption of IFRS. However, there is little research documenting the current consequences of IFRS adoption in terms of market-based earnings quality in Korea. In capturing investor perceptions of earnings quality, we build on Ecker et al.'s (2006) evidence that return-based earnings quality $(E\text{-loading})$, as captured by the sensitivity of stock returns to accounting information risk, accurately represents investor perceptions of earnings information risk. By examining the difference in the priced factor to earnings information risk between the pre- and post-IFRS adoption periods, we provide some insight into the consequences of IFRS adoption in terms of investor perceptions of earnings quality.

Using Korean Stock Exchange (KSE) listed firms from 2006 to 2014, we find that while the average of accruals quality measured as discretionary accruals decreases over the post-IFRS adoption period, market-based earnings quality $(E\text{-loading})$ is higher after IFRS adoption than before. This result indicates that despite improvements in accounting-based earnings quality, investors assess earnings quality from financial statements under IFRS to be relatively low compared to those under non-IFRS. Additionally, we show that for the post-IFRS adoption period, the market-based earnings quality is moderated by accruals-based earnings quality. This finding indicates that regarding the effect of IFRS adoption on earnings quality, return-based earnings quality is distinctive from accounting-based earnings quality. Collectively, our findings suggest that in spite of the improvement in accounting-based earnings quality since IFRS adoption, investors believe earnings information from financial statements is less reliable.

Our findings contribute to the academic and practical fields in several ways. First, given that many papers suggest the consequences of IFRS adoption on the accounting-based perspective, we show consequences on the market-based perspective by examining the difference between pre- and post-IFRS adoption in investor perceptions of information risk. Second, we argue that market-based earnings quality worsens after IFRS adoption, and thus, we provide authorities in charge of accounting regulations and enforcement with the opportunity to reassess regulations and policies regarding the effectiveness of IFRS regulation. Overall, our paper extends prior literature on IFRS regulation by showing the effect of IFRS adoption through a new perspective on earnings quality.

This paper is divided into the following sections: section 1 discusses research background and our research question and then develops hypotheses, section 2 describes methodology, including the sample, measurement of variables, and model specification, section 3 presents the empirical results. Finally, last section concludes.

1. BACKGROUND AND RESEARCH QUESTION

IFRS (International Financial Reporting Standards) adoption is considered to be a historic accounting regime change that drastically affects the information environment. Since firms are required to disclose earnings information based on economic earnings regarding the firm's intrinsic value under IFRS, financial statement information is expected to be more relevant (Barth et al., 2008). Moreover, IFRS, as a principle-based accounting standard, provides practitioners with accounting principles and general rules, thus making many of the accounting expert's decisions. Because the adoption of IFRS as a new regulation in accounting standards has changed financial statements, researchers and practitioners, including investors, have been concerned about the change in earnings quality between the pre- and post-IFRS adoption periods. In this regard, a large body of studies reports mostly the positive effects of IFRS adoption in terms of earnings quality (Barth et al., 2008; Ding et al., 2007). Specifically, Barth et al. (2008) examine the consequences of IFRS adoption using 1,896 observations of 21 countries that adopted IFRS voluntarily from 1994 to 2003. The researchers show that earnings management for firms that adopted IFRS is low relative to non-IFRS IFRS firms, and improvement in earnings quality for IFRS firms is higher than for non-IFRS firms. Bellas et al. (2007) report that the adoption of IFRS enhances the value relevance of accounting information. Moreover, Morais, and Curto (2008) document that earnings management has been reduced since the adoption of IFRS. There exist previous studies that document the change in earnings quality in the post-IFRS period in terms of value relevance and earnings persistence; however, the results of these studies are mixed. Ahmed et al. (2013) investigate whether the mandatory adoption of IFRS influences earnings quality, following Barth et al. (2008). The researchers show that firms in post-IFRS adoption reveal higher smooth earnings, higher earnings management based on accruals, and lower sensitivity regarding early recognition of loss.

There are several studies reporting the consequences of IFRS adoption regarding accounting-based earnings quality in Korea. The findings from these studies are mostly limited to the early adoption period (i.e., 2009–2010) or early in the period of mandatory adoption (i.e., 2011). Moon (2011) argues that earnings quality improves after *IFRS* adoption by showing lower accruals and earnings smoothing of 57 firms with early adoption due to changes in accounting standards from K-GAAP to K-IFRS. Choi and Shon (2012) and Park et al. (2012) also show that the early adoption of IFRS reduces both total accruals and discretionary accruals.

