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Article

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IFRS adoption in China and foreign institutional investments

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ABSTRACT

We examine the effectiveness of China's IFRS adoption from the perspective of an important set of financial report users, foreign institutional investors. We find that foreign institutional investment does not increase after China's IFRS adoption, and some evidence that it actually declines, particularly among firms with weaker incentives to credibly implement IFRS, or with greater ability to manipulate IFRS's fair value provisions. We also find that the association between earnings and returns generally declines after IFRS adoption, consistent with reduced earnings quality. In addition, we find that foreign institutional investors' returns decrease after China's IFRS adoption. Finally, the decline in foreign institutional investment is greater among investors from countries with weak institutions that have also adopted IFRS. Taken together, our evidence suggests that the weak institutional infrastructure in China's transitional economy impairs IFRS's intended goal of attracting institutional investment through improved financial reporting quality. Further, financial information users' home country institutions and IFRS adoption experience affect the effectiveness of IFRS adoption.

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1. Introduction

In an effort to improve financial reporting quality and attract foreign investment, China's domestic capital markets now use International Financial Reporting Standards (IFRS) (MOF, 2006; IASB, 2006).[1] Advocates of IFRS claim that it reduces information acquisition costs, thereby increasing investors' willingness to invest across borders (e.g., SEC, 2008; Tweedie, 2008). IFRS, however, is modeled on developed economies with strong institutions, and little is known about the effects of IFRS adoption in large transitional economies such as China, where institutions are weak. Further, foreign institutional investors' home country institutions and IFRS adoption experience may affect the ability of IFRS to attract foreign investment. The purpose of our study is to test whether China's IFRS adoption has achieved its intended goal of attracting foreign institutional investment and whether foreign investors' home country institutions and IFRS adoption experience influence the association between IFRS adoption and foreign institutional investment.

The stated goal of the International Accounting Standards Board (IASB) in formulating IFRS is to create a single set of high quality accounting standards that "take into account the financial reporting needs of emerging economies" (IFRS, 2011). As a result, many developing countries have adopted or are planning to adopt IFRS in the near future. Consistent with this trend, China mandated IFRS adoption for all publicly traded firms beginning in 2007. A primary goal of China's IFRS adoption is to attract greater foreign investment (MOF, 2006).

Prior research has generally found positive capital market consequences following mandatory IFRS adoption (Daske et al., 2008; Li, 2010; Tan et al., 2011; DeFond et al., 2011). Much of this research, however, is based on evidence from the European Union (EU), where economic and legal institutions tend to be stronger than those in China. In settings where IFRS is unlikely to be credibly implemented, the benefits of IFRS adoption tend to be weak or non-existent, consistent with the notion that the effectiveness of high quality accounting standards depends critically on managers' reporting incentives (Fan and Wong, 2002; Ball, 2006; Ball et al., 2003; Leuz, 2003). Characterized by poor investor protection, weak rule of law, and poor audit quality, China's institutional setting creates weak incentives for managers to produce high quality financial statements (DeFond et al., 2000; Chen and Yuan, 2004; Wang et al., 2008; He et al., 2012). In addition, IFRS's principles-based standards and a greater use of fair value accounting provide more opportunities for Chinese managers to misreport (He et al., 2012). Therefore, we predict that IFRS adoption in China is unlikely to result in increased financial reporting quality that will attract greater foreign investment.

We perform our primary analysis using Chinese domestically listed public firms during 2005 through 2008. During the period of our analysis, foreign investors in China's domestic market consist of 50 Qualified Foreign Institutional Investors (QFIIs) from 13 countries.[2] Our primary analysis uses panel data to compare the change in firm-level QFII ownership in each Chinese listed firm from the pre-adoption period (2005 and 2006) to the post adoption period (2007 and 2008).[3] Following Bradshaw et al. (2004), we measure foreign investment using three firm-level measures – a binary variable indicating whether a QFII holds stock in a Chinese listed firm, the number of QFIIs holding stock in a firm, and the percentage of a firm's shares owned by QFIIs. In addition, our multivariate tests control for a number of firm-level characteristics that are potentially associated with changes in foreign investment, including stock returns, return volatility, return on equity, analyst coverage, cross-listings, dividend yield, growth, and others.

We find no evidence of an increase in foreign institutional investment in Chinese domestically listed firms after IFRS adoption. Further, we find a modest but statistically significant decline in foreign investment, using all three measures of foreign institutional investment. We also continue to find these results after limiting our analysis to 2006–2007, suggesting that our results are not driven by the global financial crisis that began in 2008. We then perform cross-sectional tests designed to further identify channels through which IFRS adoption affects foreign investment. As expected, we find that the decline is larger among firms with weaker

[1] As with many IFRS adopters, China's new accounting standards contain modifications to IFRS designed to reflect its unique environment (as discussed in detail later). However, for ease of exposition, we follow prior literature (e.g., He et al., 2012) and refer to the adoption of these new standards simply as IFRS adoption.

[2] Our sample includes Hong Kong, which is a special administrative region of China.

[3] The term "foreign investors" and QFIIs are used interchangeably throughout the text.

incentives to credibly implement IFRS and a greater ability to manipulate IFRS's fair value provisions. This is consistent with foreign investors reducing their investment in Chinese firms after IFRS adoption due to concerns over declining financial reporting quality, including increased earnings manipulation. Finding predictable cross-sectional differences in the reduction in foreign institutional investment due to incentives and opportunities presented by IFRS directly links our results to China's IFRS adoption. This provides comfort that our results are not driven by changes in other macroeconomic factors.

To explore why foreign investment declined following IFRS adoption, we investigate whether IFRS adoption impairs financial reporting quality in China. We find that the association between reported earnings and stock returns declines after IFRS adoption, consistent with IFRS reducing earnings quality. In addition, we find a decline in foreign investors' returns following IFRS adoption, consistent with IFRS making it more difficult for foreign investors to pick high performing stocks.

Finally, we investigate whether foreign investors' home country institutions affect their reaction to IFRS adoption in China. We find that foreign investors from countries with weak legal and economic institutions, similar to those in China, reduce their investment by a greater amount than foreign investors from countries with strong institutions. We also find that home country adoption of IFRS exacerbates the decline in investment from countries with weak institutions, while it attenuates the decline in investment from countries with strong institutions. These findings are consistent with investors from countries with weak institutions having relatively low confidence in IFRS's credible implementation in China and with IFRS adoption being relatively less successful in countries with weak institutions when compared with countries with strong institutions.

Our study contributes to the literature in several ways. First, our evidence suggests that China's weak institutions impair IFRS's ability to attract foreign institutional investment. Prior research primarily studies developed economies and generally finds that IFRS has positive capital market consequences, particularly in countries with strong legal and economic institutions (Covrig et al., 2007; DeFond et al., 2011). We add to the literature by identifying capital market consequences of IFRS adoption in a developing economy with weak institutions. These findings complement and extend He et al. (2012), who find increased earnings management among firms with trading securities and debt restructuring following mandatory IFRS adoption in China.

Second, examining IFRS adoption in China is useful in evaluating whether IFRS achieves its stated objective of fulfilling the financial reporting needs of emerging economies, which include attracting foreign investment. This potentially has implications for other developing economies that have more recently adopted IFRS, such as Brazil, India and The Russian Federation.

Third, we enhance our understanding of the interplay between IFRS and international institutional investors or cross-border investments. De George et al. (2016) suggest that international institutional investors care about IFRS adoption because it helps them familiarize investees at a lower cost, improve the accounting information quality of investees or increase the visibility of long distance investees. While Yu and Wahid (2014) show evidence that familiarity with investees' accounting standards can improve cross-order investments, Florou and Pope (2012) cannot conclude whether investors care about information quality or familiarity. We provide evidence that institutional investors care about the information quality when investing in emerging markets such as China.

Finally, we contribute to the examination of investor background and home country institutions. Florou and Pope (2012) provide evidence that different type of investors, active versus passive, react differently to the IFRS adoption. Yu and Wahid (2014) show that accounting distance between investors' and investees' countries affect global investment decisions. Prior studies also find that economic and legal institutions affect IFRS's impact on financial reporting quality and foreign investment (Armstrong et al., 2010; DeFond et al., 2011), these studies focus primarily on the adopting countries' institutions. We provide new insights into the role of foreign investors' home country institutions on IFRS adoption. We find that foreign investors' home country institutions, and whether they are IFRS adopters, also have consequences.

The remainder of the paper proceeds as follows. Section 2 reviews the literature. Section 3 introduces China's institutional settings. Section 4 develops our hypotheses. Section 5 discusses empirical results on foreign institutional investment after China's IFRS adoption. Section 6 explores firm-level cross-sectional variation of the main results. Section 7 examines the effect of foreign investors' home country institutions

on their investment in China after IFRS adoption. Section 8 section conducts robustness tests. Section 9 summarizes and concludes.

2. Literature review

2.1. Research on mandatory IFRS adoption

Following widespread mandatory IFRS adoption in 2005, researchers have investigated numerous capital market consequences associated with mandatory IFRS adoption.[4] Landsman et al. (2012) find greater abnormal return volatility and abnormal trading volume around earnings announcements after mandatory IFRS adoption relative to firms that use domestic accounting standards. This suggests that IFRS-based earnings have greater information content than earnings based on local standards. Kim and Li (2010) show evidence of a stronger stock market reaction by IFRS firms to earnings releases of other IFRS firms in the same industry after 2005, consistent with greater information transfer and externality gains from mandatory IFRS adoption. Daske et al. (2008) provide weak evidence of a decline in the cost of capital, as well as a decline in market liquidity after IFRS adoption. Using a longer post-adoption period, Li (2010) finds evidence that the cost of capital declines after IFRS adoption in the EU. Byard et al. (2011) demonstrate that analyst forecast errors and variance decline after IFRS adoption in the EU, suggesting that IFRS earnings are more predictable than earnings under local GAAP. Armstrong et al. (2010) find an incrementally positive market reaction to 16 events associated with IFRS adoption in the EU for firms with lower quality pre-adoption information and with higher pre-adoption information asymmetry, consistent with investors expecting net information quality benefits from IFRS adoption. They also find that the market reaction is incrementally negative for firms domiciled in code law countries, consistent with investors' concerns over the implementation of IFRS in those countries. As far as we are aware, this is the only study that finds a negative capital market consequence of IFRS adoption. Finally, and perhaps the most relevant to our study, DeFond et al. (2011) show that foreign mutual fund ownership increases following mandatory IFRS adoption in the EU.[5]

A common finding in the above studies is that the benefits of IFRS adoption accrue primarily to firms where IFRS is likely to be credibly implemented, such as those in countries where legal enforcement is strong. In settings where local institutions are unlikely to result in a credible implementation, IFRS adoption tends to have little or no economic consequences.

2.2. Research on IFRS adoption in China

Research on the economic consequences of China's IFRS adoption is limited, but provides some insight into whether IFRS can successfully attract foreign investment. Prior to IFRS adoption, Chinese firms with A-shares must report using Chinese Accounting Standards (CAS), while Chinese firms with B-shares must report using the international standards. This means that firms with both A and B shares issue financial reports using both CAS and international standards. Using data from 1990 through 2001, Eccher and Healy (2000) and Lin and Chen (2005) exploit this setting by comparing the value relevance of CAS with the value relevance of the International Accounting Standards (IAS), which is the predecessor to IFRS. These studies find that accounting numbers reported using CAS tend to be more value relevant than those reported using IAS. While IAS differs from IFRS in many important respects, these findings are interesting because they suggest that CAS can be better suited to capturing the value of Chinese firms than international standards. More recently, He et al. (2012) examine Chinese firms that adopt IFRS in 2007 and examine the effect of the fair value provisions under IFRS. They find that IFRS results in increased earnings manipulation among Chinese firms with large portfolios of trading securities and debt restructuring. Overall, prior research generally suggests that IFRS adoption in China may not necessarily improve financial reporting quality.

[4] There is also a stream of research that examines firms that voluntarily adopt IFRS (Covrig et al., 2007). However, issues such as self-selection make it difficult to generalize the findings from those studies to mandatory IFRS adoption, such as in China. Thus, we restrict our literature review to mandatory IFRS adoption studies.

[5] See Bruggemann, Hitz and Sellhorn (2013) for a detailed literature review.

3. Institutional background

3.1. Adoption of IFRS in China

China's Ministry of Finance (MOF) declared its intention to converge CAS with IFRS in 2005 (Peng and Smith, 2010). The new standards were released in 2006 with mandatory implementation by public companies as of January 1, 2007. The new standards are designed to converge CAS with IFRS, where "converge" refers to the elimination of current differences between IFRS and CAS, and preventing future differences from arising (Hussey and Ong, 2005, p. 229). With the exception of a few modifications designed to accommodate the local Chinese environment, there is a general agreement that the new standards are substantially equivalent to IFRS (Peng and Smith, 2010; IASB, 2006).[6]

3.2. China's QFII system

While China's stock market is one of the largest in the Asia-Pacific region, foreign institutional investors' share of the market is far below that of more developed foreign stock markets. The Chinese government believes that this limits China's capital market development and as a result has taken measures to boost foreign investment. One such measure is the "Provisional Regulations on Investment from Qualified Foreign Institutional Investors in the Domestic Securities Market" in 2002. This was followed by the formal "Regulations on Investment from QFIIs in the Domestic Securities Market" in 2006. Contents of these two documents are consistent and similar. The QFII system is designed to facilitate and regulate foreign institutional investment in China's domestic securities markets. Among other things, the QFII system uses a strict approval process to vet new entrants, and as a result the QFIIs tend to be well capitalized, with medium or long-term investment philosophies. As of December 31, 2008, 74 QFIIs from 16 countries were approved to buy shares in China's A-share (domestic) market, of which 66 were granted investment quotas allowing them to invest.[7] Fifty of these 66 QFIIs invest in Chinese A-shares during the period of our analysis, while 16 have yet to invest. Eight of these 50 liquidated their investment by the end of 2008, leaving 42 QFIIs from 13 countries at the end of our sample period. Appendix A presents detailed information on these QFIIs, their home countries, approval time, investment quotas and quota approval time.

