

The Effect of Political and Economic Institutions on the Value Relevance of Accounting Information: The Case of China

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Abstract

This paper is motivated by the value-relevance of accounting information literature and recent significant economic, accounting and institutional changes in the emerging Chinese stock markets. The purpose of this paper is twofold. Firstly, we investigate whether accounting information based on Chinese accounting standards (CAS) or earnings based on International Financial Reporting Standards (IFRS) is more useful and relevant to investors. Secondly, we examine whether or not the combined value-relevance of earnings and book values has increased over time in the Chinese stock market. Our findings suggest that accounting earnings based on both CAS and IFRS were significant for explaining A- and B-share stock prices, respectively.

The results of yearly regression analyses generally show that the combined value-relevance of CAS and IFRS earnings and book values for A-shares and B shares was significant. However, the results indicate that total explanatory power for A-shares has increased, whereas it has decreased for B-shares over time.

Our study makes several contributions to the literature. Firstly, our study extends the literature by examining comparative value-relevance between PRC GAAP and IAS in the A- and B-share markets using data from 2001 to 2003. Few studies, if any, examine the value-relevance of accounting information in the Chinese stock market after 2000. Secondly, we fill the gap by investigating whether the combined value-relevance of CAS and IFRS accounting information increased over time in the Chinese stock markets after the accounting reforms.

Introduction

The rapid growth of China's economy has increased demand for more transparent and reliable accounting information in its capital markets. In order to attract more foreign investors and improve the usefulness of its accounting information, China revised its Chinese accounting standards (CAS) in 1992, 1998, and 2001 to bring them closer to the International Accounting Standards (IAS also referred to as IFRS. The IAS was changed to IFRS in 2001.). China currently has fully adopted the IFRS for its B-share market. However, despite the Chinese government's effort in enhancing its accounting and auditing standards and its financial infrastructure as well as its legal systems, many studies have questioned the usefulness of accounting information in the early development of the Chinese stock market (Anderson, 2000; Chen et. al., 2002; Eccher and Healy, 2000; Xiao, et. al., 2000). The usefulness of either IFRS or CAS accounting information remains in question in the emerging Chinese stock market literature.

The purposes of this paper are twofold. Firstly, we investigate whether accounting information based on CAS or earnings based on International Financial Reporting Standards (IFRS) is more useful and relevant to investors. Secondly, we examine whether or not the value-relevance of accounting earnings and book values has increased over time in the Chinese stock market. Consistent with Eccher and Healy's results in 2000, this study found that accounting earnings based on both CAS and IFRS were significant in explaining A- and B-share stock prices, respectively. However, the results show that accounting information based on IFRS did not provide greater explanatory power than did earnings based on CAS information for A-shares.

With respect to whether or not the combined value-relevance of accounting information has increased over time in the Chinese stock market, we found that the combined value-relevance of CAS earnings and book values has increased since 2001. Overall, CAS earnings coefficients are positive and significant for all years except 2000. However, CAS book values coefficients are only significant for 1996 to 1999 and 2003. This indicates that CAS earnings are better than CAS book values in explaining A-share stock prices.

Regarding the combined value-relevance of IFRS earnings and book values for the B-shares, our results show that the total explanatory power of IFRS accounting information was significant although it has decreased over time. Consistent with Collins, et. al., (1997), as the incremental explanatory power of IFRS earnings declined, the incremental explanatory power of IFRS book values increased. Both IFRS earnings and book values were significant in evaluating B-share stock prices except during 2002. Therefore, IFRS accounting information seems to be useful for stock evaluations. This finding may be partially explained by noting that negative earnings may affect value-relevant earnings accounting information.

Our study makes several contributions to the literature. Firstly, our study extends the literature by examining comparative value-relevance between PRC GAAP and IAS in the A- and B-share markets using data from 2001 to 2003. Few studies, if any, examine the value-relevance of accounting information in the Chinese stock market after 2000. Secondly, we fill the gap by investigating whether the combined value-relevance of CAS and IFRS accounting information increased over time in the Chinese stock markets after the accounting reforms.

Regarding the organization of this paper, Section II covers the institutional environment and capital market infrastructure developments in China. Section III presents the literature review. Section IV discusses model development. Sample selection and data collection is provided in Section V. Section VI presents statistical results followed by a discussion of implications and recommendations for future research.

Institutional Environment and Capital Market Infrastructure Developments In China

Capital market infrastructure development and accounting reforms in China

China is a developing country, making the transition from a centrally planned economy to a market-oriented one. In the past, its tax laws and government regulations played significant roles in financial reporting development because the government was the primary user of financial statements in the centrally controlled economy. Thus, the accounting rules conformed to tax rules as well national policy to achieve social and macroeconomic objectives. Financial statements were submitted to the Chinese Ministry of Finance (MOF), which is the highest authority overseeing enterprises and financial reporting regulations.

