Junwei Lu PhD
Full professor in Accounting, School of Management
Shandong University
Email: sdljw@sdu.edu.cn

Laifeng Yang, PhD student
School of Management
Shandong University
Email: laifeng_yang@126.com

Jin Peng
Assistant Professor of Finance
College of Business,
University of Colorado, Colorado Springs
Colorado Springs, CO, 80919, USA
E-mail: jpeng@uccs.edu
Cell: 2025505851
Fax: 7192553494

Cheng Xu, PhD (corresponding)
Assistant Professor of Entrepreneurship
International Business School Suzhou, Xi'an Jiaotong-Liverpool University,
Email: Cheng.Xu@xjtlu.edu.cn

Does Mature Foreign Investment Improve Accounting Information Quality in Emerging Markets?

Abstract:
This study investigates the role of mature overseas investment inflows in improving corporate governance within emerging economies' capital markets. Using the "Shanghai-Hong Kong Stock Connect" program as an external policy shock, we examine its impact on the quality of accounting information in pilot enterprises. Our findings reveal that the program significantly reduces earnings management behavior and enhances the quality of accounting information in interim reports of pilot enterprises. The improvement is driven by the introduction of mature overseas investors through the program. Furthermore, our study demonstrates that even in emerging economies with weak institutional frameworks, market mechanisms can effectively improve corporate governance. These findings provide evidence of the policy effects of capital market liberalization and the potential for mature overseas investment inflows to contribute to the operational efficiency of capital markets in emerging economies. The fact that interim reports do not require an external audit and are not monitored closely by regulators helps our tests to identify the market's effects on accounting information quality better and cleaner.

Keywords: Corporate governance, accounting information quality, emerging economies, foreign investors
JEL classifiers: G15, G18, G24, M41, O16

1. INTRODUCTION

In the vibrant landscape of emerging economies, the pivotal role of government intervention in advancing corporate governance has been underscored by a multitude of groundbreaking studies (Ayanda Matsane et al., 2022; Chung et al., 2022; Claessens & Yurtoglu, 2013; Irfan Haider Shakri et al., 2022; Lizares, 2022; Hu et al., 2021; Sikarwar, 2022; Xiong et al., 2022).

At the heart of corporate governance lies accounting information, the lifeblood of resource allocation in capital markets. High-quality accounting information can be the catalyst for efficient capital allocation, igniting a chain reaction of enhanced economic development (Chen & Yuan, 2014). In the context of emerging economies, research by Junior et al. (2017) unraveled a positive influence of IFRS adoption on accounting information quality in Brazil. Martins & de Campos Barros (2021) further revealed that the symbiosis of firm-level informativeness and accounting quality is even more pronounced in emerging markets with weaker information environments. Oh et al. (2014) discovered that the potency of ICFR regulation hinges on enforcement rather than mere adoption. These breakthrough findings illuminate the undeniable impact of government regulation on accounting information quality in emerging economies, particularly when enforced with conviction. In stark contrast, a myriad of studies in developed economies has delved into the market's instrumental role in enhancing accounting information quality, such as through institutional investors' shareholdings (Utama and Cready, 1997; Edmans and Holderness, 2017; Omran and Tahat, 2020; Garel et al., 2021) and joint institutional shareholdings (Kang et al., 2018; Park et al., 2019; Ramalingegowda et al., 2020), culminating in the augmentation of annual financial report quality (henceforth referred to as "annual reports").

Considering the profound emphasis placed on government regulation in elevating accounting information quality within emerging economies, a tantalizing question emerges: Can market factors unleash their potential to improve accounting information quality, and if so, how might investors wield their influence to achieve this in emerging

economies? Comprehending the role of investors in elevating accounting information quality in these dynamic environments is not only paramount for research in this realm, but also offers invaluable insights into the operation of market mechanisms in the face of suboptimal regulation.

However, research on the relationship between investors and accounting information faces two main challenges. First, previous literature has primarily focused on annual reports as the object of analysis, which has several limitations (Healy & Palepu, 2001; Leuz, Nanda, & Wysocki, 2003). On one hand, regulatory agencies have established clear rules and regulations for the disclosure of information in annual reports. On the other hand, annual reports are audited by accountants who are responsible for ensuring their quality (Kothari, Leone, & Wasley, 2005). Thus, using accounting information quality in annual reports as the research object may not be conducive to identifying the net effect of investor influence on accounting information quality. Furthermore, it may not address the question of how government and market forces can impact the efficient functioning of capital markets in an environment with weak institutional arrangements (Djankov, La Porta, Lopez-de-Silanes, & Shleifer, 2008). Second, identifying causality presents a challenge as better information disclosure can attract investors, leading to a reverse causality problem (Lang, Lins, & Maffett, 2012).

To address these challenges, this paper conducts a study using a sample of A-share listed companies on the Shanghai and Shenzhen stock exchanges from 2012 to 2016, to investigate whether and how the opening of the capital market affects the quality of interim accounting information.

The interim financial report (hereinafter referred to as "interim report") aims to provide timely accounting information, serving as an essential basis for stakeholders to fully understand a company's operating conditions and make decisions (Green, 1964). Unlike annual reports, China's Securities Law stipulates that the interim report can be disclosed

without external audit, except in special circumstances. Examining the causal impact of investors on the interim report's accounting information quality can help identify the net effect of investors and provide empirical evidence for the role of investors and auditors in improving corporate governance in a weak institutional environment.

China's capital market opening provides an excellent quasi-natural experimental scenario. This paper uses the 2012-2016 A-share listed companies as the research sample to explore whether and how mature investors improve the accounting information quality in the interim report using a difference-in-differences model. The "Shanghai-Hong Kong Stock Connect" plan, implemented in 2014, is a milestone measure for the A-share market to open up to the outside world, promoting the A-share market's inclusion in the MSCI Emerging Markets Index (Fan & Wang, 2017). This plan achieved mutual access and investment between A-shares and Hong Kong stocks, providing convenience for mature investors in trading pilot companies listed on the Shanghai Stock Exchange.

The "Shanghai-Hong Kong Stock Connect" system is relatively exogenous to the interim report's accounting information quality (Chen, Chen, & Wei, 2019). Its initial purpose was to improve the capital market's efficiency, expand the capital market's breadth and depth, and promote the capital market's healthy development. The implementation of the "Shanghai-Hong Kong Stock Connect" system means the introduction of mature foreign investors, providing a good quasi-natural experimental environment for examining the information processing effect of mature investors and revealing the causal relationship between the capital market's opening and changes in the interim report's accounting information quality.

Furthermore, this study also investigates how internal governance and external supervision affect the improvement effect of capital markets on the quality of interim financial accounting information. Regarding internal governance, this study mainly

measures the proportion of independent directors (Huang and Ke, 2022), the quality of internal control (Chen et al., 2017), and the corporate governance index (Jiang and Yuan, 2018). As for external supervision, this study mainly measures whether annual reports are audited by the Big Four, the number of analysts tracking the company, and the proportion of institutional investors' shareholdings. The research finds that the improvement in the quality of interim financial accounting information is more pronounced for companies with weaker internal governance and less external supervision in response to the opening of capital markets. This suggests that in the absence of effective regulation, mature investors introduced through the opening of capital markets can leverage their capital and knowledge advantages to enhance the quality of interim financial accounting information.

Moreover, this study finds that the improvement of the quality of interim financial accounting information contributes to enhancing the efficiency of capital markets. This indicates that high-quality interim financial accounting information can reduce information asymmetry and enhance resource allocation efficiency. Therefore, in the absence of effective regulation and formal institutions that provide reasonable assurance of the quality of interim financial accounting information, opening up capital markets can help unleash the power of the market, and enhance the efficiency of capital market operations.

This paper's findings have made contributions to the existing literature in the following ways. Firstly, it enriched the relevant literature on corporate governance in emerging markets. Scholars have widely debated whether market institutions, such as auditors, institutional investors, and financial analysts, can play an active role in corporate governance when the institutional environment is weak (Fan and Wong, 2005; Bae et al., 2006; Firth et al., 2013; Gu et al., 2013; Ke et al., 2015; Chen et al., 2018; Huang and Ke, 2022). Using the ideal research scenario of a non-mandatory audit of Chinese interim reports, this article found that mature investors can improve the quality of interim financial reporting by using their professional knowledge and experience when

neither the China Securities Regulatory Commission nor external auditors provide reasonable assurance of the quality of interim accounting information. This paper found that the "catfish effect" of capital market openness has important implications for emerging market economies, which can help strengthen policymakers' and the public's confidence in the market.

Secondly, this paper enriched the literature on the factors that influence the quality of interim financial reporting from the perspective of informal institutional factors. Existing research has explored how to improve the quality of interim financial reporting from the perspective of auditing, such as voluntary review (Bandyopadhyay et al., 2007; Bédard and Benefits, 2015) and audit committee characteristics (Manry et al., 2003; Yang and Krishnan, 2005; Kamisah and Rahman, 2012). However, this paper, under the formal institutional arrangement of non-mandatory audit of interim reports, used the "Shanghai-Hong Kong Stock Connect" as a quasi-natural experiment to empirically test whether and how capital market openness affects the quality of interim financial reporting, thus enriching the relevant literature on the factors that influence the quality of interim financial reporting.

Thirdly, this paper is also related to the extensive literature on earnings management in emerging economies. The existence of aggressive earnings management in emerging economies has been widely confirmed (Aharony et al., 2000; Chen and Yuan, 2004; Haw et al., 2005; Kao et al., 2009), but relatively little research has been done on how to adopt effective measures to reduce such aggressive earnings management (DeFond et al., 1999; Chen et al., 2018). DeFond et al (1999) found that the schemes adopted by government regulatory agencies to reduce corporate earnings management often have counterproductive effects, while Chen et al (2018) found that the market can more effectively reduce aggressive earnings management in weak institutional environments like China's by using IPO pricing power transfer scenarios. This paper found that the introduction of mature investors helped to reduce interim earnings management in

companies and enriched the relevant literature on the market's governance of aggressive earnings management in emerging economies.

Finally, this study's findings are likely to arouse the interest of regulatory agencies and financial market investors. In weak institutional environments, examining how regulatory agencies and market intermediaries can leverage their strengths and collaborate to better regulate capital market information disclosure has important practical significance and theoretical value. The increasingly fierce competition in capital markets among countries and the trend towards economic globalization continue to stimulate the opening up of capital markets around the world (Levine and Zervos, 1998; Henry, 2000; Bekaert et al., 2005; Chen et al., 2022). One important method for opening up capital markets is to reduce the role of government regulatory agencies in capital market operations, but its impact on emerging economies is mixed and often causes fierce debate (Bekaert and Harvey, 2000; Kaminsky and Schmukler, 2002; Bae et al., 2006; Naceur et al., 2008; Moshirian et al., 2021; Li et al., 2022; Peng, Hegde, & Zhang, 2022). This study provides relevant research evidence for this important debate.

In contrast to previous studies, such as those conducted by Zhao et al. (2021) and Liu and Niu (2023), which also utilize the context of the "Shanghai-Hong Kong Stock Connect" program, our research offers a unique and complementary perspective on the impact of mature foreign investment on accounting information quality in emerging markets. While earlier studies have focused on aspects like corporate governance, annual earnings management, and the quality of annual financial reports, our research investigates the causal impact of mature foreign investors on the quality of interim financial reports within the context of weak institutional frameworks. Given that annual reports are audited and regulatory authorities have relatively comprehensive arrangements for annual information disclosure, the findings of previous studies, which suggest that capital market openness helps reduce annual earnings management, may not fully capture the net effect of capital market openness. This distinction is crucial

because interim financial reports are not audited, providing a more transparent view of the true effect of foreign investment on information quality.

Our study not only deepens the understanding of the dynamics between foreign investors and accounting information quality but also underscores the role of market intermediaries and regulatory agencies in enhancing information disclosure within the capital market, particularly in emerging economies with weaker institutional environments (Levine & Zervos, 1998; Henry, 2000; Bekaert et al., 2005; Chen et al., 2022; Bekaert & Harvey, 2000; Kaminsky & Schmukler, 2002; Bae et al., 2006; Naceur et al., 2008; Moshirian et al., 2021; Li et al., 2022; Peng, Hegde, & Zhang, 2022). By focusing on the unique aspects and challenges associated with the "Shanghai-Hong Kong Stock Connect" program, our research provides valuable empirical evidence and contributes to the ongoing debate on the effectiveness of mature foreign investment in improving the quality of accounting information in emerging markets.

The structure of this paper is as follows: Section 2 provides the institutional background, theoretical analysis, and research hypotheses. Section 3 outlines the research design. Section 4 summarizes the empirical results and robustness checks. Section 5 provides further analysis. Finally, Section 6 presents the conclusion.

