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Returnee directors and corporate fraud

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Abstract

Using a large dataset of Chinese listed firms from 2005 to 2018, we examine the relationship between Chinese nationals with foreign experience serving as directors (i.e. returnee directors) and the incidence of corporate fraud. After controlling for the effects of foreign and independent directors, we find a significantly negative relationship between returnee directors and fraud. Further, relative to foreign and independent directors, returnee directors represent a more dominant force in constraining firms' fraudulent activities. These results are robust to endogeneity concerns addressed through propensity score matching and the Oster (2019) test. Further analyses show that the negative relationship between returnee directors and fraud is more pronounced when the returnees: (i) have practical overseas work experience than when they have only educational experience; (ii) work in firms operating in less-developed (more conservative) regions of China where the people are more culturally sensitive; (iii) are appointed as independent directors, instead of executive directors; and (iv) are recruited by privately owned enterprises with limited state or political interference. Collectively, the findings imply that relevant skillset (knowledge and expertise) alone is insufficient to discharge directors' monitoring functions; the ability to work in a culturally sensitive manner and maintain a level of professional independence are equally necessary.

Keywords: Returnee directors; Foreign experience; Foreign directors; Independent directors; Fraud; Emerging market

1. Introduction

The board of directors is responsible for monitoring and providing advice to the management of firms (Fama and Jensen, 1983; Agyei-Boapeah et al., 2019). Whether boards fulfill these responsibilities is widely debated in the literature and seems to depend largely on the characteristics and expertise of the directors (Chen et al., 2006; Masulis et al., 2012; Fedaseyeu et al., 2018). The quality and effectiveness of the board may be particularly important in emerging economies where fraud and corruption flourish because of weak firm-level governance structures and poor management practices, as well as country-level institutional voids such as lax regulatory environments, opaque capital markets, and underdeveloped legal systems (Chen et al., 2006; Agyei-Boapeah et al., 2020b).

Returnee directors – *nationals who return to their country of origin to serve as directors after obtaining foreign experience by way of work and/or study outside their country of origin* – could help curb corporate fraud in emerging economies for at least two major reasons. First, unlike foreign directors, returnees have local or cultural knowledge of their country of origin. Therefore, together with their knowledge of how foreign organisations operate through their foreign experiences, they are uniquely positioned to make a difference on the board. For instance, returnee directors can facilitate the adoption of superior transparent practices and effective internal control procedures from abroad, and, when necessary, use their local/cultural knowledge to adapt them to suit local settings in ways that can enhance the company's risk control environment and consequently minimise the incidence of fraud (Chen et al., 2006). These directors, especially when they derive their experiences from advanced economies, can help reduce any technical knowledge gaps that may exist across firms and countries in the fight against fraud in a culturally sensitive manner.

Second, having spent some of their educational and/or work years away from their current country of residence (and origin), returnee directors may have relatively weaker social connections with senior management within the firm, politicians, and other local officials outside the firm. This could make returnee directors more independent and effective in performing their monitoring functions by reducing opportunities for collusion, favouritism, cover-ups, and misconduct (Free and Murphy, 2015). The lack of a strong social network in the country of origin (and residence) could also increase the personal cost of fraud toward returnee directors because they are unlikely to escape punishment when wrongdoing occurs. Fich and Shivdasani (2007) report that returnee directors face greater fraud-related reputational costs. Consequently, returnee directors are incentivised to prevent fraud in bids to minimise their personal and reputational costs. However, in an environment of high power distance and a weak legal system, such as China, it is plausible that management, controlling

shareholders, and the political class could capture the board (including returnee directors), making it ineffective. Thus, examining whether and how board composition, including returnees, shapes corporate actions is of practical policy relevance for managers, market participants, and policymakers in emerging markets.

In this study, we investigate whether returnee directors are associated with lower levels of corporate fraud in emerging markets. We address this issue in the context of China for several reasons. First, as the second largest economy and the most populous country in the world, China faces a high risk of financial fraud, which is becoming increasingly international and sophisticated. Over the last two decades (specifically, between 1999 and 2020), Chinese individuals and firms constituted 11% of the total number of individuals and firms sanctioned by the World Bank for breaching its fraud and corruption policies. China ranked top on the list of 123 countries whose individuals and firms were sanctioned by the World Bank for fraud- and corruption-related offences (see Appendix 1).¹ Thus, Chinese firms, particularly those that do business internationally, need to project a positive image abroad by showing a keen interest in tackling corporate fraud. Second, Chinese firms face an acute shortage of managerial talent who can work effectively in an international environment to support tremendous growth (Farrell and Grant, 2005). Therefore, returnee directors could become valuable additions to the Chinese labour market and to the boards of Chinese firms, that have the incentive to fight fraud. Third, Giannetti et al. (2015) document that from 1992 to 2007, most provinces in China introduced policies to incentivise highly skilled immigrants (i.e. Chinese with foreign experience) to return to China. These provincial policies increased the supply of potential directors (of Chinese origin) with foreign experience for Chinese firms and provided a large pool of returnee directors to permit a robust analysis of their contributions to checking corporate fraud.

Our study relates to, but also differs from prior studies that examine the contribution of directors' foreign experience by analysing the nationality diversity of the board (e.g. Masulis et al., 2012; Du et al., 2017; Hooghiemstra et al., 2019; Ashraf and Qian, 2021; Dobija and Puławska, 2022). These previous studies have yielded mixed results. For instance, drawing from the knowledge transfer and effective monitoring perspectives, Du et al. (2017) and Ashraf and Qian (2021) find evidence that foreign directors help reduce earnings management in Chinese firms. Dobija and Puławska (2022) also show that the presence of foreign directors improves financial reporting timeliness. By contrast, Hooghiemstra et al. (2019) find that non-Nordic foreign directors on the boards of Nordic firms (firms from Denmark, Finland, Norway, and Sweden) are associated with significantly higher levels of earnings management. They attribute their findings to language-related

¹Data for this analysis were downloaded from: <https://www.worldbank.org/en/projects-operations/procurement/debarred-firms> [Accessed on 23/11/2020].

factors and lack of local and cultural knowledge. Masulis et al. (2012) find that foreign independent directors are associated with poor meeting attendance and higher financial misreporting. Masulis et al. (2012) conclude that the geographic distance between the countries of residence of independent foreign directors and the firms' headquarters increases monitoring costs, thereby reducing their effectiveness.