In order to attract foreign investments, China commenced its market-oriented economic reforms in 1978 which created increased demand for accounting information among business managers and creditors, as well as investors locally and internationally. Beginning in 1980, the MOF has attempted to harmonize and revise its accounting standards to bring them in line with the International Accounting Standards. The Accounting Standards for Business Enterprises (ASBE) issued in 1992 apply accounting standards to all sectors and ownership types. In order to eliminate important discrepancies between Chinese GAAP and IAS, a new accounting regulation was promulgated that superseded some of the accounting standards from 1992, and became effective for all listed companies on January 1, 1998. These changes addressed limitations (relaxing) on provisions for bad debts, inventory, and temporary investment valuation. In 2001, a new comprehensive ASBE was issued for application to medium- and large-sized listed firms. The standards included three new standards (intangible assets, borrowing cost, and leases), and five revised standards. The Chinese accounting standards are currently comprised of one Basic Standard and 16 Specific Standards, which have brought the Chinese accounting standards more closely into line with the International Financial Reporting Standards. The new accounting system provided more choice, subject to considerable judgment, for managers in terms of accounting recognition and evaluation than the old Chinese accounting systems (Eccher and Healy, 2000). On February 1, 2006, China's MOF further enhanced and converged its accounting standards toward international practices. Specifically, China's MOF issued and revised Accounting Standards for Business Enterprises (New Accounting Standards). The New Accounting Standards introduced the use of fair value measurement requirements in many areas, such as business combinations, some financial instruments, share-based payments, and under certain circumstances, investment property (Leung and Yang, 2006, p.1). Moreover, in order to increase the quality of financial reporting, the first auditing standard, similar to international standards and guidelines, was instituted in 1996. The second and third auditing standards became effective on January 1, 1997 and July 1, 1999, respectively.

Legal and institutional developments in the Chinese capital market

In order to restore public trust in the stock market and improve quality in both accounting measures and disclosures, China's government has taken several actions. In July 2001, the China Securities Regulatory Commission (CSRC) announced that it would list and sell more state shares to private investors. At that point in time, approximately 11% of the 130 total listed firms had become at least two-thirds privatized (Green, 2003). In addition, the CSRC in 2001 issued laws to prevent insider trading. The new laws required additional audits for companies issuing more than 300,000 shares effective in 2002, and demanded increased disclosure effective in 2003. The government plans to turn joint venture CPA firms into independent partnerships by 2010. Furthermore, a new regulation effective in 2002 requires a five-year auditor rotation. The Chinese Institute of Certified Public Accountants (CICPA) has expanded its efforts to improve ethics awareness levels among accountants since 2001 and formed four committees in 2004. These four committees are the Auditing Standards, Discipline, Appeal, and Right-Protecting Committees. The legal system also has been enhanced in recent years. The first securities civil compensation lawsuit was successfully concluded in November 2002 (Chen et al., 2000).

Current Institutional Environment and problems in China

The Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE) opened in December 1990 and July 1991, respectively. More than 1,400 firms, mostly state-owned enterprises, were listed by the end of 2004 on the SHSE and the SZSE. More than 80 firms listed on the SHSE and the SZSE issue both A- and B-shares with the same dividends, as well as voting and liquidation rights.

Companies issuing B-shares must reconcile their financial statements from Chinese general accounting principles (GAAP) to IFRS. They are also required to publish audited annual reports. Companies issuing A-shares may use CAS. While noting the IFRS are considered more transparent and more reliable, the stock prices of A-share are generally more than three times higher than those of B-shares. This substantial price difference probably relates to some combination of different accounting standards, language barriers, and a lack of reliable information about local firms and the local economy (Chakravarty, et. al., 1998).

Despite new auditing standards, the quality of auditing reports remains questionable because of the lack of audit independence, the shortage of qualified and well-trained auditors, and the existence of many misconceptions surrounding the audit process (Chen, et. al., 2000; Chen, et. al., 2001; Xiang, 1998; Xiao, et. al., 2000). For example, Tang (2000) points out that a significant number of cases still violate professional ethics in CPA practices. The legal system to protect shareholders is relatively primitive. When shareholders are defrauded by a firm's false accounting information, legal redresses are limited (Anderson, 2000). In essence, shareholders' rights are constrained by the inadequate protection of the legal system and the poor enforcement of regulations (Eccher and Healy, 2000). Financial intermediaries are limited and are of questionable quality.

Although the number of CPAs has increased in recent years, the "big four" CPA firms still lack qualified staff in China (Iekmyer, 2000). Currently, China needs to train a significantly greater number of financial professionals and independent auditors with strong professional ethics in order to enhance the implementation of a fair-value-oriented accounting system that meets IFRS. In China, accounting and auditing standards must gain the approval of the MOF, which supervises the Chinese Institute of Certified Public Accountants (CICPA), and was established to monitor and discipline CPA firms. Local auditing firms that belong to state audit bureaus or state-owned auditing firms dominate more than 7% of the audit market. As a result of the relationship between the government and the auditors'

association, auditors have minimal incentives to maintain their independence (Yang, et. al., 2003). As stated earlier, many firms listed on Chinese stock exchanges are state-owned or government agencies representing 64.9% of the total equity capital (Green, 2003). Xiao, et. al., (2000) noted that many state-owned firms overstate their earnings to make their financial statements look good because the government relies heavily on earnings to evaluate performance. Managers have less incentive to disclose accounting information to the public and comply with accounting rules. As a result, foreign investors are reluctant to invest in China given the lack of transparent and reliable accounting information.