For the mandatory adoption of IFRS, Choi (2013) and Choi (2014) investigate whether accounting information is more value relevant in the post-IFRS adoption period and finds that total equity and net income, in particular, are more value relevant in consolidated financial statements. Moon (2016) shows that accruals quality and both persistence and predictability in cash flows are higher after IFRS adoption than before.

However, Lee et al. (2016) report that the economic consequences of IFRS adoption differ by accounting intermediaries, such as accounting practitioners, auditors, and analysts. According to their survey results, while accounting practitioners recognize that accounting numbers in financial statements under IFRS reflect firm performance and financial condition with more accuracy and faithfulness, neither auditors nor analysts approve them. This implies that accounting information users perceive less improvement in earnings quality.

In this regard, we investigate whether investors perceive earnings from financial statements as more/less risky information after IFRS adoption. In capturing investor perceptions of earnings quality, we build on Ecker et al.'s (2006) evidence that return-based earnings quality $(E\text{-loading})$, as captured by the sensitivity of stock returns to accounting information risk, accurately represents investor perceptions of earnings information risk. Ecker et al. (2006) proposed a model to capture market-based earnings quality measured as a priced factor of information risk by regression of returns minus risk-free returns on unknown factors of the Fama-French 3 factor model (1993), with discretionary accruals from Dechow and Dichev (2002) as a proxy for earnings quality. In that model, the sensitivity of stock

returns to earnings quality is a priced factor of earnings quality or information risk and named as E-loading.

We use E-loading to explore the difference in how investors perceive earnings quality from financial statements between the pre- and post-IFRS adoption periods. Our research is motivated by the intuition that accounting-based earnings quality is not meaningful to some investors.

To test our research question, we form the null hypothesis as follows.

H0: The extent of investor perceptions of information risk from financial statements is not different between pre- and post-IFRS adoption periods.

2. METHODOLOGY AND SAMPLE

2.1. Market-based earnings quality (E-loading)

To the extent that the investors price the information risk through the estimation of earnings quality, we assume that a priced factor of information risk incorporates investor perceptions of earnings quality. Ecker et al. (2006) suggested E-loading capturing the sensitivity of stock returns to earnings as the proxy for the investor perception of earnings quality. To test our hypothesis, we measure E-loading following Ecker et al. (2006) and examine the difference in the level of E-loading between the pre- and post-IFRS adoption periods.

$$R_i - R_f = \alpha_{0it} + \alpha_{1it} \cdot \left(R_m - R_f\right) + \\ + \alpha_{2it} SMB + \alpha_{3it} HML + \alpha_{4it} AQ + \varepsilon, \quad (1)$$

$$\alpha_{4it} = E_f^3,$$

where R_i is daily stock returns of firm i. R_f is daily free-risk rate with 5-year maturity provided from the Bank of Korea (http://www.bok.or.kr). R_m is daily market return based on equally weighted index. SMB indicates daily SMB factor, measured as the difference of stock returns between small sized firms and larger sized firms. HML indicates daily HML factor, the difference of stock returns between high- and low- book to market firms. Lastly, AQ indicates earnings quality factor estimated based on Dechow and Dechev (2002). The estimation of regression of market returns less free risk returns on AQ, that is the coefficient α_{4it}, represents the investor perception of earnings quality.

2.2. Model specification

Assuming that E-loading E_f^3 is a proxy for the investor perception of the information risk of financial statements, as suggested by Ecker et al. (2006), we examine the changes in E-loading over the IFRS adoption periods. The regression model to test our hypothesis is as follows:

$$E_f^3 = \beta_0 + \beta_1 IFRS + \beta_2 SIZE + \beta_3 MTB + \\ + \beta_4 ROA + \beta_5 FH + \beta_6 Loss + \beta_7 BIG4 + \\ + IND + \varepsilon.$$

(Model 1)

Variable definition: E_f^3 – E-loading based on Ecker et al. (2006); E_f^3 – E-loading; $SIZE$ – firm size, measured as the logarithm of market value; MTB – firm growth, market to book value ratio; ROA – profitability, return on assets measured as net income to total assets ratio; FH – foreign investor turnover, the yearly sum of daily turnover calculated as foreign investors' trading market value to firm's trading market value; $Loss$ – firm loss, 1 if net income of firm is negative, 0 otherwise; $BIG4$ – audit firm size, 1 if auditor belongs to Big4 audit firms (i.e., PwC Samil, Deloitte Korea, Samjong KPMG, and Earnst & Young Korea), 0 otherwise.

