

DOES FOREIGN OWNERSHIP RESTRICT EARNINGS MANAGEMENT? THE CASE OF CHINA

Sang Ho Kim¹, Yohan An^{2*} and Prabhu Udawatte³

¹International Business School Suzhou, Xian Jiaotong-Liverpool University,
BB 323 BB Building, 111 Re'nai Road, Dushu Lake Higher Education Town,
Suzhou Industrial Park, Jiangsu, China 215123

²Department of Finance and Accounting, Tongmyong University, 511-1,
Business Building, 428 Sinseon-ro, Nam-gu, Busan, Republic of Korea 48520

³School of Economics, Finance and Accounting, Coventry University, WM428,
William Morris Building, Gosford Street, CV1 5DL, United Kingdom

*Corresponding author: accahn@tu.ac.kr

ABSTRACT

This study examines the effects of foreign ownership on Chinese firms' earnings management practices. Given that foreign shareholders are expected to increase the transparency of the firm's management, this study anticipates that foreign ownership would restrict earnings management of both the accrual-based earnings management (AEM), and real activity-based earnings management (REM). Using the panel dataset of the B-share and H-share firms from 2003 to 2015, this study finds that the H-share firms which cross-listed on both the mainland China and Hong Kong Stock Exchanges are more likely to manage earnings through the discretionary accruals as well as the changes in the firms' operations. In contrast the B-share firms are less likely to manage earnings by using the discretionary accruals. This study also finds that state control and large shareholdings of foreigners can restrict the B-share firms' earnings management through the discretionary accruals. The findings noted in this study imply that foreign investors who want to invest in Chinese firms must be more cautious about market inefficiency and the information asymmetry problem in the Chinese stock markets.

Keywords: China, foreign investors, earnings management, cross-listing, state owned enterprise

Publication date: 14 August 2020

To cite this article: Kim, S. H., An, Y., & Udawatte, P. (2020). Does foreign ownership restrict earnings management? The case of China. *Asian Academy of Management of Accounting and Finance*, 16(1), 63–86. <https://doi.org/10.21315/aamjaf2020.16.1.4>

To link to this article: <https://doi.org/10.21315/aamjaf2020.16.1.4>

© Asian Academy of Management and Penerbit Universiti Sains Malaysia, 2020. This work is licensed under the terms of the Creative Commons Attribution (CC BY) (<http://creativecommons.org/licenses/by/4.0/>).

INTRODUCTION

This study investigates the effect of foreign ownership on Chinese firms' earnings management practices. Since the early 1990s, the authorities of China had introduced a series of reforms which aim to attract foreign investments so as to internationalise the country's stock market. The initial aim of internationalisation was to help the mainland Chinese firms to raise funds directly from foreign investors, so that a stable and efficient source of fund that is less sensitive to local noises can be created (Su, 2003; Lien, Tseng, & Wu, 2013; China Stock Market Handbook, 2008). Previous studies (e.g., Jiang & Kim, 2004; Lien et al., 2013) have suggested that the presence of foreign shareholders in Asian countries such as Japan and Taiwan improves firm's financial transparency because their presence help to keep a check on the local managers' opportunistic behaviours. If the market was sufficiently efficient, this enhanced financial transparency would be compensated by the market system, such as a reduced capital cost (e.g., Barth, Konchitchki, & Landsman, 2013).

In the case of China, foreign investors can typically invest in firms either through the B-share firms or the H-share trading. Chinese firms normally issue the A-shares for domestic investors after they are listed on the two stock exchanges of the country – the Shanghai Stock Exchange (SHSE), and the Shenzhen Stock Exchange (SZSE). Qualified firms¹ can additionally issue B-shares for foreign investors. Alternatively, they can opt to cross-list their shares on the Hong Kong Stock Exchange (HKSE) by issuing H-shares (Su, 2003). In reality, these avenues only allow limited access to foreigners, largely due to illiquidity and inconvenience in the trading venues. As a result, there is a constant price discount of B-shares and H-shares that are open to foreign investments (Su, 2003; Mei, Scheinkman, & Xiong, 2005). This means that there is considerable market inefficiency, and information asymmetry problems in the Chinese stock markets, for foreign investors Chinese firms primarily operate in mainland China, and foreigners can trade their shares at restricted locations such as Shanghai, Shenzhen, or Hong Kong. Invariably, the foreign investors are at a disadvantage when compared with domestic investors in terms of understanding the firms' operational environment, and in obtaining the necessary information to assess the firms' true performance (Choe, Kho, & Stulz, 2005). Under this circumstance, the insiders of such firms (such as the managers and the domestic investors) may have a strong incentive to pursue their own agenda, thereby jeopardising the interests of the outsiders (such as the foreign investors' interests).

The current study employs this unique institutional setting to test the effect of foreign ownership on the Chinese firms' earnings management practices. In particular, the level of earnings management is measured through two different

practices – one using the accrual-based earnings management (*AEM*), and the other one using the real activity-based earnings management (*REM*). The *AEM* is one of the typical methods used to inflate or deflate the firms' reported earnings through the discretionary accruals. In contrast, the *REM* needs to change the firms' operations so as to manipulate the earnings, for instance, using a more generous credit policy to boost sales (Roychowdhury, 2006; Cohen, Dey, & Lys, 2008; Zang, 2011; Kim, Park, & Weir, 2012; Kuo, Ning, & Song, 2014).

The results generated in this study showed that the H-share firms which cross-listed their shares on both mainland stock exchanges, and the HKSE, were more likely to engage in earnings management by using the *AEM* and the *REM* methods. This occurs when the H-share ownership increases. However, in the B-share firms where shares were listed and traded only in mainland exchanges, they were less likely to engage in the *AEM* when foreign ownership increases. This study contributes to literature in various ways. First, we believe that this is the first of many studies to investigate the effects of foreign ownership on Chinese firms' earnings management practices. Second, the results obtained shed a new light on market efficiency, and information asymmetry problems for foreigners in the Chinese stock markets. Developing a market system that can improve the firm's market efficiency should be a critical issue for the Chinese authorities and the Chinese firms that want to raise foreign capital. Third, this study investigated the effect of foreign ownership on Chinese firms' earnings management in terms of the discretionary accruals (i.e., *AEM*), and the firm's operational changes (i.e., *REM*). In this regard, the current provides new evidence which showed that the *REM* is an effective tool to be used for measuring the firm's earnings management practices.

INSTITUTIONAL SETTINGS AND LITERATURE REVIEW

The B- and H-shares for Foreign Investors

The B- and H-shares are the most common investment tools for foreign investors. The B-shares are denominated in Renminbi (RMB) but traded in foreign currency such as US dollar in the SHSE or Hong Kong dollar in the SZSE, and the dividend from the B-share must be paid in foreign currency. According to Su (2003, p. 335), however, the B-share has two main problems in its trading. The first problem is a lack of liquidity in the secondary market because most of the B-share investors are big equity investment funds and they usually hold the B-shares for a long-term return. The second one is that the trading venues are inconvenient and the information about the B-share firms is inadequately disclosed to the foreigners. As a result, the B-share trading became quite thin and they are normally traded

at a discount. Initially, the B-share was purchasable only by foreign but Chinese authorities allowed domestic investors to purchase the B-share from 2001 (Su, 2003).