Literature Review

The value-relevance of accounting information which assumes that financial accounting numbers relate to stock prices and thus are useful to investors, represents one of the important research topics in capital market studies (Chen, et. al., 2001; Francis and Schipper, 1999; Holthausen and Watts, 2001; Kothari, 2001; Lin and Chen, 200 ; Wang & Xu, 2004). Many studies have explored the links between stock prices and returns; as well as the correlation between stock prices and accounting earnings (Ball and Brown, 1968; Eccher and Healy, 2000; Gao & Tse 2004; Harris and Muller, 1999).

More recent research (for example, Barth and Clinch, 1996; Burgstaher and Ichev 1997; Chen, et. al., 2001; Collins, et. al., 1997) pertaining to the value-relevance of accounting information also examines the relationship between balance sheet measures of assets and liabilities in conjunction with income statement measures of accounting earnings by adopting Ohlson's (199) model. Collins, et. al., (1997) suggest that both balance sheets and income statements are useful for measuring the value-relevance of accounting information. They argue that the combined value-relevance of earnings and book values has not declined over time.

Many accounting academics and practitioners argue that IFRS represent higher quality standards, including higher recognition and extensive disclosure requirements, than national accounting standards (Ashbaugh, 1999; Ashbaugh and Pincus, 2001; Avis-Friday and Rueschhoff, 1999; Harris and Muller, 1999; Leuz, 2003). Several studies examine the comparative value-relevance of IFRS accounting earnings and CAS accounting information in the Chinese stock market. However, the results of prior empirical examinations have been mixed during the early development of the Chinese capital market infrastructure. For example, Haw, et. al., (1998) compare the value-relevance of net income and cash flow in China. They find that Chinese investors rely on earnings information more than cash flow information. However, they note earnings based on Chinese GAAP relate to A-share stock returns only, not to B-shares. Further, they argue that earnings information based on Chinese GAAP are value-relevant for Chinese investors despite inadequate capital market systems, poor financial and auditing reporting, and limited access to specific information about listed firms (Haw, et al., 2001). Eccher and Healy (2000) also compare two sets of accounting information from 1992 to 1997. They conclude that both CAS and IAS earnings are correlated to stock returns for A- and B-share markets although CAS earnings are more highly correlated with A-share stock returns than IAS earnings. They posit that the difference between A- and B-share prices can be explained partially by the differences between CAS and IAS earnings information. The high correlation coefficients (77–98%) among earnings, book values, revenues, assets, and other financial ratios, may reflect the efforts of Chinese managers to avoid large disparities between the two accounting standards. Chinese domestic investors, thus, may not perceive earnings based on IAS as more useful than earnings based on CAS. Eccher and Healy (2000) argue that IAS and CAS are not enforced appropriately due to inefficient accounting and capital market infrastructures, such as auditing, the legal system, the business press, and the financial analyst community in China.

Chen, et. al. (2001) also argue that accounting information on balance sheets and income statements are value relevant to domestic Chinese investors in the Chinese stock market. However, domestic investors perceive A-share firms as more value relevant than those firms with both A- and B-shares even though the latter comply with both IAS and CAS, and disclose more information than required by regulations. Lin and Chen (200) examine the incremental value-relevance of accounting information for firms that constantly issued both A- and B-shares during 199 –2000. Their results suggest that CAS earnings are correlated with returns and prices of A- and B-shares. However, IAS reconciliation of earnings does not provide any material information benefits for either market, possibly because of the immature capital market environment. With governmental control, accounting numbers become less value relevant and are not reflected in the stock prices.

Chen, et. al., (2002) study the usefulness of accounting information for the dual-class shares market during 1992 to 1997. Their results show that accounting information based on IAS has a high explanatory power for the returns and prices of B-shares; and CAS and IAS earnings information is associated with the A- and B-share prices, respectively. However, book values are associated only with B-share prices, but not with A-share stock prices. Thus, they conclude that B-share investors appear to use the book value information to evaluate firms, whereas A-share investors view the information as irrelevant. They suggest that A-share investors find IAS earnings information to be useful for evaluating stock values, and accounting information is highly related to stock prices for firms with fewer state-owned shares.

Sami and Zhou (2004) investigate the comparative value-relevance of A- and B-shares during 1994–2000. They conclude that accounting information based on IAS is more value relevant than that based on CAS. Their result shows that the explanatory power of their model, measured by adjusted R^2 , is always higher for B-shares than for A-shares. In addition, the value-relevance of accounting information in the B-share market had no significant changes, whereas that in the A-share market stopped decreasing in 1997. They posit that this trend relates to China's reforms which may not have improved the usefulness of accounting information immediately.