Our main independent variable is IFRS, an indicator variable that is 1 if the fiscal year is during the period post-IFRS adoption, 0 otherwise. For control variables, we consider firm size $\left(\ln\left(MV\right)\right)$, firm growth $\left(MTB\right)$, profitability $\left(ROA\right)$, foreign investor turnover $\left(FH\right)$, loss $\left(Loss\right)$, and the audit firm's size $\left(BIG4\right)$. Finally, industry-fixed effect is also controlled in this model. Note that the level of E-loading signifies the extent of investors' perceptions of accounting information risk, not the low accounting quality perse. We expect β_1 of IFRS to be positive (negative) when investors

perceive earnings from financial statements for the periods of post-IFRS adoption to be more (less) risky information than those in the periods of pre-IFRS adoption. In other words, if there is no difference of investor perception of earnings quality over the IFRS adoption periods, β_1 of IFRS is expected be zero or statistically insignificant, supporting our null hypothesis.

2.3. Sample selection

Our sample consists of common stocks listed on the Korea Stock Exchange from 2006 to 2014. We retrieve annual earnings data, daily stock prices, and other financial variables from the K i value II database of NICE Investors Service Co., Ltd. (https://www.kisvalue.com). Free-risk rates with 5-year maturity we obtain information from the Bank of Korea (http://www.bok.or.kr/main/korMain.action). We impose the following restrictions: we delete (1) firms with a fiscal year end in non-December, (2) firms that belong to the financial and insurance industries, (3) firms with impairment of capital, and (4) observations with missing stock returns, announcement dates, or other financial variables. Lastly, to minimize the effect of outlier, we have the extreme values of all variables to have the value on the top and bottom 1% of each variable's distribution. The final sample contains 2,402 firm-year observations.

3. EMPIRICAL RESULTS

3.1. Descriptive statistics

Table 1 provides the descriptive statistics of our test variables across the pre-IFRS adoption period (2006–2010) and post-IFRS adoption period (2011–2014). The mean value of E-loading $\left(E_f^3\right)$ for the post-IFRS period is 0.0751, higher than that for the pre-IFRS period (0.0312), implying that it is possible that the market perceives earnings from financial statements after the adoption of IFRS as more risky information than before. For other variable, the results show that there is little difference of the values between the pre- and post-IFRS adoption in terms of mean and median value. However, the portion of firms with $BIG4$ audit firm in full sample decrease drastically after IFRS adoption period. The mean value of $BIG4$, 0.6183, prior to IFRS adoption decreases to 0.2948 after IFRS adoption.

Table 1. Descriptive statistics

Variable	Min	25%	Mean	Median	75%	Max	Std. Dev.
Panel A. Sample for pre-IFRS adoption period (2006–2010)							
E_f^3	–1.3983	–0.1372	0.0312	0.0187	0.1907	1.3814	0.3056
SIZE	23.1312	25.6546	26.7238	26.4274	27.7043	31.5409	1.5423
MTB	–13.0432	0.5203	1.1666	0.8190	1.3884	19.0361	1.2683
ROA	–0.3545	–0.0010	0.0067	0.0080	0.0196	0.1043	0.0285
FH	0.0000	0.0314	0.3498	0.0792	0.1643	28.2374	1.5652
Loss	0.0000	0.0000	0.2876	0.0000	1.0000	1.0000	0.4528
*BIG*4	0.0000	0.0000	0.6183	1.0000	1.0000	1.0000	0.4860
Panel B. Sample for post-IFRS adoption period (2011–2014)							
E_f^3	–2.6544	–0.1171	0.0751	0.0426	0.2302	1.9583	0.3492
SIZE	23.4995	26.1613	27.1452	26.8264	27.9783	31.5365	1.3384
MTB	–0.1725	0.6373	1.4607	0.9429	1.6083	15.7636	1.6609
ROA	–0.1916	0.0000	0.0020	0.0000	0.0050	0.3988	0.0220
FH	0.0000	0.0395	0.2727	0.0797	0.1565	22.7490	1.0799
Loss	0.0000	0.0000	0.3290	0.0000	1.0000	1.0000	0.4700
*BIG*4	0.0000	0.0000	0.2948	0.0000	1.0000	1.0000	0.4562

Note: Variable definitions are defined in Model 1.

