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## **Changes in the Quality of Accounting Information with the Adoption of IFRS in Korea**

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### ***ABSTRACT***

The purpose of this study is to investigate whether the quality of accounting information has changed with the adoption of IFRS. In particular, we compare the valuation coefficients and explanatory powers of earnings and equity book value between the periods before and after adopting IFRS. Using a sample of 655 Korean firms, which have adopted IFRS since the year 2011, we find that the value relevance of both earnings and equity book value is larger for the post-IFRS period than the pre-IFRS period. We also find that total explanatory power of earnings and equity book value has increased from pre-IFRS to post-IFRS periods. These results suggest that the adoption of IFRS has improved the quality of accounting information for Korean firms.

JEL classification: M4

Key Words: IFRS, Accounting Quality, Korea

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## 1. INTRODUCTION

The purpose of this study is to examine if the quality of accounting information changes with the adoption of the International Financial Reporting Standards (IFRS). More specifically, we investigate whether the quality of accounting information from income statement (earnings) and balance sheet (book value of equity) is systematically different between the period before adopting IFRS ('pre-IFRS period') and that after adopting IFRS ('post-IFRS period').

We use two different but complementary approaches to measure the quality of accounting information as reflected in firm valuation. First, we compare the magnitudes of valuation coefficients on earnings and equity book value similar to Landsman et al. (1998) and Barth et al. (2008). Second, we compare the explanatory power ( $R^2$ ) of earnings and equity book value (Landsman et al (1998) and Collins et al. (1997)).

Our empirical results, using a sample of 655 Korean firms which have adopted IFRS since the year 2011, show that the value relevance of both earnings and equity book value is larger for the post-IFRS period than the pre-IFRS period. We also find that total explanatory power of earnings and equity book value has increased from pre-IFRS to post-IFRS periods. These results suggest that the adoption of IFRS has improved the quality of accounting information for Korean firms.

The remainder of this paper is organized as follows. First, research background and a hypothesis development are discussed. Then, sample selections and measurements of variables are described. The empirical tests and their results are followed. In the final section, conclusions are addressed

## 2. BACKGROUND AND HYPOTHESIS DEVELOPMENT

Korea decided to allow the use of IFRS in 2010 (voluntary adoption year), but required its use in 2011 (mandatory year). From the reporting periods ending in 2011, all public companies in Korea must prepare their financial statements in compliance with IFRS and have those financial statements audited in comparison with IFRS. This change must have a significant impact on financial reporting in Korea especially because IFRS replaced Korean domestic accounting standards with this change. Therefore, it is a very important empirical question whether benefits from IFRS adoption exceed costs for IFRS adoption in Korea. One meaningful way to measure it would be to investigate if the quality of accounting information has improved with IFRS adoption in Korea. Value relevance, earnings smoothing, and timely loss information releases can be good surrogates for accounting information quality (Barth et.al 2008). Among these, value relevance is the frequently used measure of accounting information quality because it is the most comprehensive measure and direct measure of accounting information quality perceived by the capital market.

Numerous researches have been conducted on accounting information quality changes with adoptions of IFRS in various countries. In spite of concerns on superficial improvement but not substantial improvement of financial reporting with IFRS adoptions considering efficient capital markets and extremely high costs for implementations of and compliance with IFRS, there are more of positive than negative evidence on this issue, indicating the improvement of accounting information quality with IFRS adoptions. That is consistent with Ball et.al. (2005)'s argument that widespread adoption of IFRS could lead to more accurate, comprehensive, and timely

information and the greater comparability of financial statements across countries because of three major advantages of IFRS: Scale of economy such that the rules need to be invented or revised only once, reduced room for accounting manipulations by managers, and comparability.

However, there are significant variations of accounting information quality changes across the countries due to some country specific characteristics. Factors affecting accounting information quality are: the quality of domestic standards relative to IFRS, investors' preference of domestic standards over IFRS, implementations of IFRS, compliance with IFRS, the competitiveness of domestic capital market, and accounting environment. Ball et al. (2000) suggest that implementation of accounting standards differs across countries due to differences in enforcements as well as differences in managers' real business decisions made in direct response to accounting standards.