Meanwhile, foreigners can trade H-share if the mainland Chinese firm cross-list its shares on the HKSE. H-shares are denominated in Hong Kong dollar and traded the same as other shares in the HKSE. Compared with mainland stock exchanges, the HKSE imposes more standardised and strict requirements such as the profit test or market capitalisation test for the listing (China Stock Market Handbook, 2008). Therefore, the HKSE is believed to create a more market-oriented environment and better to lure more foreign investors for raising fund (Li, Luo, & Ng, 2014). Nonetheless, the H-share firms mainly operate in mainland and their primary regulators are Chinese authorities such as China Securities Regulatory Commission (CSRC). That is, the mainland firms who want to issue the H-shares need an approval from Chinese authorities as an essential prerequisite. Like the B-shares, the H-shares are also normally traded at a discount although both B and H-shares have the same voting right compared with the A-shares.

The Effects of Foreign Ownership on Chinese Firms

The previous studies suggest that the existence of foreign ownership tends to restrict firm's earnings management. For example, foreign investors can improve the corporate governance by diluting ownership concentration or mitigating the information asymmetry between manager and outside investors (e.g., Lien et al., 2013; Jiang & Kim, 2004). Also, foreign shareholders are more likely to monitor managers' opportunistic behaviours effectively (Chung, Ho, & Kim, 2004). In fact, Li et al. (2014) find that Chinese H-share firms that cross-listed on both the HKSE and mainland Stock exchanges, are less likely to engage in earnings management due to a lower delisting threat in the HKSE compared to the SHSE and the SZSE. Barth et al. (2013) find that an enhanced earnings' quality eventually lowers the cost of capital. That is, if the presence of foreign investors leads to a lower earnings management, the firm is likely to be compensated by an efficient market.

On the contrary, a number of recent studies suggest that foreign investors are at a disadvantage compared with domestic investors in terms of information accessibility in the Chinese stock market (Busaba et al., 2015; Mei et al., 2005; Hu & Zhao, 2018). The B- and H-share firms' operations are mostly conducted in mainland China, while their B- and H-shares are traded in restricted areas such as Shanghai, Shenzhen or Hong Kong. Therefore, foreign investors may have a difficulty in accessing these firm's operational information and understanding the

regulatory environment compared with domestic investors (Choe et al., 2005; Su, 2003). In addition, Mei et al. (2005) and Hu and Zhao (2018) find the noise trading of inexperienced investors is prevalent in Chinese stock market, which would deteriorate market efficiency. Also, Busaba et al. (2015) find that Chinese firms who cross listed on overseas markets can enjoy improved the prestige and visibility in China mainland stock exchanges. But they tend to show a poorer operating performance compared with purely domestic issuers. In short, if the market is not sufficiently efficient, the firm has little chance to be rewarded properly by the market system, and the roles and effects of foreign ownership seem very limited.

THEORIES AND HYPOTHESES DEVELOPMENT

Inspired by the Agency theory (e.g., Jensen & Meckling, 1976; Demsetz, 1983; Morck, Shleifer, & Vishny, 1988), this study posits two competing perspectives about the effects of foreign ownership on the Chinese firms' earnings management. First, if the insiders' interests were well-aligned with those of the outsiders, firms tend to increase firm value by improving firm's financial transparency. This will also be beneficial towards the foreign investors' welfare – i.e., “the convergence of interest hypothesis” (Jensen & Meckling, 1976; Cimini, 2015). In the Chinese capital market, foreign financial institutions are believed to be more skilful in assessing firms' true performance (Lien et al., 2013). More recently, An (2019) had observed that there was a positive relationship between foreign ownership, and earnings quality within Korean firms. This implies that foreign institutional investors can effectively restrict local firm manager's opportunistic behaviours.

Nonetheless, if the insiders' interests were not well-aligned with those of the outsiders, the former would be more inclined towards pursuing their own interests, at the expense of the outsiders' welfare – i.e., “managerial entrenchment hypothesis” (Demsetz, 1983; Morck et al., 1988). In this regard, the managers would engage in earnings management more aggressively. In particular, insiders of Chinese firms were more likely to behave opportunistically so as to pursue their own interests due to the market inefficiency of Chinese stock markets (Busaba et al., 2015; Mei et al., 2009; Hu & Zhao, 2018). Based on this, it is possible that the B-share and H-share firms would be more likely to engage in earnings management as their foreign ownership increases. Therefore, our first hypothesis was formulated as:

- H1: As foreign ownership increases, the B- and H-share firms are more likely to engage in earnings management.

From the historical viewpoint, it can be said that most Chinese firms were once State-Owned Enterprises (SOEs) (Su, 2003; Li et al., 2014). They used to be the centre of interest for Chinese authorities during the initial market internationalisation plans (Li et al., 2014). However, Wang and Yung (2011) noted that the SOEs were less likely to manage earnings when compared to privately owned enterprises (POEs) because their strong ties with the government can compensate for their poor business performance. Kim (2019) documented that SOEs engaged in less earnings management (both the *AEM* and *REM*), when compared to POEs because of the benefits provided to the SOEs. However, Noronha, Zeng and Vinten (2008) argued that SOEs have a stronger incentive to manipulate earnings for the management compensations since the top management of most SOEs comprised of government officials. To be more specific, SOEs were classified as state-controlled firms if the controlling shareholders were state institutions (e.g., ministry of finance) or local governments. Nevertheless, there are some contradictory views about the effect of state ownership on the firm's earnings management practices. In order to examine such effects of the state's control on foreigner-invested Chinese firms, our second hypothesis was thus formulated as:

H2: State control is significantly associated with the earnings management of foreigner-invested firms.

Since previous studies had not been conclusive on this point, the current study chose not to predict the sign of causality.

This study also examines the effect of foreign ownership on firm's earnings management practices when the foreigners served as the largest shareholders. Claessens, Djankov and Lang (2000) and La Porta, Lopez-de-Silanes and Shleifer (1999) had documented that large shareholders were more likely to pursue their own interests at the expense of minority shareholders in the context of East Asian firms. In the case of the Chinese firms, this seems to be a common practice where one single owner holds a substantial portion of outstanding shares. Numerous studies (Liu & Lu, 2007; Liu, Luo, & Tian, 2015; Kim & An, 2018) have indicated that the controlling shareholders could exert a great deal of influence on Chinese firms. Similarly, Demsetz and Lehn (1985) also argued that large shareholders tend to have a stronger, and more superior incentive to monitor the managers since their wealth is closely linked to the firm's value. If the foreign shareholders have sufficient power to restrict the insiders' opportunistic behaviour, those firms were less likely to engage in earnings management. Therefore, our third hypothesis was formulated as:

H3: The foreigner-invested Chinese firms are less likely to engage in earnings management when the foreigners are the largest shareholders.