Collins, et. al., (1997) argue that the combined value-relevance of earnings and book values has not declined in the past 40 years even though the value-relevance of earnings has decreased and the book values has increased. They argue that factors such as negative earnings may have affected the degree of value relevance. Bao and Chow (1999) investigate whether accounting information based on IAS or CAS is related to B-share stock prices for period of 1992 to 1996 by adopting Ohlson's (199) price model. They find that both earnings and book values of equity based on IAS are more highly correlated with B-share prices than those based on Chinese GAAP. In addition, earnings based on IAS are significantly associated with stock prices, whereas book values based on IAS are not significant.

Their results also suggest that the explanatory power of earnings and book values for stock prices has increased over time. Conversely, Hu (2002) points out that earnings and book values based on CAS are more highly associated with the stock price than those based on IAS for the period of 1994 to 1999. His results also show that the total explanatory power of earnings and book values has decreased over time. The decrease in the explanatory power of earnings was higher than that of the book values. Hu claims that the decline of the value-relevance of earnings and book values may be due to the increases in firms that report negative earnings.

In conclusion, the results of the value-relevance of accounting information, particularly in the early development of Chinese stock market, have been mixed. The mixed results suggest the need to further investigate the comparative usefulness of CAS and IFRS accounting information in the Chinese stock market. Accordingly, as suggested by the literature, we examine the value-relevance of accounting information in A- and B-share markets during the period 1996–2003. We include more recent samples and a longer time period than prior studies. We also test whether the explanatory power of accounting information, as measured by R^2 , has increased for firms in the A- and B-share markets.

Model Development

Model development

Returns and price models are commonly used to assess the value-relevance of accounting information in the market-based accounting research stream (Kothari and Zimmerman 199). As suggested by the literature, this study adopts both returns and price models to assess the value-relevance of accounting information (Barth and Clinch, 1996; Chen, et. al., 2001; Harris and Muller, 1999).

Model 1

Following the return/earnings valuation models used by Easton and Harris (1991), Model 1 tests the relationship of stock returns and earnings between A- and B-shares. Specifically, Model 1 tests whether the earnings based on CAS (ECAS) or earnings based on IFRS (EIFRS) is more highly correlated with stock returns in A- and B-shares stock markets. However, because of sample data limitations for B-share returns in China, this study investigates levels rather than change variables (Eccher and Healy, 2000). Vuong's (1989) z-test, a likelihood-ratio test, is used to evaluate whether the CAS or IFRS earnings provides more explanatory power for A- and B-share returns. If CAS earnings provide greater explanatory power than IFRS for the A-share return, the z-score will be large and positive; a large and negative z-score suggests the opposite.

The valuation model is specified as follows:

$$\text{Model 1*}: \text{RET}_{\text{Qit}} = \alpha_0 + \sum_{i=1}^2 \alpha_i \text{YEAR}_i + \alpha_1 [\text{E}_{\text{Hit}} / \text{P}_{\text{Qit-1}}] + \hat{a}_{it}$$

*see Table 2 for notation detail

Model 2

Model 2 decomposes earnings into CAS earnings and IFRS earnings. It highlights the difference between CAS earnings and IFRS earnings to evaluate the relationship between earnings and returns (see Amir et. al, 1993). If CAS earnings information alone is related to stock returns, both estimated coefficients, α_1 and α_2 , will be positive and similar in magnitude. However, if IFRS earnings relate to stock returns, the estimated coefficient α_1 will be positive and significant, and α_2 will be zero. If both CAS and IFRS earnings information are related to stock returns, both estimated coefficients α_1 and α_2 will be significant, but their magnitudes will differ (Eccher and Healy, 2000).

The valuation model is specified as follows:

$$\text{Model 2*}: \text{RET}_{\text{Qit}} = \alpha_0 + \alpha_1 \text{YEAR}_i + \alpha_1 [\text{E}_{\text{IASit}} / \text{P}_{\text{Qit-1}}] + \alpha_2 [\text{E}_{\text{DIFit}} / \text{P}_{\text{Qit-1}}] + \hat{a}_{it}$$

*see Table 2 for notation detail

Model 3

Following the Ohlson's (199) valuation model, Model 3 is developed. Model 3 investigates the association between A- and B-share stock prices and their earnings as well as the correlation between stock prices and book values. Model 3 tests the value-relevance of CAS and IFRS accounting information over time because the valuation models decompose the total explanatory power of earnings and book values into three components (Collins, et. al., 1997). The three components are (1) the explanatory power common to both earnings and book values; (2) the incremental explanatory power of earnings; and (3) the incremental explanatory power of book values. In these components, earnings and book values function as substitutes to explain prices and as complements of the explanatory incremental power (Collins, et. al., 1997).

The coefficients of determination from equations (1–3) are denoted R^2_{T} , R^2_{E} , and R^2_{BV} , respectively. Because R^2_{T} , R^2_{E} , R^2_{BV} , if the adjusted R^2 of book values increase each year, book values provide incremental explanatory power over time. Also, because R^2_{T} , R^2_{BV} , R^2_{E} if the adjusted R^2 of earnings increases each year, earnings provide incremental explanatory power.

