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### Is the Convergence of Accounting Standards Good for Stock Markets?

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#### Abstract

This paper examines the impact of the convergence of Hong Kong Accounting Standard 40 (HKAS 40) with the International Financial Reporting Standard (IFRS) on the stock prices of firms in the property industry. Using a sample of 22111 firm-day observations, we show that the new standard has a negative impact on the stock performance of these firms.

## 1. Introduction

The Hong Kong Institute of Certified Public Accountants has issued the Hong Kong Accounting Standard 40 *Investment Property* (HKAS 40) in 2004 to replace the Statements of Standard Accounting Practice 13 *Accounting for Investment Property* (SSAP 13). The new standard is effective from 2005, applying to all firms engaging in the business of property investment. Such a change has a significant impact on firms' financial statements. Under the new requirements of HKAS 40, a firm adopting the fair value model should measure all of its investment property at fair value. Any gain or loss arising from a change in the fair value of investment property should be reported in the income statement. In the past, such fair value adjustments were normally recognized in equity. The key changes from SSAP13 to HKAS 40 are listed in the Appendix. The convergence with international accounting standards parallelizes Hong Kong with the other 94 jurisdictions in the world that have harmonized with the IFRS. Such convergence promotes consistent accounting treatments and cross-border listings. Recent studies on accounting harmonization include Francis *et al.* (2003), Burgstahler *et al.* (2006) and Hung and Subramanyam (2007). Francis *et al.* (2003) argue that harmonization of accounting standards improves corporate governance in common-law countries. Burgstahler *et al.* (2006) examine the impact of accounting harmonization on public and private firms in Europe. Hung and Subramanyam (2007) argue that the total assets and the book value of equity, as well as the variability and the net income, are significantly higher under International Accounting Standards than under the German accounting rules (HGB). In this paper, we examine the market reaction to the convergence of HKAS 40 with the IFRS, focusing on firms engaging in property investment and development in Hong Kong. The new requirement is expected to aggravate the volatility in the income statement. As one-third of the constituent stocks of Hang Seng Index are engaged in property-related businesses, any substantial changes to the earnings of these firms will have a huge impact on the performance of the Hong Kong stock market.

## 2. Data and the Model

Our sample includes 91 listed firms which are classified under the category of "Property Industry". The information of the stock prices, the market-to-book ratio and the total assets data for the period from 1 April 2004 to 31 March 2005 are extracted from DataStream. In order to avoid any undue influence of extreme observations, we exclude the top and bottom 1% of each variable from the sample. The final sample consists of 22111 firm-day observations. We let  $R_{it}$  be the daily return of stock  $i$  at time  $t$ , and use the market-to-book ratio and the log of total assets of the individual sample firms at the end of fiscal year 2003-2004 to proxy for growth and firm size. The summary statistics of our sample are presented in Table 1.

**Table 1: Descriptive Statistics**

Variable	Mean	Std. Dev.	Minimum	25th	Median	75th	Maximum
$R_{it}$	0.00052	0.02726	-0.0977	-0.0104	0.0000	0.0096	0.1240
Firm Size	6.4352	0.7669	4.7226	5.9042	6.4378	6.9436	8.2351
Growth	0.7568	0.8838	-0.1400	0.3150	0.5200	0.8850	5.6800

In this paper, we conduct a simple event study to infer the capital market assessment of the new accounting standard. The event study methodology has long been used in the literature to examine the impact of major events on the market.<sup>1</sup> Ball and Brown (1968) and Fama *et al.* (1969) introduce the methodology that is still in use today. Several authors have employed the event study methodology to examine the impact of regulatory changes in legislation, disclosure rules and accounting standards. Schipper and Thompson (1983) find negative share price reactions during the Williams Amendments and the 1969 Tax Reform Act announcements. Li *et al.* (2008) conduct an event study to estimate the shareholder wealth effects associated with the Sarbanes Oxley Act of 2002. Events surrounding the Sarbanes-Oxley Act of 2002 are identified and portfolio average daily stock returns over each of the event periods are estimated.<sup>2</sup> Following the method of Li *et al.* (2008), we estimate the impact of accounting harmonization between HKAS40 and IFRS. Table 2 identifies the major events surrounding the enactment of the HKAS 40.