METHODOLOGY

Data and Sample

All financial data are retrieved from Chinese Stock Market and Accounting Research (CSMAR) database. In line with previous studies, this study excludes the financial sector. CSMAR database is a comprehensive dataset including the financial statements, stock trading, and shareholders information and corporate governance. Particularly, CSMAR reported the details of B- and H-share from 2003. Thus, the dataset in this study ranges from 2003 to 2015. Total 24,998 firm-year observations are identified during the sampled period.

Among them, almost 88% of sampled firms have no foreign investment, while around 12% of Chinese firms have issued the B- and/or H-shares during the sampled period. Therefore, Chinese firms who do not have any foreign investment record during the sample period are excluded. Then, the foreign shareholder data are matched up with Chinese firm's financial data. After excluding missing data, 1,736 firm-year observations are identified as direct investment (i.e., the B- and/or H-shareholding). In each test models, the whole sample is split into three subsets: direct shareholding firms (the B- and/or H-share firms), the B-share firm and the H-share firms.

Measurement of Earnings Management

Previous studies suggest two different approaches to measure firms' earnings management.

AEM

The first approach is to capture the level of earnings management through the discretionary accruals. In this approach, firm's total accruals are computed as the difference between net income and net cash flow from operation. Researchers assume that the total accruals comprise of non-discretionary accruals and discretionary accruals. The non-discretionary accruals are typically estimated using the cross-sectional modified Jones model, and the difference between total accruals and non-discretionary accruals is deemed as discretionary accruals

(Dechow, Sloan, & Sweeny, 1995). Following Kothari, Leone and Wasely (2005), firm's performance is adjusted to estimate the non-discretionary accruals, and the discretionary accruals are used as a proxy for *AEM*. Therefore, higher discretionary accruals (*AEM*) represent the more earnings management through discretionary accruals.

REM

The second approach is to measure the level of earnings management through the changes in firm's operations without discretionary accruals (Roychowdhury, 2006). The basic three measurements of *REM* are as follows. First, firm's sales manipulation such as more lenient credit terms leads to an abnormally low operating cash flow. This unusual gap can be captured by "abnormal CFO" (*ab_CFO*).

Second, the managers can manage earnings by determining the production level. Usually, a higher production level lowers the fixed costs per unit (Roychowdhury, 2006). In this case, the cost of goods sold is abnormally low and operating margin increases accordingly. Therefore, "abnormal production cost" (*ab_PROD*) can be estimated as a deviation from the normal level of production cost.

Third, the discretionary expenditure such as R&D, advertising, sales and general administration expenses would be unusually low if managers want to inflate reported earnings by reducing them – that is, "abnormal discretionary expenditure" (*ab_DISEXP*). After computing all three individual *REM* proxies, an aggregate proxy is constructed following the previous studies (e.g., Cohen et al., 2008; Kim et al., 2012; Kuo et al., 2014).

$$REM = -ab_CFO + ab_PROD - ab_DISEXP \quad (1)$$

Following Kim et al. (2012) and Kuo et al. (2015), for the convenience of interpretation, *ab_CFO* and *ab_DISEXP* are multiplied by -1 because a decrease in these variables actually means an increase in *REM*. On the other hand, *ab_PROD* is not multiplied since an increase in *ab_PROD* already indicates an increase in *REM*.

Control Variables

This study also employs a series of control variables in line with previous research (e.g., Cheng, Aerts, & Jorissen, 2010; Kim et al., 2012). The firm *SIZE* (*SIZE*) is a natural log of firm's total assets. *ROA* is employed to control firm's financial performance, where *ROA* is defined as a ratio of net profit to the lagged total asset. Leverage (*LEV*), a proxy for financial risk computed by debt-to-asset ratio. Firm growth is controlled by book-to-market value ratio (*BM*). This study also employs two control variables to reflect corporate governance factor and Chinese specific contexts. *CONT* is the ratio of controlling shareholder's ownership and *ST* is a dummy variable to have 1 if the firm is in the special treatment period² (e.g., Kuo et al., 2014).

Empirical Models

Two test models are employed in this study. The first model has *AEM* as a dependent variable and the second one has *REM* as a dependant variable. Previous studies also suggest a possible trade-off relationship between *AEM* and *REM* since managers can decide the level of *AEM* and *REM* simultaneously (e.g., Cohen et al., 2008; Kim et al., 2012; Zang, 2011; Kuo et al., 2014). In order to control trade-off effect, *REM* and/or *AEM* are inserted as an independent variable in each test models.

$$\begin{aligned}
 AEM_{i,t} = & \alpha_0 + \alpha_1 REM + \alpha_2 FINV_{i,t} \text{ (or } STATE_{i,t} \text{ or } LARG_{i,t}) \\
 & + \alpha_3 SIZE_{i,t} + \alpha_4 ROA_{i,t} + \alpha_5 LEV_{i,t} + \alpha_6 BM_{i,t} \\
 & + \alpha_7 CONT_{i,t} + \alpha_8 ST_{i,t} + \text{Year dummies}
 \end{aligned} \tag{2}$$

$$\begin{aligned}
 REM_{i,t} = & \alpha_0 + \alpha_1 AEM + \alpha_2 FINV_{i,t} \text{ (or } STATE_{i,t} \text{ or } LARG_{i,t}) \\
 & + \alpha_3 SIZE_{i,t} + \alpha_4 ROA_{i,t} + \alpha_5 LEV_{i,t} + \alpha_6 BM_{i,t} \\
 & + \alpha_7 CONT_{i,t} + \alpha_8 ST_{i,t} + \text{Year dummies}
 \end{aligned} \tag{3}$$

where,

AEM = the absolute value of discretionary accruals, where the discretionary accruals are calculated based on the cross-sectional modified Jones model adjusted for performance;

REM = the overall measurement of real activity based earnings management (= $-ab_CFO + ab_PROD - ab_DISEXP$);

FINV = the ownership percentage of four types of foreign investment. To be more specific:

$FINV_D$ = ownership percentage of direct shareholding (i.e., B- and/or H-share holding)

- $FINV_B$ = ownership percentage of B-share holding
 $FINV_H$ = ownership percentage of H-share holding
 $STATE$ = a dummy variable for state-controlled firms; 1 if controlling shareholders were either SOEs, state-institutions or local government; and 0 if otherwise;
 $LARG$ = a dummy variable for the largest shareholder; 1 if the foreigners are the largest shareholders; and 0 if otherwise;
 $SIZE$ = the natural log of total asset;
 ROA = return on asset, where ROA is a ratio of net profit to lagged total asset;
 LEV = debt-to-equity ratio;
 BM = book-to-market value ratio;
 $CONT$ = the controlling shareholder's ownership percentage;
 ST = a dummy variable for special treatment; 1 if the firm is in the special treatment status; and 0 for otherwise.

RESULTS

Descriptive Statistics

Table 1 shows the descriptive statistics of the test variables. In this study, all the continuous variables were winsorised at 1% and 99% percentile. While the AEM had a mean of 0.073, and a median of 0.046, the REM had a mean of -0.003 , and a median of 0.002. This showed that the AEM was more common than the REM , among the Chinese firms. The cause is partially due to the loose accounting scrutiny made by the Chinese authorities (Kuo et al., 2014). Direct shareholdings of the B- and/or H-shares ($FINV_D$) showed a mean of 0.308. Ownership percentage of the B-shareholdings ($FINV_B$) had a mean of 0.320, and a median of 0.329. In comparison, the ownership percentage of the H-shareholdings ($FINV_H$) showed a mean of 0.278, and a median of 0.271. These implied that foreign ownership in B- and H-share firms was considerable although these firms need to fulfil specific requirements so as to issue the B- or H-shares.