4. Hypothesis development

4.1. Main hypothesis

Ball (2001) argues that an economically efficient financial reporting and disclosure system requires strong fundamental institutions. This is consistent with prior research which finds that the capital market benefits of IFRS adoption are essentially non-existent in settings where IFRS is unlikely to be credibly implemented (Daske et al., 2008; Li, 2010; Tan et al., 2011; DeFond et al., 2011). China's weak legal and economic institutions provide managers with weak incentives to produce high quality financial statements (DeFond et al., 2000; Chen and Yuan, 2004; Wang et al., 2008; Piotroski and Srinivasan, 2008). Without major changes in its institutional infrastructure, credible implementation of IFRS is unlikely. If QFIIs understand this, IFRS adoption may not increase foreign investment.

Compared with IFRS, CAS can also potentially be better suited to curtailing the earnings management incentives engendered by China's weak institutions. While CAS has evolved to place a strong emphasis on reliability, IFRS is more investor-oriented, with a greater emphasis on value relevance. In the presence of weak institutions, a reduced emphasis on reliability potentially erodes financial reporting quality by creating greater opportunities for earnings manipulation. Further, while CAS tends to be rule-based, IFRS is decidedly

[6] The modifications include the inability to upwardly revalue fixed assets after they have been written down for impairment, and the inability to use the equity method or proportional consolidation for joint ventures. In addition, related party transaction disclosures are modified to take into account the large government holdings in many public firms.

[7] These quotas are determined by initial contributed capital and can be exceeded if market values increase.

principle-based. A shift from CAS to IFRS can further exacerbate managers' ability to report opportunistically. IFRS is also much more fair value-oriented, which provides several new opportunities for earnings management. For example, while trading securities are valued at historical cost under CAS, IFRS values them at fair value, with the corresponding change included in earnings. This allows managers to selectively classify trading securities for the purpose of maximizing reported gains. Another example is gains from debt restructuring, which are credited to equity under CAS (and thus have no effect on earnings), but which flow through the income statement under IFRS. Finally, while investment real estate is recorded at historical cost under CAS, managers are able to record them at fair value under IFRS, with the change in their market value flowing through the income statement. If QFIIs understand these new opportunities for earnings management under IFRS, they are not likely to respond positively to China's IFRS adoption. Based on the above argument, we propose the following hypothesis:

Hypothesis 1. Foreign institutional investment in China's domestic stock market does not increase after China's mandatory IFRS adoption.

Note that we are not arguing that IFRS is necessarily inferior to CAS, but rather that CAS may better fit China's current stage of economic and institutional development than IFRS. While reporting quality is poor under the CAS, it may be even poorer after IFRS adoption if managers have an increased ability to manipulate accounting information.

4.2. Firm-level cross-sectional hypotheses

4.2.1. Management incentives

There is variation across Chinese listed firms in terms of their incentives to credibly implement IFRS. Jiang et al. (2010) argue that the major agency problem for Chinese listed firms is not between shareholders and managers, but between minority shareholders and controlling shareholders. They support this argument by finding pervasive evidence that controlling shareholders of Chinese listed firms tunnel resources from listed firms through intercorporate loans. This is consistent with a large body of literature that suggests that firms with high ownership concentration and entrenched controlling shareholders have incentives to increase financial reporting opacity in order to obfuscate their self-serving behavior (Leuz, Nanda and Wysocki, 2003). Obfuscation can occur, for example, by controlling shareholders withholding or selectively disclosing unfavorable information, or opportunistically timing the release of value-relevant information. In addition, when the controlling shareholder is the Chinese government (i.e., state-owned enterprises), managers are more likely to have goals that are not profit maximizing, and as a result are prone to communicating financial information through private information channels and engaging in related party transactions (Wang et al., 2008; Piotroski and Wong, 2010; He et al., 2012).

Because firms with high ownership concentration or large government ownership lack incentives to supply quality financial information, we expect that they are less likely to credibly implement IFRS. If foreign investors realize this, we expect to find the decline in foreign institutional investment to be more pronounced in firms with high ownership concentration or with large state ownership. We predict the following:

Hypothesis 2a. The decline in foreign institutional investment due to China's mandatory IFRS adoption is greater in firms with high ownership concentration and large state ownership.

4.2.2. Firms prone to fair value manipulation

We also expect the fair value accounting provisions of IFRS to provide managers with greater opportunities for earnings manipulation. While fair value adjustment can go to the income statement, firms can also manage the timing of securities trading to boost earnings. Both trading and available-for-sale securities can provide opportunities for firms to manipulate earnings. This is consistent with He et al. (2012), who find that Chinese firms manage earnings through fair value accounting by selling available-for-sale securities. If QFIIs understand this, we expect the decline in foreign institutional investment to be more pronounced among firms with greater opportunities to manipulate earnings through fair value accounting. We propose the following hypothesis:

Hypothesis 2b. The decline in foreign institutional investment due to China's mandatory IFRS adoption is greater in firms with opportunities to manipulate earnings through fair value accounting.

4.3. Country-level cross-sectional hypothesis

A potential source of cross-sectional variation in foreign investors' response to IFRS adoption in China is the heterogeneous nature of QFIIs. While prior research finds that IFRS adopters' institutional environment affects whether IFRS is credibly implemented (Daske et al., 2008; Li, 2010; Tan et al., 2011; DeFond et al., 2011), we are unaware of research that indicates investor heterogeneity affects investment in IFRS adopters, though we know that institutional investors are not uniform and they differ in style, sophistication and horizon (Bushee, 1998). By the end of 2008, QFIIs investing in China come from thirteen different countries, with large variation in legal origins, investor protection institutions, and accounting systems. Since IFRS implementation tends to be less credible in countries with relationship-based institutions, investors from such countries are likely to be more aware of and familiar with this fact, and thus are more skeptical of IFRS's ability to improve China's financial reporting environment. Further, investors from countries with relationship-based institutions, being used to investing under a weaker institutional environment, have their unique investment styles and methods of processing information. They are more apt at processing information based on relationships, based on historical cost and not information based on fair market value. They are also more likely to doubt the effectiveness of market based information due to their past investment experience in their own countries. In sum, culture and institutions influence institutional investors' decisions. Therefore, we expect a larger decline in QFII investment from countries with relationship-based institutions. We propose the following hypothesis:

Hypothesis 3. The decline in foreign institutional investment due to China's mandatory IFRS adoption is greater for institutional investors from countries with relationship-based institutions.

Specifically, countries with relationship-based institutions tend to have code law origin (La Porta et al., 1997), low anti-director rights (La Porta et al., 1997), government only sources of accounting standards (Alford et al., 1993), continental accounting cluster (Mueller et al., 1994; Hung, 2001), high book-tax conformity (Cooper and Lybrand, 1993; Hung, 2001).

5. Empirical tests

5.1. Data and sample

We test our hypothesis over the period 2005–2008, where 2005 and 2006 are pre-IFRS adoption and 2007 and 2008 are post-adoption. Panel A, Table 1 presents the sample selection process, which begins with all A-share companies on the Shanghai and Shenzhen stock exchanges. We focus on the A-share market because it is the main investment channel through which foreign institutional investors invest in China, and because its total market capitalization is twenty times larger than that of the B-share market.[8,9] We exclude firm-year observations with missing data on monthly return volatility, yearly returns or year-end prices, and delete observations with negative book values. Our final sample contains 5518 firm-year observations. Panel B, Table 1 shows the industry distribution of firm-year observations in our sample. Firms are present in 22 major industries and tend to cluster in petrochemical and machinery industries.

Information on QFIIs' approval years, investment quotas and other details are obtained from the websites of the China Securities Regulatory Commission and China's Foreign Exchange Control Bureau. Information on QFIIs' shareholdings and the number of QFIIs per firm is based on the top 10 shareholders of firms' tradable shares obtained from the WIND Info database (provided by Wind Information Co., Ltd.). Firm-level

[8] Individual QFIIs cannot own more than 10% of a firm's shares and all QFIIs collectively cannot own more than 20%. Actual QFII holdings are far below these numbers (CSRC fund regulation 2006 No. 176). Therefore, the restrictions are not binding.

[9] The B-share market was originally created for foreign investors only. H-shares are shares listed in the Hong Kong Stock Exchange.

Table 1
Sample selection and distribution.

			2005	2006	2007	2008	Total
Panel A: Sample selection process							
Number of year-end Chinese A-share listed firms			1324	1384	1516	1593	5817
Exclude:							
(1) Firms with negative book value of equity			48	58	54	52	212
(2) Firms missing data for monthly stock return volatility, yearly stock return or year-end stock price			0	31	39	17	87
Final sample			1276	1295	1423	1524	5518
CSRC code	CSRC industry name	SIC equivalent	# of Obs.				Percentage (%)
Panel B: Sample distribution by industry							
A	Agriculture, forestry & fishery	01,02,07,08,09	132				2.39
B	Mining	10,12,13,14	100				1.81
C0	Food & Beverage	20	233				4.22
C1	Textiles & Apparel	22,23	260				4.71
C2	Wood & Furnishing	25	15				0.27
C3	Paper & printing	26,27	112				2.03
C4	Petrochemicals	28,29,30	576				10.44
C5	Electronics	36	223				4.04
C6	Metals & Non -metals	32,33,34	508				9.20
C7	Machinery	35,36,37	870				15.76
C8	Pharmaceuticals	38	352				6.38
C9	Other manufacturing	39	72				1.30
D	Utilities	49	250				4.53
E	Construction	15,16,17	120				2.17
F	Transportation	40,41,42,44,45,46,47	233				4.22
G	IT	48	332				6.02
H	Wholesale & retail trade	50,51,52,53,54,55,56,57,58,59	347				6.29
I	Finance	60,61,62,63,64,67	73				1.34
J	Real estate	65	225				4.08
K	Social Services	43,70,80,82,83	168				3.04
L	Broadcasting & culture	78,79,84	35				0.63
M	Conglomerate		282				5.11
Total			5518				100

This table presents the sample selection process by calendar year in Panel A and sample distribution by industry membership in Panel B. # *of obs.* refers to the number of observations from each industry through the entire sample period.

accounting and market numbers are obtained from the WIND Info and CSMAR (China Stock Market and Accounting Research) databases.

5.2. Empirical model

We test our hypothesis by estimating the following regression model:

$$\begin{aligned} D\_QFII_{it}, N\_QFII_{it}, P\_QFII_{it} = {} & \beta_0 + \beta_1 POST_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 TOP1_{it} + \beta_5 ROE_{it} + \beta_6 DIV_{it} \\ & + \beta_7 STDRET_{it} + \beta_8 BTM_{it} + \beta_9 RETURN_{it} + \beta_{10} XLIST_{it} + \beta_{11} DOWJ_{it} \\ & + \beta_{12} XSALE_{it} + \beta_{13} ANALYST_{it} + \beta_{14} BIG4_{it} + Industry\ dummy + \varepsilon_{it}. \end{aligned} \quad (1)$$

Following prior research (Bradshaw et al., 2004; DeFond et al., 2012), we sequentially test three dependent measures of QFII investment, each of which captures a different aspect of QFII ownership: (1) *D_QFII*, an indicator variable capturing whether any QFII owns stock in the firm at year end, (2) *N_QFII*, the logarithm transformation of one plus the number of QFIIs that own stock in each sample firm at year end, and (3) *P_QFII*, the cumulative percentage of QFII ownership in each sample firm at year end. Our independent variable of interest in Eq. (1) is *POST,* which is coded 1 for years 2007 and 2008, and 0 for years 2005 and 2006. *POST* captures the effect of IFRS adoption on QFII investment. To correct standard errors for possible serial

correlation and heteroskedasticity, we employ Huber-White standard errors clustered by firm throughout our regression analyses. Following Covrig et al. (2007) and DeFond et al. (2011), we include control variables that are defined in Appendix B. All continuous variables are winsorized at the top and bottom one percentile of their distributions.

5.3. Univariate hypothesis tests

Descriptive statistics on QFII ownership, by QFII country and year, are presented in Table 2. Panel A, Table 2 indicates that the US has the largest number of QFIIs, with 9–14 per year. Australia and Norway have the smallest number of QFIIs, with 0–1 per year. The middle four columns in Table 2 report the percentage ownership of total shares for each country-year, averaged across all Chinese listed firms. However, many

Table 2
Number of QFIIs and their shareholdings by home country and year.

