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IFRS Adoption and Financial Reporting Quality: Taiwan Experience

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Abstract

Taiwan's financial accounting regulatory amendment directions shift the framework from the U.S. GAAP-based to International Financial Reporting Standards (IFRS)-based to accelerate the pace of progress towards convergence with IFRS. In the amendment process, the converge outcomes of earnings quality become an important and urgent issue. The purpose of this study is to investigate the converge impacts on reporting quality over 1999 to 2009, which divided into three timeframes: the U.S. GAAP-based era ranging from 1999-2005, the IFRS convergence era ranging from 2006-2007, and the preparation period of IFRS adoption ranging from 2008-2009. Two criteria of reporting quality is included: value relevance and the magnitude of earnings management. The empirical results show that the financial reporting quality got improvement under the amendment towards IFRS adoption. **Keywords:** International Financial Reporting Standards, IFRS Adoption, Financial Reporting Quality, Accounting Standards, Value Relevance

Introduction

The objective of Generally Accepted Accounting Principles (GAAP) compliance is to prepare financial statements faithfully representing the enterprise's financial positions and operating results. However, in Taiwan Semiconductor Manufacturing Company (TSMC) case, 2001 financial statements reported the net income of NT \$ 14,483 million (equivalent to 483 million dollars) under Taiwan GAAP

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(TGAAP), but stated substantial loss of NT \$ 21,975 million (equivalent to 733 million dollars) under U.S. GAAP for the same year. At this point, which operating results should TSMC investors believe in? The embarrassing results show the main reason that many countries eager to harmonize their domestic GAAP with a single global reporting system. The use of International Financial Reporting Standards (IFRS) for statutory reporting around the world is the most significant regulatory trend. Therefore, the evolution of financial reporting standards in Taiwan should shift from the U.S. GAAP-based standards to IFRS adoption. In this process, the quality of Taiwan companies' earnings scenarios is a topic worthy of discussion.

International Accounting Standards Board (IASB) was established in 1973, formerly known as International Accounting Standards Committee (IASC). The IASC was restructured into the IASB at the start of 2001. IASB works to accomplish the objectives of developing a single set of high quality global accounting standards and bringing about convergence of international accounting standards and IFRS to high quality solutions. IASB has primarily followed a principles-based approach to standards setting. The standards allow more latitude to choose among alternative accounting methods. Thus, the comparability of financial statements in the 80's was strongly questioned. In response to the criticisms, IASC proceeded with the reform plans in 1987. International Organization of Securities Commission (IOSCO) agreed to IASC's core standards plan in 1995 that significantly limited the choice of accounting treatments and increased disclosure. IASC completed comparability project and received IOSCO approval in 2000. IOSCO's endorsement was a major boost to IASC's credibility and was the cornerstone of global accounting convergence.

In the wave of globalization, multinational enterprises and investment grows. Companies, accountants, investors, and governments are very concerned with the impacts from inconsistent accounting standards among countries. As a result, the demands for developing a set of global reporting system increase. Street et al. (1999) point out that the use of a single global accounting standard will bring the following benefits: first, it can reduce people's investment risk and save firms' cost of capital by allowing investors to make more efficient decisions. Second, multinational firms can lower the accounting standards compliance cost around the world. Third, it promotes international investment opportunities. Finally, it ensures efficient cross-border capital allocation.

The attitude of U.S. SEC (SEC) and Financial Accounting Standards Board (FASB) is one of a big key to IASB's mission success. FASB and IASB both recognize that U.S. GAAP and IFRS convergence is their obligations. In 2002, they jointly issued a Memorandum of Understanding which agreed to coordinate the future work for both sides to remove the differences between U.S.GAAP and IFRS. Soon, the European Union announced that all firms listed on stock exchanges are required to apply IFRS when preparing their consolidated financial statements after January 1, 2005. In addition, some countries such as France, Italy, Germany and other countries allowed early IFRS adoption before 2005. IFRS had become mandatory in Australia, Sweden, Russia, and South Africa nowadays. Other countries converging with IFRS include Canada, Japan, China and many others. Currently more than 120 countries have agreed to either permit or require the IFRS accounting standards.

However, the global accounting convergence process among different countries has some challenge. Domestic accounting principles there exist difference and financial statement expression varies in the same economic activities due to difference in their culture, political system, legal system and business habits. In 2006 Taiwan international conference,¹ Schipper noted that seeking a

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¹ 2006 International Conference on Accounting Standards, Taipei, Taiwan, October 4, 2006.