Table 2. Correlation matrix

	IFRS	E_f^3	*SIZE*	*MTB*	*ROA*	*FH*	*Loss*	*BIG*4
IFRS	1.000	0.104 (<.00)	0.188 (<.00)	0.115 (<.00)	–0.072 (0.00)	–0.032 (0.14)	0.020 (0.36)	–0.325 (<.00)
E_f^3	0.088 (<.00)	1.000	0.027 (0.18)	0.119 (<.00)	–0.041 (0.04)	–0.018 (0.38)	0.049 (0.01)	–0.036 (0.07)
SIZE	0.219 (<.00)	0.058 (0.00)	1.000	0.312 (<.00)	0.125 (<.00)	–0.133 (<.00)	–0.145 (<.00)	0.030 (0.13)
MTB	0.128 (<.00)	0.038 (0.06)	0.369 (<.00)	1.000	0.006 (0.76)	0.062 (0.00)	–0.028 (0.15)	–0.038 (0.06)
ROA	–0.214 (<.00)	–0.102 (<.00)	0.081 (<.00)	0.042 (0.04)	1.000	–0.058 (0.00)	–0.510 (<.00)	0.040 (0.05)
FH	0.031 (0.16)	0.055 (0.00)	–0.007 (0.73)	0.222 (<.00)	–0.069 (0.00)	1.000	0.039 (0.05)	–0.009 (0.66)
Loss	0.020 (0.36)	0.055 (0.00)	–0.144 (<.00)	–0.062 (0.00)	–0.785 (<.00)	0.068 (0.00)	1.000	–0.018 (0.36)
*BIG*4	–0.325 (<.00)	–0.024 (0.22)	0.041 (0.04)	–0.045 (0.02)	0.167 (<.00)	–0.057 (0.00)	–0.018 (0.36)	1.000

Notes: The Pearson correlation coefficients are indicated on the left of the empty diagonal, and Spearman correlation coefficients are on the right. The figures in parentheses are p-values. The definitions of variables are defined in Model 1.

Table 2 shows the results on the correlation of our test variables with the post-IFRS period $(IFRS)$. Consistent with Table 1, E-loading $\left(E_f^3\right)$ is positively correlated with the post-IFRS period $(IFRS)$. However, the data herein show the simple correlation estimation without controlling for other determinants of the relation between E-loading $\left(E_f^3\right)$ and *IFRS*. In the next section, we elaborate our test results by running a cross-sectional regression model.

3.2. Regression analysis results

3.2.1. The relation between IFRS adoption periods and market-based earnings quality

We conduct cross-sectional regression to test our hypothesis and find that E-loading $\left(E_f^3\right)$ is significantly positively related to *IFRS*. As presented in Table 3, the coefficients of *IFRS* are 0.0316 $(t\text{-statistics} = 2.43)$ for the pooled sample and 0.0476 $(t\text{-statistics} = 3.23)$ for the sample excluding firms from 2009 to 2010, which is the early adoption period. Assuming that higher E-loading signifies the extent of investors' perceptions of the information risk from financial statements, this result indicates that investors perceive accounting information after the adoption of *IFRS* to be riskier than before. Our finding is robust to controlling for other variables.

Table 3. Regression results

Variable	Sample excluding 2009–2010		Pooled sample	
	Coeff.	*t*-statistic	**Coeff.**	*t*-statistic
Const.	–0.1561	–0.81	–0.1027	–0.61
IFRS	0.0476	3.23***	0.0316	2.43**
SIZE	0.0053	0.98	0.0051	1.07
MTB	0.0237	4.59***	0.0189	4.07***
ROA	–0.1710	–0.64	–0.1140	–0.41
FH	–0.0019	–0.38	–0.0046	–1.04
Loss	0.0377	2.24**	0.0397	2.56***
*BIG*4	–0.0124	–0.86	–0.0126	–0.98
IND	Included		Included	
Adj. R^2	0.0451		0.0413	
#. of obs.	1,923		2,402	

Notes: The definitions of variables are defined in Model 1. The notation ***, **, and * denotes significance at the 1%, 5%, and 10% levels, respectively.

3.2.2. The moderate effect of accruals quality on the relation between IFRS adoption and market-based earnings quality

Although our finding indicates that the market prices information risk more highly for IFRS-based financial statement information, it is still doubtful that E-loading is a relevant proxy for representing overall earnings quality that investors perceive.