Home country	Number of QFIIs				Average percentage ownership of total shares outstanding (%)				Average percentage ownership of total tradable A-shares (%)			
	2005	2006	2007	2008	2005	2006	2007	2008	2005	2006	2007	2008
Panel A: QFII shareholdings												
Australia	0	0	1	1	0.000	0.000	0.001	0.001	0.000	0.000	0.001	0.001
Belgium	1	2	1	1	0.020	0.033	0.009	0.007	0.060	0.073	0.021	0.015
Canada	0	1	2	2	0.000	0.000	0.002	0.002	0.000	0.002	0.003	0.003
France	3	4	4	4	0.003	0.008	0.006	0.013	0.005	0.020	0.013	0.021
Germany	1	1	1	1	0.013	0.020	0.005	0.003	0.041	0.044	0.010	0.006
Hong Kong	2	3	3	3	0.012	0.022	0.016	0.009	0.029	0.047	0.032	0.014
Japan	2	2	3	3	0.013	0.017	0.003	0.004	0.032	0.051	0.007	0.008
Netherlands	1	2	2	2	0.005	0.023	0.023	0.004	0.017	0.060	0.042	0.007
Norway	0	0	0	1	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.001
Singapore	0	2	3	3	0.000	0.004	0.003	0.004	0.000	0.011	0.007	0.006
Switzerland	2	2	3	3	0.030	0.041	0.038	0.018	0.091	0.099	0.073	0.035
UK	2	2	3	4	0.001	0.019	0.018	0.014	0.004	0.038	0.037	0.024
US	9	12	13	14	0.036	0.077	0.059	0.030	0.112	0.199	0.118	0.057

Dep. Variable		*MEAN*	*STD*	*MIN*	*MEDIAN*	*MAX*	Diff.	*POST* = 1 vs. *POST* = 0
Panel B: Descriptive statistics on QFII investments as captured by the three dependent variables measuring QFII investment								
D_QFII	*POST* = 0	0.128	0.334	0.000	0.000	1.000	MEAN	−0.031***
	POST = 1	0.097	0.296	0.000	0.000	1.000	MEDIAN	−0.000***
N_QFII	*POST* = 0	0.124	0.353	0.000	0.000	2.079	MEAN	−0.040***
	POST = 1	0.084	0.275	0.000	0.000	1.946	MEDIAN	−0.000***
P_QFII	*POST* = 0	0.005	0.019	0.000	0.000	0.273	MEAN	−0.002***
	POST = 1	0.003	0.012	0.000	0.000	0.200	MEDIAN	−0.000***
Dep. Variable		*MEAN*	*STD*	*MIN*	*MEDIAN*	*MAX*	Diff.	POST=1 vs. POST=0
Panel C: Descriptive statistics of QFII investment in firms with QFII investment in any year of the sample period								
D_QFII	*POST* = 0	0.467	0.499	0.000	0.000	1.000	MEAN	−0.093***
	POST = 1	0.374	0.484	0.000	0.000	1.000	MEDIAN	−0.000***
N_QFII	*POST* = 0	0.454	0.553	0.000	0.000	2.079	MEAN	−0.129***
	POST = 1	0.325	0.462	0.000	0.000	1.946	MEDIAN	−0.000***
P_QFII	*POST* = 0	0.019	0.032	0.000	0.000	0.273	MEAN	−0.008***
	POST = 1	0.011	0.023	0.000	0.000	0.200	MEDIAN	−0.000***

Number of QFIIs: Number of QFIIs with investments in A-shares at year end for each referenced country.
Average percentage ownership of total shares outstanding: Average percentage share ownership across all Chinese listed firms at year-end, for each referenced country.
Average percentage ownership of total tradable A-shares outstanding: Average percentage tradable A-share ownership across all listed Chinese firms at year end, for each referenced country.
Variable definitions are presented in Appendix B. P-values in Panel B and C are from t-tests of mean differences or Wilcoxon-tests when *POST* = 1 minus *POST* = 0. $N = 5{,}518$ for Panels A and B, and $N = 1466$ for Panel C. $^{**}p < 0.05$, $^{*}p < 0.1$.
$^{***}p < 0.01$.

Table 3
Descriptive statistics on control variables partitioned on the indicator dependent variable *D_QFII*.

Variables	IFRS adoption	*D_QFII* = 0 (*N* = 4905)		*D_QFII* = 1 (*N* = 613)		*D_QFII* = 0 vs. *D_QFII* = 1	
		Mean	Median	Mean	Median	*t*-test p-values	Wilcoxon p-values
SIZE	*POST* = 0	21.212	21.137	22.219	21.977	0.000	0.000
	POST = 1	21.520	21.359	22.085	21.864	0.000	0.000
LEV	*POST* = 0	0.518	0.538	0.481	0.488	0.001	0.000
	POST = 1	0.502	0.512	0.491	0.485	0.334	0.219
*TOP*1	*POST* = 0	0.378	0.350	0.419	0.427	0.000	0.000
	POST = 1	0.361	0.344	0.386	0.379	0.008	0.005
ROE	*POST* = 0	−0.005	0.043	0.098	0.102	0.000	0.000
	POST = 1	0.051	0.073	0.111	0.109	0.000	0.000
DIV	*POST* = 0	0.009	0.000	0.019	0.015	0.000	0.000
	POST = 1	0.006	0.001	0.008	0.006	0.000	0.000
BTM	*POST* = 0	0.745	0.763	0.657	0.647	0.000	0.000
	POST = 1	0.538	0.505	0.497	0.445	0.011	0.009
RETURN	*POST* = 0	−0.240	−0.215	0.024	−0.022	0.000	0.000
	POST = 1	0.316	0.077	0.401	0.103	0.141	0.205
STDRET	*POST* = 0	0.126	0.116	0.118	0.110	0.010	0.003
	POST = 1	0.204	0.196	0.191	0.187	0.000	0.000
XLIST	*POST* = 0	0.080	0.000	0.146	0.000	0.000	0.000
	POST = 1	0.087	0.000	0.112	0.000	0.151	0.151
DOWJ	*POST* = 0	0.399	0.000	0.823	1.000	0.000	0.000
	POST = 1	0.376	0.000	0.639	1.000	0.000	0.000
ANALYST	*POST* = 0	2.141	0.000	7.802	7.000	0.000	0.000
	POST = 1	6.310	2.000	11.561	8.000	0.000	0.000
*BIG*4	*POST* = 0	0.049	0.000	0.216	0.000	0.000	0.000
	POST = 1	0.065	0.000	0.140	0.000	0.000	0.000

Variable definitions are presented in Appendix B. P-values are from *t*-test of mean difference or Wilcoxon-tests of *D_QFII* = 0 minus *D_QFII* = 1. $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$.

Chinese listed firms have a large block of essentially non-tradable shares owned by government entities. Thus, the four right columns of Panel A also report the percentage ownership based on tradable shares. These columns show that the US has the highest percentage ownership of tradable shares, with 0.057–0.112%, and that Australia and Norway have the lowest average percentage ownership, with 0.000–0.001%. While the percentage of tradable shares is larger, the pattern is similar to that computed using the total number of shares.[10]

Panel B, Table 2 compares three measures of QFII ownership before and after mandatory IFRS adoption. Consistent with our hypothesis, Panel B shows that the mean and median value of each of our QFII ownership measures declines significantly after IFRS adoption. One potential issue in this comparison, however, is that some Chinese listed firms may not be in the feasible investment set for foreign investors. Thus, Panel C repeats the analysis in Panel B after restricting the sample to the 1466 A-share firm years with at least one QFII investor. This panel also shows that the mean and median values of each QFII ownership measure declines significantly after IFRS adoption. Thus, our univariate tests support our first hypothesis. However, as many firm-specific factors affect foreign investment, we rely on multivariate analysis to formally test our predictions.

Panel A, Table 3 presents descriptive statistics of control variables in Eq. (1), partitioned based on *D_QFII*, which indicates whether a QFII owns shares in the firm, and on *POST*, which indicates whether the firm has adopted IFRS. Financial statement variables indicate that QFIIs tend to invest in firms that are larger, more highly leveraged, that have high *ROE*, higher dividend yields, higher growth (low book-to-market ratio), and lower stock return volatility. Corporate governance variables show that QFIIs tend to invest in firms with larger ownership by the largest shareholder. Variables capturing the information environment indicate that QFIIs tend to invest in firms included in important market indices, firms with more analysts following, and firms with Big-4 auditors.

[10] The total market capitalization of stock owned by all of the QFIIs ranges from the equivalent of US$1.5 billion to US$5.3 billion during the period analyzed.

Table 4
Pearson correlations.

	D_QFII	*N_QFII*	*P_QFII*	*POST*	*ROE*	*SIZE*	*LEV*	*TOP*1	*DIV*	*BTM*	*RETURN*	*STDRET*	*XLIST*	*DOWJ*	*ANALYST*
N_QFII	0.926														
	(0.00)														
P_QFII	0.693	0.828													
	(0.00)	(0.00)													
POST	−0.049	−0.063	−0.076												
	(0.00)	(0.00)	(0.00)												
ROE	0.107	0.100	0.076	0.106											
	(0.00)	(0.00)	(0.00)	(0.00)											
SIZE	0.206	0.200	0.129	0.099	0.170										
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)										
LEV	−0.040	−0.037	−0.035	−0.032	−0.253	0.295									
	(0.00)	(0.01)	(0.01)	(0.02)	(0.00)	(0.00)									
*TOP*1	0.072	0.069	0.061	−0.066	0.088	0.203	−0.055								
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)								
DIV	0.160	0.168	0.130	−0.154	0.231	0.265	−0.167	0.219							
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)							
BTM	−0.059	−0.046	−0.054	−0.373	−0.113	0.308	0.213	0.046	0.211						
	(0.00)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)						
RETURN	0.051	0.034	0.028	0.311	0.144	0.106	0.063	−0.006	−0.084	−0.358					
	(0.00)	(0.17)	(0.04)	(0.00)	(0.00)	(0.00)	(0.00)	(0.68)	(0.00)	(0.00)					
STDRET	−0.075	−0.084	−0.083	0.577	0.010	−0.047	0.054	−0.085	−0.244	−0.400	0.490				
	(0.00)	(0.00)	(0.00)	(0.00)	(0.44)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)				
XLIST	0.052	0.048	0.054	0.002	0.016	0.281	0.049	0.039	0.046	0.035	−0.010	−0.008			
	(0.00)	(0.00)	(0.00)	(0.90)	(0.22)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.45)	(0.54)			
DOWJ	0.223	0.208	0.141	−0.052	0.196	0.603	−0.003	0.060	0.245	0.015	0.155	−0.093	0.074		
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.85)	(0.00)	(0.00)	(0.27)	(0.00)	(0.00)	(0.00)		
ANALYST	0.185	0.170	0.125	0.226	0.225	0.502	−0.016	0.091	0.240	−0.064	0.055	0.005	0.144	0.372	
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.25)	(0.00)	(0.00)	(0.00)	(0.00)	(0.70)	(0.00)	(0.00)	
*BIG*4	0.151	0.150	0.120	0.004	0.063	0.436	0.023	0.097	0.160	0.061	−0.011	−0.070	0.428	0.215	0.302
	(0.00)	(0.00)	(0.00)	(0.79)	(0.00)	(0.00)	(0.09)	(0.00)	(0.00)	(0.00)	(0.43)	(0.00)	(0.00)	(0.00)	(0.00)

Variable definitions are presented in Appendix B. $N = 5518$. P-values are in parentheses.

Table 5
IFRS Adoption and Foreign Institutional Investment.

	D_QFII	*N_QFII*	*P_QFII*
Panel A: IFRS adoption and QFII investment for total sample			
POST	−0.7535***	−0.0808***	−0.0040***
	(−5.66)	(−7.36)	(−7.55)
SIZE	0.4525***	0.0545***	0.0018***
	(5.39)	(6.33)	(4.04)
LEV	−0.5226	−0.0564**	−0.0019
	(−1.48)	(−2.03)	(−1.40)
*TOP*1	−0.6516*	−0.0493	−0.0012
	(−1.77)	(−1.42)	(−0.70)
ROE	0.7022**	0.0166	0.0007
	(1.98)	(1.52)	(0.89)
DIV	13.7498***	1.9882***	0.0811***
	(3.29)	(3.89)	(3.29)
STDRET	−2.6272***	−0.2231***	−0.0147***
	(−2.62)	(−2.87)	(−3.73)
BTM	−2.0655***	−0.2166***	−0.0100***
	(−7.82)	(−9.68)	(−8.88)
RETURN	0.0496	0.0036	0.0004
	(0.81)	(0.58)	(1.20)
XLIST	−0.4539**	−0.0461**	−0.0006
	(−2.32)	(−2.50)	(−0.58)
DOWJ	0.5085***	0.0181	0.0002
	(3.16)	(1.30)	(0.23)
XSALE	0.1152	0.0066	0.0003
	(0.89)	(0.62)	(0.55)
ANALYST	0.0143**	0.0018**	0.0001**
	(2.40)	(2.37)	(2.22)
*BIG*4	0.3542*	0.0666**	0.0029*
	(1.77)	(2.28)	(1.85)
Constant	−10.1080***	−0.8203***	−0.0225**
	(−6.01)	(−4.84)	(−2.58)
Industry Indicators	yes	yes	yes
Pesudo/Adj-R^2	0.151	0.103	0.064
Panel B: IFRS adoption and QFII investment in firms where the indicator dependent variable D_QFII = 1 in at least one year			
POST	−0.6699***	−0.1888***	−0.0100***
	(−4.11)	(−5.39)	(−5.88)
SIZE	0.0686	0.0398*	0.0003
	(0.81)	(1.84)	(0.24)
LEV	0.1631	0.0269	0.0020
	(0.45)	(0.30)	(0.38)
*TOP*1	−0.6811**	−0.1815*	−0.0015
	(−2.05)	(−1.83)	(−0.25)
ROE	−0.1164	−0.0073	−0.0032
	(−0.28)	(−0.08)	(−0.49)
DIV	11.7385**	3.4629***	0.1319**
	(2.45)	(2.92)	(2.04)
STDRET	0.2090	0.0444	−0.0233*
	(0.18)	(0.17)	(−1.72)
BTM	−1.7179***	−0.4108***	−0.0224***
	(−6.05)	(−6.32)	(−6.52)
RETURN	0.0171	−0.0118	0.0003
	(0.21)	(−0.60)	(0.23)
XLIST	0.0127	−0.0352	0.0041
	(0.07)	(−0.73)	(1.35)
DOWJ	0.1060	−0.0074	−0.0023
	(0.69)	(−0.20)	(−1.05)