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prudence index of financial reporting quality is an important subject to scholars in IFRS adoption,² since prior research shows that different quality measurement approaches will bring different empirical results (e.g., Bartov et al. 2002; Kinnunen and Koskela 2003; Leuz et al. 2003; Goncharov and Zimmermann, 2006).

International accounting convergence is a consensus among the participants in Taiwan's capital market; however, whether the Taiwanese firms' IFRS adoption quality is better than TGAAP or U.S. GAAP is an important issue. We particularly need to pay more attention to the influence on financial reporting quality, since we should not ignore IASB aims to provide a single high-quality financial information system. Ball et al. (2003) study on earnings quality in four Asian countries under adoption of IAS and find that a high-quality accounting standards is a necessary condition for high quality information, but not sufficient condition. However, in the ongoing debate about the quality of IFRS, prior literature provides mixed results. Some research point out there is no difference on information quality provided by different accounting standards (Leuz et al. 2003; Tendeloo and Vanstraelen, 2005). Therefore, emphasizing the use of which accounting standards is not meaningful. Global accounting convergence process does not require a single standard. Other studies find reporting quality under IFRS adoption decreases and suggest flexibly revising the convergence project toward IFRS (Bartov et al. 2002; Kinnunen and Koskela 2003; Goncharov and Zimmermann, 2006). On the contrary, Ashbaugh and Olsson (2002); Chen et al. (2006) believe that IFRS is superior to any standards. Due to the research lacking on global accounting convergence by Taiwan, the study contributes to the literature by investigating the quality of financial reporting during the accounting regulatory evolution over time.

However, what is the quality of financial reporting? The measuring method varies in literature. Based on past research financial information quality measure can be broadly divided into two main categories: value relevant (Ashbaugh and Olsson, 2002; Bartov et al., 2002) and earnings management magnitude (Kinnunen and Koskela 2003; Leuz et al. 2003; Tendeloo and Vanstraelen, 2005). Since each measurement has its advantages and disadvantages, the research design includes two criteria of reporting quality: value relevance method and the content of earnings management.

Taiwan's financial accounting regulatory amendment direction shift the framework from the U.S. GAAP-based to IFRS-based to accelerate the pace of progress towards convergence with IFRS in 1999. The study discusses the convergence impacts on reporting earnings quality of switching from the U.S. GAAP-based to IFRS-based over 1999 to 2009, which divided into three eras.³ The study results provide domestic government deliberate about whether its long time effort in global accounting convergence is worth. We also contribute to the literature in worldwide competition among accounting standards.

Literature Review

In the global convergence process, the difference in latitude of domestic accounting standards get academia and practice attention, because of the different accounting standards allow different accounting treatments for same economics activities which made the earnings quality varied. Literature of the quality of earnings can be divided into two main categories: value relevant (Ashbaugh and Olsson, 2002; Bartov et al., 2002) and earnings management magnitude (Kinnunen and Koskela, 2003; Leuz et al., 2003; Tendeloo and Vanstraelen, 2005). Besides, some studies use a

³ The details of each era will be provided in research design.

² Full adoption of IFRS in Taiwan will start in 2013.

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single country as a research subject (Bartov et al., 2002), others made cross-country comparisons (Kinnunen and Koskela, 2003; Leuz et al., 2003). For a sample of single country with one set of regulation, there is no way to distinguish the quality among different standards; for a cross-country comparison, the empirical results cannot be viewed in isolation from other factors of a country's institutional infrastructure. Thus, it is hard to tell that the difference in reporting quality come from accounting standards or from other factors. Moreover, literature does not have consistent conclusions because of various criteria for quality in standards adoption.

Studies in value relevant examine the explanatory power of regression of stock returns on earnings under different accounting standards. Ashbaugh and Olsson (2002), using a sample of listed firms in London stock exchange, find that the R-square of the valuation model for IFRS adopters is higher than for the U.S. GAAP adopters. For a sample of German firms, Bartov et al. (2002) discuss whether U.S. GAAP advantage exist only in particular region. In other words, its high quality of U.S. GAAP adoption will be only in the territory of the United States. Bartov et al. find that the association between earnings and stock returns is higher for U.S. GAAP adopters than IFAS adopters. The result indicates that accounting numbers under U.S. GAAP are more value relevant. In addition, they conclude that the reporting quality of both U.S GAAP and IAS exceed that of German GAAP.