2. INSTITUTIONAL BACKGROUND AND HYPOTHESES DEVELOPMENT

2.1 Institutional background

In the past 40 years of China's reform and opening up, its economy has developed rapidly, and its capital market has become the second largest in the world in a short period of time (World Bank, 2021). As a relatively young player on the global stage, the Chinese capital market is dominated by inexperienced individual investors (Allen, Qian, & Qian, 2005). In order to optimize resource allocation and enhance the efficiency of the capital market, the Chinese government has been committed to promoting capital market liberalization since 1992, allowing qualified Chinese

companies to issue B shares to foreign investors (Lardy, 2019). However, progress has been relatively slow since then (García-Herrero & Xia, 2016).

To attract foreign investors and promote the development of the Chinese capital market, the Chinese government launched the Shanghai-Hong Kong Stock Connect plan on November 17, 2014. This plan allows Hong Kong investors to invest in designated companies listed on the Shanghai Stock Exchange, and provides a valuable channel for foreign capital to invest in China's stock market through the Hong Kong market. At the same time, the plan also allows mainland Chinese investors to invest in designated companies listed on the Hong Kong Stock Exchange. Therefore, the Shanghai-Hong Kong Stock Connect greatly strengthens the connection between the Shanghai and Hong Kong stock exchanges and provides an important channel for foreign capital to invest in the Chinese capital market.[1]

Overall, the Shanghai-Hong Kong Stock Connect has successfully drawn considerable mature investments from developed economies into China's A-share market, resulting in substantial shifts in the investor structure of pilot companies listed on the Shanghai Stock Exchange (Fan & Wang, 2017; Peng, Hegde, & Zhang, 2022). Consequently, it provides an ideal exogenous shock for us to identify the causal effect of capital market liberalization on the quality of accounting information (Chen, Chen, & Wei, 2019).

2.2 Hypothesis development

In regard to the specific relationship between market-opening policies and the quality of interim financial reporting in emerging markets, this article proposes a theoretical

[1] In the Hong Kong market, foreign investors are influential participants and accounted for approximately 40% of the total trading volume in 2014. Data also shows that about 85% of foreign investors are sophisticated institutional investors, indicating that foreign institutional investors are the main participants in the market. As for the sources of foreign investors, half of them come from the UK and the US, which are typical representatives of developed economies. (Data sources: Bloomberg and Wind databases.)

framework suggesting that opening up capital markets will mainly affect the quality of interim financial reporting from the following perspectives.

The conceptual framework for this study is built upon a combination of Agency Theory (Jensen & Meckling, 1976), Signaling Theory (Spence, 1973), and Information Asymmetry Theory (Akerlof, 1970) to investigate the relationship between capital market opening and the quality of interim financial reporting. Agency Theory provides the foundation for understanding how increased oversight from institutional investors can enhance corporate governance and improve financial reporting quality by aligning the interests of agents and principals (Fama & Jensen, 1983). In the context of capital market opening, this leads to an increased presence of foreign institutional investors, who can pressure companies to adopt more reasonable accounting policies, reduce information asymmetry, and enhance accounting information quality (Chung et al., 2002; Gillan & Starks, 2003).

Signaling Theory complements this by emphasizing the role of high-quality financial reporting as a signal to investors, showcasing well-managed companies with strong future prospects (Ross, 1977; Leland & Pyle, 1977). In the context of capital market opening, high-quality accounting information disclosure sends positive signals that attract foreign capital and facilitate financing advantages for companies (Botosan, 1997; Yoon, 2017). This potential financing advantage may also inhibit earnings management (Lu et al., 2022), improving accounting information quality.

Lastly, Information Asymmetry Theory highlights the importance of reducing information disparities between parties, which can be achieved through market integration and competition, ultimately leading to improved financial reporting quality (Diamond & Verrecchia, 1991). The opening of capital markets fosters market integration between China's domestic and Hong Kong's capital markets, promoting competition, and reducing information asymmetry. This process encourages listed

companies to enhance their accounting information quality as a response to the stricter information disclosure requirements and increased reliance on publicly disclosed information by overseas investors (La Porta et al., 1998; Boubakri et al., 2016).

By combining these theories, the conceptual framework explores the complex interplay between capital market opening, investor influence, signaling effects, and information asymmetry, ultimately demonstrating how these factors contribute to enhancing the quality of interim financial reporting in emerging markets. The conceptual framework is presented in Figure 1:

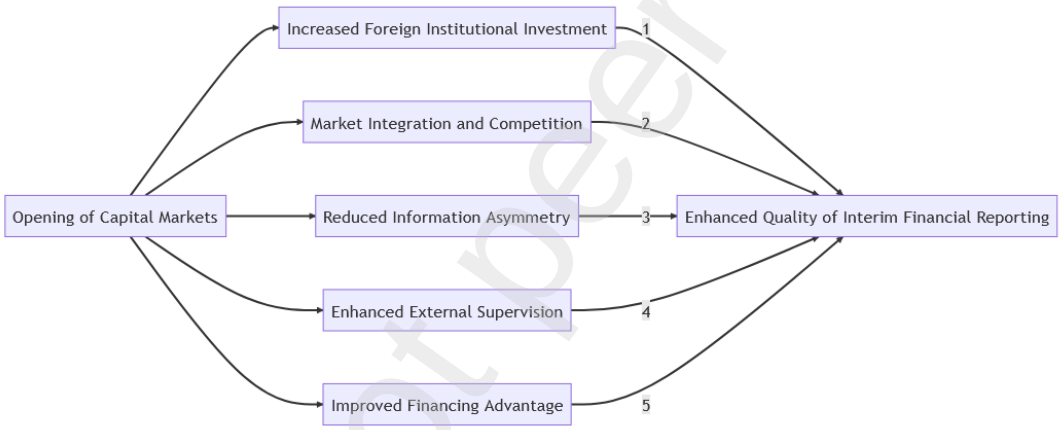

Figure 1: Conceptual framework

Firstly, the opening up of capital markets means more overseas capital flowing into the domestic capital market, which can help increase the foreign investment of pilot companies and thereby enhance the quality of interim financial reporting. Chung et al. (2002) found that institutional investors can pressure companies to adopt more reasonable accounting policies, thereby reducing the degree of information asymmetry in the company. Boone and White (2015) found that companies held by institutional investors attract more analyst attention, strengthen external governance, effectively reduce the degree of earnings management, and enhance the quality of interim financial reporting. Foreign institutional investor has international investment experience and a

professional investment philosophy (Grinblatt & Keloharju, 2000), as well as a relatively independent relationship with companies (Huang & Zhu, 2015). Therefore, foreign institutional investors can better identify companies' abnormal behavior, increase the difficulty of information manipulation by domestic listed companies (Ferreira & Matos, 2008; Bae et al., 2006; Aggarwal et al., 2011), reduce the degree of information asymmetry in the company, and thus enhance the quality of accounting information (Gillan & Starks, 2003). Based on this theoretical framework, this article expects that the opening up of capital markets will increase the foreign institutional investors' holdings of pilot companies, play a supervisory and governance role, and thereby enhance the quality of interim financial reporting.

Secondly, Yoon (2017) found that high-quality accounting information disclosure for pilot companies under the Shanghai-Hong Kong Stock Connect program can send positive signals, attracting foreign capital and facilitating financing advantages. Based on signaling theory, pilot companies will actively provide high-quality accounting information to gain financing advantages and attract more foreign capital. This potential financing advantage may also inhibit earnings management (Lu et al., 2022), improving accounting information quality.

Lastly, the capital market opening has removed barriers between China's domestic and Hong Kong's capital markets, fostering market integration, promoting competition, and reducing information asymmetry. Hong Kong's financial system is more comprehensive and imposes stricter information disclosure requirements on listed companies compared to China's domestic market. Overseas investors face higher investment costs (La Porta et al., 1998; Boubakri et al., 2016), limited channels for private communication with listed companies, and information disadvantages. Consequently, they rely more on publicly disclosed information, using their professional expertise to enhance external supervision and improve listed companies' accounting information quality.

In summary, this article posits that capital market opening can suppress firms' earnings management behavior and enhance interim financial reporting quality. Thus, it proposes the following testable hypothesis:

H1: Opening capital markets can improve the quality of interim financial reporting in emerging economies.

3. RESEARCH DESIGN

3.1 Sample selection and data sources

In view of the fact that the Chinese government implemented the "Shenzhen-Hong Kong Stock Connect" plan at the end of 2016, this paper selects the sample period of the two years before and after the launch of the "Shanghai-Hong Kong Stock Connect", that is, uses all A-shares listed in Shanghai and Shenzhen from 2012 to 2016 as the research sample, and proceeds as follows : (1) Exclude the samples of financial companies; (2) Exclude companies listed after 2014; (3) Exclude samples whose industry annual observation value is less than 15 when estimating the company's semi-annual report earnings management; (4) Exclude abnormal financial data; (5) Exclude samples with missing main financial data. The final sample includes 11,338 firm-year observations. At the same time, this paper winsorizes all continuous variables by 1% and 99% to reduce the impact of outliers. The main financial data in this paper come from CSMAR database and Wind database.

3.2 Research model and variable definition

In order to explore whether and how the opening of the capital market affects the quality of accounting information in mid-year reports of emerging capital market companies, this paper uses the "Shanghai-Hong Kong Stock Connect" plan as an exogenous impact and constructs the following difference-in-differences (DID) model:

$$absDA_{i,t} = \alpha_0 + \alpha_1 DID_{i,t} + \alpha_2 TREAT_i + \alpha_3 POST_t + \gamma X_{i,t} + \sum Ind + \sum Year + \varepsilon_{i,t} \quad (1)$$

Where *absDA* represents the quality of accounting information in mid-year reports, mainly measured by the degree of earnings management in the half-year report, and is measured as the absolute value of the controllable accruals in the half-year report according to the performance-adjusted Jones model proposed by Kothari et al. (2005); *TREAT* is a categorical indicator variable, with a value of 1 if the company is a pilot company of the "Shanghai-Hong Kong Stock Connect" plan, and 0 otherwise; *POST* is a time indicator variable, and since the implementation of the "Shanghai-Hong Kong Stock Connect" plan was in November 2014, and the dependent variable of this paper is the quality of accounting information in mid-year reports, so if the sample year is 2015 or later, the value is 1, otherwise 0. *DID* is the interaction term between *TREAT* and *POST*, and the value is 1 if the company *i* is included in the "Shanghai-Hong Kong Stock Connect" plan in year t, and 0 otherwise. In this paper, the main focus is on the estimated coefficient of the *DID* term. If it is significantly negative, it indicates that after the implementation of the "Shanghai-Hong Kong Stock Connect" plan, compared with non-pilot enterprises, the degree of earnings management in the half-year report of pilot enterprises has significantly decreased and the quality of accounting information in mid-year reports has significantly improved; otherwise, it is the opposite.

To control for possible individual-level effects, this paper follows the research of Francis et al. (2008), Lu et al. (2022), and Wang et al. (2022), and controls for company-level variables *X*, including semi-annual variables such as company size (*SIZE*), asset-liability ratio (*LEV*), return on assets (*ROA*), company growth (*GROWTH*), and operating cash flow (*CFO*). In addition, it includes annual variables such as state-owned enterprises (*SOE*), book-to-market ratio (*BM*), whether it is audited by one of the "Big Four" accounting firms (*BIG4*), equity concentration (*TOP1*), dual roles (*DUAL*), independent director ratio (*INDIR*), board size (*BOARD*), and years since listing (*AGE*). In addition, industry and year fixed effects are included in the model to control for the impact of industry and year characteristics on the quality of interim financial statements. To avoid overestimation of statistical results, this study adjusts for the clustering of

standard errors at the firm level. The specific variable definitions in this study are shown in Table 1.

Table 1: Variable Definitions

Variable Type	Variable Symbol	Variable Definition
Dependent Variable	*absDA*	Absolute value of the discretionary accruals calculated using the performance-adjusted Jones model for the semi-annual report.
Explanatory Variables	*DID*	Equals 1 if the company is a pilot company for the "Shanghai-Hong Kong Stock Connect" program in the current year, and 0 otherwise.
	TREAT	Equals 1 if the company is a pilot company for the "Shanghai-Hong Kong Stock Connect" program, and 0 otherwise.
	POST	Equals 1 if the sample year is 2015 or 2016, and 0 otherwise.
Control Variables	*SIZE*	Natural logarithm of the total assets in the semi-annual report.
	LEV	Total liabilities to total assets ratio in the semi-annual report.
	ROA	Net profit to total assets ratio in the semi-annual report.
	GROWTH	Ratio of semi-annual report revenue growth rate to the previous year's semi-annual report revenue.
	CFO	Ratio of net operating cash flow to total assets in the semi-annual report.
	ySIZE	Natural logarithm of total assets in the annual report.
	yLEV	Total liabilities to total assets ratio in the annual report.
	yROA	Net profit to total assets ratio in the annual report.
	SOE	Indicator variable taking value 1 if the company is state-owned, 0 otherwise.
	BM	Ratio of total assets in the annual report to market value.
	SOE	Indicator variable taking value 1 if the company is state-owned, 0 otherwise.
	BIG4	Indicator variable taking value 1 if the annual report is audited by a "Big Four" accounting firm, 0 otherwise.
	TOP1	Percentage of shares held by the largest shareholder.
	DUAL	Indicator variable taking value 1 if the chairman also serves as the general manager, 0 otherwise.
	INDIR	Ratio of the number of independent directors to the total number of directors.
	BOARD	Total number of directors on the board.
	AGE	Natural logarithm of the number of years since the company was founded.

