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採用國際會計準則之經濟結果: 以倫敦證券交易所 AIM 市場為例

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NSC Project Report

The economic consequences of IFRS adoption: Evidence from firms listed on AIM market of London Stock Exchange

採用國際會計準則之經濟結果: 以倫敦證券交易所 AIM 市場爲例

Abstract

The present study investigates the economic consequences of International Financial Reporting Standards (IFRS) adoption for smaller and growing companies. Despite extensive research assessing the potential impact of voluntary or mandatory IFRS adoption to the market, there is little evidence of whether the benefits are distributed equally among all adopted firms. I examine whether companies listed on London's Alternative Investment Market (AIM) would benefit from such an accounting regime change by examining their accounting quality in the pre- and post-IFRS periods. In a parallel analysis, I also investigate the accounting quality of companies listed in MAIN which are generally large in size compared to companies listed in AIM. Using a sample of UK AIM and MAIN listed firms in years 1995–2008, the findings indicate that AIM companies tend to have higher accounting quality (i.e. lower incidence of small positive earnings, higher incidence of large negative earnings, and higher value relevance of earnings) in the post-IFRS period. However, I do not find similar evidence for MAIN companies. The findings have significant policy implications to the costs and benefits concerns over the adoption of IFRS among small and medium-sized enterprises. The results imply that smaller and growing firms may economically benefit more from the change of an accounting regime to better quality of accounting standards.

Keywords: IFRS, Accounting quality, SMEs

中文摘要

本計畫主要是在探討採用國際會計準則對中小企業的影響。儘管目前有許多文獻是關於採用國際會計準則對市場之影響,但是對於採用公司的受益是否一致卻少有顯著的研究。因此,本計畫的研究發現可以彌補這方面研究的不足。本文以在倫敦 AIM 上市的英國公司做為小型與成長型公司的樣本,來討論在採用國際會計準則前後,公司會計品質的變化。在進行實證分析時,本研究也同時探討 MAIN 上市的英國公司,其會計品質在採用國際會計準則前後的變化。由於在 MAIN 市場上市的公司以大企業為主,其會計品質的變化可以拿來與 AIM 的結果做比較。利用樣本期間 1995 - 2008,實證結果顯示,AIM 公司在採用國際會計準則之後,其會計品質確實有改善(小額正盈餘發生的情形較少、大額負盈餘發生的情形較多、盈餘價值攸關性增加)。然而,本研究發現 MAIN 上市的英國公司在採用國際會計準則之後,會計品質並無明顯改善。本實證結果對於中小型企業採用國際會計準則的成本與效益問題有重要的政策意涵。小型與成長型公司,在採用高品質、以原則性為基礎的國際準則架構之後,可獲得一些經濟效益。

關鍵字: 國際會計準則、會計品質、中小型企業

1. Research Background

The on-going mandatory change in accounting standards in many countries to converge toward International Financial Reporting Standards (IFRS) has been the most topical issue in recent years. In Taiwan, publically traded companies are required to adopt IFRS from year 2013. The main advantage of adopting IFRS for companies is to enhance global comparability of financial statements and to reduce the cost of processing financial information. However, there is continuous discussion over the pros and cons of IFRS adoption and whether full adoption leads to net benefits. The adoption of IFRS may not be beneficial to all firms. Due to difference in the need for financial statements, small and medium businesses may not have the same incentives as large firms in the preparation of IFRS. Therefore, the local accounting regulatory body should assess the cost and benefit of IFRS mandatory adoptions for different size of businesses and be fully prepared for the new accounting regime change.

The motivation behind this study is to understand whether the IFRS adoption would also benefit small and medium-sized enterprises (SMEs). Many argue that full adoption of IFRS may be too costly for these firms. The International Accounting Standard Board (IASB) issued an Exposure Draft of International Financial Reporting Standards for small and medium-sized firms in February 2007. The proposed IFRS for SMEs is a simplification of full IFRS to address the cost and benefit concerns. In this project, I use the UK setting as an example to illustrate this research question and expect that the empirical finding could provide policy implications to the accounting setters. The London Stock Exchange established Alternative Investment Market (AIM) in year 1995 to offer smaller and growing companies from any country an opportunity to raise capital on a well-established and regulated market. Since its introduction, more than 2,500 firms joined AIM and some were successfully transferred to the exchange's MAIN Market. From January 2007, IFRS became mandatory for firms listed on AIM. This provides a clean setting to assess the potential impact of IFRS to smaller and growing companies.