Studies of earnings management believe high quality accounting standards could minimize the opportunities of earnings manipulation (Kinnunen and Koskela, 2003; Leuz et al., 2003; Tendeloo and Vanstraelen, 2005). Kinnunen and Koskela (2003) provide evidence of European listed companies exhibits cosmetic earnings management behaviors (hereafter CEM.) The study splits samples into two groups according to their reporting earnings and finds CEM is more significant in companies with losses. The result also indicates that IFRS adoption increases CEM, since IFRS has more latitude in accounting treatment. The quality of IFRS adoption is not higher than others. Leuz et al. (2003) perform a cluster analysis using five institutional variables included accounting regulatory structure to identify three country clusters from 31 countries over the period 1990-1999. The paper examines the magnitude of earnings management across the three clusters and finds the significant difference in accounting accruals. However, countries in the same group are characterized by the degree of investor protection rather than accounting standards framework. For example, Taiwan, Australia, Germany, France, South Africa, Japan, and Ireland are in the second group. Other eight countries such as United Kingdom, Singapore, Malaysia, United States, and so on are in the third group. It is clear that the countries within the same group have different accounting standards. The result shows no evidence of the association between accounting systems and earnings management. Besides, Tendeloo and Vanstraelen (2005) test whether shifting from domestic GAAP to IFRS could bring lower magnitude of earnings management to enhance investor protection in a country like Germany with weak investor protection mechanisms. The study finds that IFRS adoption does not decrease companies' discretionary accruals and IFRS adopters have more serious earnings manipulation, although the bad situation is mitigated in companies audited by the big four CPA firms. Therefore, Tendeloo and Vanstraelen are unable to establish that IFRS impose a significant constraint on earnings management. In addition, Goncharov and Zimmermann (2006), who focus on income smoothing, find significant difference in earnings management among different accounting standards. The firms reporting under U.S. GAAP engage in earnings smoothing lees often than firms reporting under IFRS or German GAAP. Moreover, no significant difference between IFRS and German GAAP are found. Goncharov and Zimmermann further control the factors which affect the selection of accounting treatments, such as company size, profitability, and debt ratio, and get the consistent

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results as shown above. Visibly, in preventing earnings manipulation, U.S. GAAP appears to be a notch above other accounting standards. Therefore, they propose amending IFRS.

In sum, empirical evidence has shown mixed results on the association between reporting quality and accounting standards system, since different approaches are used to quality measurement. Therefore, this study compares the various quality measurement methods. In addition, this study observes the impact on earnings quality in the global accounting convergence process to make further suggestion for the existing accounting policy.

Research Design Sample Selection

Our initial sample comprises all listed firms in Taiwan which yields an initial sample of 1,304 firms. Our time series tests require data are available for all variables in Table 1, which results in a smaller sample size of 986 firms. We obtain research data between 1999 and 2009 from Taiwan Economic Journal (TEJ) database. During 1999 to 2005, some TGAAP was revised to bring accounting standards more in line with IAS but the most part of TGAAP is closely modeled on U.S. GAAP-based at this time.

Then, the Accounting Research and Development Foundation in Taiwan revised TGAAP to adopt the fair value accounting in IFRS beginning on January 1, 2006. After all, Taiwan Financial Supervisory Commission forms a task force to study the adoption of IFRSs and announced its roadmap for the full adoption of IFRSs in 2008. We base the global accounting convergence events in Taiwan to divide our study periods into three timeframes: the U.S. GAAP-based era ranging from 1999-2005 (ERA1); the IFRS convergence era ranging from 2006-2007 (ERA2), and the preparation period of IFRS adoption ranging from 2008-2009 (ERA3). The cross-time comparisons use two quality measurements to observe impacts on earnings quality in the global accounting convergence and IFRS adoption.

Prior studies show different quality measurements have their respective pros and cros. Following the vast information quality literature we apply value relevant and earnings management as our quality proxies of different accounting framework. To obtain our inference, we estimate the following models.