Unlike foreign directors, returnee directors are not only natives of the country where the firm is located but also reside in the country. Therefore, language and cultural barriers are at a minimum (Hooghiemstra et al., 2019), as are the monitoring costs associated with geographic distance (Masulis et al., 2012). These directors can still transfer superior knowledge and business practices from foreign countries where they previously studied or worked (Giannetti et al., 2015). Györy (2020) argues that different institutional settings and economies create distinct opportunities and incentives for fraud. Therefore, fighting fraud effectively requires a deeper understanding of the institutional/cultural setting, as well as the motivations of the people committing fraud. As natives, returnees generally have a superior understanding of local fraud architecture and are, therefore, better placed to exert a stronger impact on the governance of firms than foreign directors, particularly in settings where indigenous Chinese culture is likely to be dominant.

This distinction between returnees and foreign directors and their relative contributions to firms remains largely unexplored in the literature, and we seek to bridge this gap. Whilst a few studies improved our understanding of returnee directors by examining their impact on firm performance (Giannetti et al., 2015), IPO premiums (Li et al., 2016), and investment efficiency (Dai et al., 2018), there is little or no attempt to determine the relative importance of returnee and foreign directors. We contribute to and extend these studies by investigating the influence of returnee directors on corporate fraud in the presence of foreign directors. Furthermore, since board independence largely influences effective monitoring by the board (Chen et al., 2006; Agyei-Boapeah et al., 2019), we also attempt to isolate the relative importance of returnees and independent directors in mitigating corporate fraud.

Based on a large dataset of 25,103 firm-year observations from 2005 to 2018 and multivariate probit regressions, our results indicate that the presence and proportion of returnee directors on the boards of Chinese firms are significantly and negatively related to the propensity of firms to commit fraud. Specifically, a one-standard-deviation increase in the proportion of returnees on the board (i.e. from having no returnee directors to having 15.2% returnee directors on the board) is associated with a 0.50% lower probability of fraud, which represents a 5.8% proportional decline relative to the baseline fraud likelihood of 8.6%. This finding is consistent with the presence of returnees reducing fraud. We also find that the

average effects of foreign and independent directors on fraud are not statistically significant, irrespective of whether we control for the presence of returnee directors. These results suggest that relative to foreign and independent directors, returnee directors are a more dominant force in the boardrooms of Chinese firms in terms of fraud mitigation.

We also investigate why and when returnee directors are effective monitors of management by examining three channels (*relevant skillset, cultural sensitivity, and greater independence*) through which returnees may reduce fraud. Within the relevant skillset hypothesis, we test and find that returnees are more effective when they have relevant practical work experience from abroad than when they have only educational experience. This suggests that theoretical knowledge alone acquired from overseas educational institutions without the opportunity to gain experiential/practical/hands-on learning from the workplace may not sufficiently equip returnees to make significant impacts in their home countries when they return. Furthermore, our test of the cultural sensitivity proposition reveals that returnees (who are Chinese natives) are not only more effective than foreign (non-Chinese) directors in fighting fraud, but their (returnees') impact is more pronounced in the conservative/traditional (less developed) regions of China, where local and cultural knowledge is essential. This finding implies that relevant skillset or foreign expertise alone may not be enough to achieve effective monitoring in culturally sensitive environments. It seems the local knowledge of returnees and their ability to communicate in a culturally sensitive manner make them better monitors of firms in settings with more conservative/traditional cultural values.

Regarding the greater independence hypothesis, we find that the negative association between returnee directors and corporate fraud is more pronounced when returnees serve as independent directors (rather than executive directors), suggesting that returnees are more effective to discharge their monitoring functions when they are more independent of management. In addition, we find returnees to be better monitors when they work in privately owned enterprises (POEs) rather than in state-owned enterprises (SOEs), where they face greater exposure to political pressure and interference from government bureaucrats. These findings suggest that the relevant skillset of returnees is less useful when they find themselves in environments that can compromise their independence. Collectively, our results suggest that a combination of factors—*practical experience/skillset, cultural sensitivity, and greater independence*—make returnee directors more effective at checking fraud in China. These results are robust to endogeneity concerns addressed through propensity score matching and the Oster (2019) test.

This study makes several contributions to existing literature. First, it contributes to the strand of literature on how

board composition and expertise shape fraud (Chen et al., 2006; Kuang and Lee, 2017; Chen et al., 2018) and to the growing literature on whether and how individuals' foreign experiences contribute to board effectiveness (Masulis et al., 2012; Giannetti et al., 2015; Wen et al., 2020). For example, Wen et al. (2020) provide evidence of how directors with foreign experience constrain tax aggressiveness amongst Chinese firms. Similarly, Giannetti et al. (2015) find that directors with foreign experience improve firm performance in China by facilitating internationalisation and better corporate governance practices. Nevertheless, these studies did not distinguish between the foreign experiences of Chinese nationals and foreigners. Our study is different in that we answer the question of whether returnee directors (Chinese nationals with foreign experience) influence corporate fraud (intentional deception to secure unfair gains) in China. The underlying logic is that, in addition to their foreign experience, returnee directors are also Chinese citizens and, therefore, have local/cultural knowledge of the motivations, opportunities, and modalities of fraud in China. Our analysis disentangles the effects of independent and foreign directors (i.e. foreigners on the boards of Chinese firms) from returnee directors and documents that returnee directors curb fraud in China, but independent and foreign directors (on average) do not.