4. EMPIRICAL RESULTS

4.1 Descriptive Statistics

Table 2 reports the descriptive statistics of the main variables. It can be seen that the mean value of *absDA* is 0.051, indicating that mid-year earnings management behavior is relatively common in public companies. The minimum and maximum values are 0.000 and 0.337, respectively, with a standard deviation of 0.128, indicating a significant difference in the degree of mid-year earnings management among listed companies. Therefore, investigating how to improve the quality of interim accounting information in listed companies is of strong practical significance. The mean value of *DID* is 0.093, indicating that 9.3% of sample observations were affected by the opening of the capital market, which is consistent with previous research reports (Lu et al., 2021; Chen et al., 2022). The characteristics of the control variables are basically as expected and are not elaborated on here.

Table 2 Descriptive Statistics of the Main Variables

Variable	N	Mean	SD	*p*1	*p*50	*p*99
absDA	11338	0.051	0.128	0.000	0.030	0.337
DID	11338	0.093	0.290	0.000	0.000	1.000
TREAT	11338	0.230	0.421	0.000	0.000	1.000
POST	11338	0.409	0.492	0.000	0.000	1.000
SIZE	11338	22.022	1.310	19.385	21.840	25.917
LEV	11338	0.440	0.226	0.042	0.431	0.977
ROA	11338	0.017	0.026	-0.060	0.015	0.100
GROWTH	11338	0.207	0.765	-0.687	0.069	5.066
CFO	11338	0.004	0.051	-0.156	0.007	0.153
ySIZE	11338	22.115	1.305	19.475	21.939	25.966
yLEV	11338	0.443	0.218	0.050	0.434	0.940
yROA	11338	0.033	0.053	-0.186	0.030	0.188
SOE	11338	0.409	0.492	0.000	0.000	1.000

BM	11338	0.950	1.052	0.071	0.601	5.494
BIG4	11338	0.054	0.227	0.000	0.000	1.000
TOP1	11338	35.140	15.072	8.804	33.203	74.824
DUAL	11338	0.249	0.432	0.000	0.000	1.000
INDIR	11338	0.374	0.053	0.333	0.333	0.571
BOARD	11338	8.703	1.743	5.000	9.000	15.000
AGE	11338	2.112	0.801	0.000	2.303	3.135

4.2 Correlation Analysis

Table 3 provides a correlation coefficient table between the dependent variable and the independent variables in this study. The Pearson and Spearman correlation coefficients between *DID* and *absDA* are significantly negative at the 5% level or higher, indicating a significant negative relationship between the opening of the capital market and the quality of mid-year accounting information of the enterprise, which preliminarily verifies the research hypothesis.

Table 3 Correlation Coefficient

	absDA	*DID*	*TREAT*	*POST*
absDA		-0.036***	-0.047***	0.013
DID	-0.022**		0.584***	0.384***
TREAT	-0.028***	0.584***		-0.008
POST	0.038***	0.384***	-0.008	

Note: The upper part of the table is the Spearman coefficient, and the lower part is the Pearson coefficient. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

4.3 Univariate Test

Table 4 provides the results of **the univariate test**. Grouped according to the *DID* variable, the mean values of *absDA* in the two groups were calculated. The results in

Table 4 show that the difference in *absDA* mean values between the treatment group and the control group before the "Shanghai-Hong Kong Stock Connect" plan was implemented was 0.014, and after the plan was implemented, the difference was -0.004. According to the result in column (7), the difference is -0.017 when the change in the treatment group is subtracted from the change in the control group, and it is significant at the 1% level. Therefore, the results in Table 4 preliminarily indicate that the opening of the capital market helps to reduce mid-year earnings management and improve the quality of mid-year accounting information for pilot enterprises, which preliminarily verifies the research hypothesis.

Table 4 **Univariate Test**

	Control Group		Treatment Group		Difference		Diff-in-Diff
	(1) Before Event	(2) After Event	(3) Before Event	(4) After Event	(5) =(3)-(1)	(6) =(4)-(2)	(7) =(6)-(5)
absDA	0.047	0.046	0.061	0.043	0.014***	-0.003	-0.017***

Note: ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

4.4 Baseline Regression

Table 5 provides the estimation results of the baseline regression in this paper. The estimated coefficient of the difference-in-differences (*DID*) is the main coefficient of interest in this paper because it reflects whether there is a significant change in the interim financial reporting quality of pilot enterprises compared to non-pilot enterprises before and after the opening of the Shanghai-Hong Kong Stock Connect. As shown in Table 3, the estimated coefficient of *DID* is -0.017 (t=-3.735, see column (1)) without control variables or fixed effects, -0.013 (t=-2.891, see column (2)) with only control variables, -0.018 (t=-3.805, see column (3)) with only fixed effects, and -0.014 (t=-2.992, see column (4)) with both control variables and fixed effects. All of these coefficients are significantly negative at the 1% level. The baseline regression results

not only have statistical significance but also have economic significance. Taking column (4) as an example, the mean and median of pilot enterprise's interim earnings management decreased by 27.45% (-0.014/0.051) and 46.67% (-0.014/0.030), respectively, compared to non-pilot enterprises after the implementation of the "Shanghai-Hong Kong Stock Connect" program. Therefore, the opening of the capital market has a significant negative impact on interim earnings management and can significantly improve the interim financial reporting quality of enterprises, which is consistent with our hypothesis. Regarding the control variables, the estimated values in this paper are generally consistent with existing research (Liu and Lu, 2007; Luong et al., 2017; Dyreng et al., 2022; Yang and Tang, 2022).

Table 5 Baseline Regressions

	absDA			
	(1)	(2)	(3)	(4)
DID	-0.017***	-0.013***	-0.018***	-0.014***
	(-3.735)	(-2.891)	(-3.805)	(-2.992)
TREAT	-0.001	-0.003	0.000	-0.004
	(-0.467)	(-0.583)	(0.129)	(-0.847)
POST	0.014***	0.012***		
	(3.926)	(3.686)		
SIZE		-0.002		-0.001
		(-0.297)		(-0.142)
LEV		0.029		0.032
		(1.067)		(1.193)
ROA		0.135		0.139
		(1.198)		(1.246)
GROWTH		0.014***		0.014***
		(4.452)		(4.754)
CFO		-0.170***		-0.150**
		(-3.011)		(-2.479)
ySIZE		0.001		0.002
		(0.109)		(0.237)
yLEV		0.030		0.035
		(1.107)		(1.347)
yROA		0.112***		0.120***
		(3.307)		(3.598)
SOE		-0.003		0.001
		(-0.871)		(0.381)

BM		-0.003		-0.004
		(-1.129)		(-1.200)
BIG4		-0.008		-0.007
		(-1.417)		(-1.343)
TOP1		0.000*		0.000**
		(1.795)		(2.004)
DUAL		-0.001		-0.001
		(-0.602)		(-0.351)
INDIR		-0.029		-0.048*
		(-1.132)		(-1.797)
BOARD		-0.002**		-0.003**
		(-2.070)		(-2.553)
AGE		0.003**		0.001
		(2.052)		(0.604)
CONS	0.047***	0.070	0.053***	0.043
	(41.996)	(0.959)	(36.513)	(0.536)
IND & YEAR	NO	NO	YES	YES
N	11338	11338	11338	11338
R^2_a	0.003	0.024	0.043	0.064

Note: All models include an intercept; ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively; t-values are adjusted by clustering at the firm level.

4.5 Robustness test

4.5.1 Parallel trend test. One basic assumption of using the double-difference method is to satisfy the parallel trend assumption. Based on the research background of this paper, this assumption requires that the trend of accounting information quality performance in the treatment group and the control group before the implementation of the "Shanghai-Hong Kong Stock Connect" plan is parallel, that is, there is no significant difference. In order to test this assumption, this paper refers to the study of Beck et al. (2010) and sets the following dynamic equation to test the parallel trend assumption:

$$absDA_{i,t} = \alpha + \beta_{-2}DID_{i,t}^{-2} + \beta_0 DID_{i,t}^{0} + \beta_{+1}DID_{i,t}^{+1} + \beta_{+2}DID_{i,t}^{+2} + \eta TREAT_i + \gamma X_{i,t} + \sum IND + \sum YEAR + \varepsilon_{i,t} \quad (1)$$

where DID^j is the cross-term of *TREAT* and $YEAR^j$, $YEAR^j$ is a time dummy variable relative to the year of the implementation of the "Shanghai-Hong Kong Stock Connect" plan (2014), and when j is less than 0, it represents the jth year before the

implementation of the "Shanghai-Hong Kong Stock Connect" plan, and when j is greater than 0, it represents the *j*th year after the implementation of the "Shanghai-Hong Kong Stock Connect" plan. The coefficient β_j represents the difference in accounting information quality performance between the treatment group and the control group in the jth year after the implementation of the "Shanghai-Hong Kong Stock Connect" plan. This paper takes the year before the implementation of the "Shanghai-Hong Kong Stock Connect" plan (i.e., 2013) as the base year. According to Panel A of Table 6, the coefficient of DID^{-2} is not statistically significant, and the coefficients of DID^{+1} and DID^{+2} are significantly negative at the 5% level or higher, indicating that the DID analysis in this paper satisfies the parallel trend assumption.

Table 5 Robustness Test

Panel A: Parallel Trend Test	
	(1)
	absDA
DID^{-2}	0.009
	(1.314)
DID^{0}	-0.012
	(-0.798)
DID^{+1}	-0.012*
	(-1.775)
DID^{+2}	-0.030***
	(-2.739)
TREAT	-0.023**
	(-2.436)
Controls	YES
IND & YEAR	YES
N	11338
R^2_a	0.033
Panel B: Placebo Test	
	(1)
	absDA
DID	-0.008
	(-1.494)
TREAT	-0.002
	(-0.327)
Controls	YES
IND & YEAR	YES

N	11338
R^2_a	0.064

Panel C: PSM+DID

	(1)
	absDA
DID	-0.015***
	(-2.880)
TREAT	-0.004
	(-0.873)
Controls	YES
IND & YEAR	YES
N	4628
R^2_a	0.056

Panel D: Multi-period DID Test

	(1)
	absDA
HSSC	-0.013***
	(-3.376)
Controls	YES
IND & YEAR &FIRM	YES
N	30566
R^2_a	0.095

Panel E: Replacement of the Dependent Variable

	(1)	(2)	(3)	(4)	(5)	(6)
	absDA1	*absDA2*	*absDA3*	*RESTATE1*	*RESTATE2*	*RESTATE3*
DID	-0.015***	-0.016***	-0.014***	-0.022**	-0.070***	-0.036***
	(-3.063)	(-3.486)	(-3.012)	(-2.367)	(-3.958)	(-2.991)
TREAT	-0.006	-0.003	-0.004	0.009	-0.023	0.003
	(-1.031)	(-0.640)	(-0.818)	(1.210)	(-1.553)	(0.312)
Controls	YES	YES	YES	YES	YES	YES
IND	YES	YES	YES	YES	YES	YES
YEAR	YES	YES	YES	YES	YES	YES
N	11338	11338	11338	11338	11338	11338
R^2_a	0.037	0.078	0.065	0.011	0.023	0.015

Panel F: Change of Sample

	(1)	(2)	(3)	(4)
	Accounting Information Quality of Q1 Report	Accounting Information Quality of Q3 Report	Exclude Shanghai-Hong Kong Stock Connect Sample	Exclude Mid-Year Voluntary Audit Sample
	absDA_Q1	*absDA_Q2*	*absDA*	*absDA*
DID	-0.006*	-0.018***	-0.013***	-0.013***

	(-1.763)	(-3.407)	(-2.676)	(-2.911)
TREAT	-0.000	-0.006	0.003	-0.004
	(-0.108)	(-1.037)	(0.545)	(-0.916)
Controls	YES	YES	YES	YES
IND &YEAR	YES	YES	YES	YES
N	11338	11338	11264	11267
R^2_a	0.088	0.060	0.077	0.064

Note: All models include a constant term; *** , ** , and * represent statistically significant coefficients at the 1%, 5%, and 10% levels, respectively; t-values are adjusted at the firm level using cluster correction.