Value Relevant Model

The value relevant analysis aims to compare how well a regression model on earnings under different accounting standards accounts for the variation in the stock returns. In regression analysis, the best model is the one with the highest R-square and with the most significant coefficient. The valuation model assumption is that stock price is equal to the sum of its expected cash flows discounted by the required rate of return that an investor demands for the risk of owning the stock. The study therefore use accounting earnings to proxy expected cash flows in the model .We compare explanatory power of accounting information for stock price in different timeframes and view the consistency between regression coefficients and expectation hypotheses. Following prior research, this study uses the accounting earnings as the only explanatory variable in the valuation model (Ashbaugh and Olsson 2002). We then develop the model as follows:

$$P_{i,t} = \alpha + \beta E_{i,t} + \varepsilon_{i,t} \tag{1}$$

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In equation (1), P_{i,t} represents the firm's stock price at the date of the financial statement announcement; E_{i,t} is earnings per share (EPS) based on different accounting frameworks. The R-square of each model represents relationship magnitude between earnings and stock prices. Thus, we perform a cross-time comparison among three timeframes. If the R-square in ERA3 is higher than that in ERA2 and in ERA1, we can make the inference that quality of earnings under the convergence with IFRS is better than convergence with other standards.

Earnings Management Analysis

The research relies on the methodology to split the accounting accruals into discretionary accruals and non-discretionary accruals (Huang and Lin 2007). We apply the Modified Jones Model in Dechow et al. (1995) to calculate discretionary accruals. The measure is expressed in equation (2):

$$\frac{\mathsf{TACC}_{i,t}}{\mathsf{TA}_{i,t-1}} = \alpha_1 \frac{1}{\mathsf{TA}_{i,t-1}} + \alpha_2 \frac{\Delta \mathsf{REV}_{i,t} - \Delta \mathsf{AR}_{i,t}}{\mathsf{TA}_{i,t-1}} + \alpha_3 \frac{\mathsf{PPE}_{i,t}}{\mathsf{TA}_{i,t-1}} + \epsilon_{i,t} \tag{2}$$

where, TACC_{i,t} is total accruals at the end in year t of firm i, TA_{i,t-1} is total assets at the end in year t-1 of firm i, Δ REV_{i,t} is the difference in sales between year t and year t-1 of firm i, Δ AR_{i,t} is the difference in accounts receivable between year t and year t-1 of firm i, and PPE_{i,t} is gross property, plant, and equipment of firm i in year t. Total accruals is calculated by income before extraordinary items minus operating cash flow. The values of total accruals predicted from equation (2) are non-discretionary accruals (NDACC). The residual from equation (2) is discretionary accruals (DACC). Accruals derived from the modified Jones mode are used in our analysis model of earnings management.

Our earnings management proxy is measured by smoothing ratio. Following Tendeloo and Vanstraelen (2005), we define smoothing ratio as standard deviation of non-discretionary accruals over standard deviation of earnings. While managers apply discretionary accruals to manipulate earnings, the deviations of earnings decrease. Thus, the portion from the variability of non-discretionary accruals exceeding the variability of earnings is a proxy of earnings smoothing behavior. Under the inference, the smoothing ratio is bigger than 1. The equation is as follows:

$$SR_{i,t} = \sigma NDE_{i,t} / \sigma E_{i,t}$$
 (3)

Where $SR_{i,t}$ is smoothing ratio, $\sigma NDE_{i,t}$ is standard deviation of non-discretionary accruals calculated by Modified Jonse Model, $\sigma E_{i,t}$ is standard deviation of reporting earnings. We then use Wilcoxon test to compare the mean of the smoothing ratio among three eras under different accounting frameworks. A high smoothing ratio is consistent with worse accounting quality.

Empirical Results

Descriptive Statistics

Table 1 presents descriptive statistics on all variables in our study. Table 1 shows that the mean (median) of EPS and share price in ERA3 is higher than those in the ERA1 and the ERA2. The mean and median of net income and operating cash flow based on the accounting standards in preparation period of IFRS, the ERA3 are higher than those amounts of ERA1 and ERA2. Comparing the variability of the net income and operating cash flow both scaled by assets, we find the difference between the

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scaled net income and the scaled operating cash flow decrease through the global accounting convergence. Since earnings equals to cash flows plus accruals, firms with low cash flow can manipulate more accruals to increase their reporting earning. The results suggest that earnings reporting of accounting standards under the U.S. GAAP-based (ERA1) have more latitude for earnings management.