We also contribute to the literature by showing that returnee directors are more effective in more conservative and traditional regions of China, where local and cultural knowledge may be required to effectively transfer foreign knowledge and practices. Thus, we complement previous studies of board composition by showing that the effectiveness of returnee directors in fighting fraud in emerging markets may include their ability to communicate in a culturally sensitive manner.

Further, a unique characteristic of the corporate governance landscape in emerging markets is the dominance of blockholders (La Porta et al., 1998; Shleifer and Vishny, 1997), who are incentivised to play an active role in corporate governance because of their large size of ownership (Globner, 2019). In China, approximately 99% of listed firms have at least one shareholder who owns more than 10% of the firm, and these blockholders are usually the state or quasi-state institutions (Chen et al., 2006) that tend to actively influence board composition, behaviours, and decisions. Indeed, Chen et al. (2006) suggest that most SOEs in China are profit-oriented, encouraging their directors to engage in fraudulent activities to increase profits and gain political promotion. However, empirical evidence on how state ownership influences board behaviour in China produced mixed results. Liao et al. (2019) report that female CFOs are less effective at preventing accounting fraud in Chinese SOE, whereas Liu et al. (2015) find that state ownership encourages independent directors to monitor management effectively. Our study contributes to this branch of literature by documenting that returnee directors are less effective in curbing fraud in SOEs, thereby highlighting the effects of political interference in the Chinese

institutional setting.

This study also offers practical policy guidance by providing evidence that can aid policy evaluation, especially by policymakers in Chinese provinces that introduced incentives to induce talented individuals with foreign experience to return home. Our findings provide further guidance on how firms and regions in China can unleash greater value from the foreign talent they hire to sit on their boards. Although our study is based on Chinese firms, it offers interesting implications for emerging markets wishing to fight corporate fraud or improve their corporate governance structures.

The rest of the paper is organised as follows. Section 2 reviews the related literature as a basis upon which to develop the study's conceptual framework and core hypotheses. Section 3 describes the methodology and data, whilst Section 4 presents and discusses our results and robustness tests. Finally, Section 5 concludes the paper.

2. Related literature

2.1. The Chinese institutional environment

China is the second largest economy in the world, contributing over 16% of the global gross domestic product (GDP) in 2019.² China has experienced significant economic growth since the late 1970s when it began to overhaul its economic systems toward a free-market system that included the privatisation of many SOEs, the formation of joint stock companies, and the development of capital markets (Chen et al., 2006). This movement toward a free-market system has created an increased demand for skilled labour, especially for those with experience in market-based economies such as the US and the UK. Although the country is populous, Chinese firms still face a significant shortage of skilled labour. Issues such as poor English and communication styles, little practical experience in teamwork, and cultural misfits are commonly cited as limitations to local recruitment (Farrell and Grant, 2005; Giannetti et al., 2015; Li et al., 2016).

Farrell and Grant (2005) estimate that China needs about 75,000 managers who can effectively work in an international environment, but can only obtain 3,000 to 5,000 managers. Giannetti et al. (2015) add that the few highly skilled managers in the Chinese labour market tend to be returnee emigrants who have studied or worked in developed (often market-based) economies, such as the US, the UK, Canada, and Australia. They further suggest that foreign-trained Chinese people who return to China to work are usually attracted by the provincial government policies adopted in the late

²Data from the World Bank indicate that global GDP in 2019 was US\$87.698 trillion, whilst China's GDP was US\$14.343 trillion. See <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD> [Accessed on 28/11/2020].

1990s to incentivise highly skilled emigrants to return home. The incentives included tax breaks, medical benefits, subsidised accommodation, jobs for spouses, and schooling for children (Wen et al., 2020).

In addition to the provincial government policies adopted in the 1990s, other factors drive returnees to China. Arguably, the market for returnee directors is driven by the growing economic opportunities offered by the Chinese economy. Indeed, according to World Bank data, China's GDP amounted to 70.27% of that of the US in 2021, up from 11.82% in 2000. Furthermore, as of 2021, China had the largest number of Fortune 500 companies (134) in the world (compared to 122 in the USA). Astronomical GDP growth, coupled with the influx of large companies, brings in several career opportunities with working conditions and pay packages similar to those in Western countries. It, thus, became apparent to Chinese abroad that 'the American dream can be chased in China' (Wang, 2021), hence motivating them to return home.

Moreover, China's one-child policy contributes to the pool of Chinese returnees. The one-child policy restricted families to only one child for approximately 35 years until 2016 (Gu et al., 2007; Feng et al., 2016). This policy has made it more affordable for parents to send their children overseas to study. After all, parents have only one child to take care of, making it relatively easier for them to afford education overseas, mostly in the US, UK, Canada, and Australia. In addition, the fact that most parents had only one child meant that the child was more likely to return home later (after school or working abroad) to care for their parents when they were older, thereby increasing the supply of returnees in China.

In addition to the shortage of managerial talent, poor corporate governance/disclosure is another problem that limits the growth of Chinese firms (Allen et al., 2005; Chen et al., 2006; Gul et al., 2010). Whilst China's economic reforms borrowed concepts and 'best practices' from the US and other capitalist nations, its corporate governance structure remains relatively underdeveloped and weak. For example, board chairpersons in China are full-time executives with enormous power (Chen, 2015; Jiang and Kim, 2015). Also, senior managers typically start their careers as government bureaucrats and tend to be political in their dealings (Chen et al., 2006). Furthermore, most listed Chinese companies have a unique ownership structure, with blockholders typically being state or quasi-state institutions. Finally, institutional investors (e.g. mutual funds, insurance companies, pension funds) in China are very small, and thus provide very little monitoring of firms' management. In this context, the board of directors may play an important monitoring role, especially when it succeeds in attracting highly skilled returnees who are exposed to international corporate governance standards in developed economies.