Furthermore, Figure 1 provides the coefficient estimates of β_j and their 95% confidence intervals. From Figure 1, it can be seen that the estimated value of β_j did not pass the significance test at the 10% level in the two years before the implementation of the "Shanghai-Hong Kong Stock Connect" plan, i.e., 2012-2013; however, in 2015-2016, the estimated values of β_{+1} and β_{+2} were both significantly positive at the 5% level or higher. Therefore, it can be concluded that there was no significant change in the difference in accounting information quality performance between the treatment group and the control group of enterprises before the implementation of the "Shanghai-Hong Kong Stock Connect" plan, which again verifies the parallel trend assumption.

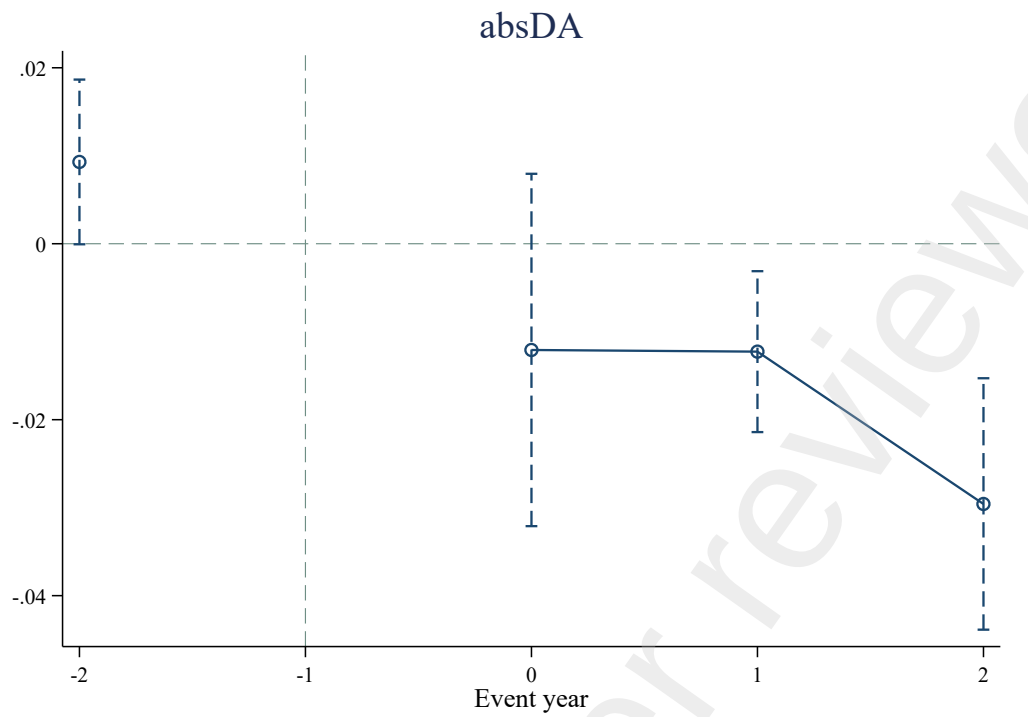

Figure 1: Coefficient estimates and confidence intervals of β_j.

4.5.2. Placebo test. Table 5 shows that the "Shanghai-Hong Kong Stock Connect" program is helpful in reducing earnings management in companies and improving the quality of interim financial reports. However, this effect may be due to differences caused by other policies or random factors. In order to verify that the changes in the quality of interim financial reports in companies are truly due to the impact of the "Shanghai-Hong Kong Stock Connect" program, the following placebo test is conducted in this paper.

(1) Drawing on the research of Cantoni et al. (2017), this paper advances the "Shanghai-Hong Kong Stock Connect" program by one year, assuming that the program began in 2013, generating the *POST1* variable, with a value of 1 for sample years from 2014 and subsequent years, and a value of 0 for 2012 and 2013, and the model (1) is re-estimated. If the baseline results of this paper are robust, we expect the estimated coefficient of *TREAT*POST1* to be insignificant. As we expected, the results in Panel B of Table 6 show that the estimated coefficient of the interaction term is not significant, indicating that the "Shanghai-Hong Kong Stock Connect" program has reduced earnings

management in pilot companies and improved the quality of interim financial reports. (2) Drawing on the research of Li et al. (2016), this paper randomly selects the same number of samples from the treatment group sample distribution, re-estimates the model (1), and records the estimated coefficients. This process is repeated 500 times. Figure 2 reports the distribution of the estimated coefficients. As shown in Figure 2, the mean of the *absDA* estimated coefficient is 0 and significantly different from the baseline regression coefficient of -0.014 in Table 5 (indicated by the vertical dashed line in the figure). Based on the above analysis, it can be concluded that the estimation results of this paper are not caused by other policies or random factors, and the decrease in earnings management and the improvement in the quality of interim financial reports in pilot companies are indeed due to the implementation of the "Shanghai-Hong Kong Stock Connect" program. Figure 2 shows the results of the placebo test.

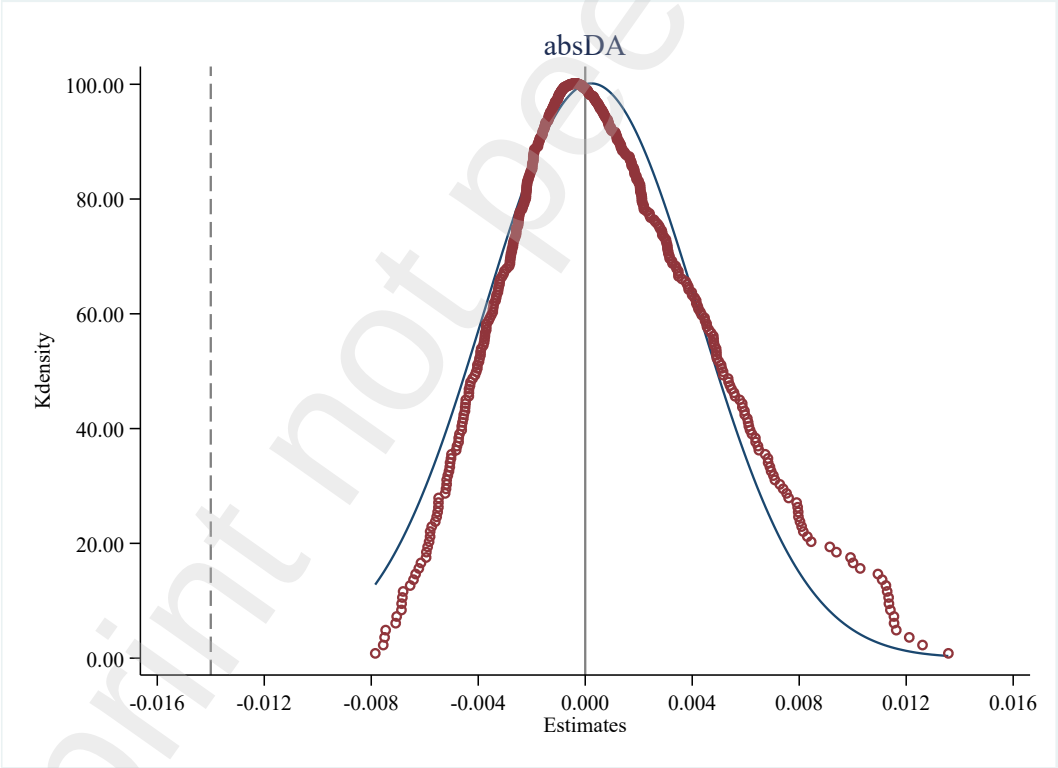

Figure 2. Results of Placebo Test.

4.5.3. PSM-DID Test. Given that the DID model requires the treatment and control groups to have similar characteristics, otherwise, the reliability of the DID analysis results may be reduced due to endogeneity issues. Based on this, this study uses

propensity score matching (PSM) to match more comparable control companies for the pilot enterprise and re-estimate the model (1). Specifically, drawing on the research of Li et al. (2022), all control variables in the model (1) are used as covariates to match the treatment and control companies at a ratio of 1:2. The results in Panel C of Table 6 show that the estimated coefficient of the *DID* term is still significantly negative at the 1% level, indicating that the "Shanghai-Hong Kong Stock Connect" plan helps to reduce earnings management in the pilot enterprises and improve the quality of accounting information reported, which further supports the hypothesis of this study.

4.5.4. Using a multi-period DID model. Given that the Chinese government launched the "Shenzhen-Hong Kong Stock Connect" plan in 2016, which further promoted the opening of the Chinese capital market, this study expands the sample to the period from 2008 to 2021[2] and re-estimates model (1) using the asymptotic double-difference method. Specifically, this study generates the Shanghai-Shenzhen-Hong Kong Stock Connect variable (*HSSC*), with a value of 1[3] for companies selected as pilot companies for the "Shanghai-Shenzhen-Hong Kong Stock Connect" plan in the following year and subsequent years, and 0 otherwise. If the opening of the capital market significantly reduces earnings management and improves the quality of accounting information reported, we expect the estimated coefficient of *HSSC* to be significantly negative. The relevant estimation results are reported in Panel D of Table 6, and it can be found that the estimated coefficient of *HSSC* is significantly negative at the 1% level, indicating

[2] Choosing 2008 as the starting year for the sample is because China implemented new accounting standards in 2007.

[3] Because the Shanghai-Hong Kong Stock Connect and the Shenzhen-Hong Kong Stock Connect plans were implemented in the second half of the year and considering that the focus of this study is on the interim report earnings management, the policy impact is unlikely to affect the interim reports of companies in the year of implementation. Therefore, the values for the year following the implementation of the Shanghai-Hong Kong Stock Connect and the Shenzhen-Hong Kong Stock Connect plans and subsequent years are set to 1.

that the opening of the capital market helps to reduce earnings management and improve the quality of accounting information reported by enterprises, and this conclusion is robust.

4.5.5. Replacement of the dependent variable. To avoid the interference of the measurement method of accounting information quality in the interim report on the empirical results of this study, on one hand, this study draws on the research of Dechow (1995), Dechow and Dichev (2002), and Ball and Shivakumar (2006) and uses the modified Jones model to recalculate three earnings management variables in the interim report (*absDA1*, *absDA2*, *absDA3*) to measure the quality of accounting information reported by enterprises in the interim report. The related estimation results are reported in columns (1) to (3) of Panel E of Table 6, and it can be found that the estimated coefficients of the DID term are all significantly negative at the 1% level, indicating that the conclusions of this study are robust. On the other hand, financial report restatements can also reflect the quality of financial report information of enterprises (Cao et al., 2012; Lobo and Zhao, 2013; Chen et al., 2018; Omer et al., 2020). Based on this, our study uses whether the interim report (*RESTATE1*), annual report (*RESTATA2*), and quarterly report (*RESTATE3*) are restated as dependent variables to investigate the impact of the "Shanghai-Hong Kong Stock Connect" plan on financial report restatements by enterprises. Columns (4) to (6) of Table 6 Panel E report the relevant estimation results, where we found that the "Shanghai-Hong Kong Stock Connect" plan can significantly reduce the likelihood of financial statement restatements (quarterly, semi-annual, or annual reports), and therefore, the plan can improve the quality of mid-year accounting information, once again confirming the conclusion of this article.

4.5.6. Change of sample.

1. Considering that semi-annual reports occupy an important position in the disclosure system of interim reports, and the "Measures for the Administration of Information

Disclosure by Listed Companies"[4] revised by the China Securities Regulatory Commission in 2021 no longer require mandatory disclosure of first and third quarterly reports of listed companies, the baseline regression in the previous section mainly examines the impact of the "Shanghai-Hong Kong Stock Connect" plan on the quality of mid-year accounting information. However, theoretically, since the "Shanghai-Hong Kong Stock Connect" plan helps to improve the quality of mid-year accounting information, it should also help to improve the quality of accounting information in the first and third quarterly reports. Therefore, based on the research by Kothari et al. (2005), this article estimates the accrual earnings management of first quarterly reports (*absDA_Q1*) and third quarterly reports (*absDA_Q3*) and empirically tests the impact of the "Shanghai-Hong Kong Stock Connect" plan on the quality of accounting information in the first and third quarterly reports. Columns (1) and (2) of Table 6 Panel F report the empirical results. The results show that the estimated coefficient of the DID item is significantly negative at the 10% level or higher, indicating that the "Shanghai-Hong Kong Stock Connect" plan can also improve the quality of accounting information in the first and third quarterly reports.

2. Given that some pilot companies were removed from the "Shanghai-Hong Kong Stock Connect" plan during the sample period, to further ensure the robustness of the conclusion, this article removes these samples, and Column (3) of Table 6 Panel F reports the empirical results. It can be found that the estimated coefficient of the *DID* item is significantly negative at the 1% level, further confirming the reliability of the conclusion of this article.