Table 4. Descriptive statistics: accruals quality

Variable	Min	25%	Mean	Median	75%	Max	Std. Dev.
Panel A. Sample for pre-IFRS adoption period (2006–2010)							
DA_{MJ}	–0.3186	–0.0337	0.0062	0.0002	0.0405	0.4496	0.0741
DA_{Ko}	–0.3082	–0.0336	0.0062	0.0002	0.0410	0.4494	0.0737
Panel B. Sample for post-IFRS adoption period (2011–2014)							
DA_{MJ}	–0.3468	–0.0308	–0.0021	–0.0028	0.0270	0.2779	0.0556
DA_{Ko}	–0.3492	–0.0304	–0.0023	–0.0032	0.0261	0.2775	0.0550

Note: DA_{MJ} and DA_{KO} indicate the discretionary accruals estimated based on Dechow et al. (1995) and Kothari et al. (2005), respectively.

Moreover, it is possible that the deterioration in accounting based-earnings quality after IFRS adoption within our sample criteria may induce relatively higher E-loading. Thus, to validate our hypothesis more clearly, we examine whether the effect of IFRS adoption on investor perceptions $(E\text{-loading})$ of earnings quality is moderated by accounting-based earnings quality (i.e., accruals quality). If the estimation of E-loading in Eq. (1) subsumes the effect of accruals quality, then the relation between investors' perceptions $(E\text{-loading})$ and IFRS will not be affected by accruals quality. However, if E-loading represents more general earnings quality independent of accruals quality, the relation between investors' perceptions $(E\text{-loading})$ and IFRS will be incrementally positive for firms with low accruals quality.

Before we run the regression model regarding our conjecture, we examine the difference in accruals quality between the pre- and post-IFRS periods. Accruals quality variables (DA) are measured as the residuals (i.e., discretionary accruals) from regression for the model in Dechow et al. (1995) and Kothari et al. (2005), in which accruals quality is negatively related to the level of discretionary accruals in total accruals. In Table 4, accruals quality (DA) reveals quite a different mean value between the pre- and post-IFRS adoption periods for both variables. Specifically, mean values were positive (0.0062 for DA_{MJ} and 0.0062 for DA_{KO}) prior to IFRS adoption and negative (–0.0021 for DA_{MJ} and –0.0023 for DA_{KO}) after IFRS adoption, suggesting that the accruals quality improves after the adoption of IFRS. In an untabulated analysis, we find that accruals quality variables $(DA_{MJ}$ and $DA_{KO})$ are negatively correlated with the post-IFRS period (IFRS), similar to Table 4. For both DA_{MJ} and DA_{KO} pearson (Spearman)'s correlation with post-IFRS (indicator variable) is about –0.044 (–0.065) and statistically significant.

For a regression model specification to test our conjecture, we intersect IFRS with accruals quality variables $(DA_{MJ}$ and $DA_{KO})$ and then regress E-loading on interaction terms. Even within the periods of post-IFRS adoption, if investors perceptions of the information risk from financial statements is higher when accruals quality is low, the interaction term $(IFRS \cdot DA)$, β_3, is expected to be significantly positive.

$$E_f^3 = \beta_0 + \beta_1 IFRS + \beta_2 DA + \beta_3 IFRS \cdot DA + \\ + \beta_4 SIZE + \beta_5 MTB + \beta_6 ROA + \beta_7 FH + \\ + \beta_8 Loss + \beta_9 BIG4 + IND + \varepsilon.$$

(Model 2)

For definitions of test variables, please refer to Model 1 and Table 4.

Table 5 presents the regression results. Both $(IFRS \cdot DA)$ have positive coefficients of 0.6116 $(t\text{-statistic} = 2.68)$ for DA_{MJ} and 0.6288 $(t\text{-statistic} = 2.72)$ for DA_{KO}. Notably, IFRS is still significantly positive even after controlling for the effect of accruals quality by pre- and post-IFRS adoption $(IFRS \cdot DA)$, and both coefficients of DA_{MJ} and DA_{KO} are not significant. This result implies that investors impose larger risk premiums for firms with low accruals quality after the adoption of IFRS than before, but they seem to be indifferent to the effect of accruals quality per se on information risk during the pre-IFRS period.