**Table 2: Major Events Surrounding HKAS 40**

Events	Event Windows (exclude non-trading days)	Dummy Variables
21 June 2004 - Issuance of Exposure Draft on HKAS 40 <i>Investment Property</i>	18, 21, 23 June 2004	$D_{1t}$
9 December 2004 - Formal Announcement date of the enforcement of HKAS 40	8, 9, 10 December 2004	$D_{2t}$
1 January 2005 - Effective date of HKAS 40	31 December 2004, 3, 4 January 2005	$D_{3t}$

<sup>1</sup> For a review of the literature, one is referred to Armitage (1995) and MacKinlay (1997).

<sup>2</sup> Hostak *et al.* (2006) argue that SOX eliminates firms with poor corporate governance.

The change of accounting practice affects both investors and firms. Investors have to analyze the realized and unrealized profit components instead of merely focusing on the accounting profit when assessing a firm's performance. Since there is a significant unrealized element included in the reported profit, firms also need to amend their dividend policy if previous dividends were paid as a percentage of earnings per share. In view of these, the convergence of HKAS 40 with IFRS will be a challenge to the industry and investors will consider the event bad news. The following model is estimated to examine the three events in Table 2:

$$R_{it} = \alpha_0 + \beta_1 D_{1t} + \beta_2 D_{2t} + \beta_3 D_{3t} + \varepsilon_{it} \quad (1)$$

where

$R_{it}$  = Daily return of stock  $i$  at time  $t$ ;

$D_{nt}$  = Dummy variable for the  $n^{\text{th}}$  event ( $n=1,2,3$ ), which takes a value of 1 for observations within the event window (3 days surrounding event  $n$ ), and 0 otherwise.

We estimate Model (1) with the 248 daily observations of stock returns from 1 April 2004 to 31 March 2005. The intercept,  $\alpha_0$ , in Model (1) represents the average daily return for the non-event trading days. The estimated coefficient of  $\beta$  is the difference in daily return between the event days and the non-event days. We expect that there is a drop in stock returns at the issuance of the exposure draft and the formal announcement. Thus, the estimated coefficients of  $D_1$  and  $D_2$  should be negative. Moreover, we anticipate that the estimated coefficient of  $D_3$  will be insignificant because the formal announcement date (9 Dec 2004) and the effective date (1 Jan 2005) are so close to each other that the information is fully digested by Event 2. Table 3 presents the results of our analysis for the three HKAS 40 events.

**Table 3: Estimation Results**

	Variable	Intercept	D1	D2	D3	Growth	Firm Size
<b>Model 1</b>	Coeff.	0.000635 <sup>a</sup>	-0.00405 <sup>b</sup>	-0.00807 <sup>a</sup>	0.00264		
	t-stat.	(3.40)	(-2.43)	(-4.84)	(1.56)		
<b>Model 2</b>	Coeff.	-0.00263	-0.00334 <sup>b</sup>	-0.00777 <sup>a</sup>	0.00365 <sup>b</sup>	-0.000327	0.000546 <sup>b</sup>
	t-stat.	(-1.56)	(-1.97)	(-4.58)	(2.12)	(-1.24)	(2.16)

<sup>a</sup> Significant at the 1% level.

<sup>b</sup> Significant at the 5% level.

The estimation results of Model 1 show that the issuance of the exposure draft and the official announcement of the enforcement of HKAS 40 have significant negative effects. The daily return

during Event 1 and Event 2 are respectively, 0.405% and 0.807% lower than the non-event period, suggesting that investors anticipate the HKAS 40 to have a negative impact on the stock prices of firms in the property sector. The impact of the third event is insignificant. To examine the robustness of our results, we include two control variables, growth and firm size, into our model and estimate

$$R_{it} = \alpha_0 + \beta_1 D_{1t} + \beta_2 D_{2t} + \beta_3 D_{3t} + \beta_4 \text{Growth}_i + \beta_5 \text{Firm\_Size}_i + \varepsilon_{it}, \quad (2)$$

where

$\text{Growth}_i$  = the market-to-book ratio of firm  $i$  at the end of fiscal year 2003-2004;

$\text{Firm\_Size}_i$  = the log of total assets of firm  $i$  at the end of fiscal year 2003-2004.

The number of firm-day observations is reduced to 20678 due to the unavailability of data on the additional variables for some firms. The results of our robustness test using Model 2 are reported in Table 3. Our results are robust to the inclusion of these two control variables. Note that there is a negative daily return of -0.263% during non-event period after the size and growth factors are controlled for. However, returns within the windows of Event 1 and Event 2 are still lower than that of the non-event period by 0.334% and 0.777% respectively. Note also that the firm size variable has a significant positive coefficient (0.00055), which is consistent with the firm size effect of Fama and French (1995).