3. Since the interim report of some sample companies was subject to voluntary audit, which may affect the estimation results of this article, the article removes the voluntarily audited interim reports from the sample and re-estimates Model (1). Column (4) of Table 6 Panel F reports the empirical results. The results show that the estimated

[4] Source of information: http://www.gov.cn/gongbao/content/2021/content_5605111.htm

coefficient of the *DID* item is significantly negative at the 1% level, which is consistent with the baseline conclusion of this article.

4.5.7. Other robustness tests.

1. Given that the 2014 revision of the "Enterprise Accounting Standards" in China is the largest since its promulgation, both in terms of scale and depth of impact[5], it may affect the estimation results of this article. Based on the above, we remove samples before 2014 and re-estimate the Model (1).

2. Given that this article may have omitted relevant variables related to firm characteristics, the article further controls for firm fixed effects (*FIRM*) in Model (1) to mitigate the potential impact of firm characteristics on the estimation results.

3. To enhance the comparability between treatment group companies and control group companies, the article transforms unbalanced panel data into balanced panel data.

The results not reported here show that after a series of robustness tests, the conclusion of this article still holds, that is, the "Shanghai-Hong Kong Stock Connect" plan can help reduce interim earnings management and improve the quality of mid-year accounting information.[6]

5. ADDITIONAL ANALYSIS

5.1 Mechanism Analysis

As of now, this study finds that, compared to non-pilot firms, the Shanghai-Hong Kong Stock Connect ("Stock Connect") program has significantly reduced earnings management in interim reports of pilot firms, and consequently, improved the quality of their interim financial reporting. Based on the theoretical analysis presented earlier,

[5] Source of information: http://www.gov.cn/gongbao/content/2014/content_2775514.htm

[6] Due to length limitations, this article did not report the relevant empirical results of other robustness tests. If necessary, readers can request them from the author.

this study posits that the Stock Connect program has bridged the barriers between the mainland Chinese and Hong Kong markets, intensifying competition in the A-share capital market, while attracting more sophisticated investors to the Chinese A-share market. The heightened competition and influx of mature investors imply increased difficulty and costs associated with manipulating corporate information, thus the Stock Connect program facilitates the enhancement of the quality of firms' interim financial reporting.

To further substantiate the channels through which the Stock Connect program improves the quality of firms' interim financial reporting, this study conducts a mechanism analysis from three perspectives: cross-listing in Hong Kong, QFII shareholding, and shareholding by the Hong Kong Securities Clearing Company Limited.

1. Cross-listing in Hong Kong. Chinese A-share listed companies can apply for cross-listing on the Hong Kong Stock Exchange (HKEX), becoming A+H share companies. As these firms are listed on both exchanges, they are required to disclose financial reports in compliance with the regulatory requirements of both jurisdictions. In other words, A+H share companies have already been influenced by sophisticated investors prior to the implementation of the Stock Connect program. Therefore, if the introduction of mature investors is a valid mechanism for improving the quality of interim financial reporting after the implementation of the Stock Connect program, it is expected that the program would not have a significant impact on the quality of interim financial reporting for A+H share companies.

To test this expectation, this study divides the entire sample into two groups (A+H and non-A+H) based on whether the company was an A+H share company before the implementation of the Stock Connect program, and re-estimates Model (1) for each subsample. The empirical results are presented in Table 7, Panel A, columns (1) and

(2). The results reveal that the *DID* estimate coefficient is only significantly negative in the non-A+H share subsample, while being insignificant in the A+H share subsample. This is consistent with the study's expectation, suggesting that the mature investors introduced through the Stock Connect program contribute to the reduction of earnings management in interim reports for pilot firms and enhance the quality of their interim financial reporting.

Table 7: Mechanism Analysis

Panel A: Cross-listing and QFII Shareholding				
	(1)	(2)	(3)	(4)
	Cross-listed	Non-cross-listed	QFII Shareholding	No QFII Shareholding
DID	0.000	-0.014***	0.002	-0.015***
	(0.013)	(-2.961)	(0.232)	(-3.017)
TREAT	0.000	-0.004	-0.005	-0.003
	(0.008)	(-0.879)	(-0.775)	(-0.643)
Controls	YES	YES	YES	YES
IND & YEAR	YES	YES	YES	YES
N	364	10973	983	10355
R^2_a	0.262	0.064	0.211	0.063

Panel B: Hong Kong Investors in the Top Ten Tradable Shares			
	(1)	(2) HK Investor in Top 10 Tradable Shares	(3) HK Investor not in Top 10 Tradable Shares
	HK_TOP10	*absDA*	*absDA*
DID	0.229***	-0.001	-0.014***
	(14.624)	(-0.104)	(-3.010)
TREAT	0.008	0.001	-0.004
	(0.784)	(0.130)	(-0.864)
Controls	YES	YES	YES
IND & YEAR	YES	YES	YES
N	11338	306	11031
R^2_a	0.268	0.261	0.064

Note: All models include a constant term; ***, **, and * represent coefficients that are statistically significant at the 1%, 5%, and 10% levels, respectively; t-values are adjusted for clustering at the firm level.

2. QFII Shareholding. It is worth noting that A+H companies and non-A+H companies

may face different legal, economic, and social system constraints, which may affect the estimation results of this study. To alleviate this potential concern, this study examines the differential impact of QFII shareholding on the relationship between the "Shanghai-Hong Kong Stock Connect" plan and the quality of interim financial information. Before the implementation of the "Shanghai-Hong Kong Stock Connect" plan, China launched the QFII plan in 2002, allowing qualified foreign investors to invest in China's mainland stock market and serving as an essential policy for opening China's capital market (Li et al., 2021). The China Securities Regulatory Commission (CSRC) has set strict standards for foreign investors applying for QFII licenses in terms of operating history, scale, and other aspects to ensure their professionalism and cashability. Generally, foreign investors with QFII licenses are mature investors from developed countries with rich experience and professional skills. Therefore, before the implementation of the "Shanghai-Hong Kong Stock Connect" plan, companies with QFII shareholdings were already influenced by mature investors. At the same time, companies with and without QFII shareholdings are subject to the same legal, economic, and social system constraints. Thus, the establishment of QFII helps to mitigate the interference of institutional differences on the estimation results of this study. As previously mentioned, if the inflow of mature investors is an effective mechanism for the "Shanghai-Hong Kong Stock Connect" plan to improve the quality of interim financial information, this study expects that the plan should have no significant impact on companies that previously had QFII shareholdings.

To test this expectation, this study re-estimates model (1) by dividing the entire sample into two subsamples based on whether there were QFII shareholdings before the implementation of the "Shanghai-Hong Kong Stock Connect" plan. Columns (3) and (4) of Panel A in Table 7 report the empirical results. It can be found that the "Shanghai-Hong Kong Stock Connect" plan significantly improves the quality of interim financial information for non-QFII shareholding enterprises, with the *DID* term estimate coefficient being significantly negative at the 1% level. This further confirms that the

implementation of the "Shanghai-Hong Kong Stock Connect" plan has introduced mature investors, thereby reducing interim earnings management and improving the quality of interim financial information for pilot enterprises.

To further substantiate the conclusions of this study, we focus on whether Hong Kong investors are among the top ten shareholders of the company's outstanding shares. First, the "Shanghai-Hong Kong Stock Connect" plan breaks the barriers between China's mainland market and the Hong Kong market, making it convenient for Hong Kong investors to invest in mainland companies. Therefore, this study expects that the "Shanghai-Hong Kong Stock Connect" plan will significantly increase the likelihood of Hong Kong investors becoming the top ten shareholders of a company's outstanding shares. Second, Hong Kong investors becoming the top ten shareholders of outstanding shares means that they have a higher proportion of shares, and the breadth and depth of information collection by Hong Kong investors on the company will be significantly improved, thereby enhancing the quality of the company's interim financial information. Therefore, if the mature investments introduced by the "Shanghai-Hong Kong Stock Connect" plan significantly improve the quality of interim financial information, it should have a more significant impact on companies that did not have Hong Kong investors among their top ten shareholders of outstanding shares before the implementation of the plan.

To test this expectation, this study first examines whether the "Shanghai-Hong Kong Stock Connect" plan would significantly increase the likelihood of Hong Kong investors becoming the top ten shareholders of outstanding shares in the pilot companies. Next, the sample is divided into two groups based on whether there were Hong Kong investors among the top ten shareholders of outstanding shares in the year before the implementation of the "Shanghai-Hong Kong Stock Connect" plan. Table 7, Panel B, reports the relevant estimation results. As shown in Column (1) of Panel B in Table 7, the *DID* term estimate coefficient is 0.229 (t=14.624), indicating that the

implementation of the "Shanghai-Hong Kong Stock Connect" plan has increased the likelihood and proportion of Hong Kong investors holding shares in mainland listed companies, further enhancing the credibility of the study's conclusions. Meanwhile, as can be seen from Columns (2) and (3) of Panel B in Table 7, compared to companies that previously had Hong Kong investors among the top ten shareholders of outstanding shares, the improvement effect of the "Shanghai-Hong Kong Stock Connect" plan on the quality of interim financial information is more significant for companies that did not previously have Hong Kong investors among the top ten shareholders of outstanding shares. Therefore, the conclusion that the "Shanghai-Hong Kong Stock Connect" plan introduces mature investors, thereby reducing interim earnings management and enhancing the quality of interim financial information for enterprises, is further supported.

5.2 Heterogeneity Analysis

As mentioned earlier, this study finds that the "Shanghai-Hong Kong Stock Connect" plan promotes the influx of mature investors into the mainland capital market, thereby helping to reduce interim earnings management and improve the quality of interim financial information for enterprises. However, whether and how the impact of the "Shanghai-Hong Kong Stock Connect" plan on the quality of interim financial information depends on the heterogeneous characteristics of enterprises remains to be further discussed. Since companies have different abilities and costs to manipulate information (Zalata and Roberts, 2016), this paper further examines whether and how different internal governance and external supervision moderate the relationship between the "Shanghai-Hong Kong Stock Connect" plan and the quality of interim financial information for enterprises (Doyle et al., 2007; Li et al., 2018; Wilson et al., 2022).

1. Corporate internal governance. Corporate governance literature suggests that effective internal governance strengthens the monitoring of management, thereby

limiting firms' accrual-based earnings management and improving the quality of corporate information (Klein, 2002; Xie et al., 2003; Peasnell et al., 2005; Doyle et al., 2007). Therefore, the effectiveness of internal governance should affect the relationship between the "Shanghai-Hong Kong Stock Connect" plan and the quality of interim financial information for enterprises. To test this expectation, this paper mainly examines corporate internal governance from three perspectives: the proportion of independent directors, the quality of internal control, and the corporate governance index. The sample is divided into two sub-samples based on the industry-year median, and the full sample is regressed by groups.

First, the higher the proportion of independent directors on the board, the better the board's independence, which helps restrain management's earnings manipulation behavior (Beasley, 1995; Peasnell et al., 2005; Wu et al., 2016). Therefore, based on the industry-year median of the independent director ratio, the sample is divided into groups with lower and higher independent director ratios. The empirical results are reported in Columns (1) and (2) of Table 7, Panel A. Second, one of the objectives of internal control is to ensure the truthfulness and completeness of corporate financial reporting and related information and protect investors' interests (Altamuro and Beatty, 2010). Effective internal control, through a series of controls, can achieve effective supervision and control of business activities, thereby restraining corporate earnings management behavior (Doyle et al., 2007; Song et al., 2022). Based on this, this paper uses Chen et al. (2017)'s internal control index to measure the quality of corporate internal control, and divides the sample into groups with low and high internal control quality based on the cross-sectional median of internal control quality. The empirical results are reported in Columns (3) and (4) of Table 7, Panel A. Finally, to more comprehensively measure corporate governance, following the study of Jiang and Yang (2018), a comprehensive corporate governance index (*CGI*) is constructed based on

nine relevant corporate governance indicators[7] using principal component analysis. Generally, the better the corporate governance, the larger the index. Furthermore, based on the industry-year median of *CGI*, the full sample is divided into two groups and model (1) is re-estimated. The relevant estimation results are reported in Columns (5) and (6) of Table 7, Panel A.

The estimation results in Table 7, Panel A, show that the improvement effect of the "Shanghai-Hong Kong Stock Connect" plan on the quality of interim financial information for pilot enterprises is more significant in companies with a lower proportion of independent directors, poorer internal control quality, and worse corporate governance. This suggests that when a company's internal governance is weak, mature investors can leverage their advantages to exert supervisory and governance roles on the enterprise, reducing interim earnings management and enhancing the quality of interim financial information.