Table 1. Descriptive statistics

	ERA1			ERA2			ERA3			Variance Analyses	
	Mean	Median	S.D.	Mean	Median	S.D.	Mean	Median	S.D.	Mean	Median
Share price	20.118	16.190	156.88	16.905	13.800	32.079	29.133	23.320	43.290	55.90***	506.15***
EPS	0.771	0.644	4.038	1.226	1.008	3.952	2.098	1.756	2.522	48.68***	688.23***
Deflated net income	0.061	0.046	0.112	0.071	0.054	0.432	0.072	0.062	1.223	7.12***	9.91***
Deflated operating cash flow	0.039	0.033	0.209	0.068	0.060	0.642	0.075	0.070	0.191	4.47**	82.70***
Deflated total accruals	0.088	0.043	0.180	0.066	0.049	0.272	0.793	0.056	0.084	1.15	14.87***
Deflated non-discretionary accruals	0.033	0.017	0.052	0.044	0.022	0.221	0.015	0.086	0.022	7.23***	31.33***
Deflated discretionary accruals	0.089	0.046	0.168	0.089	0.053	0.153	0.076	0.054	0.083	1.46	8.342***
*** and ** denote significance at <1% and <5%, respectively.											
All deflated variables are scaled by assets.											

In addition, the median (0.056) of total accruals in absolute value and the median (0.054) of discretionary accruals in the ERA3 are higher than those in the ERA2 and the ERA1. The variability in accruals offers preliminary evidence that earnings manipulation become worse during the global convergence process toward IFRS. The scenario results from higher latitude of IFRS. However, the descriptive statistics is only a preliminary analysis, whether the quality of IFRS adoption is worse need further test to confirm it.

Value Relevant

Table 2 presents the association between earnings and stock prices among three global convergence eras. We use returns of the third month after the end of the fiscal year as our dependent variable to focus on the information influence of earnings announcement and reduce the information influence of other event on returns.

Table 2. Regression results of value relevant

$\theta E_{i,t} + \varepsilon_{i,t}$		(1)	
	ERA1	ERA2	ERA3
Intercept	-1.364 (-0.419)	12.321(32.282)***	1.981 (2.530)
EPS	29.948 (40.244)***	5.475 (60.830)***	14.114 (62.732)***
F-value	1617	3700	3935
Adjusted R ²	57.1%	45.5%	67.6%

Variable definitions:

P_i: returns of the third month after the end of the fiscal year.

E_i: earnings per share (EPS).

Numbers in the parentheses are t-values. *** is significant at 0.01.

The results indicate that the regression model has high adjusted R². The coefficient on earnings of three different eras in the equation (1) is significantly positive; in other words, high earnings

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representing good business operation performance would have better market reactions. The results are consistent in direction with those reported on prior literature.

We further observe that the magnitude and significance of regression coefficient increase over time. The adjusted R² in the ERA1 shows that earnings can explain 57.1% variance of stock returns. However, 67.6% variance of stock returns explained by earnings in the ERA3. The value relevant of earnings increases over time. We make the inference that the quality of accounting information gets better along with the accounting convergence. The quality and usefulness of financial reporting significantly improve while Taiwan prepares to whole adoption of IFRS. In the ERA2, reporting earnings explaining only 45.5% variance of stock returns is the lowest one of the three eras. It reveals that the IFRS convergence era is a regulatory transition period. In the transition period, the regulation in amending would be fuzzy and imperfect.

Besides, a multinational corporation will have different reported earnings under different local GAAP (e.g. TSMC event). The different earnings information of one firm would lead investors to revise their belief. Therefore, the explanation power of earnings decreases in the ERA2.

Earnings management

We measure earnings management in terms of smoothing ratio and the results are shown in Table 3. Descriptive statistics on earnings management proxy under different eras are presented in Panel A of Table 3, and the comparison of different eras are presented in Panel B of Table 3. As reported in Panel A, smoothing ratio of the ERA1 is higher than that of the ERA2 and the ERA3 (mean=4.0224, median=0.8333 vs. mean=1.3859, median=0.7024 vs. mean=1.3256, median=0.4487). The results indicate that earnings management based on accounting standards of the ERA1, measured by the variability of non-discretionary accruals over the variability of net income is higher than those of the IFRS convergence era (ERA2) and the preparation period of IFRS adoption (ERA3). That is, firms frequently use discretionary accruals to reduce the volatility of earnings in the U.S. GAAP-based era (ERA1). This kind of managers' behavior decreases over time during the IFRS convergence process. We obtain an inference that accounting information quality is improved in the convergence toward IFRS. The result is similar to the conclusion of value relevant analysis.