### 3. Conclusion

In this paper, we have identified critical events surrounding the enactment of the HKAS 40 and conducted a simple event study to infer the market reaction to the new accounting standard. We show that there is a fall in stock returns for firms in the property industry due to the launch of this important accounting change. Negative stock returns are observed during the issuance of the exposure draft and the formal announcement of the enforcement of the new standard. The results suggest that the provisions and enforcement of HKAS 40 have an adverse effect on the industry. Three possible explanations for this phenomenon are given. First, since the change in total assets will be considered as part of the profits and losses, the new accounting standard increases the volatility of firms' earnings. An increase in volatility makes these firms less attractive to investors. Second, existing shareholders may square their positions to avoid the risk and uncertainty induced by the new accounting practice, and the share prices of these firms will fall as a result. Finally, to comply with the new standard, firms may need to spend additional resources to reassess the fair value of their assets. These tangible costs will eventually be reflected in the stock prices.

## Appendix: SSAP 13 vs HKAS 40

- Under SSAP 13, a gain or loss from a change in the fair value of investment property was taken directly to an investment property revaluation reserve account on a portfolio basis to the extent that the reserve remained in surplus. However, under HKAS 40, such changes will be recognized in profit or loss for the period in which it arises.
- Under HKAS 40, a lessee may classify an interest in land and buildings held under an operating lease as an investment property.
- HKAS 40 requires that if the cost model is chosen for accounting of investment property, it would be applied to all investment property and only on the first-time adoption of HKAS 40.
- Under HKAS 40, it is encouraged, *but not required* for a company to determine the fair value of investment property on the basis of a valuation by a valuer who holds a recognized and relevant professional qualification and has recent experience in the location and category of the investment property being valued.
- HKAS 40 removes the current requirement to depreciate property carried at fair value and held under leasehold interest with a remaining lease term of 20 years or less.
- HKAS 40 no longer sets a 15% limit on the portion of property held for own use or leased to group firms.
- HKAS 40 requires that investment property leased to other group firms is treated as investment property in an entity's separate financial statements since the Board could find no justification for treating property leased to another entity in the same group (or to another related party) differently from property leased to other parties.

## References

- Armitage, S. (1995) "Event Study Methods and Evidence on Their Performance" *Journal of Economic Surveys* **9**, 25-52.
- Ball, R., and P. Brown (1968) "An Empirical Evaluation of Accounting Income Numbers" *Journal of Accounting Research* **6**, 159-178.
- Burgstahler, D., L. Hail and C. Leuz (2006) "The Importance of Reporting Incentives: Earnings Management in European Private and Public Firms" *The Accounting Review* **81(50)**, 983-1016.
- Fama, E., L. Fisher, M. Jensen and R. Roll (1969) "The Adjustment of Stock Prices to New Information" *International Economic Review* **10**, 1-21.
- Fama, E. and K. French (1995) "Size and Book-to-Market Factors in Earnings and Returns"

*Journal of Finance* 50, 131-156.

Francis, J., I. Khurana and R. Pereira. (2003) "The Role of Accounting and Auditing in Corporate Governance and the Development of Financial Markets Around the World" *Asia-Pacific Journal of Accounting and Economics* **10(1)**, 1-30.

Hostak, P., T. Lys and Y. Yang (2006) "Is Sarbanes-Oxley Act Scaring Away Lemons or Oranges? An Examination of the Impact of Sarbanes-Oxley Act on the Attractiveness of US Capital Markets to Foreign firms" Working Paper, Northwestern University.

Hung, M. and K. R. Subramanyam (2007) "Financial Statement Effects of Adopting International Accounting Standards: The Case of Germany" *Review of Accounting Studies* **12**, 623-657.

Li, H., M. Pincus and S. Rego (2008) "Market Reaction to Events Surrounding the Sarbanes-Oxley Act of 2002 and Earnings Management" *Journal of Law & Economics* **51(1)**, 111-134.

MacKinlay, A. C. (1997) "Event Studies in Economics and Finance" *Journal of Economic Literature* **35**, 13-39.

Schipper, K. and R. Thompson (1983) "The Impact of Merger-Related Regulations on the Shareholders of Acquiring Firms" *Journal of Accounting Research* **21**, 184-221.