Previous studies on comparison between value relevance of accounting information in developed and emerging economies provide interesting and intuitive results. Comparisons between German GAAP and IFRS are indecisive (Harris et al. 1999; Bartov et al. 2005; Hung et al 2007). There are also mixed results on whether US GAAP are more value relevant than IFRS (Harris et al 1999; Van der Meulen et al. 2007; Barth et al. 2008). The impact of IFRS adoption on value relevance in United Kingdom is positive (Horton et al. 2010), while that in Spain is negative (Callao et al. 2007), indicating Spanish GAAP are more value relevant than IFRS.

Ali et al. (2000) find that the value relevance is lower in the continental European cluster than it is in Anglo-Saxon cluster. Domestic GAAP's of Finland (Niskanen et al. 2000), Switzerland (Babalyan 2001), and China (Lin et al. 2005) are as value relevant as IFRS. Barth et al. (2008) find that value relevance improves with the adoption of IFRS in EU. Barth et al. (2012) also find that adoption of IFRS in EU show higher comparability to US GAAP with respect to the relationship between accrual measures such as earnings, book-value of equity vis-à-vis market/cash measures such as price, return, and cash flows. In their multi-countries study on value relevance, Devalle et al. (2010) find that the value relevance improvement with the adoption of IFRS in Europe firms is indecisive. From a regression of stock prices on earnings and book value, they find various results across countries and accounting measures. Value relevance of earnings has increased with IFRS adoption, while that of book value has decreased in German and France. Value relevance of both earnings and book value has decreased in Spain and Italy. Value relevance of earnings and book value has increased the United Kingdom.

In sum, results from previous studies on the impact of IFRS adoptions on the value relevance of accounting information are not conclusive and varying across countries depending on country specific factors.

Korean GAAP prior to the IFRS adoption are different from IFRS, especially in the area of consolidated financial statements. Korean GAAP used to have more pervasive presence of conservative accounting than IFRS. Due to stronger control by the government in Korea than other countries with equivalent economic power and economic diversity, enforcement of accounting standards would be more effective in Korea, which leads to higher compliance with accounting standards. Since Korean capital market is deemed to be not as efficient and as big as capital markets in more advanced economies such as the New York Stock Exchange, NASDAQ, Tokyo Stock Exchange, London Stock Exchange, and Hong Kong Stock Exchange, improved

comparability of accounting information with IFRS adoption will attract more capitals into Korean market that will, in turn, drive down the cost of capital. A testable hypothesis here-from would be:

**Hypothesis:** Ceteris Paribus, the value relevance of accounting information improves with the adoption of IFRS in Korea.

### 3. SAMPLE SELECTION AND VALUE RELEVANCE MEASURES

#### 3.1 Sample Selection

Our sample consists of 655 firms that are listed in The Korean Stock Exchange (KSE) at the end of year 2011. To be included in the sample, the firms must satisfy the following criteria:

- (1) Sufficient accounting data (net income, equity etc.) was available each year from 2009 to 2011.
- (2) Stock price data at the end of the year was available each year over the study period (2009-2011)
- (3) December fiscal year ending firms throughout the study period.
- (4) Firms in the banking industry, such as banks and insurance companies were excluded.

IFRS has been adopted by all the Korean firms since 2011. All the relevant data after the IFRS adoption were available only for year 2011 (post-IFRS period), year 2009 was chosen as a pre-IFRS period to make the analysis symmetrical. Year 2010 was excluded in the empirical analysis because it was a transition period. Criteria (1)-(3) were imposed to ensure the availability of data enough to carry out the trend analysis. The criterion (4) was required because the banking industry is different from others in firm characteristics such as earning generating process and systematic risk.

#### 3.2. Research Method

The quality of accounting information for firm valuation can be defined as the ability of financial statements to summarize information that affects firm value (Collins et al. (1997); Francis and Schipper (1999)), i.e., the value relevance of accounting information. Although financial statements provide lots of different value relevant information, earnings and book value of equity have been considered as two key measures. Following the valuation model developed by Ohlson (1995) and subsequent empirical studies, we operationalize the value relevance of earnings and book value by estimating the following regression model (1):

$$P_{it} = a_0 + a_1 EPS_{it} + a_2 BV_{it} + \varepsilon_{it} \quad (1)$$

Where,  $P_{it}$  = the price of stock for firm i at the end of year t;  
 $EPS_{it}$  = the earnings per share of firm i during the year t;  
 $BV_{it}$  = the book value per share for firm i at the end of year t;