In conclusion, the impact of the "Shanghai-Hong Kong Stock Connect" plan on the quality of interim financial information depends on the heterogeneous characteristics of enterprises, particularly in relation to their internal governance structures. When internal governance is weaker, the influence of mature investors can be more significant in improving the quality of financial information. This highlights the importance of effective internal governance and the potential benefits of external monitoring through programs like the "Shanghai-Hong Kong Stock Connect" plan in the context of enhancing the quality of financial information for enterprises.

---

[7] These nine variables are respectively the shareholding ratio of the largest shareholder, shareholding ratio of management, shareholding ratio of institutional investors, number of analysts following the company, proportion of independent directors, the sum of the square of the shareholding ratio of the second to the tenth largest shareholders, whether the company is cross-listed, whether it is audited by one of the four major auditing firms, and whether it is a state-owned enterprise.

Panel A: Internal Corporate Governance						
	(1) High Ind. Ratio	(2) Low Ind. Ratio	(3) Good ICQ	(4) Poor ICQ	(5) Good CG	(6) Poor CG
	absDA	*absDA*	*absDA*	*absDA*	*absDA*	*absDA*
DID	-0.007	-0.018***	-0.008	-0.019***	-0.003	-0.022***
	(-1.279)	(-2.711)	(-1.347)	(-3.167)	(-0.501)	(-3.413)
TREAT	0.001	-0.007	-0.012	0.005	-0.002	-0.005
	(0.273)	(-0.998)	(-1.512)	(1.186)	(-0.490)	(-0.696)
Controls	YES	YES	YES	YES	YES	YES
IND	YES	YES	YES	YES	YES	YES
YEAR	YES	YES	YES	YES	YES	YES
N	5452	5886	5645	5693	5313	6025
R^2_a	0.113	0.064	0.052	0.085	0.146	0.050
Panel B: External Corporate Supervision						
	(1) Big Four Auditing	(2) Non-Big Four Auditing	(3) High Analyst Coverage	(4) Low Analyst Coverage	(5) High Inst. Ownership	(6) Low Inst. Ownership
	absDA	*absDA*	*absDA*	*absDA*	*absDA*	*absDA*
DID	-0.003	-0.015***	-0.005	-0.019***	-0.004	-0.035***
	(-0.527)	(-2.714)	(-0.937)	(-2.957)	(-1.211)	(-2.747)
TREAT	0.011**	-0.005	-0.005	-0.003	-0.005*	-0.002
	(2.202)	(-1.090)	(-1.524)	(1.186)	(-1.821)	(-0.161)
Controls	YES	YES	YES	YES	YES	YES
IND	YES	YES	YES	YES	YES	YES
YEAR	YES	YES	YES	YES	YES	YES
N	615	10722	5183	6155	4033	7305
R^2_a	0.191	0.064	0.094	0.056	0.075	0.080

Note: All models include a constant term; ***, **, and * represent coefficients that are statistically significant at the 1%, 5%, and 10% levels, respectively; t-values are adjusted for clustering at the firm level.

2. External corporate governance. A favorable external governance environment can help reduce information asymmetry and alleviate the agency conflict between management and external shareholders (Jensen and Meckling, 1976), thus reducing a firm's earnings management. Additionally, foreign investors introduced by the "Shanghai-Hong Kong Stock Connect" plan may rely on existing alternative

information disclosure channels to some extent due to the lack of private communication channels and mechanisms with mainland-listed companies (Brochet et al., 2019). Therefore, this paper expects that the improvement effect of the "Shanghai-Hong Kong Stock Connect" plan on the pilot companies' interim financial report quality will be more pronounced in firms with weaker external governance. Auditors, analysts, and institutional investors serve as important market intermediaries and investors, playing a crucial role in external governance, helping to reduce information asymmetry, and ultimately enhancing a firm's accounting information quality (Becker et al., 1998; Nelson et al., 2002; Abarbanell and Lehavy, 2003; Yu, 2008; Wilson et al., 2022). This paper examines external governance from the perspectives of auditors, analysts, and institutional investors to investigate whether and how it affects the relationship between the "Shanghai-Hong Kong Stock Connect" plan and the pilot firms' interim financial report quality.

First, given that the China Securities Regulatory Commission does not require mandatory auditing for interim reports, this paper uses whether the annual report has been audited by the Big Four to examine the role of auditors. This is because, for listed companies' interim reports, although annual report auditors are not legally responsible for unaudited interim reports, external information users often associate annual report auditors with listed companies, so any issues with the quality of annual or interim financial reports would affect the auditor's reputation (Lu et al., 2022). At this point, high-reputation annual report auditors face significant reputation risks and are more motivated to influence interim financial report quality. Based on this, following Lu et al. (2022), who measure the external governance of auditors based on whether the annual report is audited by the "Big Four," the sample is divided into two groups and model (1) is re-estimated. Table 7, Panel B, columns (1) and (2) report the empirical results. Second, as professional information miners, interpreters, and disseminators, analysts help reduce information asymmetry, increase a firm's market attention, and improve the accounting information quality. Therefore, this paper uses the natural

logarithm of the number of analyst teams following the firm in that year plus one to measure analysts' external governance of listed companies. The full sample is divided into two sub-samples based on the industry-year median, and model (1) is re-estimated. Table 7, Panel B, columns (3) and (4) report the estimated results. Finally, institutional investors, with their professional knowledge and strong information-mining capabilities (Utama and Cready, 1997; Edmans and Holderness, 2017), are more capable of supervising listed companies and thus influencing their interim financial report quality. This paper divides the full sample into two sub-samples based on the industry-year median of institutional investors' shareholding ratios and re-estimates model (1). Table 7, Panel B, columns (5) and (6) report the empirical results.

The estimation results of Table 7, Panel B show that the *DID* coefficients are significantly negative in sub-samples with weaker external governance (non-Big Four annual report auditors, fewer analysts following, and lower institutional investor ownership ratios), indicating that the improvement effect of the ""Shanghai-Hong Kong Stock Connect" plan on the interim financial report quality of pilot companies is more pronounced for firms with weaker external governance. As anticipated earlier, foreign investors lack channels and mechanisms for private contact with listed companies. Therefore, the alternative information provided by increased external governance would reduce the supervisory and governance effects of the "Shanghai-Hong Kong Stock Connect" plan on pilot firms.

5.3 Economic Consequences Analysis

Accounting information is one of the most important sources of information in the capital market (Palepu and Healy, 2012), and the quality of accounting information can affect the efficiency of the capital market. Through theoretical analysis and empirical tests, this paper finds that the introduction of mature investors after the implementation of the "Shanghai-Hong Kong Stock Connect" plan helps reduce interim earnings management of pilot firms and improve the quality of their interim accounting information. Naturally, a question arises: does the improvement in interim accounting

information quality under the "Shanghai-Hong Kong Stock Connect" plan help enhance the information efficiency of the capital market?

To test this expectation, the paper carries out the following tests. First, the paper selects stock price synchronicity and stock price crash risk to measure capital market information efficiency and examines the potential impact of the improvement in interim accounting information quality on capital market information efficiency under the "Shanghai-Hong Kong Stock Connect" plan. On the one hand, compared with mature capital markets, stock prices in emerging capital markets cannot reflect firm-specific information well due to the presence of "noise," leading to stock price synchronicity. Stock price synchronicity is an important indicator of capital market information efficiency (Morck et al., 2000; DeFond et al., 2004; Hutton et al., 2009; Gul et al., 2010). It describes the correlation between individual stock price fluctuations and market fluctuations and measures the extent to which firm-specific information is incorporated into stock prices. Based on this, the paper constructs *SYN1* and *SYN2* to measure firm stock price synchronicity, following existing research (Piotroski and Roulstone, 2004; Chen and Hameed, 2006; Hutton et al., 2009; Chen et al., 2022), and empirically tests the impact of the "Shanghai-Hong Kong Stock Connect" plan on the stock price synchronicity of pilot firms.[8] On the other hand, stock price crash risk refers to the probability of a sudden drop in individual stocks without any information warning signs. At the firm level, management tends to hide negative news for self-interest motives. Once the accumulated negative news exceeds a threshold, its concentrated release can

[8] First, based on $R_{i,t}=\alpha_i+\beta_{1i}R_{m,t-1}+\beta_{2i}R_{m,t}+\beta_{3i}R_{m,t}+1+\varepsilon_{i,t}$ and $R_{i,t=}\alpha_i+\beta_{1i}R_{m,t-1}+\beta_{2i}R_{I,t-1}+\beta_{3i}R_{m,t}+\beta_{4i}R_{I,t-1}+\beta_{5i}R_{m,t+1}+\beta_{6i}R_{m,t+1}+\varepsilon_{i,t}$, R^2_{ch} and R^2_{mktind} are calculated; Second, $SYN1=\ln\left(\frac{R^2_{ch}}{1-R^2_{ch}}\right)$, $SYN2=\ln\left(\frac{R^2_{mktind}}{1-R^2_{mktind}}\right)$

lead to stock price crashes (Hong and Stein, 2003; Jin and Myers, 2006; Bhattacharya and Yu, 2008). Stock price crashes not only severely damage the healthy development of the capital market but also exacerbate financial risks. Based on this, the paper uses the negative coefficient of skewness of stock returns (*NCSKEW*) and the up-down volatility of stock returns (*DUVOL*), following Piotroski et al. (2015), to measure stock price crash risk and examines the impact of the "Shanghai-Hong Kong Stock Connect" plan on the stock price crash risk of pilot firms.

Second, to investigate the role of improved interim accounting information quality, the paper divides the entire sample into two groups based on the changes in interim accounting information quality before and after the implementation of the "Shanghai-Hong Kong Stock Connect" plan (i.e., a group with larger changes in interim accounting information quality and a group with smaller changes). Specifically, the average interim earnings management before the plan's implementation is subtracted from the average interim earnings management after the plan's implementation to obtain the average change in interim earnings management for each firm under the "Shanghai-Hong Kong Stock Connect" plan. The sample is then divided into two groups based on industry medians: a group with larger changes in interim earnings management and a group with smaller changes. Model (1) is re-estimated. It can be expected that, compared to the group with smaller changes in interim earnings management, the effect of the "Shanghai-Hong Kong Stock Connect" plan on enhancing the information efficiency of the capital market for pilot firms should be more pronounced in the group with larger changes in interim earnings management. In other words, the improvement in interim accounting information quality for pilot firms under the "Shanghai-Hong Kong Stock Connect" plan helps enhance capital market information efficiency and promotes the healthy development of the capital market. Table 8 reports Panel A with the empirical results for future one-period stock price synchronicity as the dependent variable, and Panel B with the empirical results for future one-period stock price crash risk as the dependent variable.

As can be seen from Panel A of Table 8, the DID (difference-in-differences) estimate coefficient remains significantly negative in the group with larger changes in interim accounting information quality, and is insignificant in the group with smaller changes. This conclusion remains robust when using different methods to calculate stock price synchronicity indices. Therefore, the expectation that the "Shanghai-Hong Kong Stock Connect" plan enhances firms' interim accounting information quality, helps reduce stock price synchronicity, and improves capital market information efficiency is verified. In Panel B of Table 8, the negative coefficient of skewness of stock returns (*NCSKEW*) and the up-down volatility of stock returns (*DUVOL*) are used to measure stock price crash risk. Consistent with expectations, the *DID* estimate coefficient remains significantly negative in the group with larger changes in interim accounting information quality and is insignificant in the group with smaller changes. Thus, the expectation that the "Shanghai-Hong Kong Stock Connect" plan enhances firms' interim accounting information quality, helps reduce stock price crash risk, and promotes the healthy development of the capital market is verified.

Table 8: Economic Consequence Analysis

Panel A: Stock Price Synchronicity				
	(1)	(2)	(3)	(4)
	Small	Large	Small	Large
	$SYN_{i,t+1}$	$SYN_{i,t+1}$	$SYN_{i,t+1}$	$SYN_{i,t+1}$
DID	-0.224	-0.436***	-0.114	-0.344***
	(-1.169)	(-3.206)	(-0.924)	(-4.134)
TREAT	0.357***	0.346***	0.078	0.136***
	(3.214)	(4.866)	(1.284)	(3.246)
Controls	YES	YES	YES	YES
IND & YEAR	YES	YES	YES	YES
N	2962	5912	2962	5912
R^2_a	0.170	0.176	0.234	0.233
Panel B: Stock Price Crash Risk				
	(1)	(2)	(3)	(4)
	Small	Large	Small	Large
	$NCSKEW_{i,t+1}$	$NCSKEW_{i,t+1}$	$DUVOL_{i,t+1}$	$DUVOL_{i,t+1}$
DID	-0.000	-0.001***	-0.086	-0.122***

	(-1.197)	(-6.968)	(-1.150)	(-2.584)
TREAT	0.011***	0.011***	-0.019	0.038
	(19.291)	(30.107)	(-0.444)	(1.386)
Controls	YES	YES	YES	YES
IND & YEAR	YES	YES	YES	YES
N	2839	5721	2838	5721
R^2_a	0.347	0.404	0.046	0.059

Note: All models include a constant term; ***, **, and * represent coefficients that are statistically significant at the 1%, 5%, and 10% levels, respectively; t-values are adjusted for clustering at the firm level.