2. Review of Literature and hypotheses development

The study by Ball (2006) provides detailed discussion on the impact of IFRS to investors. As small investors are less likely to obtain financial information from other sources, improving financial reporting quality as promised by IFRS allows them to compete better with professionals such as financial analysts and reduces the risk of trading with a better-informed professional. In addition, the adoption of IFRS eliminates international differences in accounting standards and standardises reporting formats, lowering the cost to investors of processing financial information. In general, IFRS offer increased comparability and reduced information costs and information risk to investors. This would lead to lower costs of capital and increased share prices. Despite the aforementioned advantages of IFRS adoption, some argue that reporting incentives dominate accounting standards in determining the quality of financial reporting. Holthausen (2009) suggests that the effect of accounting standards alone may be weak relative to the effects of other forces such as managerial incentives and institutional features of the economy in determining the outcome of financial reporting process.

A large number of studies have investigated the potential impact of IFRS to the market by examining market reaction to any related announcements and the economic benefits (e.g. accounting quality and costs of capital) to companies reporting under IFRS in major regulated markets (Barth et al., 2008; Armstrong et al., 2007; Christensen et al., 2007). Ball (2006) interprets financial reporting quality as satisfying the demand for financial reporting. That is high quality financial statements provide useful information to a variety of users of financial statements. This requires an accurate depiction of economic reality, a low capacity for managerial manipulation, and timeliness and conservative reporting. Ball (2006) argues that increasing reporting transparency could improve the efficiency of contracting between firms and outside investors.

Empirical evidence shows that mandatory IFRS adoption is associated with better accounting quality and lower costs of equity capital (Armstrong et al., 2010; Barth et al., 2008; Daske et al., 2008). Based on an international sample, Barth et al. (2008) find that firms applying IFRS are associated with lower degrees of earnings smoothing, less management toward earnings targets, more timely loss recognition, and higher value relevance of reported earnings and book value of equity. This evidence indicates a better quality of accounting. Some evidence shows that countries with strong legal enforcement and firms with incentive to be transparent in financial reporting incur greater economic benefit after IFRS adoption (Armstrong et al., 2010; Daske et al., 2008; Christensen et al., 2007; Lee et al., 2008). For instance, Armstrong et al. (2010) find that the pre-IFRS market reactions to similar events are less positive for firms in code-law countries such as Germany, France, and Switzerland where the legal enforcement is relatively weak.

Despite extensive study on IFRS, relatively few investigate the impact to smaller and growing companies. Hence, the finding in this project fills in this void and contributes to the accounting literature on the economic consequences of the global convergence toward IFRS.

Empirical evidence indicates that there is benefit for voluntary IFRS adopters (Barth et al., 2008; Christensen et al., 2007). I conjecture that this also apply to AIM companies if IFRS is a set of good accounting standards that would lead to improved quality of financial reporting. This leads to the following hypothesis:

H1: The accounting quality of AIM firms increases after the mandatory adoption of IFRS.

3. Research methods, sample and data

The sample consists of UK companies listed on the AIM and MAIN markets over the period 1995–2008. The accounting and market data is collected from Worldscope. Additional information is available from the London Stock Exchange website. I examine whether these companies exhibit less earnings management (i.e., high accounting quality), more timely loss recognition, and greater value relevance of earnings and book values after the adoption of IFRS (i.e. IFRS adoption becomes mandatory in year 2005 for MAIN and in year 2007 for AIM). After deleting firms with missing accounting and finance variables, the final sample is 10,735 firm-year observations with 3,787 observations from AIM and 6,948 observations from MAIN. The accounting quality indicators are mainly related to earnings management. Prior studies show that limiting managerial opportunistic

discretion in determining accounting amounts increases the quality of accounting (e.g., Ashbaugh and Pincus, 2001; Barth et al., 2008; Ewert and Wagenhofer, 2005). Accounting standards that limit managerial discretion and opportunistic behavior would result in earnings more reflective of a firm's economic position. The accounting quality measures used in this study are as follows.

(1) Earnings variance

The variability of earnings is measured based on the variance of the residuals from the following regression of change in net income on variables identified in prior studies that are unattributable to the financial reporting system (Barth et al., 2008),

$$\Delta EARN_{ii} = \alpha_0 + \alpha_1 SIZE_{ii} + \alpha_2 MB_{ii} + \alpha_3 LEV_{ii} + \alpha_4 SALES_{ii} + \alpha_5 CF_{ii} + \varepsilon_{ii} \quad . \tag{1}$$

 $\Delta EARN_{ii}$ is change in earnings for firm i in year t scaled by total assets; $SIZE_{it}$ is firm size measured as the natural log of total assets; MB_{it} is natural log of the market to book ratio; LEV_{it} is leverage measured as the debt to equity ratio; $SALES_{it}$ is growth in company sale; and CF_{it} is cash flow from operations scaled by total assets. I compare the variance of earnings ($\Delta EARN^*$) before and after IFRS adoption for both MAIN and AIM companies. If IFRS reduces the scope for managerial discretion, managers would engage less in earnings smoothing which increase the variability of reported earnings. MAIN and AIM firms may exhibit greater earnings variability in the post-IFRS period. The post-IFRS period starts from year 2005 for companies listed in MAIN and from year 2007 for companies listed in AIM.