As our metrics to measure the value relevance of earnings and book value, we use

both the coefficient estimates ( $\hat{a}_1$  and  $\hat{a}_2$ ) and explanatory power ( $R^2$ ) of regression model (1). We estimate the model (1) for pre-IFRS period and post-IFRS period, separately. Regression coefficients,  $\hat{a}_1$  and  $\hat{a}_2$ , can be interpreted as the weight of earnings and book value in pricing equity, respectively. Alternatively, they are called 'earnings response coefficient' and 'book value response coefficient'. Using this metric of value relevance, we can state our hypothesis as:

$$\begin{aligned} \text{Hypothesis: } \quad & \hat{a}_1 (\text{Post-IFRS period}) > \hat{a}_1 (\text{Pre-IFRS period}) \\ & \hat{a}_2 (\text{Post-IFRS period}) > \hat{a}_2 (\text{Pre-IFRS period}); \end{aligned}$$

To measure the value relevance of earnings and book value, we obtain not only the *total* explanatory power ( $R^2$ ) by estimating the regression model (1), but also the *incremental* explanatory power ( $R^2$ ) of earnings and book value by estimating the following two equations:

$$P_{it} = b_0 + b_1 BV_{it} + \varepsilon_{it} \quad (2)$$

and

$$P_{it} = c_0 + c_1 EPS_{it} + \varepsilon_{it} \quad (3)$$

The *incremental* explanatory power ( $R^2$ ) of earnings and book value can be defined as:

$$\begin{aligned} \text{Incremental } R^2 \text{ of EPS} &= R^2 \text{ of Model (1)} - R^2 \text{ of Model (2);} \\ \text{Incremental } R^2 \text{ of BV} &= R^2 \text{ of Model (1)} - R^2 \text{ of Model (3).} \end{aligned}$$

We test our hypothesis by comparing *total* as well as *incremental* explanatory powers between Pre-IFRS and Post-IFRS periods.

## 4. EMPIRICAL RESULTS

### 4.1 Descriptive Statistics

Table 1 provides descriptive statistics for selected variables of the sample firms. Also reported are Wilcoxon rank test statistics for the differences in these variables between pre-IFRS period and post-IFRS period. Selected variables include stock price (P), earnings per share (EPS), book value of equity per share (BV), firm size as measured by market value of equity (MV), return on equity (ROE) and the ratio of transitory income to permanent income (RTIPI). RTIPI, a measure of earnings quality, is obtained by dividing extraordinary items by income from continuing operations.

The average (median) stock price (P) is 29,150 won (7,340 won) during pre-IFRS period and 35,304 won (8,960 won) during post-IFRS period, and the difference is statistically significant (at  $\alpha < 0.001$ ). Post-IFRS period also exhibits larger BV and MV than pre-IFRS period. However, other variables (EPS, ROE and RTIPI) are smaller for post-IFRS period than for pre-IFRS period. Especially, RTIPIs of post-IFRS period are significantly lower (mean values of 55.9% versus 11.5%) than those of pre-IFRS period. This suggests that earnings quality has improved after adopting IFRS for Korean firms.

**Table 1. Descriptive Statistics of Selected Variables**

Variables	Pre-IFRS Period			Post-IFRS Period			Wilcoxon z-statistics (p-value)
	Mean	Std Dev	Median	Mean	Std Dev	Median	
P <sup>1)</sup>	29.150	68.815	7.340	35.304	76.766	8.960	-3.158 (0.001)***
EPS <sup>2)</sup>	2.279	7.447	0.719	2.386	7.547	0.550	1.479 (0.139)
BV <sup>3)</sup>	35.595	70.510	10.196	39.702	74.353	10.981	-1.752 (0.079)*
MV <sup>4)</sup>	8.371	31.583	1.016	9.706	33.436	1.105	-1.053 (0.292)
ROE <sup>5)</sup>	-0.105	3.514	0.065	-0.019	1.146	0.052	3.215 (0.001)***
RTIPI <sup>6)</sup>	0.559	8.776	0.008	0.115	0.804	0.006	2.005 (0.045)**

1) Price per common share at the end of fiscal year end (in ₩1,000).

2) Earnings per share (in ₩1,000).

3) Book value of equity per share (in ₩1,000).