Thus,

$$\text{Model 3*}: P_{\text{Qit}}^6 = a_0 + a_1 [\text{E}_{\text{Hit}}] + a_2 [\text{BV}_{\text{Hit}}] + \hat{a}_{it}, \quad (1)$$

$$P_{\text{Qit}} = b_0 + b_1 [\text{E}_{\text{Hit}}] + \hat{a}_{it} \quad (2)$$

$$P_{\text{Qit}} = c_0 + c_1 [\text{BV}_{\text{Hit}}] + \hat{a}_{it} \quad (3)$$

*See Table 4 for notation detail

Sample Selection and Data Collection

The sample firms were selected from firms issuing both A- and B-shares listed on the Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE). The accounting data were collected from the Taiwan Economic Journal's (TEJ) Great China database, a C-ROM database specializing in stock market data and financial statements. Fifty-five firms were selected during the years 2001 to 2003 for models 1 and 2. Model 3 includes 1 firms from 1996–2003. Only firms with complete data were included.

Discussion of Results

Table 1 reports the descriptive statistics.

Panel A in Table 1 shows that IFRS (B-share) and CAS (A-share) stock returns grew and are highly correlated over time (from 68% in 2001 to 86% in 2003). The discrepancy between the A- and the B-share stock prices has decreased (the mean price of B-shares is less than 0% of the A-share mean). The mean and the median of IFRS earnings and the book values per share in Panel B, Table 1, are less than CAS earnings and the book values per share. Moreover, the standard deviation of IFRS earnings is higher than that of CAS earnings.

The comparative value-relevance of IFRS and CAS appear in Table 2.

Model 1 in Table 2 shows that both CAS and IFRS earnings are highly significant (at 1% level) for explaining A- and B-share stock prices, respectively. However, the explanatory power of the model, measured by R^2 , is much higher for the B-share market than for the A-share stock market (R^2 for B-shares = 0.28; R^2 for A-shares = 0.129). The Vuong (1989) z-test of these differences in explanatory power in the A-share price regression model is statistically significant at the 1% level and positive (3.32).

Model 2 in Table 2 shows that both IFRS earnings as well as the difference between IFRS and CAS earnings are significant in explaining A-share stock prices but not B-share stock prices. These findings suggest that A-share returns are more highly correlated with the CAS accounting information than with the IFRS accounting information.

Table 3 and Figure 1 report the results of Model 3.

Panel A in Table 3 shows that the combined value-relevance of CAS earnings (A-shares) and the book values (A-shares), measured by R^2 , has increased since 2001. Overall, CAS earnings coefficients are positive and significant for all years except 2000. However, CAS book values coefficients are only significant for 1996 to 1999 and 2003. The adjusted R^2 for earnings are generally higher than those of book values in all years. This indicates that CAS earnings are better than CAS book values in explaining A-share stock prices. The results in Table 3, Panel B, pertaining to value relevance over time for A-share firms report positive earnings. The explanatory power of Model 3, adjusted by R^2 , has decreased over time since 2001 although its adjusted R^2 is higher than that for the whole sample except for in 1996 and 2001 to 2003. This result suggests that factors other than negative earnings may have adversely affected the value relevance of accounting information for the A-share market.

The yearly regression model for the B-share market in the Model 3 appears in Table 4 and Figure 2.

In line with the finding from Model 2, the adjusted R^2 for the B-share market is higher than that of the A-share market in most years (except 1996 and 2002). The total explanatory power (combined value-relevance of earnings and book values) of IFRS accounting information, as presented in Panel A, was significant although it has decreased over time. The result is consistent with the theory of Collins, et. al., (1997), as the incremental explanatory power of IFRS earnings declined, the incremental explanatory power of IFRS book values increased. Both IFRS earnings and book values are significant in evaluating B-share stock prices except during 2002. Therefore, IFRS accounting information seems to be useful for stock evaluations. Panel B shows that the adjusted R^2 for B-share firms reporting positive earnings are higher than those of the whole sample in all years except 2000. This finding may be partially explained by noting that negative earnings may affect value-relevant earning accounting information.

Implications and Recommendations for Future

This study examines the usefulness of IFRS and CAS in the Chinese stock market during a period of time of a China economy in transition and a high level of government involvement in setting accounting standards. According to the return and price models in this study, both CAS and IFRS accounting information are useful in evaluating A- and B-share stock values, respectively. However, the explanatory power of accounting information, measured by adjusted R^2 , is much higher for the B-share market than for the A-share market, consistent with Sami and Zhou (2004), Chen, et. al., (2002), and Eccher and Healy (2000). Overall, A-share investors heavily focus on CAS earnings to evaluate stock prices, whereas B-share investors (including international investors) rely on both IFRS earnings and the book values. Our results suggest, consistent with Eccher and Healy (2000), that IFRS does not provide any additional material informational benefit over CAS for Chinese domestic investors.

Several explanations may be drawn from these findings. Firstly, Chinese accounting information users may not interpret IFRS accounting information well. Most local accountants do not fully understand the theoretical rationale for the conceptual framework of the new Anglo-American accounting standards (Tang, 2000). This would highlight the need to enhance international accounting training and provide continued accounting education to local accountants.