(2) Incidence of small positive earnings

Following Barth et al. (2008), I examine the tendency of managing towards positive earnings in the pre and post-IFRS periods based on the following regression:

$$IFRSDUM_{it} = \alpha_0 + \alpha_1 SPOS_{it} + \alpha_2 SIZE_{it} + \alpha_3 MB_{it} + \alpha_4 LEV_{it} + \alpha_5 SALES_{it} + \varepsilon_{it}.$$
 (2)

The post-IFRS dummy (*IFRSDUM*_{it}) equals one in the post-IFRS period (i.e., from year 2005 for MAIN and from year 2007 for AIM) and zero otherwise. *SPOS*_{it} is a dummy indicator that equals one if earnings scaled by total assets is between 0 and 0.01 (Barth et al., 2008; Lang et al., 2003). I predict a negative coefficient on *SPOS* if AIM companies manage earnings toward small positive amounts more frequently before the adoption of IFRS and this evidence may also exist in MAIN companies.

(3) Incidence of large negative earnings

Timely loss recognition (conservative reporting) is an indicator of good earnings quality as it results in economic benefits (Barth et al., 2008; Lang et al., 2003; Garcia Lara et al., 2005; 2009). I measure the level of timely loss recognition as the coefficient of large negative earnings of the following regression:

$$IFRSDUM_{it} = \alpha_0 + \alpha_1 LNEG_{it} + \alpha_2 SIZE_{it} + \alpha_3 MB_{it} + \alpha_4 LEV_{it} + \alpha_5 SALES_{it} + \varepsilon_{it}$$
 (3)

The post-IFRS dummy ($IFRSDUM_{it}$) equals one in the post-IFRS period (i.e., from year 2005 for MAIN and from year 2007 for AIM) and zero otherwise. $LNEG_{it}$ is a dummy indicator that equals one if earnings scaled by total assets is less than -0.20 and zero otherwise. I predict a positive coefficient on LNEG as AIM companies may recognize large losses more frequently in the post-IFRS period than they do in the pre-IFRS period and this evidence may also exist in MAIN companies.

(4) Value relevance

The value relevance measure is based on the level of explanatory power from a regression of stock price on earnings and book value of equity. Following Barth et al. (2008), to obtain a measure that is unaffected by differences across industries, I first regress stock price on industries then regress the residuals from this (P^*) on book value per share (BVPS) and earnings per share (EPS),

$$P_{it}^* = \beta_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \varepsilon_{it} \quad . \quad (4)$$

BVPS and EPS are book value and earnings per share. To assess the economic impact of IFRS adoption on the value relevance of earnings and book value of equity, I include IFRS dummy (IFRSDUM) that equals one in the post-IFRS period (i.e. equals 1 from year 2005 for MAIN and from year 2007 for AIM companies) and zero otherwise in equation (4),

$$P_{it}^* = \beta_0 + \beta_1 IFRSDUM_{it} + \beta_2 BVPS_{it} + \beta_3 BVPS * IFRSDUM + \beta_4 EPS_{it} + \beta_5 EPS * IFRSDUM + \varepsilon_{it}.$$
 (5)

Positive coefficients on the interactive terms ($BVPS_{it}*IFRSDUM_{it}$ and $EPS_{it}*IFRSDUM_{it}$) imply that earnings and book value of equity are more value relevant in the post-IFRS period.

3. Empirical results

Table 1 reports descriptive statistics for main financial variables for the period 1995–2008. EARN is earnings before interest and tax scaled by total assets; SIZE is the natural log of total assets; LEV is total debts divide by common stock of equity; SALES is total sales scaled by total assets; MB is natural log of the market-to-book ratio; CF is cash flow from operating activities scaled by total assets; Return is annual share return calculated as $(P_t - P_{t-1})/P_{t-1}$ where P is share price at the fiscal year end; BVPS is book value per share, and EPS is earnings per share. Median values of earnings return on assets (EARN), and cash flow (CF) are 0.026, and 0.019 for AIM companies and 0.074, and 0.067 for MAIN companies. Median values of size and sales growth are 9.605 and 0.141 among AIM companies and 11.985 and 0.079 among MAIN companies. Median values of MB and LEV are 0.959 and 0.105 for AIM firms and 1.022 and 0.34 for MAIN companies. Median annual stock

return is -0.174 and 0.009 for AIM and MAIN companies respectively. Median values of *BVPS* and *EPS* are 0.154 and 0.004 for AIM and 0.755 and 0.141 for MAIN. The descriptive analyses indicate that AIM companies generally are less profitable and are smaller in size than MAIN. Furthermore, AIM firms have lower growth in sales, lower leverage and lower annual stock returns.