Pearson's correlation coefficients are presented in Table 2. Consistent with Kuo et al. (2014), the AEM and REM were observed to be significantly and positively correlated. This showed that the Chinese firms may mix both approaches so as to manage earnings. There were no specific correlations between the AEM and $FINV_B$ and $FINV_H$, but there were positive correlations between the REM and $FINV_B$ and $FINV_H$. Based on this, it is possible that the B- and H-share firms preferred the REM to the AEM as foreign shareholding increases. Overall, the

REM showed greater movement than the *AEM* in response to changes occurring in the foreign ownership percentage.

Table 1
Descriptive statistics for the firms with foreign investment

	Mean	Median	S.D.	Min	25%	75%	Max
<i>AEM</i>	0.073	0.046	0.094	0.001	0.021	0.089	0.610
<i>REM</i>	-0.003	0.002	0.272	-1.049	-0.114	0.113	1.003
<i>FINV_D</i>	0.308	0.299	0.114	0.082	0.238	0.384	0.653
<i>FINV_B</i>	0.320	0.329	0.122	0.052	0.242	0.403	0.653
<i>FINV_H</i>	0.278	0.271	0.087	0.115	0.215	0.328	0.501
<i>SIZE</i>	21.455	21.307	1,271	18.784	20.597	22.145	25.289
<i>ROA</i>	0.044	0.039	0.080	-0.262	0.012	0.076	0.349
<i>LEV</i>	0.469	0.460	0.239	0.050	0.301	0.616	1.516
<i>BM</i>	0.545	0.525	0.259	0.080	0.337	0.738	1.144
<i>CONT</i>	0.382	0.364	0.158	0.091	0.256	0.501	0.764
<i>ST</i>	0.039	0.000	0.195	0.000	0.000	0.000	1.000
<i>STATE</i>	0.521	1.000	0.500	0.000	0.000	1.000	1.000
<i>LARG</i>	0.299	0.000	0.458	0.000	0.000	1.000	1,000

Note: *FINV_D* is foreign ownership percentage in terms of B- and H-shares. *FINV_B* is foreign ownership percentage in terms of B-shares only. *FINV_H* is foreign ownership percentage in terms of H-shares only.

This study also observed that firm size (*SIZE*) was negatively correlated with both the *AEM* and the *REM*. This showed that the larger firms had less earnings management in terms of both the discretionary accruals and real-activity manipulations. Additionally, the correlations between *SIZE* and foreign ownership percentages (*FINV_D*, *FINV_B*, and *FINV_H*) showed that the larger firms had less foreign investments. The *ROA* had a positive correlation with the *AEM*, but a negative correlation with the *REM*. This implied that the higher *ROA* firms may use *AEM* more than *REM*. Similarly, the book-to-market value (*BM*), and the state control (*STATE*) have negative correlations with the *AEM*, but positive correlations with the *REM*. This also showed that the high growth firms preferred the *AEM* to the *REM*. The results further indicated that highly leveraged firms (*LEV*), and special treatment firms (*ST*) had positive correlations with both the *AEM* and the *REM*. Moreover, the dummy representing the largest foreign shareholders (*LARG*) had a marginal positive correlation with the *AEM*, and a highly positive correlation with the *REM*. Taken together, the correlations matrix justified the adoption of the *REM* as a useful measurement of earnings management since the *REM* correlated significantly with most of the key variables.

Table 2
Pearson correlation coefficient matrix

	AEM	REM	FINV _D	FINV _B	FINV _H	SIZE	ROA	LEV	BM	CONT	ST	STATE	LARG
AEM	1												
REM	0.0301 (0.000) [†]	1											
FINV _D	0.0179 (0.436)	0.0643 (0.005)**	1										
FINV _B	-0.0018 (0.949)	0.0488 (0.077) [†]	0.9922 (0.000) [†]	1									
FINV _H	0.0191 (0.643)	0.1398 (0.001)***	0.8856 (0.000) [†]	-0.9803 (0.000) [†]	1								
SIZE	-0.1016 (0.000) [†]	-0.0242 (0.000) [†]	-0.3341 (0.000) [†]	-0.2948 (0.000) [†]	-0.3822 (0.000) [†]	1							
ROA	0.1613 (0.000) [†]	-0.1922 (0.000) [†]	-0.0399 (0.072)*	-0.0384 (0.151)	-0.0047 (0.905)	0.1058 (0.000) [†]	1						
LEV	0.1433 (0.000) [†]	0.0953 (0.000) [†]	0.0162 (0.464)	0.0177 (0.507)	-0.0254 (0.512)	0.1947 (0.000) [†]	-0.3772 (0.000) [†]	1					
BM	-0.1273 (0.000) [†]	0.0916 (0.000) [†]	0.0908 (0.000) [†]	0.1849 (0.000) [†]	-0.3025 (0.000) [†]	0.4613 (0.000) [†]	-0.2111 (0.000) [†]	0.2765 (0.000) [†]	1				
CONT	-0.0113 (0.106)	-0.0194 (0.007)***	-0.2238 (0.000) [†]	-0.1511 (0.000) [†]	-0.2947 (0.000) [†]	0.2176 (0.000) [†]	0.1346 (0.000) [†]	-0.0744 (0.000) [†]	0.1018 (0.000) [†]	1			
ST	0.1522 (0.000) [†]	0.0299 (0.000) [†]	0.0017 (0.938)	-0.0085 (0.752)	0.0109 (0.779)	-0.0991 (0.000) [†]	0.0406 (0.000) [†]	0.094 (0.000) [†]	-0.0578 (0.000) [†]	-0.0262 (0.000) [†]	1		
STATE	-0.0718 (0.000) [†]	0.0300 (0.000) [†]	-0.1919 (0.000) [†]	-0.216 (0.000) [†]	0.066 (0.096)*	0.2904 (0.000) [†]	-0.0816 (0.000) [†]	0.1848 (0.000) [†]	0.2742 (0.000) [†]	0.1748 (0.000) [†]	0.0056 (0.392)	1	
LARG	0.0389 (0.088)*	0.0635 (0.006)***	0.4786 (0.000) [†]	0.4549 (0.000) [†]	0.3777 (0.000) [†]	-0.3158 (0.000) [†]	-0.1064 (0.000) [†]	0.0801 (0.000) [†]	-0.0934 (0.000) [†]	-0.6804 (0.000) [†]	0.0718 (0.001)***	-0.2896 (0.000) [†]	1

Note: *p*-values are in the parentheses. *, **, ***, and † denote the significance at 10%, 5%, 1%, and 0.1%, respectively.