2.2. Directors with foreign experience

Studies on the role of directors with foreign experience on corporate boards are relatively new, but growing. This literature suggests that directors with foreign experience help to facilitate companies' access to foreign resources (Masulis et al., 2012; Oxelheim et al., 2013), improve investment efficiency (Dai et al., 2018) and firm performance (Giannetti et al., 2015) in emerging markets, transfer governance practices across countries (Giannetti et al., 2015; Iliev and Roth, 2018), achieve better CSR engagement (Zhang et al., 2018), and constrain firms' tax aggressiveness (Wen et al., 2020) as well as their earnings management activities (Du et al., 2017 and Ashraf and Qian, 2021).

Based on a sample of US corporations, Masulis et al. (2012) find that independent directors with foreign experience can help their firms resolve cultural differences in international markets and in the process help them to make better cross-border acquisitions in the home countries/regions of the foreign independent directors. However, they also find that foreign independent directors have poor board meeting attendance records and are associated with a greater likelihood of financial misreporting. They conclude that foreign independent directors are poor monitors of US firms because the geographic distance between their home countries and the companies' headquarters imposes substantial oversight costs (e.g. travel costs to attend board meetings). Similarly, owing to the lack of local knowledge, rules, culture, and language, Hooghiemstra et al. (2019) show that non-Nordic foreign directors are ineffective monitors, leading to greater earnings management in Nordic firms with foreign (non-Nordic) directors. However, in an emerging market context, Giannetti et al. (2015) show that when Chinese firms hire directors with foreign experience, these directors help improve their corporate governance and management practices by transmitting knowledge from advanced economies to emerging markets. They find significant performance increases and reductions in earnings management for firms with a higher proportion of returnee directors.

Other recent studies also suggest that directors with foreign experience serving on the boards of emerging market firms improve the board's monitoring functions and make the firm behave ethically. For example, Zhang et al. (2018) suggest that directors with foreign experience strengthen the contract enforceability environment in emerging markets by discouraging firms from renegeing on their social and environmental obligations. They report a positive and significant association between directors with foreign experience and firms' CSR engagement. Wen et al. (2020) find a significantly negative association between directors with foreign experience and tax avoidance, suggesting that these directors help constrain firms' tax aggressiveness. They further find that the negative relationship between directors with foreign experience and tax avoidance only holds when directors' foreign experience is derived from countries or regions with higher

investor protection. Other studies emphasise the value of foreign experience and show that directors with foreign experience reduce earnings management, improve financial reporting through effective monitoring (Du et al., 2017; Ashraf and Qian, 2021; Dobija and Puławska, 2022), and improve strategic decisions such as foreign IPOs (Li et al., 2016) and investments (Dai et al., 2018).

Overall, individuals with foreign experience appear to have a reputation for adding value to firms when recruited to sit on boards, particularly in emerging markets. Directors with foreign experience contribute to the firm by improving management practices and corporate governance to make the firm behave more ethically. A typical feature of prior studies is that they combine the foreign experiences of directors, both *native* and *foreign*, without attempting to distinguish between them. The current study contributes to the literature by not only examining the relationship between returnee directors and corporate fraud but also attempts to investigate the relative importance of returnee directors (i.e. natives with foreign experience) and foreign directors.

2.3. Fraud theories: The fraud triangle, reputational cost, and social connection perspectives

In modelling fraud, prior studies (e.g. Free and Murphy, 2015; Kuang and Lee, 2017; Chen et al., 2018) use the ‘fraud triangle’ to suggest that three main conditions drive fraud: (i) an incentive or pressure to commit fraud, (ii) an opportunity to commit fraud, and (iii) the ability of fraudsters to escape punishment when they commit fraud. To the extent that hiring returnee directors affects board effectiveness, returnee directors can shape some, if not all, conditions that influence corporate fraud. This is because effective directors may represent a countervailing force against fraudulent corporate behaviour because strong and high-quality supervision by independent directors helps deter managerial opportunism (Chen et al., 2006; Coles et al., 2014; Hope et al., 2019). Therefore, we argue that returnee directors are more likely to experience less corporate fraud. Our core argument is underpinned by the reputational cost hypothesis and social connection view of corporate fraud.

The reputational cost hypothesis posits that good directors establish reputations as effective monitors and are rewarded with additional board seats, whereas bad directors suffer reputational losses and bear personal costs in the form of fewer opportunities to serve on other boards (Fama and Jensen, 1983; Fich and Shivdasani, 2007). The reputational cost hypothesis holds that the independent directors of firms accused of financial misconduct suffer personal losses in the form of a damaged reputation. Reputational losses tend to be greater for directors who already enjoy a high reputation in the

director labour market, such as returnee directors (who have had the opportunity to learn and/or work abroad) in emerging markets. Empirically, the directors of firms that engage in fraud face reputational penalties. Srinivasan (2005) finds that non-executive directors, particularly those serving on an audit committee, experience substantial director turnover when firms restate their earnings. He further finds a decline in other board seats held by non-executive directors of firms that restate earnings, implying that earnings restatement damages directors' reputations and diminishes their job prospects in the director labour market. Fich and Shivdasani (2007) report that following a financial fraud lawsuit, non-executive directors do not face abnormal turnover on the board of the sued firm, but experience a significant decline in other board seats held. They also demonstrate this decline in other directorships is greater for more severe allegations of fraud and when the non-executive director bears greater responsibility for monitoring fraud.

As returnee directors are generally considered to have exceptional ability and superior expertise derived from developed economies, we expect these highly sought-after returnee directors to face greater reputational costs when fraud occurs in their firms (Wen et al., 2020). Therefore, returnee directors facing high reputational costs are unlikely to encourage fraudulent activities. These types of directors serve as effective management monitors and instil managerial discipline to minimise their own reputational (personal) costs in the event of financial misconduct.