Secondly, the perception of less value relevant and useful IFRS accounting information may relate to the weak evaluation systems and dearth of valuation experts available to the Chinese stock market. Because IFRS principles are based on a fair-value-oriented accounting system, managers and accountants must exercise more professional reporting judgment than that necessitated by the rule-based CAS in their accounting evaluations. Thus, China needs build a sufficient supporting infrastructure, such as a system for fair value evaluation, and trained professional evaluators to support fair-value accounting systems. China also needs to develop an effective legal system to monitor, implement, and enforce accounting regulations as well as improve auditor independence.

Thirdly, Chinese domestic investors may perceive CAS as more value relevant than IFRS because they traditionally have focused on CAS earnings to evaluate stock prices, despite its accounting information limitations. Furthermore, the high level of speculation in the Chinese stock market may make accounting information secondary and unimportant for Chinese domestic investors.

Our results show that the combined value-relevance of CAS and IFRS accounting information has declined over time until recently. This finding may be explained partially by the Chinese government's effort to reform its accounting regulations and change the institutional environment to assure and/or restore investors' confidence in the value-relevance of accounting information. In addition, the increased frequency of negative earnings reports appear to diminish the explanatory power of earnings.

In conclusion, it will take more time to improve the value-relevance of IFRS accounting information in this highly politicized environment, with an economy in transition and an ineffective supporting capital market infrastructure. China should continue to increasingly promote international accounting education to its universities and accounting practices and educate investors, accounting preparers, and auditors in local CPA firms, as well as provide comprehensive guidelines to clarify accounting practices and help companies fully comply with the new accounting standards.

With effect on January 1, 2007, listed companies in China are required to prepare their financial statements in compliance with IFRS which are unfamiliar to most companies in China. From the 'managerial' perspective, the current insufficient and ineffective accounting infrastructure system in China as well as the shortage in accountants with IFRS knowledge, judgment and related skills, companies will find it challenging to comply with the new financial reporting requirements. Companies may need to look outside and consider hiring qualified and experienced accountants and/or consultants with IFRS knowledge from Hong Kong, for instance, and/or from other developed countries, such as Australia, Canada, USA, UK, etc., while providing their current in-house accountants ongoing training. In addition, companies will need to redesign or implement from "scratch" an effective accounting system that can process accounting information according to IFRS. Monitoring and reporting/researching ongoing IFRS implementation should top research agendas going forward. Whether IFRS proves worthwhile for users of financial information with respect to the Chinese stock market (A-share) will also be an intriguing topic for future research.

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Table 1: Descriptive Statistics

Panel A: Variables for 55 firms offering A- and B-shares, 2001–03

Variables	Mean (Return)		Median (Return)		Pearson Correlation	Mean (Price)		Mean (Earn)	
Year	B-share	A-share	B-share	A-share	A, B-share	A-share	B-share	A-share	B-share
2001	-0.28	-0.15	-0.26	-0.14	0.68***	12.79	5.89	0.11	0.11
2002	-0.20	-0.20	-0.22	-0.26	0.80***	9.33	4.87	-0.05	-0.07
2003	-0.01	-0.09	-0.04	-0.13	0.86***	8.20	4.23	0.07	0.09

Panel B: Variables for 51 firms offering A- and B-shares in 1996–2003

A-share					
Variables	Mean	Standard Deviation	Minimum	Median	Maximum
Stock price	11.04	4.73	1.57	10.18	30.78
Earnings	0.09	0.49	-5.2	0.1	1.1
Book values	2.42	1.58	-7.93	2.32	6.35
B-share					
Variables	Mean	Standard Deviation	Minimum	Median	Maximum
Stock price	4.24	3.09	0.43	3.71	31.87
Earnings	0.06	0.57	-7.29	0.08	1.15
Book values	2.36	1.63	-7.93	2.26	6.36

***Significant at 1%; **Significant at 5%; *Significant at 10% level.

Notes: Earnings = earnings per share of A- (B-) shares for the firm for the fiscal year t. Book values = A- (B-) shares of book values per share for the fiscal year t. P_A (P_B) = stock price of A- (B-) shares for firm i at the end of the fourth month after the fiscal year t. RET_{Ait} (RET_{Bit}) = cumulative 12 month rate of return on A- (B-) shares for firm i across annual report announcements on April 30 between t and t – 1.

Table 2: A-Share (B-Share) Stock Returns and Earnings Reported under IAS and CAS, 2001–03.

Intercept and Year Effects	A-Share Return Models			Intercept and Year Effect	B-Share Return Models		
	Estimated Coefficients (t statistics)				Estimated Coefficients (t statistics)		
	Model 1	Model 1	Model 2		Model 1	Model 1	Model 2
E_{CASit}/P_{Ait-1}	0.839*** (4.24)			E_{CASit}/P_{Bit-1}		0.453*** (4.06)	
E_{IFRSit}/P_{Ait-1}		0.682*** (3.7)	0.855*** (4.29)	E_{IFRSit}/P_{Bit-1}	0.417*** (3.9)		0.455*** (4.06)
$E_{DIF,it}/P_{Ait-1}$			1.347** (2.16)	$E_{DIF,it}/P_{Bit-1}$			0.360 (1.12)
Adjusted R ²	0.129	0.11	0.13	Adjusted R ²	0.28	0.28	0.28
Vuong z-test ^a	3.32*** ^b			Vuong z-test	0.43 ^c		

$$\text{Model 1 } RET_{Qit} = \alpha_0 + \sum_{i=1}^2 \alpha_i YEAR_i + \alpha_1 [E_{Hit} / P_{Qit-1}] + \epsilon_{it}$$

$$\text{Model 2. } RET_{Qit} = \alpha_0 + \sum_{i=1}^2 \alpha_i YEAR_i + \alpha_1 [E_{IASit} / P_{Qit-1}] + \alpha_2 [E_{DIF,it} / P_{Qit-1}] + \epsilon_{it}$$