The Effect of Foreign Ownership Percentage on Earnings Management

Table 3 showed the test results for H1 – i.e., the effect of foreign investment on Chinese firms' earnings management practices. Since our datasets were constructed as panels, we engaged the panel data analysis. Hausman's test supported the fixed effect model rather than the random effect model, for all the test models. As an example, in Model (1) of Panel A of Table 3, Hausman's test result showed $\chi^2 = 65.13$ (p -value < 0.000). This supported the choice of the fixed effect model. Thus, the fixed effect estimators are primarily reported in this study.

Table 3

The effect of foreign investment percentage on earnings managements

Dep. Var.	Panel A: B- and H-shares		Panel B: B-shares		Panel C: H-shares	
	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>
<i>REM</i>	-0.009 (-1.05)		0.013 (1.32)		-0.151+ (-9.07)	
<i>AEM</i>		-0.001 (-0.65)		0.116 (1.32)		-1.053+ (-9.07)
<i>FINV_D</i>	-0.078 (-1.05)	0.256 (1.61)				
<i>FINV_B</i>			-0.147** (-2.32)	0.180 (0.97)		
<i>FINV_H</i>					0.343*** (3.20)	1.289+ (4.61)
<i>SIZE</i>	-0.018*** (-3.2)	0.002 (0.14)	-0.017** (-2.54)	-0.015 (-0.77)	-0.004 (-0.49)	0.074*** (2.87)
<i>ROA</i>	0.292+ (8.97)	-0.294*** (-3.1)	0.292+ (7.6)	-0.170 (-1.48)	0.148** (2.55)	-0.743+ (-4.95)
<i>LEV</i>	0.089+ (5.18)	-0.039 (-0.78)	0.089+ (4.37)	-0.045 (-0.75)	0.112+ (3.56)	0.067 (0.81)
<i>BM</i>	-0.015 (-0.92)	0.022 (0.48)	-0.017 (-0.83)	0.024 (0.38)	-0.011 (-0.5)	-0.045 (-0.75)
<i>CONT</i>	-0.102*** (-2.82)	-0.205* (-1.94)	-0.123*** (-2.84)	-0.257** (-2.01)	0.051 (0.81)	0.245 (1.48)
<i>ST</i>	0.009 (1.1)	0.009 (0.36)	0.020* (1.93)	-0.011 (-0.38)	-0.006 (-0.44)	0.056 (1.53)

(continue on next page)

Table 3 (continued)

Dep. Var.	Panel A: B- and H-shares		Panel B: B-shares		Panel C: H-shares	
	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>
Constant	0.482+ (3.7)	-0.103 (-0.27)	0.493*** (3.24)	0.317 (0.71)	-0.026 (-0.11)	-2.232*** (-3.49)
Year	Controlled					
No. of obs.	1,736 [†]	1,736	1,223	1,223	523	523
<i>R</i> ²	0.0969	0.0264	0.1121	0.0268	0.2762	0.3166
<i>F</i> -statistics	8.29	2.09	6.92	1.51	8.26	10.03
(<i>p</i> -value)	(0.000)	(0.003)	(0.000)	(0.070)	(0.000)	(0.000)

Note: [†]Two firms issued both B- and H-shares, which generated ten common firm-year observations. *t*-statistics are in the parentheses. *, **, ***, and † denote the significance at 10%, 5%, 1%, and 0.1%, respectively.

In Panel A, the percentage of the foreign direct investment ($FINV_D$) had no specific relationship with the *AEM* and the *REM*. In Panel B, the B-share percentage ($FINV_B$) was negatively associated with the *AEM* in Model (1) ($t = -2.32$, $p < 0.05$), but it was not significantly associated with the *REM* in model (2). This showed that a higher B-share percentage led to a lower *AEM*. In contrast, Panel C showed the positive association between ownership percentage of H-share ($FINV_H$) and the *AEM* and the *REM*. These results are highly significant in both test models ($t = 3.20$ and $p < 0.01$ in Model [1], and 4.61 and $p < 0.001$ in Model [2], respectively). Thus, it showed that the H-share firms were more likely to manage earnings through the *AEM* and the *REM* as the H-shareholding increased. Therefore, H1 was not supported in the B-share firm, but it was fully supported in the H-share firms. It was interesting to note that the B-share firms were less likely to engage in the *AEM* whereas the H-share firms were more likely to manage earnings aggressively by using both the *AEM* and the *REM*.

The results obtained from the current study were, however, different from Li et al. (2014). They had noted that the cross-listing of H-share firms had a curbing effect on their earnings management since the HSKE imposed less strict delisting rules when compared with the mainland stock exchanges. Nonetheless, the H-share firms operated primarily in mainland China, making the foreigners relatively at a disadvantage in accessing the firm's operational information. This therefore, emphasised the deep information asymmetry between the domestic and foreign investors. Given that the main aim of the cross-listing on the HKSE was to access foreign capital (Noble, 2013), this information gap would therefore, create the leeway for insiders (i.e., managers and domestic shareholders) to manage earnings opportunistically.

Nonetheless, the B-share firms were only listed, and traded in the mainland stock exchanges. Since the B-share firms had already proven to be unattractive to foreign investors, the managers of these B-share firms may not have any incentive to manipulate the earnings. Rather, the B-share firms were burdened with the duty of monitoring costs, such as supplementary audits in addition to statutory audits (Su, 2003). Therefore, the negative relationship between the $FINV_B$ and the AEM in Model (1) as shown in Panel B, was understandable although there was no significant association between the $FINV_B$ and the REM .

The Effect of State Control on Earnings Management in Foreigner-Invested Firms

Table 4 presents the effects of the state control on the earnings management, based on four foreign investment types. The H-share firms are shown in Panel C. This study found that there was a significant negative association between the $STATE$ and the AEM in Model (1), as shown in Panels A and B. Specifically, the $STATE$ was observed to be significant at 0.1% level ($t = -6.03$, $p < 0.001$) as shown in Panel A and Panel B ($t = -5.60$, $p < 0.001$) of Model (1). These results were consistent with the outcome of Wang and Young (2011) who had mentioned that the state-controlled firms were less likely to manipulate earnings as they do not have much pressure to manage the earnings, unlike the privately-owned enterprises. Specifically, the B-share firms, as shown in Panel B, had a significantly decreased AEM when these were controlled by the state. In all the test Models (2), the REM was noted to have no specific relationship with the $STATE$. Therefore, state control affected only the AEM , but not the REM .