Another reason why returnee directors may be able to deter corporate fraud is provided by the literature on directors' social connections and networks. Previous studies examined the effect of internal social connections on fraud and highlighted how these connections generate affective bonds that can either reduce the stringency of monitoring by directors or increase the potential for collusion. Free and Murphy (2015) show that organisational bonds developed amongst employees within a firm can lead to parties in the firm colluding to perpetrate fraud. Khanna et al. (2015) examine how reciprocity that develops through appointments based on connections affects CEOs' opportunities to commit fraud. The authors find that directors and executives connected with the CEOs of their firms are more likely to be subservient to CEOs, thereby increasing the propensity for fraud commission and decreasing the likelihood of fraud detection.

Kuang and Lee (2017) demonstrate that beyond affective bonds developed through internal social connections, opportunities to commit fraud can also increase through external social connections. They argued that externally and socially connected directors may use their social influence to cover up their wrongdoing or influence regulatory and/or justice systems in a self-serving manner. Such directors have strong incentives to commit fraud. Consistent with their hypothesis, the authors find that well-connected independent directors have a lower likelihood of fraud detection. They further find that

in firms with well-connected independent directors, fraud remains undetected for a longer period and fewer people are charged with fraud, suggesting that independent directors' external connectedness is instrumental in minimising the cost of fraud commission.

In the context of our study, which involves directors who are Chinese nationals and have spent some years away from China, returnee directors may have relatively weaker social connections with the top management teams of Chinese firms. This provides limited room for returnee directors to foster the development of in-group favouritism and potentially jeopardise their independence and the quality of their monitoring/supervision. Therefore, the weaker internal social connections that are likely to exist between returnee directors and the firm's executives could reduce the likelihood of deceit, cover-up, collusion, and misconduct. Furthermore, returnee directors may have limited and weak external social ties with influential people in China. Thus, it is unlikely for them to influence the regulatory and justice systems to escape or mitigate penalties if they were fraudulent. This would reduce their incentives to aid the commission of fraud but instead encourage them to monitor intensely to prevent fraudulent practices.

Overall, both the reputational costs and social connections theoretical perspectives suggest that returnee directors are more effective at performing board monitoring functions. Therefore, as vigilant monitors of a firm's management, we expect the presence of returnee directors to be associated with a lower likelihood of corporate fraud. The channels or mechanisms through which returnees reduce corporate fraud are summarised in the next section.

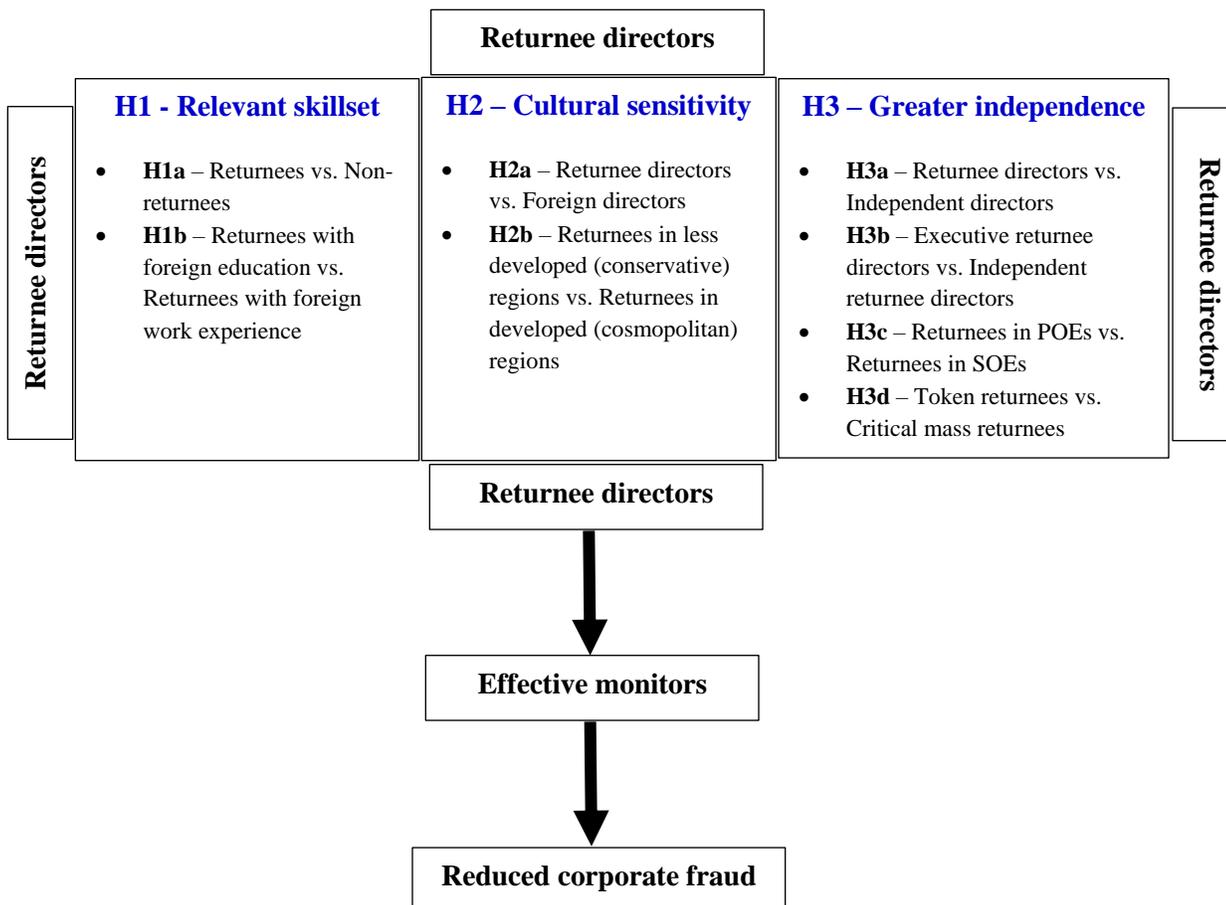
2.4. Conceptual framework and hypotheses

2.4.1. Conceptual framework

Fig. 1 presents the framework of the link between returnee directors and corporate fraud which we empirically test in this study. According to this framework, returnee directors possess at least three unique qualities—*relevant practical skillset, cultural sensitivity, and greater independence*—that make them effective management monitors, leading to a lower incidence of fraud in their firms. These three qualities form the basis for the hypotheses of this study. First, the returnees' relevant skillset hypothesis (*H1*) is underpinned by the knowledge transfer literature (Giannetti et al., 2015), and attempts to explain why and how returnee directors may be more effective monitors than ordinary directors. *H1* includes two sub-hypotheses that focus on (i) the knowledge/experience of returnees vs. non-returnees (*H1a*) and (ii) the *nature* of foreign experience obtained by returnees with educational experience vs. returnees with practical work experience (*H1b*).