4) Market value of equity (in ₩Trillions).

5) Return on equity = Net Income / Equity

6) Ratio of transitory income to permanent income = Extraordinary items/Income from continuing operations

\*\*\* Significant at  $\alpha < 0.01$ ; \*\* Significant  $\alpha < 0.05$ ; \* Significant  $\alpha < 0.10$ ;

Table 2 shows correlations among variables for the sample during pre-IFRS period (Panel A) and post-IFRS period (Panel B). The upper right (lower left) hand side contains the Spearman (Pearson) correlation coefficients. As expected, earnings (E) and book values (BV) are positively correlated with stock prices (P), and with each other. More importantly, correlation of stock price (P) with accounting information (EPS and BV) is stronger for post-IFRS period than for pre-IFRS period. For example, Spearman correlation coefficients of P with EPS (BV) are 0.708 (0.868) during post-IFRS period, but 0.611 (0.820) during pre-IFRS period. This suggests that the adoption of IFRS has improved the quality of accounting information in its role for firm valuation.

**Table 2. Correlation Among variables**

<i>Panel A: Pre-IFRS period</i>			
Variables	P	EPS	BV
P	1.000	0.611	0.820
EPS	0.752	1.000	0.639
BV	0.787	0.677	1.000
<i>Panel B: Post-IFRS period</i>			
Variables	P	EPS	BV
P	1.000	0.708	0.868
EPS	0.789	1.000	0.645
BV	0.803	0.725	1.000



Pearson correlations are in the bottom-left cells and Spearman correlations are in the upper-right cells. All of the correlation coefficients are significant at the 0.0001 level.

#### 4.2 Results of Comparing Valuation Coefficients

Table 3 presents the results of comparing the value relevance of earnings and book value, as measured by the coefficients from regression model (1). We first estimate equation (1) for pre-IFRS period and post-IFRS period, separately. Results from regression model (1) are presented in Table 3.

The coefficients on EPS and BV have the predicted sign (positive) and are statistically significant (at  $\alpha < 0.001$ ) for both pre-IFRS and post-periods. More importantly, the coefficient on EPS (earnings response coefficient: ERC) for post-IFRS period (4.443) is larger than that for pre-IFRS period (3.748). Although the difference is small, the coefficient on BV (book value response coefficient: BVRC) for post-IFRS period (0.502) is also larger than that for pre-IFRS period (0.499).

As an additional approach to test our hypothesis, we estimate the following 2 pooled cross-sectional and time-series models which include a dummy variable,  $D_{it}$ , which takes a value one if the observation belongs to the year after adopting IFRS (post-period) and zero otherwise:

$$P_{it} = b_0 + b_1 D_{it} + b_2 EPS_{it} + b_3 EPS_{it} * D_{it} + b_4 BV_{it} + b_5 BV_{it} * D_{it} + \varepsilon_{it} \quad (4)$$

**Table 3. Coefficients from Regressions of Stock Price on Earnings and Equity Book Value: Using Pooled Regression with Dummy Variables <sup>1)</sup>**

$$P_{it} = b_0 + b_1 D_{it} + b_2 EPS_{it} + b_3 EPS_{it} * D_{it} + b_4 BV_{it} + b_5 BV_{it} * D_{it} + \varepsilon_{it}$$

	Expected sign	Pre-IFRS Period	Post-IFRS period	Pooled Sample
Intercept	?	2,828.890 (1.730)*	1,759.071 (2.710)***	2,828.890 (1.680)*
$D$	?			1,934.587 (0.810)
$EPS$	+	3.748 (14.100)***	4.443 (14.940)***	3.748 (13.670)***
$EPS * D$	+			0.694 (1.740)*
$BV$	+	0.499 (17.780)***	0.502 (16.640)***	0.499 (17.250)***
$BV * D$	+			0.003 (0.070)
Adj. $R^2$ (%)		70.69	73.47	72.26

- 1)  $D_{it}$  is a dummy variable which takes a value of one if the firm  $i$  in year  $t$  belongs to the period before adopting IFRS, and zero if it belongs to the period after the adoption of IFRS.