Table 4
The effect of state ownership on earnings management in foreign invested firms

Dep. Var.	Panel A: B- and H-shares		Panel B: B-shares		Panel C: H-shares	
	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>
<i>REM</i>	-0.009 (-1.05)		0.013 (1.36)		-0.142 [†] (-8.54)	
<i>AEM</i>		-0.002 (-0.76)		0.122 (1.36)		-1.012 [†] (-8.54)
<i>STATE</i>	-0.063 [†] (-6.03)	0.014 (0.46)	-0.066 [†] (-5.6)	0.027 (0.76)	-0.016 (-0.61)	0.021 (0.30)
<i>SIZE</i>	-0.015*** (-3.12)	-0.009 (-0.63)	-0.011* (-1.86)	-0.023 (-1.3)	-0.023*** (-2.71)	0.013 (0.58)

(continue on next page)

Table 4 (continued)

Dep. Var.	Panel A: B- and H-shares		Panel B: B-shares		Panel C: H-shares	
	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>
<i>ROA</i>	0.278 [†] (8.63)	-0.286*** (-3.01)	0.272 [†] (7.15)	-0.162 (-1.41)	0.176*** (3.02)	-0.694 [†] (-4.53)
<i>LEV</i>	0.084 [†] (5.05)	-0.021 (-0.45)	0.077 [†] (3.93)	-0.033 (-0.57)	0.145 [†] (4.81)	0.180** (2.18)
<i>BM</i>	-0.012 (-0.76)	0.033 (0.72)	-0.015 (-0.76)	0.029 (0.47)	0.001 (0.08)	0.012 (0.2)
<i>CONT</i>	-0.101*** (-2.88)	-0.242** (-2.35)	-0.118*** (-2.8)	-0.273** (-2.18)	-0.011 (-0.19)	-0.024 (-0.15)
<i>ST</i>	0.009 (1.05)	0.010 (0.41)	0.017* (1.7)	-0.009 (-0.3)	-0.011 (-0.83)	0.034 (0.92)
Constant	0.455 [†] (4.24)	0.219 (0.7)	0.372*** (2.96)	0.522 (1.4)	0.529*** (2.65)	-0.415 (-0.77)
Year	Controlled					
No. of obs.	1,734 ¹	1,734	1,221	1,221	523	523
<i>R</i> ²	0.1165	0.0251	0.1326	0.0266	0.2598	0.2832
<i>F</i> -statistics	10.18	1.98	8.37	1.50	7.60	8.55
(<i>p</i> -value)	(0.000)	(0.000)	(0.000)	(0.073)	(0.000)	(0.000)

Note: ¹Two firms issued both B- and H-shares, which generated ten common firm-year observations. *t*-statistics are in the parentheses. The controlling shareholders of state firms can be SOE (State-owned Enterprise), State institution (e.g., Ministry of Finance), or local government. *t*-statistics are in the parentheses. *, **, ***, and [†] denote the significance at 10%, 5%, 1%, and 0.1%, respectively.

Interestingly, however, the H-share firms did not show any negative relationship between the *STATE* and the *AEM* and *REM*, as shown in Panel C. This suggests that the H-firms' earnings management practices were less susceptible due to the instance of being state controlled. In short, the B-share firms were less likely to use the *AEM* if they were controlled by the state while the cross-listed H-share firms were not affected by the state control in terms of earnings management. Therefore, H2 was partially supported in the B-share firms, but not in the H-share firms.

The Effect of Foreign Investment on Earnings Management when Foreign Investors are the Largest Shareholder

Table 5 presents the effects of foreign investment on earnings management when the foreigners served to be the largest shareholders in Chinese firms

(*LARG*). The results obtained were somewhat similar to previous tests. The negative association between the *LARG* and the *AEM* in Model (1) as shown in Panels A and B, suggests that the B-share firms were less likely to use the *AEM* to manipulate earnings when the foreigners were the largest shareholder. In model (1), the *LARG* was negatively associated with the *AEM* at 5% significance level ($t = -2.34, p < 0.05$) as noted in Panel A, and $t = -2.17, p < 0.05$ as noted in Panel B. This result implied that if foreigners were the largest shareholder of the B-share firms, the local manager's opportunistic behaviours in managing the earnings was more likely to reduce. However, in Model (2), it was observed that the *REM* did not have any significant relationship with the *LARG*.

Table 5
The effect of foreign investment on earnings management if foreign investors are the largest shareholders

Dep. Var.	Panel A: B- and H-shares		Panel B: B-shares		Panel C: H-shares	
	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>
<i>REM</i>	-0.009 (-1.14)		0.012 (1.21)		-0.142 [†] (-8.55)	
<i>AEM</i>		-0.002 (-0.8)		0.107 (1.21)		-1.014 [†] (-8.55)
<i>LARG</i>	-0.024** (-2.34)	-0.015 (-0.51)	-0.027** (-2.17)	-0.022 (-0.60)	-0.003 (-0.23)	-0.002 (-0.06)
<i>SIZE</i>	-0.016*** (-3.27)	-0.011 (-0.74)	-0.014** (-2.19)	-0.027 (-1.46)	-0.022*** (-2.62)	0.011 (0.53)
<i>ROA</i>	0.288 [†] (8.87)	-0.288*** (-3.03)	0.287 [†] (7.47)	-0.165 (-1.44)	0.174*** (3.01)	-0.692 [†] (-4.51)
<i>LEV</i>	0.090 [†] (5.32)	-0.016 (-0.34)	0.087 [†] (4.29)	-0.025 (-0.42)	0.145 [†] (4.74)	0.183** (2.21)
<i>BM</i>	-0.017 (-1.1)	0.037 (0.81)	-0.023 (-1.09)	0.038 (0.63)	0.002 (0.12)	0.009 (0.16)
<i>CONT</i>	-0.139*** (-3.39)	-0.275** (-2.32)	-0.160*** (-3.21)	-0.327** (-2.23)	-0.025 (-0.38)	-0.020 (-0.11)
<i>ST</i>	0.010 (1.17)	0.010 (0.42)	0.020* (1.95)	-0.008 (-0.29)	-0.012 (-0.9)	0.035 (0.94)
Constant	0.452 [†] (4.03)	0.285 (0.88)	0.400 (2.96)	0.645 (1.62)	0.487** (2.59)	-0.361 (-0.71)

(continue on next page)

Table 5 (continued)

Dep. Var.	Panel A: B- and H-shares		Panel B: B-shares		Panel C: H-shares	
	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>
Year	Controlled					
No. of obs.	1,736 ¹	1,736	1,223	1,223	523	523
<i>R</i> ²	0.0989	0.0249	0.1116	0.0262	0.2592	0.2831
<i>F</i> -statistics	8.48	1.97	6.88	1.48	7.58	8.55
(<i>p</i> -value)	(0.000)	(0.006)	(0.000)	(0.080)	(0.000)	(0.000)

Note: *t*-statistics are in the parentheses. *, **, ***, and † denote the significance at 10%, 5%, 1%, and 0.1%, respectively.

Focusing on the H-share firms, it was observed that there was no specific relationship between the *LARG* and the *AEM* and *REM* as shown in Panel C of Model (1). Even if the shareholders in the H-share firms were the largest, it was not likely to curb the manager's opportunistic behaviours. Therefore, H3 was partially supported in the B-share firms, but not in the H-share firms.

The Effect of Foreign Investment on Earnings Management with All Test Variables

Table 6 presents the test results of all the test variables – *FINV*, *STATE* and *LARG*. Panel C of Table 6 confirms that the H-share firms were more likely to use both the *AEM* and *REM* to manipulate earnings as the ownership in the H-share firms increased ($t = 3.20$, $p < 0.01$ in Model [1] and $t = 4.77$, $p < 0.001$ in Model [2] respectively). However, the *STATE* and *LARG* did not affect the H-share firms' earnings management practices.