Table 3. Smoothing ratio
Panel A: Descriptive statistics

Periods	Mean	Median	Q3	Q1	S.D.
ERA1	4.0224	0.8333	1.6825	0.4605	26.1984
ERA2	1.3859	0.7024	1.3879	0.3553	2.52328
ERA3	1.3256	0.4487	0.9385	0.2166	7.9503

Panel B: Variances analysis

		P-value	of	mean	P-value	of	median
		variance ^a			variance ^b		
ERA1 vs.	ERA2	0.006***			0.019		
ERA1 vs.	ERA3	0.003***			0.000***		
ERA2 vs.	ERA3	0.806			0.000***		
ERA1 vs.ERA	A2 vs. ERA3	0.001***			0.000***		

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Variable definition:

Smoothing ratio: standard deviation of non-discretionary accruals over standard deviation of earnings.

a.T test.

b.Wilcoxon test.

We further use statistic tests to compare whether the mean and median of smoothing ratio less than three eras differ significantly. Panel B of Table 3 reveals the results of the test. It shows that the statistic difference exists. Since the reporting quality of the ERA1 is less than that of ERA2 and ERA3, we could infer that quality of U.S. GAAP is lower than IFRS. The finding that IFRS is superior to other standards is consistent with study results from Ashbaugh and Olsson (2002).

Conclusions

Our study uses two criteria of quality measurement to investigate the scenario during the global accounting convergence process in Taiwan. The result of value relevant analysis indicates that the explanation power of reported earnings to market returns increases under accounting standards of the preparation plan for IFRS adoption. That is, standard amendment leads to financial statements packed with more useful information. Moreover, earnings management analysis reveals that the standards amendment based on the preparation plan of IFRS adoption significantly restrain earnings manipulation and then the reporting quality of financial statements improve. Both results are consistent, indicating that the standards amendment in the ERA3 does increase quality of financial statements. We obtain the inference that IFRS is superior to U.S. GAAP.

Based on our study, the amendment of Taiwan's accounting standards, shifting from the U.S. GAAP-based to IFRS convergence and IFRS adoption, can achieve remarkable success in increasing the comparability and quality of financial reporting. Recently, Taiwan has announced to apply IFRS starting from January 1, 2013. Investors, however, still feel confused by one company with very different operating performance under different standards. Our study could provide investors some idea of the difference in earnings quality, and give the government empirical evidence support to earn investors understanding while enforcing the new accounting standards.

References

- Ashbaugh, H., & Olsson, P. (2002). An Exploratory Study of the Valuation Properties of Cross-listed Firms' IAS and U.S. GAAP Earnings and Book Values. *The Accounting Review*, 77(1), 107-126.
- Ball, R., Robin, A., & Wu, J. S. (2003). Incentives versus Standards: Properties of Accounting Income in Four East Asian Countries. *Journal of Accounting and Economics*, 36, 235-270.
- Bartov, E., Goldberg, S. R., & Kim, M. S. (2002). Comparative Value Relevance among German, U.S. and International Accounting Standards: A German Stock Market Perspective. Working paper, University of New York.
- Chen, T., Li, S., & Tsai, B. (2006). Effects of Accounting Principles and Information Asymmetry on the Earnings Response in the Chinese Stock Exchanges. *The International Journal of Accounting Studies*, 43, 1-25(in Chinese).
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting Earnings Management. *The Accounting Review*, 70, 193-225.
- Goncharov, I., & Zimmermann, J. (2006). Do Accounting Standards Influence the Level of Earnings Management? Evidence from Germany. Working paper, University of Bremen.

- Vol. 2, No. 4, 2012, E-ISSN: 2225-8329 © 2012 HRMARS
- Huang, C. J., & Lin, C. G. (2007). , Earnings Management in IPO Lockup and Insider Trading: Evidence from Taiwan. *Emerging Markets Finance and Trade*, 43(5), 78-91.
- Kinnunen, J., & Koskela, M. (2003). Who Is Miss World in Cosmetic Earnings Management? A Crossnational Comparison of Small Upwards Rounding in Net Income Numbers among Eighteen Countries. *Journal of International Accounting Research*, 2, 39-68.
- Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings Management and Investors Protection: An International Comparison. *Journal of Financial Economics*, 69, 505-527.
- Street, D. L., Gray, S. J., & Bryant, S. M. (1999). Acceptance and Observance of International Accounting Standards: An Empirical Study of Companies Claiming to Comply with IASs. *The International Journal of Accounting*, 34(1), 11-48.
- Tendeloo, V. B., & Vanstraelen, A. (2005). Earnings Management under German GAAP versus IFRS. *European Accounting Review*, 14, 155-180.