\*\*\* Significant at  $\alpha < 0.01$ ; \*\* Significant  $\alpha < 0.05$ ; \* Significant  $\alpha < 0.10$ ;

In model (4), the coefficients  $b_3$  and  $b_5$  represent the differences in ERCs and

BVRCs between pre-IFRS and post-IFRS periods, respectively, while  $a_4$  and  $a_5$  represent the differences in ERCs and BVRCs between pre-IFRS and post-IFRS periods, respectively,

The right most column of Table 3 presents the results of estimating the above model (4). A significantly positive value of coefficient  $b_3$  means that EPS has larger effect on equity price for post-IFRS period than for pre-IFRS period. As for BV, the coefficient  $b_5$  is also positive, but statistically insignificant.

These results are consistent with the argument that the adoption of IFRS has improved the quality of accounting information in valuing equity for Korean firms. Overall, our findings lend support to our hypothesis.

#### 4.3 Results of Comparing Explanatory Powers

Table 4 presents the results of comparing the explanatory powers of earnings and book value between pre-IFRS period and post-IFRS period. The total  $R^2$  indicates that earnings and book value jointly explain 73.5% (70.7%) of the variation in equity prices during post-IFRS period (pre-IFRS period). An important result is that there is a significant increase in total  $R^2$  from pre-IFRS period to post-IFRS period.

However, the results on incremental explanatory powers are mixed. For example, while incremental  $R^2$  of EPS has slightly increased (8.9% versus 9.0%), incremental  $R^2$  of BV has decreased (14.2% versus 11.2%) from pre-IFRS period to post-IFRS period. On the other hand, common  $R^2$  has increased from 47.6% to 53.3%. Overall, these results suggest that the adoption of IFRS has improved the quality of accounting information relative value relevance of equity book value (over earnings) is larger for high-leverage firms than for low-leverage firms, as measured by the explanatory power of book value and earnings for equity prices.

**Table 4. R-Squares ( $R^2$ ) from the Regression of Stock Price on Earnings and/or Equity Book Value**

$$P_{it} = a_0 + a_1EPS_{it} + a_2BV_{it} + \varepsilon_{it}$$

Classification of R-squares <sup>1)</sup>	Pre-IFRS period		Post-IFRS period	
	$R^2$	% of Total	$R^2$	% of Total
Total	0.707	100.0	0.735	100.00
EPS incremental	0.089	12.50	0.090	12.30
BV incremental	0.142	20.00	0.112	15.30
Common	0.476	67.50	0.533	72.40

1) Each R-square measure is obtained from the following models:

Model 1:  $P_{it} = a_0 + a_1EPS_{it} + a_2BV_{it} + \varepsilon_{it}$

Model 2:  $P_{it} = b_0 + b_1BV_{it} + \varepsilon_{it}$

Model 3:  $P_{it} = c_0 + c_1EPS_{it} + \varepsilon_{it}$

- Total  $R^2 = R^2$  of Model 1.
- Incremental  $R^2$  of EPS =  $R^2$  of Model 1 –  $R^2$  of Model 2.
- Incremental  $R^2$  of BV =  $R^2$  of Model 1 –  $R^2$  of Model 3.

- Common  $R^2 = R^2$  of Model 1 –  $R^2$  of Model 2 –  $R^2$  of Model 3.

#### **4. CONCLUSIONS**

This study examines if the quality of accounting information changes with the adoption of the International Financial Reporting Standards (IFRS). More specifically, we investigate whether the quality of accounting information from income statement (earnings) and balance sheet (book value of equity) is systematically different between the period before adopting IFRS ('pre-IFRS period') and that after adopting IFRS ('post-IFRS period').

Using a sample of 655 Korean firms which have adopted IFRS since the year 2011, we find that the value relevance of both earnings and equity book value is larger for the post-IFRS period than the pre-IFRS period. We also find that total explanatory power of earnings and equity book value has increased from pre-IFRS to post-IFRS periods. Overall, these results suggest that the adoption of IFRS has improved the quality of accounting information for Korean firms.