Table 6

The effect of foreign investment on earnings management with all test variables

Dep. Var.	Panel A: B- and H-shares		Panel B: B-shares		Panel C: H-shares	
	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>
<i>REM</i>	-0.009 (-1.04)		0.014 (1.38)		-0.151 [†] (-9.05)	
<i>AEM</i>		-0.001 (-0.69)		0.123 (1.38)		-1.051 [†] (-9.05)
<i>FINV</i> _D	-0.035 (-0.62)	0.305* (1.83)				

(continue on next page)

Table 6 (continued)

Dep. Var.	Panel A: B- and H-shares		Panel B: B-shares		Panel C: H-shares	
	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>	<i>AEM</i>	<i>REM</i>
<i>FINV_B</i>			-0.096 (-1.45)	0.231 (1.17)		
<i>FINV_H</i>					0.353*** (3.20)	1.367† (4.77)
<i>STATE</i>	-0.061† (-5.9)	0.013 (0.44)	-0.064† (-5.35)	0.027 (0.75)	-0.004 (-0.16)	0.072 (1.01)
<i>LARG</i>	-0.019* (-1.76)	-0.033 (-1.06)	-0.015 (-1.17)	-0.039 (-0.99)	-0.013 (-0.76)	-0.027 (-0.61)
<i>SIZE</i>	-0.019*** (-3.41)	0.001 (0.11)	-0.018*** (-2.64)	-0.017 (-0.86)	-0.004 (-0.4)	0.085*** (3.12)
<i>ROA</i>	0.278† (8.61)	-0.296*** (-3.1)	0.273† (7.19)	-0.170 (-1.47)	0.148** (2.55)	-0.750† (-4.99)
<i>LEV</i>	0.092† (5.36)	-0.034 (-0.68)	0.089† (4.37)	-0.038 (-0.64)	0.115† (3.59)	0.059 (0.69)
<i>BM</i>	-0.009 (-0.56)	0.019 (0.41)	-0.007 (-0.36)	0.020 (0.32)	-0.014 (-0.61)	-0.045 (-0.75)
<i>CONT</i>	-0.144† (-3.55)	-0.261** (-2.19)	-0.162*** (-3.29)	-0.322** (-2.2)	0.032 (0.48)	0.183 (1.02)
<i>ST</i>	0.009 (1.14)	0.010 (0.41)	0.019* (1.86)	-0.009 (-0.3)	-0.006 (-0.47)	0.053 (1.43)
Constant	0.560† (4.32)	-0.086 (-0.23)	0.557† (3.66)	0.358 (0.79)	-0.029 (-0.11)	-2.528† (-3.68)
Year	Controlled					
No. of obs.	1,734	1,734	1,221	1,221	523	523
<i>R</i> ²	0.1191	0.0274	0.1366	0.0282	0.2772	0.3192
<i>F</i> -statistics	9.47	1.97	7.86	1.44	7.51	9.18
(<i>p</i> -value)	(0.000)	(0.005)	(0.000)	(0.085)	(0.000)	(0.000)

Note: *t*-statistics are in the parentheses. *, **, ***, and † denote the significance at 10%, 5%, 1%, and 0.1%, respectively.

The state-controlled firms (*STATE*) were more likely to refrain from using the *AEM* in the B-share firms (Panels A and B in Model [1]). Similarly, if the foreigners were the largest shareholders in the Chinese firms, the firms were also less likely to rely on the *AEM* (Panel A in Model [1]). Nonetheless, this result was only marginally significant at 10%.

DISCUSSION AND CONCLUSION

This study had investigated the effect of foreign ownership on Chinese firms' earnings management practices. Despite the continuous efforts of the Chinese authorities in attracting foreign capital, the equity markets of firms located in mainland China were still restrictive to foreign investors. Little is known about the roles and effects of foreign ownership in Chinese firms. It is believed that the current study is the first of its kind in examining the effect of foreign shareholding on Chinese firms' earnings quality.

The results generated in this study showed that the B-share firms were reluctant to use the *AEM* as the B-share ownership increased. These firms also had no specific association with the *REM*. Compared with other mainland firms, the B-share firms need to bear additional monitoring costs such as supplementary audits. This may deter the B-share firms from relying on the *AEM*.

In contrast, the H-share firms were more likely to engage in earnings management by using both the *AEM* and *REM* as the H-share ownership increases. Although the HKSE was expected to be more market-friendly, it was also under stricter outsiders' scrutiny. It appears that foreign investors were more likely to be disadvantaged by the greater information asymmetry as noted in the disparity. The H-share firms' primary operations were conducted in mainland China, thereby depriving the foreigners from the accessibility to the mainland firms' true operational information, as well as the monitoring of the insiders' opportunistic behaviours. Given that the aim of the H-share issuance was to gather finance directly from foreign investors, the results in this study showed that the H-share firms had a stronger incentive to engage in earnings management more aggressively.

The results obtained had also shown that if the B-share firms were under state control, they were less likely to use the *AEM*. However, results showed that state control had no impact on the H-share firm's earnings management practices. There were also no specific association between state control and either the *AEM* or the *REM*. This study also tested the same relationship when foreigners served as the largest shareholders in Chinese firms. Likewise, the results also indicated that the *AEM* tend to decrease when the B-shareholders formed the largest shareholders. The *AEM* and *REM* were not affected when the H-share holders formed the largest shareholders.

This study seems to cast a doubt on the positive effects of foreign ownership in Chinese corporate governance practices. The findings gathered from the current study showed that foreign investors who wanted to invest in Chinese firms need to be more vigilant about current market inefficiency, and the problem of information asymmetry which is currently happening within the Chinese stock markets. The results also suggested that Chinese authorities should implement more effective measures which can facilitate market efficiency in the mainland's stock markets, if it intends to attract more foreign investment.

Despite the above findings and implications, this study needs further verification. For instance, foreign ownership is still uncommon in many Chinese firms. Thus, future research may need to focus on examining the effects of foreign ownership as new measurements for internalisation are being introduced by the Chinese government. This is because little is known about the effects of the two-stock exchange connects – the SHSE-HKSE connect, and the SZSE-HKSE connect. Second, the measurement methods used to evaluate earnings management are diverse. For example, the level of earnings management can be measured by the discretionary accruals or the variations in accruals (e.g., standards deviation of accruals). Therefore, future research may consider using other approaches to generate more robust results.

NOTES

1. In order to issue the B-share, Chinese firm needs to apply for an approval from the CSRC (Chinese Securities Regulatory Commission) which is responsible for the regulation and supervision of the issuing and trading of the B-shares (Su, 2003, p. 51). Also, the provisions pertaining to the issue B-shares contain important matters such as information disclosure, the trading of B-shares by stockbroker and agents, and the duties of key personnel in the board of directors.
2. The SHSE and the SZSE would give 'special treatment' to the stocks of listed companies with abnormal financial conditions such as net loss of two consecutive fiscal years or any abnormal financial behaviour identified and claimed by the CSRC or a Stock Exchange. (China Stock Market Handbook, 2008, p. 38).
3. In the special treatment period, the stock of the listed company should be restricted in many aspects such as: (i) the limit of the increase and decrease of ST share quotation is 5%; (ii) a special label, "ST" before the original share name; and (iii) the company's interim report needs to be audited (China Stock Market Handbook, 2008, p. 38).