Table 5 (*continued*)

	D_QFII	*N_QFII*	*P_QFII*
XSALE	0.0627	0.0217	0.0004
	(0.49)	(0.68)	(0.21)
ANALYST	0.0006	−0.0004	0.0001
	(0.10)	(−0.28)	(0.70)
*BIG*4	0.2464	0.0648	0.0029
	(1.31)	(1.30)	(1.08)
Constant	−0.7772	−0.1361	0.0297
	(−0.47)	(−0.32)	(1.17)
Industry Indicators	yes	yes	yes
Pesudo/Adj-R^2	0.0486	0.052	0.055
Panel C: IFRS adoption and QFII investment after restricting analysis to 2006 (pre-adoption year) and 2007 (post adoption year)			
POST	−0.8534***	−0.1148***	−0.0053***
	(−4.62)	(−5.74)	(−5.60)
SIZE	0.3941***	0.0522***	0.0016**
	(3.45)	(3.90)	(2.53)
LEV	−0.1366	−0.0212	−0.0003
	(−0.32)	(−0.56)	(−0.18)
*TOP*1	−0.7707	−0.0709	−0.0009
	(−1.61)	(−1.31)	(−0.34)
ROE	0.4992	0.0212	0.0004
	(1.39)	(1.25)	(0.48)
DIV	21.3428***	3.6509***	0.1810***
	(3.56)	(3.76)	(3.65)
STDRET	−3.3750***	−0.2225**	−0.0168***
	(−2.61)	(−2.00)	(−2.77)
BTM	−2.3116***	−0.2729***	−0.0130***
	(−4.59)	(−5.19)	(−4.98)
RETURN	0.0687	0.0045	0.0006
	(0.96)	(0.58)	(1.23)
XLIST	−0.6705***	−0.0855***	−0.0027**
	(−2.85)	(−3.47)	(−2.14)
DOWJ	0.3805*	0.0074	−0.0008
	(1.96)	(0.36)	(−0.75)
XSALE	0.0804	−0.0025	−0.0003
	(0.54)	(−0.17)	(−0.45)
ANALYST	0.0226	0.0053**	0.0003***
	(1.54)	(2.48)	(2.77)
*BIG*4	0.5613**	0.0919**	0.0039*
	(2.32)	(2.16)	(1.82)
Constant	−8.8522***	−0.7499***	−0.0182
	(−4.06)	(−3.02)	(−1.50)
Industry Indicators	yes	yes	yes
Pesudo/Adj-R^2	0.148	0.112	0.076

Variable definitions are presented in Appendix B. This table reports regressions of *D_QFII* (existence of QFIIs), *N_QFII* (log of one plus the number of QFIIs) and *P_QFII* (investment scale of QFIIs) on all independent variables. We estimate the regression using a logistic specification in Column 1 and OLS in Columns 2 and 3. Z-statistics (reported in parentheses in Column 1) and t-statistics (reported in parentheses in Columns 2 and 3) are corrected for heteroskedasticity and based standard errors clustered by firm. For all variables, we use observation for a given firm over the entire sample period. $N = 5518$ for Panel A, $N = 1466$ for Panel B and $N = 2718$ for Panel C.

*** $p < 0.01$.

** $p < 0.05$.

* $p < 0.1$.

Table 4 presents Pearson correlation coefficients. Whether QFII investment is measured as the existence of at least one QFII investor (*D_QFII*), the number of QFII investors (*N_QFII*), or the percentage of QFII investors (*P_QFII*), it is positively correlated with firm size (*SIZE*), dividend yield (*DIV*), shareholding of the largest shareholder (*TOP*1), firm visibility (*XLIST*, *DOWJ*), analyst following (*ANALYST*), and Big 4 audit

(*BIG*4). *D_QFII*, *N_QFII* and *P_QFII* are negatively correlated with financial leverage (*LEV*), book-to-market ratio (*BTM*), and return volatility (*STDRET*). These results are consistent with Table 3. *D_QFII*, *N_QFII* and *P_QFII* are also positively correlated with *ROE*, suggesting that QFIIs tend to invest in profitable firms. *D_QFII*, *N_QFII* and *P_QFII* are negatively correlated with *POST*, suggesting that QFIIs reduce investments in Chinese listed firms after IFRS adoption, consistent with our univariate results in Panels B and C, Table 2.

5.4. Multivariate hypothesis tests

Multivariate tests are reported in Panel A, Table 5. The coefficients on *POST* are negative and significant for all QFII investment measures (−0.7535, *z*-statistic = −5.66 using *D_QFII*; −0.0808, *t*-statistic = −7.36 using *N_QFII*; and −0.0040, *t*-statistic = −7.55 using *P_QFII*). Thus, consistent with univariate tests, our multivariate results support our first hypothesis.

A potential concern in Panel A, Table 5 is that the feasible set of Chinese firms suitable for foreign investment is likely limited. Thus, we repeat our analysis in Panel A after restricting the sample to the 1466 A-share firm year observations with at least one QFII investor at the end of the year. The results, reported in Panel B, Table 5, also show that the coefficients on *POST* are negative and significant for all QFII measures (−0.6699, *z*-statistic = −4.11 using *D_QFII*; −0.1888 *t*-statistic = −5.39 using *N_QFII*; and −0.0100, *t*-statistic = −5.88 using *P_QFII*). Thus, Panel B, Table 5 suggests that Panel A results are not driven by firms not in QFIIs' feasible investment set.

Another potential concern is that our results may be explained by an overall decline in investment following the global financial crisis in 2008. We investigate this issue by repeating the analysis in Panel A, Table 5 after restricting the sample to 2006–2007, where *POST* equals 0 for 2006 and 1 for 2007. Panel C again reports that QFII investment significantly declines based on all three ownership measures (−0.8534, *z*-statistics = −4.62 for *D_QFII*; −0.1148, *t*-statistics = −5.74 for *N_QFII*; −0.0053, *t*-statistics = −5.60 for *P_QFII*). Thus, results in Panel C, Table 5 are consistent with the decline in foreign investment being due to China's IFRS adoption, and not to an investment downturn following the financial crisis.

Overall, results in Table 5 support our first hypothesis by showing that China's IFRS adoption is actually followed by reduced foreign institutional investment. We acknowledge, however, that QFIIs' percentage ownership of the China's A-share market is very low, suggesting that the overall capital market consequences of the decline are somewhat limited. Specifically, Table 2, Panel B indicates that among the top 10 shareholders, the mean percentage of QFII ownership was 0.005% pre-IFRS adoption, and 0.003% post-IFRS adoption. Nonetheless, the important implication of our finding is that IFRS adoption in China did not achieve the government's intended goal of increasing foreign institutional investment, and in fact resulted in a modest reduction in foreign investment.

6. Firm-level cross-section analyses

6.1. Management incentives

We test Hypothesis 2a by estimating the following regression

$$\begin{aligned} D\_QFII_{it}, N\_QFII_{it}, P\_QFII_{it} = {} & \beta_0 + \beta_1 POST_{it} + \beta_2 INCENTIVE_{it} + \beta_3 POST_{it} * INCENTIVE_{it} + \beta_4 SIZE_{it} \\ & + \beta_5 LEV_{it} + \beta_6 TOP1_{it} + \beta_7 ROE_{it} + \beta_8 DIV_{it} + \beta_9 STDRET_{it} + \beta_{10} BTM_{it} \\ & + \beta_{11} RETURN_{it} + \beta_{12} XLIST_{it} + \beta_{13} DOWJ_{it} + \beta_{14} XSALE_{it} \\ & + \beta_{15} ANALYST_{it} + \beta_{16} BIG4_{it} + Industry\ dummy + \varepsilon_{it}. \end{aligned} \quad (2)$$

To examine the effect of ownership concentration, *INCENTIVE* equals 1 if the largest shareholder owns more than 50% of a firm's total shares and 0 otherwise. To examine the effect of state ownership, *INCENTIVE* equals 1 if a firm is ultimately controlled by the government and 0 otherwise. Table 6 presents the results of this analysis. When we define *INCENTIVE* based on ownership concentration, all three of the coefficients on *POST*INCENTIVE* are negative and significant (−0.4883, *z*-statistic = −2.13 for *D_QFII*; −0.0656,

Table 6
IFRS adoption, firm incentives, and foreign institutional investment.

	Ownership concentration			State ownership		
	D_QFII	*N_QFII*	*P_QFII*	*D_QFII*	*N_QFII*	*P_QFII*
POST	−0.6367***	−0.0667***	−0.0033***	−0.5555***	−0.0563***	−0.0027***
	(−4.48)	(−5.85)	(−6.35)	(−3.00)	(−4.00)	(−3.72)
INCENTIVE	−0.0583	0.0087	0.0006	0.1431	0.0191*	0.0007
	(−0.39)	(0.50)	(0.57)	(1.33)	(1.75)	(1.17)
*POST*INCENTIVE*	−0.4883**	−0.0656***	−0.0033***	−0.2018	−0.0280**	−0.0015**
	(−2.13)	(−3.13)	(−2.77)	(−1.46)	(−2.31)	(−2.36)
SIZE	0.4580***	0.0556***	0.0019***	0.4515***	0.0546***	0.0018***
	(5.48)	(6.47)	(4.19)	(5.29)	(6.22)	(4.04)
LEV	−0.5423	−0.0577**	−0.0021	−0.5084	−0.0539*	−0.0018
	(−1.53)	(−2.08)	(−1.49)	(−1.43)	(−1.94)	(−1.34)
TOP1				−0.7007*	−0.0557	−0.0013
				(−1.83)	(−1.52)	(−0.70)
ROE	0.7112*	0.0162	0.0006	0.7053**	0.0164	0.0006
	(1.95)	(1.47)	(0.87)	(1.97)	(1.49)	(0.82)
DIV	12.8335***	1.8916***	0.0779***	13.4228***	1.9475***	0.0782***
	(3.07)	(3.73)	(3.20)	(3.20)	(3.82)	(3.18)
STDRET	−2.6370***	−0.2216***	−0.0147***	−2.7353***	−0.2322***	−0.0151***
	(−2.65)	(−2.85)	(−3.71)	(−2.74)	(−3.01)	(−3.84)
BTM	−2.0700***	−0.2190***	−0.0102***	−2.0541***	−0.2159***	−0.0099***
	(−7.81)	(−9.77)	(−8.92)	(−7.76)	(−9.66)	(−8.86)
RETURN	0.0504	0.0031	0.0004	0.0526	0.0037	0.0004
	(0.82)	(0.50)	(1.13)	(0.86)	(0.60)	(1.22)
XLIST	−0.4593**	−0.0452**	−0.0006	−0.4575**	−0.0466**	−0.0006
	(−2.34)	(−2.47)	(−0.57)	(−2.31)	(−2.53)	(−0.55)
DOWJ	0.5086***	0.0173	0.0001	0.5005***	0.0173	0.0001
	(3.17)	(1.25)	(0.07)	(3.09)	(1.24)	(0.19)
XSALE	0.1073	0.0059	0.0003	0.1143	0.0063	0.0003
	(0.83)	(0.56)	(0.50)	(0.88)	(0.59)	(0.53)
ANALYST	0.0154***	0.0020**	0.0001**	0.0147**	0.0019**	0.0001**
	(2.60)	(2.56)	(2.42)	(2.46)	(2.43)	(2.27)
BIG4	0.3582*	0.0656**	0.0028*	0.3529*	0.0661**	0.0029*
	(1.79)	(2.25)	(1.83)	(1.75)	(2.26)	(1.84)
Constant	−10.4569***	−0.8601***	−0.0251***	−10.2034***	−0.8367***	−0.0242***
	(−6.20)	(−5.04)	(−2.80)	(−5.98)	(−4.84)	(−2.69)
Industry Indicators	yes	yes	yes	yes	yes	yes
Adjusted/Pseudo R2	0.153	0.106	0.066	0.152	0.104	0.065

This table reports regressions of *D_QFII* (existence of QFIIs), *N_QFII* (log of one plus the number of QFIIs) and *P_QFII* (investment scale of QFIIs) on all independent variables. We estimate the regression using a logistic specification in Column 1 and OLS in Columns 2 and 3. Z-statistics (reported in parentheses in Column 1) and t-statistics (reported in parentheses in Columns 2 and 3) are corrected for heteroskedasticity and based on error terms clustered by firm. For all variables, we use observations for a given firm over the entire sample period. $N = 5518$. *INCENTIVE* = 1 if the largest shareholder owns more than 50% for the "ownership concentration" columns, or if the firm is ultimately controlled by the government for the "state ownership" columns, and 0 otherwise. The definitions of other variables are presented in Appendix B.