Table 1. Descriptive statistics

| AIM sample (3,787 obs.) | Mean | Q1 | Median | Q3 | Std |
|--------------------------|--------|--------|--------|--------|-------|
| • | -0.094 | | 0.026 | | |
| EARN | | -0.149 | | 0.103 | 0.380 |
| CF | -0.047 | -0.102 | 0.019 | 0.096 | 0.267 |
| SIZE | 9.621 | 8.655 | 9.605 | 10.596 | 1.422 |
| SALES | 0.632 | -0.034 | 0.141 | 0.522 | 1.875 |
| MB | 1.088 | 0.621 | 0.959 | 1.445 | 0.723 |
| LEV | 0.433 | 0.000 | 0.105 | 0.462 | 1.093 |
| Return | -0.064 | -0.551 | -0.174 | 0.191 | 0.786 |
| BVPS | 0.442 | 0.036 | 0.154 | 0.476 | 0.955 |
| EPS | 0.038 | -0.012 | 0.004 | 0.069 | 0.229 |
| | | | | | |
| MAIN sample (6,948 obs.) | Mean | Q1 | Median | Q3 | Std |
| EARN | 0.044 | 0.022 | 0.074 | 0.128 | 0.213 |
| CF | 0.054 | 0.015 | 0.067 | 0.122 | 0.155 |
| SIZE | 12.112 | 10.543 | 11.985 | 13.609 | 2.370 |
| SALES | 0.234 | -0.009 | 0.079 | 0.233 | 0.984 |
| MB | 1.144 | 0.688 | 1.022 | 1.456 | 0.670 |
| LEV | 0.712 | 0.052 | 0.340 | 0.822 | 1.331 |
| Return | 0.054 | -0.283 | 0.009 | 0.273 | 0.652 |
| BVPS | 1.410 | 0.257 | 0.755 | 1.720 | 1.956 |
| EPS | 0.256 | 0.016 | 0.141 | 0.367 | 0.482 |

Table 2 reports the Pearson product-moment and Spearman rank-order correlations between the variables. To facilitate discussion, I focus on the Spearman correlations. Panel A shows that earnings return on assets (*EARN*) is positively correlated with firm size, leverage, growth in sales, market-to-book ratio, stock returns and cash flow return on assets in AIM sample firms. In addition, future growth opportunities (*MB*) are negatively correlated with firm size and leverage, and leverage is positively correlated with cash flow return on assets (*CF*). In contrast, Panel B indicates that, for MAIN firms, future growth opportunities (*MB*) are positively correlated with firm size and leverage, and leverage is negatively associated with cash flow return on assets.

Table 2 reports the correlation matrix for AIM and MAIN samples.

| Panel A: AII | M (3,787 obs.) |) | | | | | | | |
|--------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | EARN | SIZE | LEV | SALES | MB | Return | BVPS | EPS | CF |
| EARN | 1.000 | 0.350 | 0.108 | 0.120 | 0.043 | 0.270 | 0.425 | 0.849 | 0.681 |
| SIZE | 0.419 | 1.000 | 0.288 | 0.073 | -0.238 | 0.051 | 0.690 | 0.388 | 0.347 |
| LEV | 0.020 | 0.105 | 1.000 | 0.013 | -0.048 | 0.022 | 0.148 | 0.137 | 0.090 |
| SALES | -0.055 | 0.026 | 0.004 | 1.000 | 0.153 | 0.073 | 0.040 | 0.110 | 0.025 |
| MB | -0.086 | -0.229 | 0.124 | 0.066 | 1.000 | 0.292 | -0.226 | -0.002 | -0.011 |
| Return | 0.135 | -0.024 | -0.029 | -0.006 | 0.269 | 1.000 | 0.097 | 0.254 | 0.241 |
| BVPS | 0.158 | 0.479 | -0.006 | -0.002 | -0.142 | -0.027 | 1.000 | 0.480 | 0.387 |
| EPS | 0.350 | 0.296 | 0.023 | -0.017 | -0.022 | 0.074 | 0.451 | 1.000 | 0.575 |
| CF | 0.743 | 0.431 | 0.012 | -0.095 | -0.129 | 0.120 | 0.143 | 0.230 | 1.000 |
| Panel B: MA | AIN (6,948 ob | s.) | | | | | | | |
| | EARN | SIZE | LEV | SALES | MB | Return | BVPS | EPS | CF |
| EARN | 1.000 | 0.135 | -0.011 | 0.200 | 0.333 | 0.230 | 0.146 | 0.629 | 0.607 |
| SIZE | 0.246 | 1.000 | 0.468 | 0.036 | 0.149 | 0.101 | 0.466 | 0.476 | 0.157 |
| LEV | 0.011 | 0.294 | 1.000 | 0.026 | 0.104 | 0.031 | 0.132 | 0.220 | -0.038 |
| SALES | -0.067 | -0.073 | -0.004 | 1.000 | 0.184 | 0.081 | -0.044 | 0.102 | 0.099 |
| MB | 0.114 | 0.087 | 0.223 | 0.064 | 1.000 | 0.288 | -0.217 | 0.162 | 0.299 |
| Return | 0.126 | 0.016 | -0.022 | -0.002 | 0.269 | 1.000 | 0.077 | 0.207 | 0.171 |
| BVPS | 0.107 | 0.283 | -0.059 | -0.053 | -0.223 | -0.016 | 1.000 | 0.661 | 0.099 |
| EPS | 0.338 | 0.338 | 0.076 | -0.038 | 0.078 | 0.062 | 0.603 | 1.000 | 0.368 |
| CF | 0.621 | 0.247 | -0.005 | -0.078 | 0.122 | 0.091 | 0.014 | 0.198 | 1.000 |