## REFERENCES

- Ali, A and L. S. Hwang, 2000, Country Specific Factors Related to Financial Reporting and The Value Relevance of Accounting Data. *Journal of Accounting Research* 38: 1-21.
- Armstrong, C., M. Barth, and A. Jagolinger. 2010. Market Reaction to the Adoption of IFRS in Europe, *The Accounting Review* 85: 31-61.
- Babalyan, L., 2001, Association between Accounting Earnings and Stock Returns as a Measure of Value Relevance of Accounting Standards: empirical Evidence from Swiss Market. Available at <http://www.ssrn.com/abstract=301923>.
- Ball, R., S. P. Kothari, and A. Robin. 2000. The Effect of Institutional Factors on Properties of Accounting Earnings. *Journal of Accounting and Economics* 29:1-51.
- \_\_\_\_\_ and L. Shivakumar, "Earnings Quality in U.K. Private Firms," *Journal of Accounting and Economics* 39, 2005, pp. 83-128.
- Barth, M.E., W. R. Landsman and M. H. Lang, 2008, International Accounting Standards and Accounting Quality, *Journal of Accounting Research* 46(3), pp 467-498.
- Barth, M., W. Landsman, M. Lang, and C. Williams. 2012. Are IFRA-based and US-GAAP-based Accounting Amounts Comparable? *Journal of Accounting and Economics* 54: 68-93.
- Bartov, E, S. R. Goldberg, and M. Kim. 2005. Comparative Value relevance among German, U.S., and International Accounting Standards: A German Stock Market Perspective. *Journal of Accounting, auditing, and finance* 20 (2): 95-119.
- Callao, S., J. Jarne and J. Lainez, 2007, Adoption of IFRS in Spain: Effect on the Comparability and Relevance of Financial Reporting, *Journal of Accounting, Auditing, and Taxation* 16: 148-178.
- Collins D.W., M. Pincus and H Xie, Equity Valuation and Negative Earnings: the Role of Book Value of Equity, *The Accounting Review* 75 (1999), pp 29-61
- Devalle, A., E. Onali, and R. Magarini. 2010. Assessing the Value Relevance of Accounting Data After the Introduction of IFRS in Europe. *Journal of International Management and Accounting* 21: 85-119.
- Francis, J. and K. Schipper. 1999. Have financial Statements Lost Their Relevance? *Journal of Accounting Research* 37: 319-352.

- Harris, M. and K. Muller, 1999. The Market Value of IAS versus U.S. GAAO Accounting Measures Using Form 20-F Reconciliations. *Journal of Accounting and Economics* 26:285-312.
- Horton, J., and G. Serafeim. 2010. Market Reaction to and Valuation of IFRS Reconciliation Adjustments- First Evidence from the UK. *Review of Accounting Studies* 15: 725-751.
- Hung, M. and K. Subramanyam, 2007. Financial Statement Effects of Adopting International Accounting Standards: The Case of German, *Review of Accounting Studies* 12: 623-657
- Jamal, K., R. Bloomfield, T. Christensen, R. Colson, S. Moehrle, J. Olson, S. Penman, T. Stober, S. Sunder, and R. Watts. 2010. A Research-Based Perspective on the SEC's Proposed Rule-Roadmap for the Potential Use of Financial Statements Prepared in Accordance with International Financial Reporting Standards (IFRS) by U.S. Issuers. *Accounting Horizons* 24: 139-147.
- Landsman, W., W. Beaver; and M. E. Barth. 1998. Relative Valuation Roles of Equity Book Value and Net Income as a Function of Financial Health, *Journal of Accounting and Economics*, February 1998, Vol. 25 Issue 1, pp. 1-34
- Lin, Z. and F. Chen, 2005, Value Relevance of International Accounting Standards Harmonization: Evidence from A- and B-share Market in china, *Journal of International Accounting, Auditing and Taxation* 14: 79-103.
- Niskanen, J., j. Kinnunen and E. Kasanen. 2000. The Value Relevance of IAS Reconciliation Components: Empirical Evidence from Finland, *Journal of Accounting and Public Policy* 19: 119-137.
- Ohlson, J., Earnings, Book Values and Dividends in Equity Valuation, 1995, *Contemporary Accounting Research* 11: 661-687.
- Securities Exchange Commissions (SEC). 2008. Roadmap for the Potential Use of the Financial Statement Prepared in Accordance with International Financial Reporting Standards (IFRS) by U.S. Issuers. *Available at* <http://www.sec.gov/rules/proposed/2009/33-9005.pdf>.
- Van der Meulen, S., A. Gaeremynck and M. Willekens, 2007, Attribute Differences between U.S. GAAP and IFRS Earnings: An Explanatory Studies, *the international Journal of Accounting* 42: 123-142.