*** $p < 0.01$.
** $p < 0.05$.
* $p < 0.1$.

t-statistic = −3.13 for *N_QFII*; and −0.0033, *t*-statistic = −2.77 for *P_QFII*). When we define *INCENTIVE* based on state ownership, the coefficients on *POST*INCENTIVE* are negative and significant for *N_QFII* (−0.0280, *t*-statistics = −2.31) and *P_QFII* (−0.0015, *t*-statistics = −2.36). Thus, Table 6 suggests that QFIIs are more likely to reduce their investment in Chinese firms that have low incentives to credibly implement IFRS. Importantly, Table 6 finds that the decline in QFII investment is related to IFRS adoption, as opposed to merely a time-trend in foreign investment during the period of our analysis.

Table 7
IFRS adoption and fair value accounting.

	D_QFII	*N_QFII*	*P_QFII*
Panel A: IFRS adoption, financial assets and QFII investment			
POST	−0.6488***	−0.0708***	−0.0036***
	(−4.23)	(−5.69)	(−5.38)
SMA_FA	−0.1524	−0.0164	−0.0011
	(−0.89)	(−0.99)	(−1.42)
POST SMALL_FA*	−0.1455	0.0030	0.0009
	(−0.56)	(0.14)	(0.87)
LARGE_FA	−0.0437	0.0183	0.0013
	(−0.25)	(0.93)	(1.04)
POST LARGE_FA*	−0.3476	−0.0444**	−0.0024**
	(−1.41)	(−2.04)	(−1.96)
SIZE	0.4726***	0.0555***	0.0018***
	(5.58)	(6.46)	(4.03)
LEV	−0.5509	−0.0540*	−0.0018
	(−1.53)	(−1.94)	(−1.25)
TOP1	−0.7069*	−0.0521	−0.0013
	(−1.92)	(−1.51)	(−0.79)
ROE	0.6909*	0.0172	0.0007
	(1.95)	(1.57)	(0.99)
DIV	13.7228***	1.9668***	0.0798***
	(3.27)	(3.86)	(3.25)
STDRET	−2.5706**	−0.2253***	−0.0148***
	(−2.57)	(−2.91)	(−3.76)
BTM	−2.0439***	−0.2148***	−0.0099***
	(−7.76)	(−9.61)	(−8.84)
RETURN	0.0560	0.0039	0.0005
	(0.92)	(0.64)	(1.25)
XLIST	−0.4178**	−0.0445**	−0.0006
	(−2.10)	(−2.38)	(−0.54)
DOWJ	0.5178***	0.0186	0.0002
	(3.20)	(1.33)	(0.27)
XSALE	0.1369	0.0072	0.0003
	(1.05)	(0.68)	(0.58)
ANALYST	0.0135**	0.0018**	0.0001**
	(2.27)	(2.27)	(2.16)
BIG4	0.3685*	0.0674**	0.0029*
	(1.84)	(2.30)	(1.88)
Constant	−10.4812***	−0.8404***	−0.0230***
	(−6.19)	(−4.96)	(−2.60)
Industry Indicators	yes	yes	yes
Adjusted/Pseudo R2	0.153	0.104	0.065
Panel B: IFRS adoption, fair value accounting and QFII investment			
POST	−0.6567***	−0.0744***	−0.0040***
	(−4.69)	(−6.33)	(−6.22)
FAIR_LOSS	−0.0243	−0.0149	−0.0015*
	(−0.13)	(−0.75)	(−1.74)
*POST*FAIR_LOSS*	−0.1504	0.0113	0.0013
	(−0.56)	(0.46)	(1.26)
FAIR_GAIN	−0.1989	−0.0036	−0.0001
	(−1.00)	(−0.16)	(−0.10)
*POST*FAIR_GAIN*	−0.4567	−0.0471*	−0.0019*
	(−1.55)	(−1.78)	(−1.73)
SIZE	0.4876***	0.0568***	0.0019***
	(5.73)	(6.59)	(4.31)
LEV	−0.5592	−0.0599**	−0.0021
	(−1.56)	(−2.15)	(−1.50)

Table 7 (*continued*)

	D_QFII	*N_QFII*	*P_QFII*
TOP1	−0.7524**	−0.0557	−0.0016
	(−2.05)	(−1.61)	(−0.92)
ROE	0.7108**	0.0168	0.0007
	(1.97)	(1.53)	(0.93)
DIV	13.5471***	1.9774***	0.0813***
	(3.19)	(3.87)	(3.30)
STDRET	−2.5950***	−0.2268***	−0.0149***
	(−2.58)	(−2.92)	(−3.78)
BTM	−2.0638***	−0.2161***	−0.0099***
	(−7.80)	(−9.69)	(−8.88)
RETURN	0.0620	0.0046	0.0005
	(1.01)	(0.75)	(1.36)
XLIST	−0.3844**	−0.0418**	−0.0004
	(−1.97)	(−2.27)	(−0.38)
DOWJ	0.4904***	0.0179	0.0001
	(3.05)	(1.28)	(0.20)
XSALE	0.1377	0.0083	0.0004
	(1.06)	(0.77)	(0.72)
ANALYST	0.0144**	0.0017**	0.0001**
	(2.38)	(2.22)	(2.04)
BIG4	0.3665*	0.0681**	0.0030*
	(1.82)	(2.32)	(1.89)
Constant	−10.7150***	−0.8572***	−0.0241***
	(−6.31)	(−5.07)	(−2.79)
Industry Indicators	yes	yes	yes
Pesudo/Adj-R^2	0.157	0.105	0.066

This table reports regressions of *D_QFII* (existence of QFIIs), *N_QFII* (log of one plus the number of QFIIs) and *P_QFII* (investment scale of QFIIs) on all independent variables. We estimate the regression using a logistic specification in Column 1 and OLS in Columns 2 and 3. Z-statistics (reported in parentheses in Column 1) and t-statistics (reported in parentheses in Columns 2 and 3) are corrected for heteroskedasticity and based on error terms clustered by firm. For all variables, we use observations for a given firm over the entire sample period. N = 5518. In Panel A, *SMALL_FA* = 1 if the firm's financial assets (trading securities and available-for-sale securities) scaled by total assets are among the bottom 50% percentile of sample firms whose average of financial assets at the end of year 2007 and 2008 are non-zero; *LARGE_FA* = 1 if the firms' financial assets (trading securities and available-for-sale securities) scaled by total assets are among the top 50% percentile of sample firms whose average of financial assets at the end of year 2007 and 2008 are non-zero. In Panel B, *FAIR_GAIN* = 1 if a firm has fair value gains in its income statement during 2007 or 2008; *FAIR_LOSS* = 1 if a firm has fair value losses in its income statement during 2007 or 2008. Other variable definitions are presented in Appendix B.

*** $p < 0.01$.

** $p < 0.05$.

* $p < 0.1$.

6.2. Firms prone to fair value manipulation

We test Hypothesis 2b by estimating the following regression:

$$\begin{aligned} D\_QFII_{it}, N\_QFII_{it}, P\_QFII_{it} = {} & \beta_0 + \beta_1 POST_{it} + \beta_2 SMALL\_FA_{it} + \beta_3 POST_{it} * SMALL\_FA_{it} \\ & + \beta_4 LARGE\_FA_{it} + \beta_5 POST_{it} * LARGE\_FA_{it} + \beta_6 SIZE_{it} + \beta_7 LEV_{it} \\ & + \beta_8 TOP1_{it} + \beta_9 ROE_{it} + \beta_{10} DIV_{it} + \beta_{11} STDRET_{it} + \beta_{12} BTM_{it} \\ & + \beta_{13} RETURN_{it} + \beta_{14} XLIST_{it} + \beta_{15} DOWJ_{it} + \beta_{16} XSALE_{it} \\ & + \beta_{17} ANALYST_{it} + \beta_{18} BIG4_{it} + Industry\ dummy + \varepsilon_{it}. \end{aligned} \tag{3}$$

We assume that firms with a high level of financial assets, which include trading securities and available-for-sale securities, have a greater ability to manipulate earnings through fair value accounting after IFRS adoption. Thus, we create two indicator variables to capture the size of financial assets: *SMALL_FA* equals 1 if the

ratio of financial assets scaled by total assets is below the sample median of firms with non-zero financial assets and 0 otherwise; *LARGE_FA* equals 1 if the ratio of financial assets scaled by total assets is above the sample median of firms with non-zero financial assets and 0 otherwise. We interact *SMALL_FA* and *LARGE_FA* with *POST* and expect the coefficient on *POST*LARGE_FA* to be negative if our conjecture is correct.

Panel A, Table 7 shows that the coefficients on *POST*SMALL_FA* are always insignificant, and that the coefficients on *POST*LARGE_FA* are negative and significant for *N_QFII* (−0.0444, *t*-statistics = −2.04) and *P_QFII* (−0.0024, *t*-statistics = −1.96), indicating that QFIIs reduce their investment in firms with large financial assets both in terms of the number of firms and percentage ownership. Overall, these findings are consistent with our expectations.

We further explore this issue by examining whether the decline in investment is larger for firms that report gains from fair value adjustments. This analysis is motivated by the observation that the incentive to manage earnings upward is likely stronger than the incentive to manage downward. Thus, firms reporting fair value gains are more likely to be manipulating earnings than firms reporting fair value losses. If QFIIs understand this, we expect the decline in foreign institutional investment to be more pronounced in firms reporting gains under the fair value provisions of IFRS than firms reporting losses. We test this conjecture by estimating the following regression:

$$\begin{aligned} D\_QFII_{it}, N\_QFII_{it}, P\_QFII_{it} = {} & \beta_0 + \beta_1 POST_{it} + \beta_2 FAIR\_LOSS_{it} + \beta_3 POST_{it} * FAIR\_LOSS_{it} \\ & + \beta_4 FAIR\_GAIN_{it} + \beta_5 POST_{it} * FAIR\_GAIN_{it} + \beta_6 SIZE_{it} + \beta_7 LEV_{it} \\ & + \beta_8 TOP1_{it} + \beta_9 ROE_{it} + \beta_{10} DIV_{it} + \beta_{11} STDRET_{it} + \beta_{12} BTM_{it} \\ & + \beta_{13} RETURN_{it} + \beta_{14} XLIST_{it} + \beta_{15} DOWJ_{it} + \beta_{16} XSALE_{it} \\ & + \beta_{17} ANALYST_{it} + \beta_{18} BIG4_{it} + Industry\ dummy + \varepsilon_{it}. \end{aligned} \tag{4}$$

We define two indicator variables to capture expected fair value manipulation. *FAIR_LOSS* equals 1 if the fair value adjustment results in a loss in the income statement and 0 otherwise. *FAIR_GAIN* equals 1 if the fair value adjustment results in a gain in the income statement and 0 otherwise. We interact *FAIR_LOSS* and *FAIR_GAIN* with *POST* and expect the coefficient on *POST*FAIR_GAIN* to be negative.

Panel B, Table 7 shows that while the coefficients on *POST*FAIR_LOSS* are all insignificant, the coefficients on *POST*FAIR_GAIN* are negative and significant for *N_QFII* (−0.0471, *t*-statistics = −1.78) and *P_QFII* (−0.0019, *t*-statistics = −1.73). This further supports our conjecture that the decline in investment is more pronounced in firms with greater opportunities to manipulate earnings through fair value accounting. It also provides cross-sectional evidence that the decline in QFIIs' investment is not merely due to a time trend as fair value accounting is associated with IFRS adoption.

6.3. Further corroborative analyses

6.3.1. Usefulness of accounting earnings

We test our conjecture that IFRS is likely to impair financial reporting quality in China by comparing the earnings-return association under IFRS versus CAS. This test exploits the fact that the initial 2007 financial reports under IFRS must include restated 2006 financials under IFRS. We estimate the following equation:

$$\begin{aligned} CAR_{it} = {} & \beta_0 + \beta_1 X_{it}/P_{it} + \beta_2 (X_{it} - X_{it-1})/P_{it-1} + \beta_3 IFRS_{it} \\ & + \beta_4 IFRS_{it} * X_{it}/P_{it-1} + \beta_5 IFRS_{it} * (X_{it} - X_{it-1})/P_{it-1} + Industry\ Dummy + e_{it}, \end{aligned} \tag{5}$$

where *CAR* is the fifteen-month (from the first month of the fiscal year to the third month after the end of the fiscal year) cumulative abnormal monthly return for year 2006 using the market model; X_{it} is earnings for 2006 under CAS or earnings for year 2006 restated under IFRS; X_{it-1} is earnings for 2005 computed under CAS; *IFRS* equals 1 for 2006 earnings restated under IFRS and 0 otherwise.[11] If IFRS impairs financial reporting

[11] X_{it-1} is 2005CAS and $(X_{it} - X_{it-1})$ is [2006CAS – 2005CAS]. $IFRS^* X_{it}$ indicates 2006IFRS and $IFRS^*(X_{it} - X_{it-1})$ indicates [2006IFRS – 2005CAS] where 2006IFRS is 2006CAS restated based on IFRS.

quality, we expect the association between CAR_{it} and unexpected earnings $(X_{it} - X_{it-1})/P_{it-1}$ to be lower for IFRS restated earnings when compared to CAS earnings, consistent with a negative coefficient on $IFRS_{it}{}^{*}(X_{it} - X_{it-1})/P_{it-1}$ ($\beta_5 < 0$).