Bold text indicates significant at 1% level and italic text indicates significant at 5% or 10% level.

Table 3 reports the results of accounting quality using the variability of earnings. The findings show that earnings variability decline in the post-IFRS period in both AIM and MAIN sample and the degree of decrease is more pronounced in AIM firms. This result is inconsistent with my conjecture that IFRS reduces the scope for earnings smoothness. The evidence implies that AIM and MAIN firms engage in more earnings smoothness post-IFRS.

Table 3 variance of earnings

| | AIM | | MAIN |
|----------------------------|-------|----------------------------|-------|
| Pre-IFRS (obs = 2,625) | 0.234 | Pre-IFRS (obs = $4,295$) | 0.076 |
| Post-IFRS (obs = $1,162$) | 0.072 | Post-IFRS (obs = $2,653$) | 0.029 |

Table 4 reports the logistic regression results of the incidence of small positive earnings. The findings indicate that the incidence of small positive earnings is less likely to occur in the post-IFRS period for AIM companies (-0.489, p-value = 0.0619). However, I do not find such results for

MAIN companies. Of the control variables, AIM and MAIN firms generally have higher sales while lower MB in the post-IFRS period.

Table 4 Results of small positive earnings

| | AIM | (p-value) | | MAIN | (p-value) |
|---------------|---------|--------------|---------------|--------|-------------|
| Intercept | -2.070 | (<.0001)*** | Intercept | -0.472 | (0.0006)*** |
| SPOS | -0.489 | $(0.0619)^*$ | SPOS | 0.067 | (0.6707) |
| SIZE | 0.207 | (<.0001)*** | SIZE | 0.013 | (0.2238) |
| MB | -0.775 | (<.0001)*** | MB | -0.187 | (<.0001)*** |
| LEV | -0.055 | (0.1689) | LEV | 0.031 | (0.1175) |
| SALES | 0.079 | (<.0001)*** | SALES | 0.065 | (0.0088)*** |
| Wald χ^2 | 247.310 | (<.0001)*** | Wald χ^2 | 30.476 | (<.0001)*** |
| Obs | 3,787 | | Obs | 6,948 | |

Table 5 reports the logistic regression results of the incidence of large negative earnings. The findings indicate that the incidence of large negative earnings is more likely to occur in the post-IFRS period for both AIM and MAIN companies and this is more pronounced for AIM.

Table 5 Results of large negative earnings

| | AIM | (p-value) | | MAIN | (p-value) |
|---------------|---------|--------------|---------------|--------|-----------------|
| Intercept | -2.596 | (<.0001)*** | Intercept | -0.576 | (<.0001)*** |
| LNEG | 0.426 | (<.0001)*** | LNEG | 0.275 | $(0.0101)^{**}$ |
| SIZE | 0.251 | (<.0001)*** | SIZE | 0.022 | $(0.0590)^*$ |
| MB | -0.773 | (<.0001)*** | MB | -0.193 | (<.0001)*** |
| LEV | -0.054 | (0.1771) | LEV | 0.030 | (0.1307) |
| SALES | 0.072 | (0.0001)*** | SALES | 0.063 | (0.0119)** |
| | | | | | |
| Wald χ^2 | 262.797 | (<.0001) *** | Wald χ^2 | 36.848 | (<.0001) *** |
| Obs | 3,787 | | Obs | 6,948 | |

Table 6 reports the results of value relevance of earnings and book value pre- and post-IFRS periods. *T*-statistics in parentheses are based on Huber–White standard errors clustered by firm and year. The results show that there is no difference in the value relevance of earnings and book value pre and post-IFRS for MAIN companies. However, I find that the value relevance of book value declines while value relevance of earnings increases in the post-IFRS period for AIM companies. The adjusted R-square for MAIN is significantly higher than that of AIM.