REFERENCES

- An, Y. (2019). An empirical study on the relationship between foreign investors and earnings quality. *Research in World Economy*, 10(3), 99–107. <https://doi.org/10.5430/rwe.v10n3p99>
- Barth, M. E., Konchitchki, Y., & Landsman, W. R. (2013). Cost of capital and earnings transparency. *Journal of Accounting and Economics*, 55(2–3), 206–224. <https://doi.org/10.1016/j.jacceco.2013.01.004>
- Busaba, W. Y., Guo, L., Sun, Z., & Yu, T. (2015). The dark side of cross-listing: A new perspective from China. *Journal of Banking and Finance*, 57, 1–16. <https://doi.org/10.1016/j.jbankfin.2015.04.004>
- China Stock Market Handbook*. (2008). Saratoga, USA: Javvin Press.
- Cheng, P., Aerts, W., & Jorissen, A. (2010). Earnings management, asset restructuring, and the threat of exchange delisting in an earnings-based regulatory regime. *Corporate Governance: An International Review*, 18(5), 438–456. <https://doi.org/10.1111/j.1467-8683.2009.00780.x>
- Choe, H., Kho, B. C., & Stulz, R. M. (2005). Do domestic investors have an edge? The trading experience of foreign investors in Korea. *The Review of Financial Studies*, 18(3), 795–829. <https://doi.org/10.1093/rfs/hhi028>
- Chung, R., Ho, S., & Kim, J. B. (2004). Ownership structure and the pricing of discretionary accruals in Japan. *Journal of International Accounting, Auditing and Taxation*, 13(1), 1–20. <https://doi.org/10.1016/j.intaccudtax.2004.02.003>
- Cimini, R. (2015). How has the financial crisis affected earnings management? A European study. *Applied Economics*, 47(3), 302–317. <https://doi.org/10.1080/00036846.2014.969828>
- Claessens, S., Djankov, S., & Lang, L. H. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, 58(1–2), 81–112. [https://doi.org/10.1016/S0304-405X\(00\)00067-2](https://doi.org/10.1016/S0304-405X(00)00067-2)
- Cohen, D. A., Dey, A., & Lys, T. Z. (2008). Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. *The Accounting Review*, 83(3), 757–787. <https://doi.org/10.2308/accr.2008.83.3.757>
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *The Accounting Review*, 193–225.
- Demsetz, H. (1983). The structure of ownership and the theory of the firm. *The Journal of Law and Economics*, 26(2), 375–390. <https://doi.org/10.1086/467041>
- Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93(6), 1155–1177. <https://doi.org/10.1086/261354>
- Hu, Y., & Zhao, T. (2018). Does cross-listing really enhance market efficiency for stocks listed in the home market? The perspective of noise trading in the Chinese Stock Market. *Emerging Markets Finance and Trade*, 54(2), 307–327. <https://doi.org/10.1080/1540496X.2017.1336085>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)

- Jiang, L., & Kim, J. B. (2004). Foreign equity ownership and information asymmetry: Evidence from Japan. *Journal of International Financial Management & Accounting*, 15(3), 185–211. <https://doi.org/10.1111/j.1467-646X.2004.00107.x>
- Kim, S. H., & An, Y. (2018). The effect of ownership-control disparity on the Chinese firm's real activity earnings management. *Pacific Accounting Review*, 30(4), 482–499. <https://doi.org/10.1108/PAR-01-2018-0003>
- Kim, J. R. (2019). State ownership and earnings management: Evidence from the split share structure reform in China. Available at SSRN 3298807. <https://doi.org/10.2139/ssrn.3298807>
- Kim, Y., Park, M. S., & Wier, B. (2012). Is earnings quality associated with corporate social responsibility? *The Accounting Review*, 87(3), 761–796. <https://doi.org/10.2308/accr-10209>
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163–197. <https://doi.org/10.1016/j.jacceco.2004.11.002>
- Kuo, J. M., Ning, L., & Song, X. (2014). The real and accrual-based earnings management behaviors: Evidence from the split share structure reform in China. *The International Journal of Accounting*, 49(1), 101–136. <https://doi.org/10.1016/j.intacc.2014.01.001>
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517. <https://doi.org/10.1111/0022-1082.00115>
- Li, T., Luo, M., & Ng, D. (2014). Earnings management and listing regulations in China. *China Finance Review International*, 4(2), 124–152. <https://doi.org/10.1108/CFRI-02-2014-0005>
- Lien, D., Tseng, M. C., & Wu, S. (2013). Foreign investors in Taiwan: Their roles and government perspectives. *Business Horizons*, 56(6), 749–756. <https://doi.org/10.1016/j.bushor.2013.07.007>
- Liu, Q., & Lu, Z. J. (2007). Corporate governance and earnings management in the Chinese listed companies: A tunneling perspective. *Journal of Corporate Finance*, 13(5), 881–906. <https://doi.org/10.1016/j.jcorpfin.2007.07.003>
- Liu, Q., Luo, T., & Tian, G. G. (2015). Family control and corporate cash holdings: Evidence from China. *Journal of Corporate Finance*, 31, 220–245. <https://doi.org/10.1016/j.jcorpfin.2015.02.007>
- Mei, J., Scheinkman, J., & Xiong, W. (2005). *Speculative trading and stock prices: Evidence from Chinese AB share premia* (No. w11362). National Bureau of Economic Research. <https://doi.org/10.3386/w11362>
- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20, 293–315. [https://doi.org/10.1016/0304-405X\(88\)90048-7](https://doi.org/10.1016/0304-405X(88)90048-7)
- Noble, J. (2013). “End of the road for China's ‘B’ market”, *Financial Times*, Retrieved from <https://www.ft.com/content/254b3b6e-5a2a-11e2-a02e-00144feab49a>
- Noronha, C., Zeng, Y., & Vinten, G. (2008). Earnings management in China: An exploratory study. *Managerial Auditing Journal*, 23(4), 367–385. <https://doi.org/10.1108/02686900810864318>

- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3), 335–370. <https://doi.org/10.1016/j.jacceco.2006.01.002>
- Su, D. (2003). *Chinese stock markets: A research handbook*. Singapore: World Scientific Publishing Co. <https://doi.org/10.1142/4602>
- Wang, L., & Yung, K. (2011). Do state enterprises manage earnings more than privately owned firms? The case of China. *Journal of Business Finance & Accounting*, 38(7–8), 794–812. <https://doi.org/10.1111/j.1468-5957.2011.02254.x>
- Wu, M. W., Shen, C. H., Lu, C. H., & Chan, C. C. (2012). Impact of foreign strategic investors on earnings management in Chinese banks. *Emerging Markets Finance and Trade*, 48(5), 115–133. <https://doi.org/10.2753/REE1540-496X480507>
- Zang, A. Y. (2011). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The Accounting Review*, 87(2), 675–703. <https://doi.org/10.2308/accr-10196>