Table 8 reports that while the coefficients on X_{it}/P_{it-1} and $(X_{it} - X_{it-1})/P_{it-1}$ are significantly positive, the coefficient on $IFRS_{it}{}^{*}X_{it}/P_{it-1}$ is insignificant and the coefficient on $IFRS_{it}{}^{*}(X_{it} - X_{it-1})/P_{it-1}$ is significantly negative (−0.1213, t-statistic = −2.02). This suggests that the association between stock returns and earnings is lower under IFRS than under CAS. A limitation of this analysis, however, is that IFRS restated earnings for 2006 are announced in 2007, while stock returns are measured in 2006. Thus, we also perform a test that compares the earnings-return association before and after IFRS adoption using earnings reported in the income statement (i.e., without regards to the restatement of IFRS earnings in 2006). This analysis is based on estimating the following equation:

$$CAR_{it} = \beta_0 + \beta_1 X_{it}/P_{it} + \beta_2 (X_{it} - X_{it-1})/P_{it-1} + \beta_3 POST_{it} + \beta_4 POST_{it} * X_{it}/P_{it-1} + \beta_5 POST_{it} * (X_{it} - X_{it-1})/P_{it-1} + Industry\ Dummy + \varepsilon_{it}, \quad (6)$$

Table 8
IFRS adoption and the usefulness of accounting earnings.

	CAR_{2006}	$CAR_{2005,\ 2006}$ versus $CAR_{2007,\ 2008}$
X_t/P_{t-1}	0.4696***	0.2084*
	(2.76)	(1.71)
$(X_t - X_{t-1})/P_{t-1}$	0.4288***	0.5351***
	(4.31)	(5.28)
$IFRS_t$	−0.0321***	
	(−3.90)	
$IFRS_t{}^{*}X_t/P_{t-1}$	−0.0092	
	(−0.07)	
$IFRS_t{}^{*}(X_t - X_{t-1})/P_{t-1}$	−0.1213**	
	(−2.02)	
$POST_t$		0.2354***
		(16.30)
$POST_t{}^{*}X_t/P_{t-1}$		0.3605
		(1.57)
$POST_t{}^{*}(X_t - X_{t-1})/P_{t-1}$		−1.6607***
		(−5.31)
Constant	−0.0620	−0.0188
	(−1.04)	(−0.73)
Industry indicators	yes	yes
Observations	2,445	5,098
Adjusted R-squared	0.140	0.107

We estimate the regression using OLS. t-statistics (reported in parentheses) are corrected for heteroskedasticity and are based on error terms clustered by firm. CAR is the cumulative abnormal return of firm i in year t over the 15 months extending from the first month of a fiscal year to 3 months after the fiscal-year end, calculated using residuals from a monthly market model $R_{jt} = b_{0t} + b_{1t}$-$R_{mt} + e$, where R_{mt} is the value-weighted market return for month t. This model is estimated over the 36 months prior to the beginning of the fiscal year (Brown et al., 1987; Easton and Harris, 1991). X_t is the earnings per share, P_{t-1} is the beginning-of-period share price. In the first column, the dependent variable CAR is the fifteen-month cumulative abnormal monthly return for year 2006, $IFRS_t$ equals 1 for year 2006 earnings restated under $IFRS$ and 0 otherwise. In the second column, CAR_t is the annual fifteen-month cumulative abnormal monthly return of firm i in year t, and $POST_t$ equals 1 for years 2007 and 2008 and 0 for years 2005 and 2006.

*** $p < 0.01$.
** $p < 0.05$.
* $p < 0.1$.

where all variables are as defined earlier, and *POST* equals 1 for years 2007 and 2008, and zero for years 2005 and 2006. If IFRS impairs financial reporting quality subsequent to its adoption in 2007, we expect the association between CAR_{it} and unexpected earnings $(X_{it} - X_{it-1})/P_{it-1}$ to be lower during the two years after IFRS adoption, consistent with a negative coefficient on $POST_{it}{}^{*}(X_{it} - X_{it-1})/P_{it-1}$ ($\beta_5 < 0$).

Table 8 reports that while the coefficients on X_{it}/P_{it-1} and $(X_{it} - X_{it-1})/P_{it-1}$ are significantly positive, the coefficient on $POST_{it}{}^{*}X_{it}/P_{it-1}$ is insignificant and the coefficient on $POST_{it}{}^{*}(X_{it} - X_{it-1})/P_{it-1}$ is significantly

Table 9
IFRS adoption and foreign institutional investors' ability to identify good investments.

	Dependent variable: firm's future one year market-adjusted stock return		
POST	0.1204***	0.1140***	0.0971***
	(3.42)	(3.24)	(2.79)
D_QFII	0.2235***		
	(3.31)		
*D_QFII*POST*	−0.3201***		
	(−4.58)		
N_QFII		0.1938***	
		(2.90)	
*N_QFII*POST*		−0.2926***	
		(−4.33)	
P_QFII			2.6156**
			(2.00)
*P_QFII*POST*			−4.0576***
			(−3.07)
SIZE	−0.0209	−0.0198	−0.0165
	(−1.09)	(−1.04)	(−0.87)
LEV	0.2914***	0.2897***	0.2845***
	(3.83)	(3.81)	(3.74)
TOP1	−0.2023**	−0.2029**	−0.2063***
	(−2.54)	(−2.55)	(−2.59)
ROE	0.1998***	0.2000***	0.2006***
	(3.32)	(3.32)	(3.33)
DIV	0.8429	0.8410	1.1359
	(0.70)	(0.70)	(0.96)
STDRET	0.9779***	0.9688***	0.9811***
	(4.08)	(4.04)	(4.08)
BTM	0.3709***	0.3659***	0.3556***
	(6.36)	(6.28)	(6.13)
RETURN	−0.1548***	−0.1538***	−0.1542***
	(−9.93)	(−9.83)	(−9.84)
XLIST	−0.0480	−0.0478	−0.0527
	(−1.04)	(−1.04)	(−1.14)
DOWJ	−0.0049	−0.0046	−0.0044
	(−0.15)	(−0.14)	(−0.13)
XSALE	0.0107	0.0103	0.0099
	(0.40)	(0.39)	(0.37)
ANALYST	−0.0032**	−0.0032**	−0.0034***
	(−2.41)	(−2.44)	(−2.59)
BIG4	−0.1392***	−0.1399***	−0.1388***
	(−3.03)	(−3.04)	(−2.98)
Constant	0.1214	0.1103	0.0560
	(0.33)	(0.30)	(0.15)
Industry Indicators	yes	yes	yes
Adj-R^2	0.049	0.049	0.047

Variable definitions are presented in Appendix B. We estimate the regression using OLS. t-statistics (reported in parentheses) are corrected for heteroskedasticity and are based on error terms clustered by firm. For all variables we use observations for a given firm over the entire sample period. Ten observations are dropped due to missing data on future one year market-adjusted returns. $N = 5508$. $^{*}p < 0.1$.
*** $p < 0.01$.
** $p < 0.05$.

negative (−1.6607, *t*-statistic = −5.31). This again suggests that the association between stock returns and earnings is lower under IFRS than under CAS.

In conclusion, results in Table 8 are consistent with deteriorating earnings quality after IFRS adoption, as reflected in a decline in the association between abnormal earnings and stock returns.

6.3.2. Foreign investors' ability to identify profitable investments

If IFRS provides more opportunities for earnings management (He, Wong and Young, 2012), it will diminish the reliability of accounting information. Poor information quality will hamper the decision usefulness of financial reporting, causing investment efficiency to decline for QFIIs. This can be reflected in an increase in difficulty for QFIIs to identify profitable investments after IFRS adoption. We test this possibility by examining whether QFIIs' ability to identify profitable investments declines after IFRS adoption using the following model:

$$\begin{aligned} ADJRET_{it+1} = {} & \beta_0 + \beta_1 POST_{it} + \beta_2 D\_QFII_{it}(orN\_QFII_{it}, P\_QFII_{it}) + \beta_3 POST_{it} \\ & * D\_QFII_{it}(orN\_QFII_{it}, P\_QFII_{it}) + \beta_4 LEV_{it} + \beta_5 TOP1_{it} + \beta_6 ROE_{it} + \beta_7 DIV_{it} \\ & + \beta_8 STDRET_{it} + \beta_9 BTM_{it} + \beta_{10} RETURN_{it} + \beta_{11} XLIST_{it} + \beta_{12} DOWJ_{it} + \beta_{13} XSALE_{it} \\ & + \beta_{14} ANALYST_{it} + \beta_{15} BIG4_{it} + Industry\ dummy + \varepsilon_{it}. \end{aligned} \tag{7}$$

Our dependent variable is the one-year ahead market-adjusted stock return, an *ex post* measure of profitable investment. If it becomes more difficult for QFIIs to identify profitable investments after IFRS adoption, we expect the coefficients on $POST^*D\_QFII$, $POST^*N\_QFII$ and $POST^*P\_QFII$ to be negative. Table 9 reports that the coefficients on $POST^*D\_QFII$ (−0.3201, *t*-statistics = −4.58), $POST^*N\_QFII$ (−0.2926, *t*-statistics = −4.33) and $POST^*P\_QFII$ (−4.0576, *t*-statistics = −3.07) are all significantly negative. Thus, as expected, China's IFRS adoption appears to compromise QFII's stock picking ability.

7. Effects of foreign investors' home country institutions and IFRS experience

To investigate whether foreign institutional investors' home country institutions affect the association between IFRS adoption and QFII investment, we partition our sample based on whether a QFII is from a country where the legal and financial reporting institutions are market-based or relationship-based, using: legal origins (code law versus common law); anti-director rights (based on the median level of anti-director rights from La Porta et al., 1997); government versus private standard setters (from Ali and Hwang, 2000), accounting clusters (from Mueller et al., 1994; Hung, 2001); and book-tax conformity (from Cooper and Lybrand, 1993; Hung, 2001). Appendix C reports the classifications for each QFII country. Information on QFIIs' home country IFRS adoption experience is from Armstrong et al. (2010) and Daske et al. (2008).

Panel A, Table 10 presents results incorporating QFIIs' home country institutions using *D_QFII* as our dependent variable in regression Eq. (1). For brevity, we only report the coefficients on *POST*. After IFRS adoption, QFII investment significantly declines for QFIIs from both market-based and relationship-based countries. The coefficients on *POST* are negative and significant based on all five measures of market-based or relationship-based orientation. However, the decline is larger for QFIIs from relationship-based countries than for QFIIs from market-based countries in four of the five measures. The difference in the coefficients on *POST* between these two groups is 0.3229 (chi-squared value = 3.84) based on legal origin; 0.3888 (chi-squared value = 5.95) based on source of standards; 0.3978 (chi-squared value = 6.30) based on accounting cluster; or 0.4047 (chi-squared value = 6.56) based on financial tax alignment. This same pattern exists and tends to be statistically stronger when we use *N_QFII* (Panel B) or *P_QFII* (Panel C) as the dependent variable. Specifically, in Panels B and C the decline is larger in magnitude for QFIIs from relationship-based countries than for QFIIs from market-based countries for all five measures (at $p \leq 0.05$). Thus, results in Table 10 support our second hypothesis that the decline in QFII investment after IFRS adoption is stronger among QFIIs from countries with relationship-based institutions.

QFIIs' expectations regarding IFRS are also likely to be a function of whether their home countries have adopted IFRS. IFRS adoption is more likely to have positive consequences in countries with market-based

Table 10
IFRS adoption and foreign institutional investors' home country institutions.

Specific institution of QFII's home country	Market-based institutions		Relationship-based institutions		Diff. in coeffs. on *POST*
	POST	*Pseudo* R^2	*POST*	*Pseudo* R^2	
Panel A: IFRS adoption and QFII indicator (D_QFII) partitioned on QFIIs' home country institutions					
Legal origin	−0.5874***	0.144	−0.9103***	0.144	0.3229
	(−3.57)		(−5.85)		(3.84)**
Anti-director rights	−0.6769***	0.142	−0.7901***	0.144	0.1132
	(−4.08)		(−5.12)		(0.47)
Source of standards	−0.5929***	0.150	−0.9817***	0.137	0.3888
	(−3.72)		(−5.94)		(5.95)**
Accounting cluster	−0.5892***	0.150	−0.9870***	0.137	0.3978
	(−3.72)		(−5.93)		(6.30)**
Book-tax alignment	−0.5862***	0.151	−0.9909***	0.136	0.4047
	(−3.71)		(−5.94)		(6.56)**

Specific institution of QFII's home country	Market-based institutions		Relationship-based institutions		Diff. in coeffs. on *POST*
	POST	*Adj-*R^2	*POST*	*Adj-*R^2	
Panel B: IFRS adoption and number of QFIIs (N_QFII) partitioned on QFIIs' home country institutions					
Legal origin	−0.0029***	0.074	−0.0050***	0.080	0.0021
	(−6.83)		(−7.89)		(26.96)***
Anti-director rights	−0.0031***	0.073	−0.0046***	0.082	0.0015
	(−6.99)		(−7.93)		(10.88)***
Source of standards	−0.0028***	0.070	−0.0055***	0.085	0.0027
	(−6.96)		(−7.98)		(42.50)***
Accounting cluster	−0.0029***	0.071	−0.0053***	0.083	0.0024
	(−7.13)		(−7.61)		(35.34)***
Book-tax alignment	−0.0029***	0.071	−0.0052***	0.082	0.0023
	(−7.19)		(−7.37)		(31.79)***