Q = A-share, B-share; H: CAS, IFRS; E_{DIF} : $E_{CAS} - E_{IFRS}$

***Significant at 1%; **Significant at 5%; *Significant at 10%.

Notes: E_{CAS} (E_{IFRS}) is earnings per share of A- (B-) shares for the firm for the fiscal year t. BV_{CAS} (BV_{IFRS}) is A-share book values per share for the firm for the fiscal year t. P_{Ait-1} (P_{Bit-1}) is stock price of A- (B-) shares for firm i at the end of the fourth month after the fiscal year t – 1. RET_{Ait} (RET_{Bit}) is cumulative 12 month rate of return on A- (B-) shares for firm i over annual report announcements on April 30 between t and t – 1. $E_{DIF,it}$ is different earnings between A- and B-shares for firm i for fiscal year t. Year is a series of indicator variables, including nonaccounting information about future abnormal per shares available in a particular year; the base year is 2001. $\hat{\epsilon}_{it}$ is a random error term for firm i for fiscal year t.

^aThe Vuong z-test examines the null hypothesis that there is no difference in the explanatory power of two nested regressions using E_{IFRSit} , BV_{IFRSit} and E_{CASit} , BV_{CASit} as independent variables in A- (B-) share regressions.

^bCAS model/IFRS model in the A-share regression.

^cCAS model/IFRS model in the B-share regression.



Q= A; B-share market, H= CAS; IAS

Notes: Price is calculated per share of market value in the year following the end of April, as provided by the *TEJ* database. Because B-share stock prices are reported in U.S. dollars for the SHSE and in Hong Kong dollars for the SZSE in the *TEJ* database, Hong Kong dollars have been translated into U.S. dollars, and then from U.S. dollars into Renminbi using the average April exchange rate because most firms report their financial status between April 1 and April 30. The translated rate is that published by the U.S. Federal Reserve Board.

E_{CAS} is earnings per share of A- shares for the firm for the fiscal year t . BV_{CAS} is A-share book values per share for the firm for the fiscal year t . P_{Ait} is stock price of A- shares for firm i at the end of the fourth month after the fiscal year. Incr BV is the incremental explanatory power of book values, if the explanatory power of the adjusted R^2 from regression (2) is less than the adjusted R^2 from regression (1). Incr Earn is the incremental explanatory power of Earnings. if the explanatory power of the adjusted R^2 from regression (3) is less than the adjusted R^2 from regression (1).

Table 4: Yearly Regressions of B-Share Prices on IFRS Earnings and Book Values, 1996–2003

Panel A: B-share regressions for whole sample firms									
Years	β_2 (E_{IFRSit})	β_3 (BV_{IFRSit})	Adj- R^2 (A)	β_5 (E_{IFRSit})	Adj- R^2 (B)	β_6 (BV_{Sit})	Adj- R^2 (C)	Incr BV (A)-(B):	Incr Earn (A)-(C)
1996	2.761*** (2.94)	0.740 (1.58)	0.320	3.638*** (4.72)	0.299	1.552*** (3.82)	0.214	0.021	0.106
1997	2.752*** (3.01)	0.449 (1.33)	0.484	3.734*** (6.81)	0.476	0.399*** (5.86)	0.340	0.008	0.144
1998	0.825** (2.29)	0.447*** (3.78)	0.634	1.904*** (7.65)	0.535	0.661*** (8.76)	0.602	0.099	0.032
1999	1.347** (2.38)	0.406*** (3.22)	0.559	2.734*** (6.78)	0.473	0.6332*** (7.38)	0.516	0.086	0.043
2000	2.357 (1.4)	0.233 (0.93)	0.152	3.54*** (3.19)	0.155	0.495*** (2.98)	0.137	-0.003	0.015
2001	0.070 (0.33)	0.230* (1.75)	0.098	0.329** (2.06)	0.060	0.259*** (2.74)	0.115	0.038	-0.017
2002	1.122 (0.96)	0.157 (0.49)	0.011	1.456 (1.53)	0.026	0.335 (1.28)	0.013	-0.015	-0.002
2003	0.891* (1.79)	0.402*** (4.68)	0.402	1.729*** (3.11)	0.148	0.457*** (5.57)	0.375	0.254	0.148