Next, the returnees' cultural sensitivity hypothesis (*H2*) emphasises the advantages that returnee directors may have over foreign directors, drawing largely from the literature that stresses cultural fluidity in the boardroom (Piekarri et al., 2015). *H2* seeks to explain why returnee directors may be better monitors than foreign directors (*H2a*) and why returnees may be more effective in checking fraud in some regions of China (e.g. less-developed and conservative regions) than others (i.e. more-developed and cosmopolitan regions) (*H2b*). Finally, the greater independence hypothesis (*H3*) builds on the social/political connection perspective (Free and Murphy, 2015; Kuang and Lee, 2017) to contend that returnees may exhibit greater independence than other directors, including ordinary independent directors. We develop four sub-hypotheses to test *H3*, by comparing the roles of: (i) returnee directors vs. ordinary independent directors (*H3a*); (ii) executive returnee directors vs. independent returnee directors (*H3b*); (iii) returnees in POEs (low political environment) vs. returnees in SOEs (high political environment) (*H3c*); and (iv) 'Token' returnees vs. Critical mass returnees (*H3d*). The full set of hypotheses is presented in the following section.

Fig. 1: Conceptual framework of the relations between returnee directors and corporate fraud



2.4.2. Hypothesis 1: Relevant skillset of returnees and effective monitoring (H1a and H1b)

Having studied and/or worked in foreign countries, returnees may possess the relevant skills (including knowledge and experience) required to perform their board functions effectively. In China, where the economy is transitioning from a command to a free-market economic model, foreign experience from market-oriented countries may be valuable for firms. Meanwhile, prior literature (e.g. Giannetti et al., 2015) suggests that the majority of Chinese travelling for overseas education tend to head to Western countries, such as the US, the UK, Canada, and Australia, which have capital market orientations and stronger corporate governance practices. Therefore, Chinese returnee directors may be better equipped with the market-oriented experience, knowledge, and skills required to improve their firms' internal control systems. If returnee directors are perceived to have relevant or even superior skills, they will face higher reputational costs when fraud occurs (Fama and Jensen, 1983; Fich and Shivdasani, 2007), which will motivate them to intensely monitor management and ultimately check fraud. Since experiential knowledge is generally considered superior to academic knowledge (Billet, 2009; Inceoglu et al., 2019; Andrews and Higson, 2008), it is plausible that the relationship between returnee directors and fraud is stronger for returnees with relevant work experience than for those with only educational experience. Moreover, returnees with relevant work experience often tend to have educational experience because they first leave their home country to study overseas, and then seek work experience. Collectively, we expect returnees, especially those with relevant work experience, to be effective monitors and associated with a lower likelihood of fraud. This leads us to formulate *H1a* and *H1b*:

H1a: *There is a negative relationship between the proportion (and presence) of returnee directors and the incidence of corporate fraud.*

H1b: *The negative relationship between returnee directors and the incidence of corporate fraud is more pronounced when returnees have relevant foreign work experience than when they have only foreign educational experience.*

2.4.3. Hypothesis 2: Cultural sensitivity of returnees and effective monitoring (H2a and H2b)

Since returnees and foreign directors both have experience abroad, one can expect the above arguments to hold for foreign directors (i.e. non-Chinese directors). However, some factors (e.g. lack of cultural awareness) may arguably render

foreign directors less effective at fighting fraud than their returnee counterparts. Györy (2020) reports that the institutional setting is an important determinant of the three main conditions for fraud (incentive/pressure to commit fraud, opportunity to commit fraud, and ability to escape punishment). Indeed, fraud manifests in different forms and modes, and the societal norms, rules, customs, and beliefs embedded in an institutional setting shape the limits and extent to which actors can pursue their interests (Nee, 2003). Consequently, effectively combating fraud requires deeper cultural/local knowledge, something that returnee directors are more likely to possess relative to foreign directors because they are Chinese nationals.

Unlike returnee directors, most foreign directors may not know the local language or lack the domain-specific knowledge and cultural fluidity to effectively monitor management. For example, when a foreign director is appointed, the boardroom language often changes from the local language to English, and since English is not the first language of most Chinese board members, discussions sometimes become elementary and less nuanced (Piekarri et al., 2015), making it easy for fraud to go undetected. Similarly, Hooghiemstra et al. (2019) show that language affects the internal workings of boards that include foreigners. They show that when foreigners sit on boards, language proficiency is adversely affected, which (in turn) reduces the quality of board monitoring. Therefore, although foreign directors have international expertise, they may be less equipped (relative to returnee directors) to perform monitoring functions. This leads us to contend that returnee directors' foreign expertise may be more effectively deployed in mitigating corporate fraud in Chinese firms than the foreign expertise of foreign (non-Chinese) directors.