Specific institution of QFII's home country	Market-based institutions		Relationship-based institutions		Diff. in coeffs. on *POST*
	POST	*Adj-*R^2	*POST*	*Adj-*R^2	
Panel C: IFRS adoption and percentage ownership of QFII (*P_QFII*) partitioned on QFIIs' home country institutions					
Legal origin	−0.0013***	0.039	−0.0027***	0.055	0.0014
	(−4.35)		(−7.12)		(19.66)***
Anti-director rights	−0.0013***	0.037	−0.0027***	0.056	0.0014
	(−4.52)		(−6.99)		(20.75)***
Source of standards	−0.0016***	0.038	−0.0024***	0.057	0.0008
	(−4.81)		(−6.84)		(4.99)**
Accounting cluster	−0.0016***	0.038	−0.0024***	0.056	0.0008
	(−4.79)		(−6.86)		(5.11)**
Book-tax alignment	−0.0016***	0.037	−0.0024***	0.057	0.0008
	(−4.78)		(−6.88)		(5.23)**

Variable definitions are presented in Appendix B. This table reports regressions of the QFII indicator variable (*D_QFII*), log of one plus the number of QFIIs (*N_QFII*), and percentage investment of QFIIs(*P_QFII*) after partitioning on QFIIs' country level institutions. We estimate the regression using a logistic specification in Panel A and OLS in Panels B and C. Z-statistics (reported in parentheses in Panel A except for the last volume) and t-statistics (reported in parentheses in Panels B and C except for the last column) are corrected for heteroskedasticity and are based on error terms clustered by firm. For all variables we use observations for a given firm over the entire sample period. For the last column, Chi-squared values are reported in parentheses of Panel A and F-values are reported in parentheses of Panels B and C. $N = 5518$. $^{*}p < 0.1$.
*** $p < 0.01$.
** $p < 0.05$.

institutions, but not in countries with relationship-based institutions. If QFIIs are from countries with primarily market-based institutions, they are more likely to view IFRS adoption favorably. In contrast, if the QFIIs are from countries with primarily relationship-based institutions, they are less likely to view IFRS adoption

Table 11
IFRS adoption and foreign institutional investors' home country experience with IFRS.

Specific institution of QFII's home country	Market-based institutions		Diff. in coeffs. on *POST*	Relationship-based institutions		Diff. in coeffs. on *POST*
	IFRS experience	*No-IFRS experience*		*IFRS experience*	*No-IFRS experience*	
Panel A: IFRS adoption and QFII indicator (D_QFII) partitioned on QFIIs' home country institutions and IFRS experience						
Legal origin	0.0528	−0.9080***	0.9608	−0.9273***	−1.0411**	0.1138
	(0.23)	(−4.62)	(17.83)***	(−5.70)	(−2.42)	(0.49)
Anti-director rights	−0.1679	−0.9080***	0.7401	−0.7873***	−1.0411**	0.2538
	(−0.74)	(−4.62)	(10.51)***	(−4.86)	(−2.42)	(2.46)
Source of standards	−0.2006	−0.9080***	0.7074	−0.9945***	−1.0411**	0.0466
	(−1.00)	(−4.62)	(12.50)***	(−5.67)	(−2.42)	(0.07)
Accounting cluster	−0.1857	−0.9080***	0.7223	−1.0007***	−1.0411**	0.0404
	(−0.94)	(−4.62)	(13.25)***	(−5.67)	(−2.42)	(0.05)
Book-tax alignment	−0.1693	−0.9080***	0.7387	−1.0049***	−1.0411**	0.0362
	(−0.86)	(−4.62)	(14.04)***	(−5.67)	(−2.42)	(0.04)
Panel B: IFRS adoption and number of QFIIs (N_QFII) partitioned on QFIIs' home country institutions and IFRS experience						
Legal origin	−0.0016***	−0.0039***	0.0023	−0.0055***	−0.0033***	−0.0022
	(−2.86)	(−6.91)	(15.93)***	(−7.34)	(−2.90)	(8.18)***
Anti-director rights	−0.0022***	−0.0039***	0.0017	−0.0050***	−0.0033***	−0.0017
	(−3.17)	(−6.91)	(6.13)**	(−7.46)	(−2.90)	(5.86)**
Source of standards	−0.0021***	−0.0039***	0.0018	−0.0061***	−0.0033***	−0.0028
	(−3.69)	(−6.91)	(10.02)***	(−7.38)	(−2.90)	(11.26)***
Accounting cluster	−0.0023***	−0.0039***	0.0016	−0.0059***	−0.0033***	−0.0026
	(−4.05)	(−6.91)	(8.45)***	(−6.92)	(−2.90)	(8.77)***
Book-tax alignment	−0.0023***	−0.0039***	0.0016	−0.0057***	−0.0033***	−0.0024
	(−4.17)	(−6.91)	(8.03)***	(−6.60)	(−2.90)	(7.30)***
Panel C: IFRS adoption and percentage ownership of QFII (P_QFII) partitioned on QFIIs' home country institutions and IFRS experience						
Legal origin	−0.0001	−0.0012***	0.0011	−0.0022***	−0.0004***	−0.0018
	(−0.74)	(−4.98)	(53.17)***	(−6.53)	(−2.99)	(27.59)***
Anti-director rights	−0.0001	−0.0012***	0.0011	−0.0022***	−0.0004***	−0.0018
	(−0.86)	(−4.98)	(65.05)***	(−6.39)	(−2.99)	(26.38)***
Source of standards	−0.0004**	−0.0012***	0.0008	−0.0019***	−0.0004***	−0.0015
	(−2.14)	(−4.98)	(17.37)***	(−6.13)	(−2.99)	(22.52)***
Accounting cluster	−0.0004**	−0.0012***	0.0008	−0.0019***	−0.0004***	−0.0015
	(−2.11)	(−4.98)	(17.53)***	(−6.15)	(−2.99)	(22.75)***
Book-tax alignment	−0.0004**	−0.0012***	0.0008	−0.0019***	−0.0004***	−0.0015
	(−2.08)	(−4.98)	(17.72)***	(−6.17)	(−2.99)	(22.89)***

Variable definitions are presented in Appendix B. This table reports regressions of the QFII indicator variable (*D_QFII*), log of one plus the number of QFIIs (*N_QFII*), and percentage investment of QFIIs (*P_QFII*) after partitioning on QFIIs' country level institutions and IFRS experience. We estimate the regression using a logistic specification in Panel A and OLS in Panels B and C. Z-statistics (reported in parentheses in Panel A except for the last column) and t-statistics (reported in parentheses in Panels B and C except for the last volume) are corrected for heteroskedasticity and are based on error terms clustered by firm. For all variables, we use observation for a given firm over the entire sample period. For the column "Diff. in coeffs. on *POST*", Chi-squared values are reported in parentheses in Panel A and F-values are reported in parentheses of Panel B and Panel C. $N = 5518$. *p < 0.1. We note that in some columns, the coefficients are identical across different partitions. This is because the partitioned countries are identical across some of the partitioning variables.
*** $p < 0.01$.
** $p < 0.05$.

favorably. Thus, we expect the decline in investment to be relatively small for QFIIs from countries with market-based institutions that have adopted IFRS, as compared with QFIIs from countries with relationship-based institutions that have adopted IFRS.

Table 11 incorporates a partitioning variable that captures whether a QFII's home country has adopted IFRS. Again, we only report coefficients on *POST*. Panel A uses *D_QFII* as the dependent variable and finds that among QFIIs with market-based home countries, QFII investment declines less after IFRS adoption for those with IFRS experience than for those without IFRS experience.[12] The difference in the coefficients on *POST* is significantly positive (0.9608, chi-squared value = 17.83 based on legal origin; 0.7401, chi-squared value = 10.51 based on anti-director rights; 0.7074, chi-squared value = 12.50 based on the source of standards; 0.7223, chi-squared value = 13.25 based on accounting cluster; and 0.7387, chi-squared value = 14.04 based on book-tax alignment). This suggests that home country IFRS experience attenuates the decline in investment for QFIIs from market-based countries. However, Panel A, Table 11 also shows that, among QFIIs with relationship-based home countries, there is no significant difference in the decline in QFII investment for QFIIs with and without IFRS experience.

In Panel B, we use the number of QFIIs, *N_QFII*, as the dependent variable. For QFIIs from market-based countries, we find results similar to those in Panel A. For QFIIs from relationship-based countries, we find that QFIIs investment declines more after IFRS adoption for those from countries with IFRS experience than for those from countries without IFRS experience. The difference in the coefficients on *POST* between QFIIs from countries with and without IFRS experience is significantly negative (−0.0022, *F*-value = 8.18 based on legal origin; −0.0017, *F*-value = 5.86 based on anti-director rights; −0.0028, *F*-value = 11.26 based on source of standards; −0.0026, *F*-value = 8.77 based on accounting cluster; and −0.0024, *F*-value = 7.30 based on book-tax alignment). This suggests that home country IFRS experience exacerbates the decline in investment for QFIIs from relationship-based countries.

Panel C uses the percentage ownership as the dependent variable, *P_QFII*, with qualitatively similar results to those in Panel B. Therefore, results in Table 11 support our conjecture that the decline in foreign institutional investment is smaller for QFIIs from countries with market-based institutions that have adopted IFRS; and greater for QFIIs from countries with relationship-based institutions that have adopted IFRS.

8. Robustness tests

8.1. Investigating whether QFIIs spread their investments more thinly after IFRS adoption

Our data on QFII investors is necessarily restricted to those among the top 10 shareholders of tradable shares, since this is the only information available on QFII ownership.[13] If IFRS actually improves reporting quality in China, QFIIs may spread their investment across more firms, with relatively less invested in each firm. If so, they may end up not being the top 10 shareholders for a specific stock even though they have actually maintained or increased their overall investment in Chinese firms. We emphasize, however, that this seems unlikely given that our analysis in Tables 8 and 9 shows that accounting quality appears to decline after IFRS adoption. Specifically, we find that: (1) the association between earnings and returns is larger under CAS than under IFRS; (2) the association between earnings and returns declines after IFRS adoption; and (3) QFII's investment returns decline following IFRS adoption. These findings are consistent with He et al. (2012), who also find that accounting quality declines after China's IFRS adoption.

Nevertheless, we conduct two additional analyses to determine whether restricting the data on QFIIs to those among the top 10 largest shareholders is likely to bias our results. Our first test is based on the notion that if this restriction results in a bias, the bias will likely become larger as the restriction becomes narrower. For example, if a bias exists, we would expect it to be greater if our data are restricted to QFII investors

[12] We note that the coefficients are identical across some partitions. For example, the coefficients on legal origin and anti-director rights for countries without IFRS experience are identical in Panel A. This is because the legal origin partition and the anti-director rights partition for countries without IFRS experience capture the identical set of countries.

[13] Similar reporting threshold issues exist in the US setting. SEC 13F filing is required only for institutional investors with total investment discretion above USD 100 million and for specific investment above USD 200,000.

among the top 5 shareholders. Thus, we repeat our tests in Panel A, Table 5 after limiting ownership data to the top 9, top 8, top 7, top6 and top 5 shareholders. We continue to find negatively significant coefficients on *POST* ($p < 0.01$) with all successive restrictions. More importantly, we find no evidence that the magnitude of the negative coefficient on *POST* declines as we move from restricting the analysis to the top 5, top 6, 7, 8, 9 and 10 shareholders, which would be the case if the bias is larger when QFII data is restricted to fewer than the top 10 shareholders. In fact, when our dependent variables are *N_QFII* and *P_QFII*, the negative coefficient on *POST* is significantly larger in magnitude when QFIIs are restricted to the top 8, 9, and 10, when compared to the top 5 shareholders. Thus, the results of this analysis are not consistent with a bias resulting from restricting the QFIIs to those among the top 10 shareholders.

Our second analysis repeats our tests in Panel A, Table 5 using *P_QFII* as the dependent variable, after limiting the sample to firms with the same QFIIs among the top 10 shareholders both before and after adoption. By limiting the analysis to firms where a QFII is a top 10 shareholder both before and after IFRS adoption, we are certain that the QFII's investment in those firms did not decline due to the QFII ceasing to be among the top 10 shareholders. We find that the coefficient on *POST* remains significantly negative ($p < 0.01$). Thus, the results of this analysis are not consistent with a bias resulting from restricting our analysis to QFIIs among the top 10 shareholders.

8.2. Dropping US QFIIs

As the US has the largest number of QFIIs, we repeat our tests in Panel A, Table 5 after dropping US QFIIs. The coefficients on *POST* remain significantly negative ($p < 0.01$), suggesting that our results are not driven by US QFIIs.[14]

8.3. Effects of IPOs and SEOs

Since new equity issues may affect our results for the percentage of QFII ownership (*P_QFII*), we repeat our tests in Panel A, Table 5 after dropping the 463 observations with IPOs or SEOs in 2007 or 2008. The coefficients on *POST* remain significantly negative ($p < 0.01$), suggesting that our results are not driven by of SEOs or IPOs.

8.4. Alternative distribution density functions underlying the regression model

We repeat our tests in Panel A, Table 5 using the raw number of QFIIs instead of the logarithm of one plus the number of QFIIs as a measure of our dependent variable *N_QFII*. The raw number of QFIIs range from 0 to 7. Using a Tobit or a Poisson regression model, we find that the coefficients on *POST* remain significantly negative ($p < 0.01$).