Table 5. Regression analysis results

Variable	DA = DA_{MJ}		DA = DA_{Ko}	
	Coeff.	t-statistic	**Coeff.**	t-statistic
Const.	–0.1434	–0.75	–0.1409	–0.73
IFRS	0.0470	3.19***	0.0469	3.18***
DA	–0.1308	–0.85	–0.1341	–0.87
IFRS · *DA*	0.6116	2.68***	0.6288	2.72***
SIZE	0.0054	1.00	0.0054	1.00
MTB	0.0242	4.69***	0.0242	4.69***
ROA	–0.2356	–0.76	–0.2178	–0.71
FH	–0.0013	–0.25	–0.0012	–0.23
Loss	0.0405	2.41**	0.0407	2.42**
*BIG*4	–0.0132	–0.91	–0.0135	–0.93
IND	Included		Included	
Adj. R^2	0.0486		0.0487	
#. of Obs.	1,923		1,923	

Notes: The definitions of variables are defined in Model 1 and Model 2. The notation ***, **, and * denotes significance at the 1%, 5%, and 10% levels, respectively.

3.2.3. Asymmetric effect of accruals quality on the investor perception of information risk

Although the investor perception of information risk varies with the extent of accruals quality for the post-IFRS period, we cast a further question of the asymmetric effect of accruals quality on the investor's perception of information risk. We decompose the accruals quality variable (DA) into low accruals quality (DA^+) and high accruals quality (DA^-), which are based on the median value of *DA*. Our regression model includes the distinctive interaction terms, $IFRS \cdot DA^+$ and $IFRS \cdot DA^-$, as independent variables.

Empirical results will show more evidence that investors are able to distinguish firms with high earnings quality from those with low earnings quality regarding financial statement information. If investors recognize the extent of accruals quality after IFRS adoption, the incremental effect of accruals quality on the investor's perception of information risk is more pronounced for firms with low earnings quality.

Table 6 shows that the effects of accruals quality on market-based earnings quality from financial statements after the IFRS adoption. For DA_{MJ}, $IFRS \cdot DA^+$ is significantly positive (0.6318, t-statistics = 1.65), but $IFRS \cdot DA^-$ is not significant (0.6268, t-statistics = 1.47). This result is similar to that for DA_{KO}.

Table 6. Regression analysis results

Variable	$DA = DA_{MJ}$		$DA = DA_{Ko}$	
	Coeff.	t-statistic	**Coeff.**	t-statistic
Const.	–0.1602	–0.83	–0.1626	–0.84
IFRS	0.0482	2.29***	0.0430	2.03***
DA^+	–0.0162	–0.07	–0.0268	–0.11
DA^-	–0.2879	–0.93	–0.2858	–0.90
$IFRS \cdot DA^+$	0.6318	1.65*	0.7705	1.99*
$IFRS \cdot DA^-$	0.6268	1.47	0.5164	1.18
SIZE	0.0058	1.08	0.0060	1.10
MTB	0.0237	4.53***	0.0234	4.49***
ROA	–0.2282	–0.74	–0.2099	–0.68
FH	–0.0015	–0.29	–0.0016	–0.30
Loss	0.0406	2.41**	0.0409	2.42**
*BIG*4	–0.0139	–0.96	–0.0148	–1.02
IND	Included		Included	
Adj. R^2	0.0479		0.0483	
#. of obs.	1,923		1,923	

Notes: The definitions of variables are defined in Model 1 and Model 2. The notation ***, **, and * denotes significance at the 1%, 5%, and 10% levels, respectively.

CONCLUSION

Assuming that the market-based information risk measure $(E\text{-loading})$ suggested by Ecker et al. (2006) accurately represents investor perceptions of earnings quality, we investigate whether E-loading is different pre- and post-IFRS adoption. Using KSE-listed firms from 2006 to 2014, we find evidence that E-loading is higher in post-IFRS adoption period compared to pre-IFRS adoption period. This result indicates that investors consider the risk embedded in accounting-based information in the post-IFRS adoption period to be riskier than before. Although accruals quality has improved since IFRS adoption, the results show that the positive relation between E-loading and the post-IFRS period is pronounced for firms with low accruals quality. This means that investors give more weight to information risk in pricing firms with low accruals quality

after the adoption of IFRS than before and that higher E-loading in the post-IFRS period does not subsume the effect of accruals quality on information risk.

Our paper extends the literature on the consequences of IFRS adoption by showing the change of investor perceptions of information risk over the IFRS adoption periods. Moreover, our findings contribute to the practice field by providing evidence that market-based earnings quality from financial statements worsens after IFRS adoption, thus suggesting that authorities in charge of accounting regulations and enforcement have the opportunity to inspect the effectiveness of IFRS regulations.

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