Furthermore, the source/nature of the foreign experience of returnees and foreign directors may have varying effects on corporate fraud. Arguably, compared with foreign directors, returnee directors may have superior foreign experience relevant to improving governance structures in Chinese firms. Both anecdotal evidence³ and the existing literature (e.g. Giannetti et al., 2015) suggest that the majority of Chinese travelling for overseas education tend to head to Western countries, such as the US, the UK, Canada, and Australia, which have capital market orientations and stronger corporate governance practices. In contrast, most foreign directors of Chinese firms hail from other Asian countries (e.g. Hong Kong, Macao, Taiwan, Japan, Singapore, and Korea) with relatively weaker governance practices. Du et al. (2017) report that an overwhelming 46.57% of foreign directors in Chinese firms come from Hong Kong, Macao, and Taiwan, and a further 35.05% come from other Asian countries, such as Japan, Singapore, and Korea. Consequently, as China is increasingly

³According to Statista, a German-based company specializing in market and consumer data, the top four overseas destinations for Chinese students in both 2015 and 2021 were the US, the UK, Canada, and Australia. See <https://www.statista.com/statistics/1108708/china-students-preferred-destinations-for-study-abroad/> [Accessed on 15/06/2022].

transitioning toward a free-market economy (Chen et al., 2006), we expect the overseas experience of returnee directors (obtained largely from Western economies) to be more instrumental in mitigating fraud in China than the overseas experience of foreign directors (obtained mainly from other Asian economies).

Lastly, China has a unique institutional setting in which the eastern coastal parts of the country are considered less culturally sensitive and relatively developed in terms of contract enforcement, legal environment, and general corporate regulatory environment (Fan et al., 2011; Shi et al., 2012; Cordeiro et al., 2013). Arguably, returnee directors in firms located in these more-developed regions may have a minimal impact on fraud because these regions have more effective external regulatory environments and governance structures which can substitute for the monitoring role of returnee directors. Nevertheless, in less-developed regions where the external corporate regulatory environment is weak, firms may need to rely more on their internal governance mechanisms to check fraud, thus making the role of returnee directors more crucial in such regions. Moreover, the less-developed regions of China are less cosmopolitan (more conservative) and more culturally sensitive, thereby making the local and cultural knowledge of returnee directors more relevant in implementing changes in such regions. Based on the discussion in this subsection, we formulate our next set of hypotheses:

H2a: *The effect of returnee directors on the incidence of corporate fraud is, on average, stronger than that of foreign directors.*

H2b: *The effect of returnee directors on the incidence of corporate fraud is more pronounced for firms in less-developed regions (where cultural sensitivity is crucial) than for those in other (more cosmopolitan) regions of China.*

2.4.4. Hypothesis 3: Independence of returnees and effective monitoring (H3a and H3b)

Finally, the returnee directors of Chinese firms may be able to monitor management intensely because they are more likely to exercise independence than other directors (e.g. non-returnee independent directors). The literature suggests that independent boards improve monitoring and effectiveness (Black and Kim, 2012; Agyei-Boapeah et al., 2019). Therefore, it is plausible that independent directors replace returnee directors to mitigate fraud in Chinese firms. However, given China's unique context, we hypothesise that returnee directors are more effective than ordinary independent directors in checking fraud.

As previously mentioned, the Chinese stock market is unique in that the government is the largest shareholder in most listed firms, and large government ownership can influence board independence. Liu et al. (2015) report that 70% of the independent directors of Chinese listed firms are nominated by the top shareholders of the firm, who tend to be government officials. Individuals with strong social and/or political connections are often appointed as independent directors in most listed Chinese firms. Moreover, the Chinese government is not a passive shareholder; rather, it actively intervenes in company management and often compels firms to pursue social and political goals (Chen et al., 2011; Fan et al., 2007). Indeed, anecdotal evidence suggests that independent directors in government-controlled firms move in different directions. For example, Xiangbin Yin, a Chinese independent director, described his experience as follows: ‘...*the State, the largest shareholder, wants him to be a “KGB” in the company...*’ (Shen and Jia, 2005, p. 233). Hence, the independent directors of most Chinese listed firms may lack the ability and/or incentive to actively monitor and discipline management because of political considerations and interference from politicians.

By contrast, from the social connection perspective (Kuang and Lee, 2017), returnee directors are likely to be more independent and better monitors of management because their time spent abroad decreases their social and political connections in China, which reduces the affective bonds between them and management/politicians. Thus, on average, returnee directors may be more independent and monitor management more intensely than ordinary independent directors. This leads us to formulate *H3a*:

H3a: *The effect of returnee directors on the incidence of corporate fraud is, on average, stronger than that of independent directors.*

To further explore whether greater board independence partly explains the relationship between returnee directors and fraud, it is important to distinguish between executive and non-executive (independent) returnee directors. Prior studies (e.g. Weisbach, 1988; Gyapong et al., 2019) suggest that because non-executive directors are more independent of management (relative to executive directors), they are incentivised to monitor managers effectively. Therefore, we expect independent (non-executive) returnee directors to be more effective in fighting fraud than executive returnee directors. Specifically, the social connection theoretical lens (Free and Murphy, 2015; Kuang and Lee, 2017) suggests that affective bonds easily develop between executive directors and management, implying that returnees who serve in executive roles

may lose their independence and become less effective monitors than those who serve as independent directors.

Accordingly, we formulate *H3b*:

H3b: *The effect of returnee directors on the incidence of corporate fraud is stronger when the returnees serve as independent (non-executive) directors than when they are executive directors.*

Regarding the independence of returnee directors, we argued earlier that relative to ordinary independent directors, returnees may be subject to minimal political control/interference due to their limited network/connections to local politicians and government bureaucrats. However, some returnees may also be either politically connected themselves or simply find themselves working in high political environments, where they lack the ‘free hand’ to operate as professionals. In such cases, returnee directors may lose their independence and effectiveness when discharging their monitoring roles. That is, even when returnee directors have the relevant skillsets (including work-related foreign experience and education), they are unlikely to make the expected impact on the board if they are politically connected or face interfering conditions in the firm that prevent them from operating freely.