Table 6 Results of value relevance

| | AIM | (t-stat) | | MAIN | (t-stat) |
|------------------|--------|------------|------------------|--------|-----------|
| Intercept | -1.402 | (-2.92)*** | Intercept | -0.818 | (-2.54)** |
| IFRSDUM | -0.863 | (-1.72)* | IFRSDUM | -0.827 | (-2.13)** |
| BVPS | 1.885 | (3.17)*** | BVPS | 0.718 | (3.03)*** |
| BVPS*IFRSDUM | -1.618 | (-2.77)*** | BVPS*IFRSDUM | 0.053 | (0.22) |
| EPS | -3.637 | (-1.49) | EPS | 2.110 | (1.66)* |
| EPS*IFRSDUM | 4.795 | (1.98)** | EPS*IFRSDUM | 1.524 | (1.08) |
| | | | | | |
| Adj R-square (%) | 4.60 | | Adj R-square (%) | 20.43 | |
| Obs | 3,787 | | Obs | 6,948 | |

Conclusions

Despite extensive research assessing the potential impact of voluntary or mandatory IFRS adoption to the market, there is little evidence of whether the benefits are distributed equally among all adopted firms. Therefore, the finding of the project fills in this gap in the literature. I examine whether companies listed on London's Alternative Investment Market (AIM) would benefit from such an accounting regime change by examining their accounting quality

It is essential for policy makers to recognize that the benefits of IFRS adoption may vary across different size of businesses as their incentives of financial reporting may vary. The current projects intend to provide evidence comparing the economic consequences of IFRS adoption among AIM and MAIN companies listed on the London Stock Exchange. The findings generally support the increase in accounting quality among AIM firms from pre- to post-IFRS period, except for earnings smoothness. However, the results for MAIN companies are relatively weak. There is no consistent evidence from the earnings management metrics, timely loss recognition metrics, and the value relevance of reported earnings and book values. Overall, the findings imply that AIM companies have more incentives to adopt IFRS as they benefit more from the mandatory adoption of IFRS than MAIN firms by improving the quality of accounting. As AIM comprises of mainly small and growth businesses, the asymmetric information between investors and manager is more severe than large and stable firms. Thus, the adoption of good quality of accounting standards could help reduce information asymmetries. I believe the evidence could provide implications to management, investors and accounting standard setting bodies. In particular, the evidence would contribute to the literature on how the benefit of IFRS varies across firms with different attributes and have policy implications to the decision of mandatory IFRS adoption in Taiwan.

References

Armstrong C., Barth, M., Jagolinzer, A., and Riedl, E. (2010), "Market reaction to adoption of IFRS in Europe". *The Accounting Review*, 85: 31–61.

Ashbaugh, H. and Pincus, M. (2001), "Domestic accounting standards, International Accounting

- Standards, and the predictability of earnings". Journal of Accounting Research, 39: 417–434.
- Ball, R. (2006), "International Financial Reporting Standards (IFRS): pros and cons for investors". *Accounting and Business Research*, 36: 5–27.
- Barth, M., Landsman, W., and Lang., M. (2008), "International Accounting Standards and accounting quality". *Journal of Accounting Research*, 46: 467–98.
- Christensen, H., Lee, E., and Walker, M. (2007), "Cross-sectional variations in the economic consequences of international accounting harmonisation: The case of mandatory IFRS adoption in the UK". *International Journal of Accounting*, 42: 341–379.
- Daske, H., Hail, L., Leuz, C., and Verdi. R. (2008), "Mandatory IFRS reporting around the world: Early evidence on the economic consequences". *Journal of Accounting Research*, 46: 1085–1142.
- Ewert, R. and Wagenhofer, A. (2005), "Economic effects of tightening accounting standards to restrict earnings management". *The Accounting Review*, 43: 1101–1124.
- Garcia Lara, J.M., Garcia Osma, B. and Mora, A. (2005), "The effect of earnings management on the asymmetric timeliness of earnings". *Journal of Business Finance and Accounting*, 32: 691–726.
- Garcia Lara, J.M., Garcia Osma, B. and Penalva, F. (2009), "Accounting conservatism and corporate governance". *Review of Accounting Studies*, 14: 161–201.
- Holthausen, R. (2009), "Accounting standards, financial reporting outcomes, and enforcement". *Journal of Accounting Research*, 47 (2): 447–458.
- Lang, M., Raedy, J., and Yetman, M. (2003), "How representative are firms that are cross listed in the United States? An analysis of accounting quality". *Journal of Accounting Research*, 41: 363–386.
- Lee, E., Walker, M., and Christensen, E. (2008), "The impact of mandatory IFRS adoption on the cost of equity capital in Europe". ACCA Research Report 105.