6. CONCLUSION

Accounting information is one of the most important sources of information for the capital market, and the quality of accounting information is a guarantee for the healthy operation of the capital market. The interim report aims to provide more timely accounting information. Under the system background without independent audits, timely interim report information disclosure may lead to a decrease in the quality of accounting information. As one of the most important users of corporate interim reports, investors should play a supervisory role to achieve a win-win situation for the quality and timeliness of corporate interim accounting information. Therefore, based on the half-year report data of listed companies on China's A-share market from 2012 to 2016, this paper uses the implementation of the Shanghai-Hong Kong Stock Connect plan as an exogenous shock and establishes a DID model to empirically test the impact of mature investor inflows on the quality of interim accounting information for emerging capital market companies. China, as the largest and fastest-growing emerging economy, can provide experience and reference for other emerging economies based on the research results in this paper and also provide the theoretical basis for those who aim to promote high-quality economic development through capital market liberalization.

This study found that compared with pilot enterprises, the Shanghai-Hong Kong Stock Connect plan has helped significantly improve the quality of interim accounting information for pilot enterprises. After a series of robustness tests, the above conclusion still holds robustness. The Shanghai-Hong Kong Stock Connect plan breaks down the

barriers between the mainland market and the Hong Kong capital market, and the introduction of mature investors is the basic mechanism for the above causal relationship. Through mechanism analysis, this paper finds that the improvement effect of the Shanghai-Hong Kong Stock Connect plan on the quality of interim accounting information of enterprises does not exist in companies previously listed on the Hong Kong Stock Exchange, companies held by QFII, or companies with Hong Kong investors among the top ten circulating shareholders. Heterogeneity analysis found that the improvement effect of the Shanghai-Hong Kong Stock Connect plan on the quality of interim accounting information for pilot enterprises is more significant in companies with poor internal governance (low proportion of independent directors, low quality of internal control, and small corporate governance index) or weak external supervision (annual reports audited by non-big accounting firms, few analysts tracking, and low proportion of institutional investors). Furthermore, this study found that the improvement of the quality of interim accounting information for pilot enterprises by the Shanghai-Hong Kong Stock Connect plan can help reduce the synchronization risk of stock prices and the risk of the stock price collapse, improve the efficiency of capital market information, and promote the healthy development of the capital market.

This study has important implications for market participants and regulatory agencies in emerging economies on how to improve the quality of accounting information disclosure and the efficiency of capital market operations. First, regulatory agencies should focus on the quality of information disclosure in addition to emphasizing the timeliness of corporate information disclosure. At the same time, regulatory agencies for capital markets in emerging economies should promote capital market liberalization, use market forces to improve the efficiency of capital market operations, and promote the healthy development of capital markets. When regulation is insufficient, market forces can play an active and complementary role in improving the efficiency of the capital market. Second, mature investors in developed economies should fully recognize the role of their mature investment concepts and professional knowledge in

the supervision and governance of capital markets in other economies and continue to export their investment concepts and practices to help the development of economic globalization. For investors in emerging economies, they should strengthen the learning of professional investment knowledge, actively promote capital market liberalization, help improve the quality of corporate accounting information disclosure, and promote the high-quality development of the capital market. Finally, it is necessary to optimize the governance mechanism of listed companies and improve internal and external supervision.

This article, based on the background of the system that mid-year reports do not require mandatory audits and the external shock of the Shanghai-Hong Kong Stock Connect plan, cleanly identified the impact of mature investment inflows on the quality of accounting information in mid-year reports and conducted an analysis. However, there are also certain limitations due to the availability of data. Specifically, during the sample period, this article only distinguishes between the binary variables of "Shanghai-Hong Kong Stock Connect" stocks and non-"Shanghai-Hong Kong Stock Connect" stocks and lacks detailed holding data for each listed company by overseas investors through "Shanghai-Hong Kong Stock Connect" investment. In future research, under the premise of identifying "Shanghai-Hong Kong Stock Connect" stocks, continuous variables such as holding ratio and trading volume can be further used to examine the policy effects of "Shanghai-Hong Kong Stock Connect", providing more accurate and comprehensive evidence for the liberalization of the capital market.

References:

Abarbanell, J., and R. Lehavy. 2003. Can stock recommendations predict earnings management and analysts' earnings forecast errors? *Journal of Accounting Research* 41 (1):1-31.

Aggarwal, R., I. Erel, M. Ferreira, and P. Matos. 2011. Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics* 100 (1):154-181.

Aharony, J., C.-W. J. Lee, and T. J. Wong. 2000. Financial packaging of IPO firms in China. *Journal of Accounting Research* 38 (1):103-126.

Akerlof, G. A. 1970. The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics* 84 (3):488-500.

Allen, F., J. Qian, and M. Qian. 2005. Law, finance, and economic growth in China. *Journal of Financial Economics* 77 (1):57-116.

Altamuro, J., and A. Beatty. 2010. How does internal control regulation affect financial reporting? *Journal of Accounting Economics* 49 (1-2):58-74.

Bae, K.-H., W. Bailey, and C. X. Mao. 2006. Stock market liberalization and the information environment. *Journal of International Money Finance* 25 (3):404-428.

Ball, R., and L. Shivakumar. 2006. The role of accruals in asymmetrically timely gain and loss recognition. *Journal of Accounting Research* 44 (2):207-242.

Bandyopadhyay, S. P., J. E. Boritz, and G. Liu. 2007. Voluntary Assurance on Interim Financial Statements and Earnings Quality. Paper read at CAAA) 2008 Annual Conference Paper.

Beasley, J. E. J. J. o. t. o. r. s. 1995. Determining teaching and research efficiencies. *Journal of The Operational Research Society* 46 (4):441-452.

Beck, T., R. Levine, and A. Levkov. 2010. Big bad banks? The winners and losers from bank deregulation in the United States. *The Journal of Finance* 65 (5):1637-1667.

Becker, C. L., M. L. DeFond, J. Jiambalvo, and K. Subramanyam. 1998. The effect of audit quality on earnings management. *Contemporary Accounting Research* 15 (1):1-24.

Bédard, J., and L. Courteau. 2015. Benefits and costs of auditor's assurance: Evidence from the review of quarterly financial statements. *Contemporary Accounting Research* 32 (1):308-335.

Bekaert, G., and C. R. Harvey. 2000. Foreign speculators and emerging equity markets. *The Journal of Finance* 55 (2):565-613.

Bekaert, G., C. R. Harvey, and C. Lundblad. 2005. Does financial liberalization spur growth? *Journal of Financial Economics* 77 (1):3-55.

Bhattacharya, U., and X. Yu. 2008. The causes and consequences of recent financial market bubbles: An introduction. *The Review of Financial Studies* 21 (1):3-10.

Boone, A. L., and J. T. White. 2015. The effect of institutional ownership on firm transparency and information production. *Journal of Financial Economics* 117 (3):508-533.

Botosan, C. A. 1997. Disclosure level and the cost of equity capital. *Accounting Review*:323-349.

Brochet, F., G. S. Miller, P. Naranjo, and G. J. Yu. 2019. Managers' cultural background and disclosure attributes. *The Accounting Review* 94 (3):57-86.

Cantoni, D., Y. Chen, D. Y. Yang, N. Yuchtman, and Y. J. Zhang. 2017. Curriculum and ideology. *Journal of Political Economy* 125 (2):338-392.

Cao, Y., L. A. Myers, and T. C. Omer. 2012. Does company reputation matter for financial reporting quality? Evidence from restatements. *Contemporary Accounting Research* 29 (3):956-990.

Chan, K., and A. Hameed. 2006. Stock price synchronicity and analyst coverage in emerging markets. *Journal of Financial Economics* 80 (1):115-147.

Chan, M. K., and S. Kwok. 2017. Risk-sharing, market imperfections, asset prices: Evidence from China's stock market liberalization. *Journal of Banking Finance* 84:166-187.

Chen, C.-L., P.-Y. Weng, and C.-Y. Chien. 2018a. Qualified foreign institutional investor ownership deregulation and the restatement of financial reports---empirical findings from Taiwan. *International Review of Economics Finance* 56:465-485.

Chen, J., K. C. Chan, W. Dong, and F. Zhang. 2017. Internal control and stock price crash risk: Evidence from China. *European Accounting Review* 26 (1):125-152.

Chen, J., B. Ke, D. Wu, and Z. Yang. 2018b. The consequences of shifting the IPO offer pricing power from securities regulators to market participants in weak institutional environments: Evidence

from China. *Journal of Corporate Finance* 50:349-370.

Chen, K. C., Z. Chen, and K. J. Wei. 2009. Legal protection of investors, corporate governance, and the cost of equity capital. *Journal of Corporate Finance* 15 (3):273-289.

Chen, K. C., and H. J. T. A. R. Yuan. 2004. Earnings management and capital resource allocation: Evidence from China's accounting-based regulation of rights issues. *The Accounting Review* 79 (3):645-665.

Chen, Y., J. Huang, X. Li, and Q. Yuan. 2022. Does stock market liberalization improve stock price efficiency? Evidence from China. *Journal of Business Finance Accounting* 49 (7-8):1175-1210.

Chung, C. Y., H. Kim, and K. Wang. 2022. Do domestic or foreign institutional investors matter? The case of firm information asymmetry in Korea. *Pacific-Basin Finance Journal* 72:101727.

Chung, R., M. Firth, and J.-B. Kim. 2002. Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance* 8 (1):29-48.

Claessens, S., and B. B. Yurtoglu. 2013. Corporate governance in emerging markets: A survey. *Emerging Markets Review* 15:1-33.

Dechow, P. M., and I. D. Dichev. 2002. The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review* 77 (s-1):35-59.

Dechow, P. M., R. G. Sloan, and A. P. J. A. r. Sweeney. 1995. Detecting earnings management. *Accounting Review*:193-225.

Defond, M. L., and M. Hung. 2004. Investor protection and corporate governance: Evidence from worldwide CEO turnover. *Journal of Accounting Research* 42 (2):269-312.

DeFond, M. L., T.-J. Wong, S. J. J. o. a. Li, and economics. 1999. The impact of improved auditor independence on audit market concentration in China. *Journal of Accounting Economics* 28 (3):269-305.

Diamond, D. W., and R. E. Verrecchia. 1991. Disclosure, liquidity, and the cost of capital. *The Journal of Finance* 46 (4):1325-1359.

Djankov, S., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2008. The law and economics of self-dealing. *Journal of Financial Economics* 88 (3):430-465.

Doyle, J. T., W. Ge, and S. J. T. a. r. McVay. 2007. Accruals quality and internal control over financial reporting. *The Accounting Review* 82 (5):1141-1170.

Dyreng, S. D., S. A. Hillegeist, and F. Penalva. 2022. Earnings management to avoid debt covenant violations and future performance. *European Accounting Review* 31 (2):311-343.

Edmans, A., and C. G. Holderness. 2017. Blockholders: A survey of theory and evidence. *The Handbook of the Economics of Corporate Governance* 1:541-636.

Fama, E. F., M. C. J. T. j. o. l. Jensen, and Economics. 1983. Separation of ownership and control. *The Journal of Law Economics* 26 (2):301-325.

Fan, J. P., and T. J. Wong. 2005. Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *Journal of Accounting Research* 43 (1):35-72.

Fan, Q., and T. Wang. 2017. The impact of Shanghai–Hong Kong Stock Connect policy on AH share price premium. *Finance Research Letters* 21:222-227.

Ferreira, M. A., and P. Matos. 2008. The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics* 88 (3):499-533.

Firth, M., C. Lin, P. Liu, and Y. Xuan. 2013. The client is king: Do mutual fund relationships bias analyst recommendations? *Journal of Accounting Research* 51 (1):165-200.

Francis, J. R., and D. Wang. 2008. The joint effect of investor protection and Big 4 audits on earnings

quality around the world. *Contemporary Accounting Research* 25 (1):157-191.

Garel, A., J. M. Martin-Flores, A. Petit-Romec, and A. Scott. 2021. Institutional investor distraction and earnings management. *Journal of Corporate Finance* 66:101801.

Gigler, F., C. Kanodia, H. Sapra, and R. Venugopalan. 2014. How frequent financial reporting can cause managerial short-termism: An analysis of the costs and benefits of increasing reporting frequency. *Journal of Accounting Research* 52 (2):357-387.

Gillan, S., and L. T. Starks. 2003. Corporate governance, corporate ownership, and the role of institutional investors: A global perspective. *Weinberg Center for Corporate Governance Working Paper* (2003-01).

Green, D. 1964. Towards a theory of interim reports. *Journal of Accounting Research*:35-49.