8.5. Other data issues

The number of approved QFIIs increased during our sample period, with 22 QFIIs newly granted quotas in 2007 or 2008. When we repeat our tests in Panel A, Table 5 after excluding these newly approved QFIIs, the coefficients on *POST* remains significantly negative ($p < 0.01$) for all three measures of the dependent variable. Also, our tests are performed using annual data. When we use quarterly data, we obtain qualitatively similar results.

9. Conclusion

We examine the effect of China's mandatory IFRS adoption on foreign institutional investment in China's domestic stock market. We hypothesize that due to China's institutional setting, foreign investment is unlikely

[14] Results here and in subsequent analyses are not tabulated for brevity.

to increase after IFRS adoption. We also hypothesize that the association between IFRS adoption and foreign institutional investment should vary with investors' home country institutions and IFRS adoption experience.

Our analysis supports our predictions by finding: (1) foreign institutional investment declines after China's IFRS adoption; (2) the decline is more pronounced for firms with weak incentives to credibly implement IFRS, and for firms with greater opportunities to manipulate earnings through the fair value provisions of IFRS; (3) the association between earnings and returns declines for QFIIs after IFRS adoption; (4) IFRS adoption compromises QFIIs' ability to identify profitable investments; (5) the decline in investment after IFRS adoption is more pronounced for QFIIs from countries with relationship-based institutions than for QFIIs from countries with market-based institutions; and (6) home country IFRS experience attenuates the decline in investment from QFIIs from market-based countries while it exacerbates the decline in investment from QFIIs from relationship-based countries.

Although we likely cannot fully rule out the 2008 financial crisis effect or some other confounding effects on QFII investment, we conclude that mandatory IFRS adoption does not help China achieve its goal of attracting more foreign investments. Further, the effect of IFRS adoption on foreign institutional investment is a function of investors', and therefore financial information users', home country institutions and IFRS adoption experience.

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Appendix A. QFIIs' profiles

QFII name	Home country	Qualification date	Total quota (100 million USD)	Date of initial quota	Initial quota (100 million USD)
AMP Capital Investors Ltd.	Australia	2006.04.10	3.00	2006.08.01	2.00
Platinum Investment Company Ltd.	Australia	2008.06.02	1.50	2008.09.10	1.50
First State Investment Management (UK) Ltd.	Australia	2008.09.11	0.00	2009.06.16	1.20
Fortis Bank SA/NV	Belgium	2004.09.29	5.00	2004.11.21	1.00
KBC Asset Management N.V.	Belgium	2008.06.02	1.50	2008.07.31	1.50
KBC Financial Products UK Ltd.	Belgium	2006.04.10	1.00	2006.06.09	1.00
Caisse de Depot et Placement du Quebec	Canada	2008.08.22	2.00	2008.11.03	2.00
Power Corporation of Canada	Canada	2004.10.15	0.50	2004.11.21	0.50
The Bank of Nova Scotia	Canada	2006.04.10	1.50	2006.06.09	1.50
BNP Paribas	France	2004.09.29	2.00	2004.10.27	0.75
Calyon S.A.	France	2004.10.15	0.75	2005.01.10	0.75
La CompagnieFinancierr Edmond de Rothschild Banque	France	2006.04.10	1.00	2006.07.19	1.00
SocieteGenerale	France	2004.09.02	0.50	2004.09.17	0.50

Appendix A (*continued*)

QFII name	Home country	Qualification date	Total quota (100 million USD)	Date of initial quota	Initial quota (100 million USD)
Allianz Global Investors Luxembourg S.A.	Germany	2008.12.16	0.00	2009.03.04	1.00
Deutsche Bank Aktiengesellschaft	Germany	2003.07.30	4.00	2003.08.26	0.50
Dresdner Bank Aktiengesellschaft	Germany	2004.09.27	0.75	2004.11.08	0.75
Hang Seng Bank Ltd.	Hong Kong	2004.05.10	1.00	2004.06.22	0.50
HSBC Global Asset Management (Hong Kong) Ltd.	Hong Kong	2006.09.05	2.00	2007.02.13	2.00
JF Asset Management Ltd.	Hong Kong	2005.12.28	1.50	2006.04.12	1.50
The Hong Kong and Shanghai Banking Corporation Ltd.	Hong Kong	2003.08.04	4.00	2003.08.26	0.50
DAIWA Asset Management Co.	Japan	2008.09.11	1.00	2008.12.26	1.00
Daiwa Securities SMBC Co., Ltd.	Japan	2004.05.10	0.50	2004.07.05	0.50
Mitsubishi UFJ Securities Co., Ltd.	Japan	2008.12.29	0.00	2009.03.25	1.00
Mizuho Securities Co., Ltd	Japan	2006.09.05	0.50	2007.02.13	0.50
Nikko Asset Management Co., Ltd.	Japan	2003.12.11	4.50	2004.02.09	0.50
Nomura Securities Co., Ltd.	Japan	2003.05.23	3.50	2003.06.04	0.50
Sumitomo Mitsui Asset Management Company, Ltd.	Japan	2006.09.25	3.00	2007.02.13	2.00
The Dai-ichi Mutual Life Insurance Company	Japan	2005.12.28	2.00	2006.02.22	1.00
ABN AMRO Bank N.V.	Netherland	2004.09.02	1.75	2004.09.17	0.75
ING Bank N.V.	Netherland	2003.09.10	4.00	2003.10.16	1.00
Robeco Institutional Asset management B.V.	Netherland	2008.05.05	1.50	2008.06.20	1.50
Shell Asset Management Company B.V.	Netherland	2008.09.12	0.00	2009.12.08	1.00
Norges Bank	Norway	2006.10.24	5.00	2008.01.24	2.00
DBS Bank Ltd.	Singapore	2006.02.13	1.00	2006.04.12	1.00
Government of Singapore Investment Corporation Pte Ltd.	Singapore	2005.10.25	3.00	2005.11.16	1.00
Oversea-Chinese Banking Corporation Ltd.	Singapore	2008.08.28	1.50	2008.11.12	1.50
Temasek Fullerton Alpha Investments Pte Ltd.	Singapore	2005.11.15	1.00	2005.12.12	1.00
United Overseas Bank Ltd.	Singapore	2006.08.05	0.50	2006.11.07	0.50
UOB Asset Management Ltd.	Singapore	2008.11.28	0.00	2009.08.25	0.50

Appendix A (*continued*)

QFII name	Home country	Qualification date	Total quota (100 million USD)	Date of initial quota	Initial quota (100 million USD)
Mirae Asset Global Investments Co., Ltd.	South Korea	2008.07.25	1.50	2008.09.02	1.50
Samsung Investment Trust Management Co., Ltd.	South Korea	2008.08.25	1.50	2008.11.07	1.50
ACE INA International Holdings, Ltd.	Switzerland	2008.08.05	1.50	2008.11.13	1.50
Credit Suisse (Hong Kong) Ltd.	Switzerland	2003.10.24	5.00	2003.11.28	0.50
Pictet Asset Management Ltd.	Switzerland	2006.10.25	1.00	2008.04.01	1.00
UBS Global Asset Management (Singapore) Ltd.	Switzerland	2006.09.25	2.00	2007.01.11	2.00
Credit Suisse	Switzerland	2008.10.14	0.00	2009.05.22	2.00
UBS AG	Switzerland	2003.05.23	8.00	2003.06.04	3.00
ABU Dhabi Investment Authority	UAE	2008.12.03	0.00	2009.01.17	2.00
Barclays Bank PLC	UK	2004.09.15	2.00	2004.10.15	0.75
Martin Currie Investment Management Ltd.	UK	2005.10.25	1.20	2005.11.24	1.20
Prudential Asset Management Co., Ltd.	UK	2008.04.07	0.75	2008.05.04	0.75
Prudential Asset Management (Hong Kong) Ltd.	UK	2006.07.07	3.00	2006.10.12	2.00
Schroder Investment Management Ltd.	UK	2006.08.29	2.00	2006.12.11	2.00
Standard Chartered Bank (Hong Kong) Ltd.	UK	2003.12.11	0.75	2004.05.19	0.75
Alliance Bernstein Ltd.	US	2008.08.28	0.50	2008.11.12	0.50
INVESCO Asset Management Ltd.	US	2004.08.04	2.50	2005.03.08	0.50
Lehman Brothers International (Europe)	US	2004.07.06	2.00	2004.08.16	0.75
Merrill Lynch International	US	2004.04.30	3.00	2004.07.16	0.75
State Street Global Advisors Asia Ltd.	US	2008.05.16	0.50	2008.11.03	0.50
Citigroup Global Markets Ltd.	US	2003.06.05	5.50	2003.06.18	0.75
Goldman Sachs Asset Management International	US	2005.05.09	2.00	2005.11.16	2.00
Morgan Stanley & Co. International Ltd.	US	2003.06.05	4.00	2003.07.01	3.00
AIG Global Investment Corp.	US	2005.11.14	0.50	2005.12.12	0.50
Bill & Melinda Gates Foundation	US	2004.07.19	1.00	2004.08.28	1.00
Capital International, Inc.	US	2008.12.18	0.00	2009.03.31	1.00
GE Asset Management Incorporated	US	2006.08.05	1.88	2007.01.11	2.00
Goldman, Sachs & Co.	US	2003.07.04	3.00	2003.07.24	0.50

(*continued on next page*)

Appendix A (*continued*)

QFII name	Home country	Qualification date	Total quota (100 million USD)	Date of initial quota	Initial quota (100 million USD)
JPMorgan Chase Bank, National Association	US	2003.09.30	1.50	2003.11.04	0.50
Morgan Stanley Investment Management Inc.	US	2006.07.07	2.00	2006.09.05	2.00
President and Fellows of Harvard College	US	2008.08.22	2.00	2008.11.14	2.00
Stanford University	US	2006.08.05	1.00	2006.11.07	0.50
T. Rowe Price International, Inc.	US	2008.09.12	1.10	2008.12.03	1.10
The Trustees of Columbia University in New York	US	2008.03.12	1.00	2008.04.07	1.00
Yale University	US	2006.04.14	1.50	2006.08.01	0.50

Appendix B. Variable definitions

Variable	Definition
Dependent variables	
D_QFII	Indicator variable equal to 1 if a firm has at least one QFII in the top 10 shareholders of tradable A-shares at the end of each year, and 0 otherwise
N_QFII	Log of one plus the number of QFIIs among the top 10 shareholders who own tradable A-shares at the end of each year
P_QFII	The percentage of a firm's A-shares held by the QFIIs among the top 10 shareholders who own tradable shares, divided by the firm's total tradable A-shares at the end of each year
Experimental variables	
POST	Indicator, 1 for years 2007 and 2008 (post-adoption), and 0 for years 2005 and 2006 (pre-adoption)
Control variables	
SIZE	Firm size, computed as the natural logarithm of year-end total assets
LEV	Financial leverage, computed as the ratio between year-end total liabilities and total assets
TOP1	Year-end percentage shareholdings of the largest shareholder
ROE	Return on equity computed as net income scaled by year-end shareholders' equity
DIV	Dividend yields, computed as dividend per share scaled by stock price at the end of each year
STDRET	Standard deviation of a firm's monthly stock returns for each year
BTM	The ratio between a firm's book value and market value of total assets
RETURN	Market-adjusted annual stock return of a firm for each year
XLIST	Indicator variable equal to 1 if a firm issues B-shares or H-shares, and 0 otherwise
DOWJ	Indicator variable equal to 1 if a firm is included in the Dow-Jones 600 index and 0 otherwise
XSALE	Indicator variable equal to 1 if a firm discloses sales from foreign subsidiaries and 0 otherwise
ANALYST	The number of analysts following a firm
BIG4	Indicator variable equal to 1 if a firm is audited by a BIG 4 auditor and 0 otherwise

Appendix C. Institutions of QFIIs' home countries

	Legal system		Accounting system			IFRS adoption
	Legal origin	Anti-director rights	Source of standards	Accounting cluster	Financial tax alignment	
Institutions by QFIIs' home countries						
Australia	1	4	Government-only	British-American	0	1
Belgium	0	0	Government-only	Continental	1	1
Canada	1	4	Government & Private	British-American	0	0
France	0	2	Government-only	Continental	1	1
Germany	0	1	Government-only	Continental	1	1
Hong Kong	1	4	Government & Private	British-American	0	1
Japan	0	3	Government-only	Continental	1	0
Netherlands	0	2	Government & Private	British-American	0	1
Norway	0	3	Government-only	Continental	0	1
Singapore	1	3	Government & Private	British-American	0	1
Switzerland	0	1	Government-only	Continental	1	1
UK	1	4	Government & Private	British-American	0	1
US	1	5	Government & Private	British-American	0	0
Classification of Institutions of QFIIs' home countries						
Market-based	1	>3	Government & Private	British-American	0	NA
Relationship-based	0	<=3	Government-only	Continental	1	NA

Legal origin: 1 for common law countries and 0 for code law countries (La Porta et al., 1997).
Anti-director rights: an index aggregating the shareholder rights, where the index ranges from 0 to 5 (La Porta et al., 1997).
Source of standards: accounting standards set by governmental bodies only or in conjunction with private-sector bodies (Alford et al., 1993).
Accounting cluster: cluster classification according to the country's accounting practices (Mueller et al., 1994; Hung, 2001).
Tax-book conformity: equals 1 for countries with high tax-book conformity, and 0 for countries with low conformity (Cooper and Lybrand, 1993; Hung, 2001).
IFRS adoption: fromDaske et al. (2008) and Armstrong et al. (2010), equals 1 for countries where IFRS is permitted or required, and 0 otherwise.

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