Report on attending the European Accounting Association 2010 Annual Conference, Istanbul, Turkey and the American Accounting Association 2010 Annual Conference, San Francisco, USA

The paper entitled "R&D expenditures and asymmetric timeliness of earnings: The case intellectual capital intensive sectors" was presented at the European Accounting Association (EAA) Annual Conference (concurrent session), May 19 -21, Istanbul, Turkey and the American Accounting Association (AAA) 2010 Annual Conference (concurrent session), July 31- August 4, San Francisco, USA. In addition, another joint paper entitled "IFRS 2 'Share-Based Payment' and Executive Compensation: the Case of FTSE 350 Firms in the UK" with Dr Lisa Liu and Dr Jiang Wei from Warwick Business School was also presented in this year's EAA annual meeting.

EAA is the largest accounting conference in Europe. My paper regarding R&D expenditures was presented in a concurrent session chaired by Professor Alessandro Lai from University of Verona, Italy. There are other two papers working on the financial reporting issues. One of them provides evidence regarding the adoption of IFRS in Australia and its impact on the value relevance of intangible assets. The authors argue that their evidence from Australia provide policy implications to the accounting standards setters in the US. The other paper was presented by professors from the US using an experimental approach to examine the effect of financial reporting knowledge and information viewing behavior on judgments of non-professional investors and they focus on pro-forma accounting reconciliation disclosures. Comments from the audience were well received. In general, suggestions to my paper focus on the control of company size and a better explanation of the institutional background. Firms of different size vary in their patenting activities and large firms tend to be more affordable to innovation activities. Thus, it is essential to provide deeper insight into these issues. The paper regarding executive compensation was chaired by Dr Mine Aksu from Sabanci University, Turkey. The comments are generally constructive and some suggest to work on further tests regarding the economic consequences of the impact of IFRS 2.

AAA annual conference is the largest international accounting conference. There were about forty sessions in each time slot. I was allocated to the "Accounting for R&D" session. Around fifteen participants were in my session. The session moderator was Professor Barry Marks from University of Houston-Clear Lake and the discussant for my paper was Kean Wu from University of Oregon. The other paper presented is "Accounting Convergence of Intangibles: Value relevance of R&D Accounting Treatment" presented by Mingming Feng from Oklahoma State University and discussed by Shawki M. Farag from American University in Cairo. I presented my paper for 25 minutes followed by the discussant's comments and general questions. My research focuses on R&D-induced information asymmetry between managers and shareholders. Timely loss recognition in earnings is considered as an effective corporate governance mechanism in constraining managers' incentives and ability to manipulate earnings. I report results showing that higher R&D outlays are associated with greater timely loss recognition but this effect is less pronounced among those with greater disclosure of patent grants.

The discussant commented that the research idea of this study is novel. The discussant and participants made the following key suggestions:

(a) Control for corporate governance. E.g. try to incorporate the impact of ownership structure in the regression.

My response: It is important to consider some corporate governance factors for example, the percentage of managerial ownership, percentage of institutional shareholdings, if the ownership structure is part of the pyramid structure and whether companies have cross-holdings within the affiliated group, and the proportion of outside directors etc.

(b) What is the effect of company size? There is possibility that the results are mainly driven by big firms.

My response: This argument is valid and I will conduct this test in future revision.

- (c) Endogenous decisions. E.g. applying for patents and reporting aggressively.
 - My response: To address this concern, I would have to apply a two-stage least squares regression which I could try to implement in the future.
- (d) Consider the lifecycle of R&D.
- (e) The effect on future performance.

My response: Prior studies show that R&D is associated with greater market capitalization. My results show that R&D expenditures and the quantity of patent grants are positively associated with the market-to-book ratio.

There were active discussions in my session. The participants and discussants were very interested in the papers. The comments are generally constructive and I will take them into account in my future revision of the paper. In addition to receiving comments on my paper, I learned from listening to the presentation of the other paper about the effect of R&D treatment on value relevance before and after the IFRS adoption in Australia. This study finds that less managerial discretion on R&D reduces the value relevance of earnings and book value of equity and that allowing capitalization and more managerial discretion on R&D could increase the value relevance of financial statements.

Overall, by participating and presenting in the EAA 2010 and AAA 2010 Annual conference, I received several useful suggestions and learned some potential topics for future research. As the economic consequence of IFRS adoption is a topical issue in recent years, my future research can incorporate the accounting treatment of R&D and the valuation of intangible assets.