Grinblatt, M., and M. Keloharju. 2000. The investment behavior and performance of various investor types: a study of Finland's unique data set. *Journal of Financial Economics* 55 (1):43-67.

Gu, Z., Z. Li, and Y. G. Yang. 2013. Monitors or predators: The influence of institutional investors on sell-side analysts. *The Accounting Review* 88 (1):137-169.

Gul, F. A., J.-B. Kim, and A. A. Qiu. 2010. Ownership concentration, foreign shareholding, audit quality, and stock price synchronicity: Evidence from China. *Journal of Financial Economics* 95 (3):425-442.

HAW, I. M., D. Qi, D. Wu, and W. Wu. 2005. Market consequences of earnings management in response to security regulations in China. *Contemporary Accounting Research* 22 (1):95-140.

Healy, P. M., and K. G. Palepu. 2001. Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting Economics* 31 (1-3):405-440.

Henry, P. B. 2000. Do stock market liberalizations cause investment booms? *Journal of Financial Economics* 58 (1-2):301-334.

Hong, H., and J. C. Stein. 2003. Differences of opinion, short-sales constraints, and market crashes. *The Review of Financial Studies* 16 (2):487-525.

Hu, M., W. Xiong, and C. Xu. 2021. Analyst coverage, corporate social responsibility, and firm value: Evidence from China. *Global Finance Journal* 50:100671.

Huang, J., and B. Ke. 2022. How Does Reduced Timeliness of Public Enforcement Affect Corporate Disclosure Quality: Evidence from China. *Available at SSRN 3229011*.

Huang, W., and T. Zhu. 2015. Foreign institutional investors and corporate governance in emerging markets: Evidence of a split-share structure reform in China. *Journal of Corporate Finance* 32:312-326.

Hutton, A. P., A. J. Marcus, and H. Tehranian. 2009. Opaque financial reports, R2, and crash risk. *Journal of Financial Economics* 94 (1):67-86.

Ismail, K., and R. A. Rahman. 2012. The wealth of information from quarterly financial reports in Malaysia. *African Journal of Business Management* 6 (3):1054.

Jensen, M. C., and W. H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3 (4):305-360.

Jiang, X., and Q. Yuan. 2018. Institutional investors' corporate site visits and corporate innovation. *Journal of Corporate Finance* 48:148-168.

Jin, L., and S. C. Myers. 2006. R2 around the world: New theory and new tests. *Journal of Financial Economics* 79 (2):257-292.

Kaminsky, G., and S. L. Schmukler. 2002. Emerging market instability: do sovereign ratings affect

country risk and stock returns? *The World Bank Economic Review* 16 (2):171-195.

Kang, J.-K., J. Luo, and H. S. Na. 2018. Are institutional investors with multiple blockholdings effective monitors? *Journal of Financial Economics* 128 (3):576-602.

Kao, J. L., D. Wu, and Z. Yang. 2009. Regulations, earnings management, and post-IPO performance: The Chinese evidence. *Journal of Banking Finance* 33 (1):63-76.

Ke, B., C. S. Lennox, and Q. Xin. 2015. The effect of China's weak institutional environment on the quality of Big 4 audits. *The Accounting Review* 90 (4):1591-1619.

Kothari, S. P., A. J. Leone, and C. E. Wasley. 2005. Performance matched discretionary accrual measures. *Journal of Accounting Economics* 39 (1):163-197.

Landsman, W. R., and E. L. Maydew. 2002. Has the information content of quarterly earnings announcements declined in the past three decades? *Journal of Accounting Research* 40 (3):797-808.

Lang, M., K. V. Lins, and M. Maffett. 2012. Transparency, liquidity, and valuation: International evidence on when transparency matters most. *Journal of Accounting Research* 50 (3):729-774.

Lardy, N. R. 2019. *The state strikes back: The end of economic reform in China?*: Peterson Institute for International Economics.

Leland, H. E., and D. H. Pyle. 1977. Informational asymmetries, financial structure, and financial intermediation. *The Journal of Finance* 32 (2):371-387.

Leuz, C., D. Nanda, and P. D. Wysocki. 2003. Earnings management and investor protection: an international comparison. *Journal of Financial Economics* 69 (3):505-527.

Levine, R., and S. Zervos. 1998. Capital control liberalization and stock market development. *World development* 26 (7):1169-1183.

Li, P., Y. Lu, and J. Wang. 2016. Does flattening government improve economic performance? Evidence from China. *Journal of Development Economics* 123:18-37.

Li, Q., X. Liu, J. Chen, and H. Wang. 2022. Does stock market liberalization reduce stock price synchronicity?—Evidence from the Shanghai-Hong Kong stock connect. *International Review of Economics Finance* 77:25-38.

Li, Y., X. Li, E. Xiang, and H. G. Djajadikerta. 2020. Financial distress, internal control, and earnings management: Evidence from China. *Journal of Contemporary Accounting Economics* 16 (3):100210.

Li, Z., P. Wang, and T. Wu. 2021. Do foreign institutional investors drive corporate social responsibility? Evidence from listed firms in China. *Journal of Business Finance Accounting* 48 (1-2):338-373.

Liu, M., and X. Niu. 2023. The impact of capital market opening on earnings management: Empirical evidence based on “Land− Port Connection”. Finance Research Letters:103864.

Liu, Q., and Z. J. Lu. 2007. Corporate governance and earnings management in the Chinese listed companies: A tunneling perspective. *Journal of Corporate Finance* 13 (5):881-906.

Lizares, R. M. 2022. Ownership concentration and board structure: Alignment and entrenchment effects in an emerging market. *Managerial Decision Economics* 43 (6):2557-2569.

Lobo, G. J., and Y. Zhao. 2013. Relation between audit effort and financial report misstatements: Evidence from quarterly and annual restatements. *The Accounting Review* 88 (4):1385-1412.

Lu, J., X. Bu, and J. Chen. 2021. Do inflowing sophisticated investors induce classification shifting? New evidence from market liberalisation in China. *Accounting Finance* 61 (5):6193-6223.

Luong, H., F. Moshirian, L. Nguyen, X. Tian, and B. Zhang. 2017. How do foreign institutional investors enhance firm innovation? *Journal of Financial Quantitative Analysis* 52 (4):1449-1490.

Manry, D., S. L. Tiras, and C. M. Wheatley. 2003. The influence of interim auditor reviews on the association of returns with earnings. *The Accounting Review* 78 (1):251-274.

Martins, O. S., and L. A. B. de Campos Barros. 2021. Firm informativeness, information environment, and accounting quality in emerging countries. *The International Journal of Accounting* 56 (01):2150004.

Matsane, A., F. Nakpodia, and G. Areneke. 2022. Assessing the value relevance of fair value measurements: a South African perspective. *Corporate Governance: The International Journal of Business in Society* (ahead-of-print).

Morck, R., B. Yeung, and W. Yu. 2000. The information content of stock markets: why do emerging markets have synchronous stock price movements? *Journal of Financial Economics* 58 (1-2):215-260.

Moshirian, F., X. Tian, B. Zhang, and W. Zhang. 2021. Stock market liberalization and innovation. *Journal of Financial Economics* 139 (3):985-1014.

Naceur, S. B., S. Ghazouani, and M. Omran. 2008. Does stock market liberalization spur financial and economic development in the MENA region? *Journal of Comparative Economics* 36 (4):673-693.

Nelson, M. W., J. A. Elliott, and R. L. Tarpley. 2002. Evidence from auditors about managers' and auditors' earnings management decisions. *The Accounting Review* 77 (s-1):175-202.

Ng, L., F. Wu, J. Yu, and B. Zhang. 2016. Foreign investor heterogeneity and stock liquidity around the world. *Review of Finance* 20 (5):1867-1910.

Oh, K., W. Choi, S. W. Jeong, and J. Pae. 2014. The effect of different levels of internal control over financial reporting regulation on the quality of accounting information: evidence from Korea. *Asia-pacific Journal of Accounting Economics* 21 (4):412-442.

Omer, T. C., M. K. Shelley, and F. M. Tice. 2020. Do director networks matter for financial reporting quality? Evidence from audit committee connectedness and restatements. *Management Science* 66 (8):3361-3388.

Omran, M., and Y. A. Tahat. 2020. Does institutional ownership affect the value relevance of accounting information? *International Journal of Accounting Information Management*.

Palepu, K. G., P. M. Healy, S. Wright, M. Bradbury, and J. Coulton. 2020. *Business analysis and valuation: Using financial statements*: Cengage AU.

Park, H.-S. 2016. China's RMB internationalization strategy: its rationales, state of play, prospects and implications. *M-RCBG Associate Working Paper Series* 63:1-187.

Park, J., J. Sani, N. Shroff, H. J. J. o. A. White, and Economics. 2019. Disclosure incentives when competing firms have common ownership. *Journal of Accounting Economics* 67 (2-3):387-415.

Peasnell, K. V., P. F. Pope, and S. Young. 2005. Board monitoring and earnings management: do outside directors influence abnormal accruals? *Journal of Business Finance & Accounting* 32 (7-8):1311-1346.

Peng, J., S. P. Hegde, and H. Zhang. 2022. Economic Policy Uncertainty, Shareholder Conflicts of Interests, and Asset Prices: Evidence from Dual-Listed Stocks in China. *University of Connecticut School of Business Research Paper No. Forthcoming*.

Piotroski, J. D., and D. T. Roulstone. 2004. The influence of analysts, institutional investors, and insiders on the incorporation of market, industry, and firm-specific information into stock prices. *The Accounting Review* 79 (4):1119-1151.

Ramalingegowda, S., S. Utke, and Y. Yu. 2021. Common institutional ownership and earnings

management. *Contemporary Accounting Research* 38 (1):208-241.

Ross, S. A. 1977. The determination of financial structure: the incentive-signalling approach. *The Bell Journal of Economics*:23-40.

Shakri, I. H., J. Yong, and E. Xiang. 2022. Does compliance with corporate governance increase profitability? Evidence from an emerging economy: Pakistan. *Global Finance Journal* 53:100716.

Sikarwar, E. 2022. Board attributes, hedging activities and exchange rate risk: Multi-country firm-level evidence. *Economic Modelling* 110:105800.

Silva Junior, J. C. A. d., J. F. Caldeira, and H. d. S. Torrent. 2017. Effects of IFRS on accounting information quality: evidence for Brazil. *International Journal of Economics Finance* 9 (5):44-57.

Song, Z., Y. Liu, and J. Wang. 2022. Mandatory internal control and earnings management. *Emerging Markets Finance Trade* 58 (12):3439-3453.

Spence, M. 1978. Job market signaling. In *Uncertainty in economics*: Elsevier, 281-306.

Utama, S., and W. M. Cready. 1997. Institutional ownership, differential predisclosure precision and trading volume at announcement dates. *Journal of Accounting Economics* 24 (2):129-150.

Wang, J., J. J. Wang, S. Tulig, W. Zhang, and Z. Li. 2022. A study on the effect of joint supervision between auditors and sponsors: evidence from China. *Accounting Finance* 62 (2):2757-2780.

Wilson, M., K. T. Wang, Y. Wu, and A. Lau. 2022. Institutional investors and earnings management associated with controlling shareholders' promises: Evidence from the split share structure reform in China. *Journal of Contemporary Accounting Economics* 18 (3):100330.

World Bank. 2021. World Bank national accounts data, and OECD National Accounts data files. Retrieved from https://data.worldbank.org/indicator/NY.GDP.MKTP.CD

Wu, S., C.-M. Chen, and P.-C. Lee. 2016. Independent directors and earnings management: The moderating effects of controlling shareholders and the divergence of cash-flow and control rights. *The North American Journal of Economics Finance* 35:153-165.

Xie, B., W. N. Davidson III, and P. DaDalt. 2003. Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance* 9 (3):295-316.

Xiong, W., M. Dong, and C. Xu. 2022. Institutional Investors and Corporate Social Responsibility: Evidence from China. *Emerging Markets Finance Trade*:1-12.

Yang, J. S., and J. Krishnan. 2005. Audit committees and quarterly earnings management. *International Journal of Auditing* 9 (3):201-219.

Yang, M., and W. Tang. 2022. Air pollution, political costs, and earnings management. *Emerging Markets Review* 51:100867.

Yu, F. F. 2008. Analyst coverage and earnings management. *Journal of Financial Economics* 88 (2):245-271.

Zalata, A., and C. Roberts. 2016. Internal corporate governance and classification shifting practices: An analysis of UK corporate behavior. *Journal of Accounting, Auditing Finance* 31 (1):51-78.

Zhao, Y., C. Xiang, and W. Cai. 2021. Stock market liberalization and institutional herding: Evidence from the Shanghai-Hong Kong and Shenzhen-Hong Kong stock connects. Pacific-Basin Finance Journal 69:101643.