Panel B: B-share regressions for firms reporting positive earnings

β_2 (E_{IFRSit})	β_3 (BV_{IFRSit})	Adj-R ² (A)	β_5 (E_{IFRSit})	Adj-R ² (B)	β_6 (BV_{IFRSit})	Adj-R ² (C)	Incr BV (A)-(B):	Incr Earn (A)-(C)
4.477*** (3.66)	0.285 (0.55)	0.414	4.919*** (5.4)	0.425	1.540*** (3.41)	0.218	-0.011	0.196
6.699*** (5.45)	-0.208 (-0.58)	0.621	6.124*** (8.37)	0.627	1.350*** (4.79)	0.349	-0.006	0.272
2.629*** (5.16)	0.245* (1.93)	0.758	3.384*** (10.00)	0.739	0.752*** (6.96)	0.575	0.019	0.183
2.729*** (2.82)	0.271* (1.71)	0.553	4.024*** (6.53)	0.529	0.621*** (5.77)	0.466	0.024	0.087
6.726*** (3.15)	-0.0132 (-0.05)	0.333	6.638*** (4.95)	0.349	0.590*** (3.41)	0.195	-0.016	0.138
1.756* (1.71)	0.329** (2.16)	0.225	2.525** (2.48)	0.135	0.418*** (2.85)	0.178	0.09	0.047
-0.687 (-0.11)	0.212 (0.26)	-0.062	0.422 (0.09)	-0.031	0.155 (0.26)	-0.029	-0.031	-0.033
2.378** (2.01)	.471*** (4.26)	0.416	4.268*** (3.30)	0.184	0.555*** (5.23)	0.375	0.038	0.229

$$(1) P_{Jit} = a_0 + a_1 [E_{kit}] + a_2 [BV_{kit}] + \epsilon_{it} \quad (A)$$

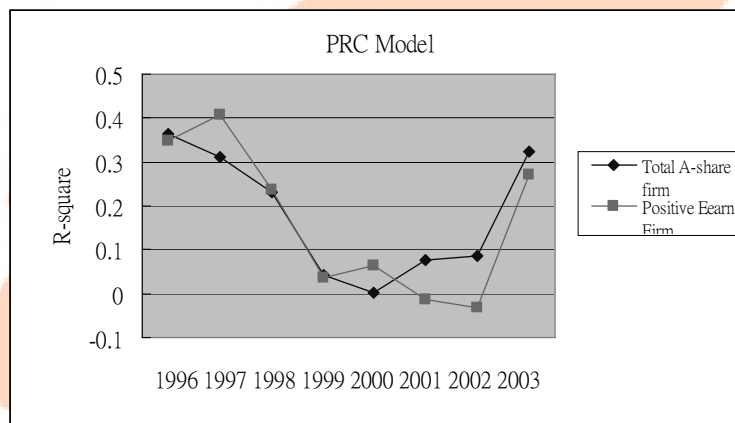
$$(2) P_{Jit} = b_0 + b_1 [E_{kit}] + \epsilon_{it} \quad (B)$$

$$(3) P_{Jit} = c_0 + c_2 [BV_{kit}] + \epsilon_{it} \quad (C)$$

J= A; B-share market, K= PRC; IAS

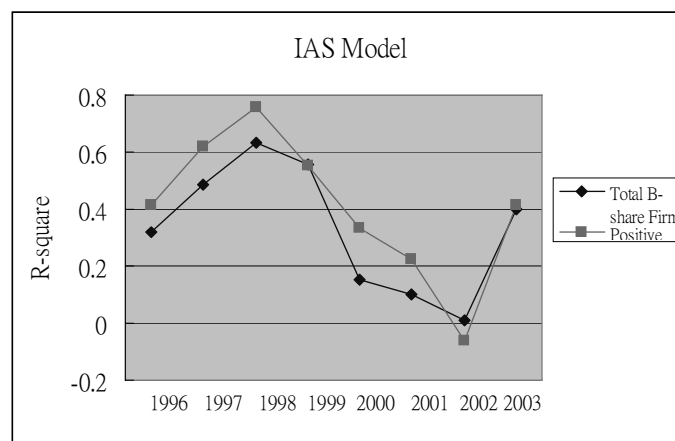
Notes: E_{IFRSit} is earnings per share of B-shares for the firm for the fiscal year t. BV_{IFRS} is B-share book values per share for the firm for the fiscal year t. P_{Bt} is stock price of B shares for firm i at the end of the fourth month after the fiscal year. Incr BV is the incremental explanatory power of book values. if the explanatory power of the adjusted R^2 from regression (2) is less than the adjusted R^2 from regression (1). Incr Earn is the incremental explanatory power of Earnings. if the explanatory power of the adjusted R^2 from regression (3) is less than the adjusted R^2 from regression (1).

Figure 1: Yearly Regressions of A-Share Prices on CAS Earnings and Book Values for All Firms and Firms Reporting Positive Earnings, 1996–2003



Notes: The total explanatory power of CAS earnings and book values for total A-share sample firms and A-share firms reporting positive earnings

Figure 2: Yearly Regressions of B-Share Prices on IFRS Earnings and Book Values for All Firms and Firms Reporting Positive Earnings, 1996–2003



Notes: The total explanatory power of IFRS earnings and book values for total B-share sample firms and B-share firms reporting positive earnings