國科會補助計畫衍生研發成果推廣資料表

日期:2010/12/30

國科會補助計畫

計畫名稱:採用國際會計準則之經濟結果:以倫敦證券交易所AIM市場為例

計畫主持人: 詹凌菁

計畫編號: 98-2410-H-004-180- 學門領域: 會計

無研發成果推廣資料

98年度專題研究計畫研究成果彙整表

計畫主持人:詹凌菁 計畫編號:98-2410-H-004-180-

計畫名稱:採用國際會計準則之經濟結果: 以倫敦證券交易所 AIM 市場為例 備註(質化說 量化 明:如數個計畫 本計畫實 共同成果、成果 實際已達成 際貢獻百 預期總達成 單位 成果項目 列為該期刊之 數(含實際已 數(被接受 分比 達成數) 封面故事... 或已發表) 等) 0 100% 期刊論文 0 100% 篇 研究報告/技術報告 論文著作 0 0 100% 研討會論文 100% 專書 0 0 申請中件數 100% 專利 件 0 0 100% 已獲得件數 國內 0 0 100% 件 件數 技術移轉 0 0 100% 千元 權利金 0 0 100% 碩士生 參與計畫人力 博士生 0 0 100% 人次 (本國籍) 0 0 博士後研究員 100% 0 0 100% 專任助理 2 0 80% 期刊論文 100% 篇 研究報告/技術報告 論文著作 100% 研討會論文 0 0 專書 100% 章/本 0 0 100% 申請中件數 專利 件 0 0 已獲得件數 100% 國外 0 0 件數 100% 件 技術移轉 0 0 權利金 100% 千元 碩士生 100% 0 0 100% 參與計畫人力 博士生 人次 0 (外國籍) 0 100% 博士後研究員 0 0 100% 專任助理

其他成果

(無法以量化表達之成 果如辦理學術活動、獲 得獎項、重要國際影響 作、研究成果國際影響 力及其他協助產業益 所發展之具體效益 項等,請以文字敘述填 列。)

國際合作案:英國公開發行與非公開發行公司之債權契約研究 2010/12~2011/11 (行政院國家科學委員會). 參與工作:共同主持人.

| | 成果項目 | 量化 | 名稱或內容性質簡述 |
|----|-----------------|----|-----------|
| 科 | 測驗工具(含質性與量性) | 0 | |
| 教 | 課程/模組 | 0 | |
| 處 | 電腦及網路系統或工具 | 0 | |
| 計 | 教材 | 0 | |
| 畫加 | 舉辦之活動/競賽 | 0 | |
| | 研討會/工作坊 | 0 | |
| 項 | 電子報、網站 | 0 | |
| 目 | 計畫成果推廣之參與(閱聽)人數 | 0 | |

國科會補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值(簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性)、是否適合在學術期刊發表或申請專利、主要發現或其他有關價值等,作一綜合評估。

| 1. | 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估 |
|-----|--|
| | ■達成目標 |
| | □未達成目標(請說明,以100字為限) |
| | □實驗失敗 |
| | □因故實驗中斷 |
| | □其他原因 |
| | 說明: |
| | 研究成果在學術期刊發表或申請專利等情形: |
| | 論文:□已發表 □未發表之文稿 ■撰寫中 □無 |
| | 專利:□已獲得 □申請中 ■無 |
| | 技轉:□已技轉 □洽談中 ■無 |
| | 其他:(以100字為限) |
| | 本人目前仍在撰寫本計畫研究發現之文搞,期望將結果發表至國際期刊。另外,本人有一 |
| 篇 | 已完成之文稿,內容主要在探討跨國上市公司採用國際會計準則之經濟後果,本文投稿至 |
| Joi | urnal of Accounting and Public Policy,目前是第一階段修正。 |
| 3. | 請依學術成就、技術創新、社會影響等方面,評估研究成果之學術或應用價 |
| | 值(簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性)(以 |
| | 500 字為限) |
| | 本計畫主要是在探討採用國際會計準則對中小企業的影響。儘管目前文獻大多發現採用國 |
| | 際會計準則對資本市場是有利的,本計畫以在 AIM 上市的英國公司做為研究樣本,探討 AIM |
| | 公司(通常為小型與成長型公司)在採用國際會計準則之後會計品質是否有提升,並以在 |
| | MAIN 上市的英國公司做為對照樣本。實證結果顯示,AIM 公司在採用國際會計準則之後, |
| | 其會計品質確實有改善(小額正盈餘發生的情形較少、大額負盈餘發生的情形較多、盈餘 |
| | 價值攸關性增加)。然而,結果發現 MAIN 上市的英國公司在採用國際會計準則之後,會計 |
| | 品質並無明顯改善。本實證結果對於中小型企業採用國際會計準則的成本與效益問題有重 |
| | 要的政策意涵。 |