To test this conjecture, we take advantage of China’s unique context in which a large proportion of firms are SOEs (see Chen et al., 2006). Prior studies show that the independence and effectiveness of the board of directors and other senior managers of Chinese firms differ between POEs and SOEs because the latter are more prone to political interference from central and local governments (Chen et al., 2006; Fan et al., 2007; Li and Zhang, 2010; Zhang et al., 2018). The government, acting as the controlling shareholder, appoints the majority of board members and senior managers of SOEs, and most of these appointees tend to be former government bureaucrats or connected to the People’s Congress (Chen et al., 2006). Appointments based on political considerations often do not offer the best-qualified directors, leading to a suboptimal board that becomes the ‘puppet’ of politicians and, thus, may be less effective in performing its monitoring and advisory functions.

Existing evidence shows that given the high political interference in Chinese SOEs (Li and Zhang, 2010), even some well-qualified directors may not make a significant impact because they may lack the freedom to operate effectively in such settings. Zhang et al. (2018) find that returnee directors promote CSR activities in Chinese firms only when the CEO has no political connections. They conclude that returnee directors often do not obtain support from CEOs with political connections. Fan et al. (2007) also document that due to political interference, firms run by politically connected boards

have poorer financial performance than those run by their politically unconnected counterparts.

Based on these insights, we expect the relationship between returnee directors and corporate fraud to differ for SOEs and POEs. Specifically, we posit that the degree of independence and effectiveness of returnee directors is contextual and that these directors (i.e. returnees) can have a greater impact on checking fraud in POEs than in SOEs. This is because the returnee directors recruited into SOEs are likely to be relatively socially (or politically) connected and perhaps less qualified than their POE counterparts who may be less politically connected. Thus, returnee directors in SOEs may face lower reputational costs and a higher likelihood of colluding with others to engage in misconduct or overlooking the wrongdoing of management as a way of returning personal favours. On the other hand, high-quality returnee directors may not only be recruited by POEs, but they may also be allowed to operate with a free hand, leading to effective monitoring of management. Consequently, returnee directors may be more effective in curbing fraud in POEs (environments with less political interference) than in SOEs (environments with high political interference). We formally state this hypothesis as follows:

H3c: *The negative relationship between the proportion (and presence) of returnee directors and corporate fraud is stronger in POEs (low political environment) than in SOEs (high political environment).*

An alternative method to testing whether returnees will have a free hand and a supportive environment to operate is to consider if they are seen as mere ‘tokens’ on the board to boost corporate image. Token status theory (Kanter, 1977) argues that when directors with specific or unique characteristics or features represent only a small fraction of the board, they may be seen as tokens. Therefore, token directors may be marginalised, ignored, and not judged based on their abilities because they are viewed as bringing auxiliary traits to the board (Konrad et al., 2008; Hughes, 1944). Consequently, Glazer and Kristol (1976) suggest that directors with unique features or characteristics can have a greater impact on firm-level outcomes when they have similar colleagues on the board. Since returnees are highly regarded in the Chinese labour market, some firms may be tempted to use them as mere tokens to boost their corporate image. We expect marginalisation and tokenism to be less likely when returnees are not alone but can act together with other returnees to form a critical mass to have a stronger voice in the boardroom. Having more returnees on the board ultimately safeguards their independence and emboldens them to monitor management by instituting radical reforms to mitigate the risk of fraud. This leads to *H3d*:

H3d: *The effect of returnee directors on corporate fraud is stronger when a board has more than one returnee director.*

3. Data and methodology

3.1. Data sources and sample

We start with a sample of all A-share companies listed on the Shanghai and Shenzhen Stock Exchanges from 2005 to 2018. The data to construct the variables are extracted from the China Stock Market and Accounting Research (CSMAR) database. Consistent with previous studies on corporate fraud (e.g. Wu et al., 2016; Zhang, 2018), we consider only non-financial companies in our sample because financial firms are in highly regulated industries and may have substantially different levels of fraud risk. Finally, we exclude firm-year observations with missing data for the key variables. After applying these restrictions, our final sample consists of 25,103 firm-year observations. Appendix 4 presents the distributions of the sample across years.

3.2. Estimation model

To capture the relationship between returnee directors and a firm's likelihood of fraud, we estimate the following probit regression:

$$P(Fraud_{it}) = \beta_0 + \beta_1 Returnee_{it} + \beta_n Controls_{it} + \varepsilon_{it}, \quad (Eq. 1)$$

where i , t , and ε_{it} represent firm i , year t , and an error term, respectively. The dependent and independent variables ($Fraud$ and $Returnee$), as well as the control variables, are defined below: When computing the z-statistics, we cluster the standard errors using the White-robust (Huber-White) standard error method to minimise within-firm and/or within-cross-sectional correlation concerns.⁴ To derive an economic interpretation of our results, we follow Uysal (2011) and Agyei-Boapeah et al. (2019) in reporting the marginal effects of the probit regressions, which allows us to interpret our parameter estimates as elasticities. Unless otherwise specified, marginal effects were evaluated using the means of the covariates.

⁴Using a two-way (firm- and year-level) standard error clustering did not qualitatively change our key results and conclusions. These results are available upon request.

3.3. Variables

3.3.1. Corporate fraud

Consistent with existing studies on corporate fraud (e.g. Wu et al., 2014; Zhang, 2018), we define corporate fraud (*Fraud*) as a dummy variable that takes the value of 1 if the firm is subject to an enforcement action for fraud or violation of a regulation in the observation year and 0 otherwise. Fortunately, our analysis is unlikely to suffer from the problem of false fraud detection because our data source, *the Chinese Securities Regulatory Commission's (CSRC) enforcement actions from CSMAR*, does not publish undecided cases. Examples of fraud include market-related fraud such as fraudulent listings, insider trading, illegal trading of stocks, and manipulation of stock prices. Other types of fraud in our sample include accounting/disclosure-related fraud such as false classifications, false disclosures, false records (misleading statements), delayed disclosures, improper accounting treatments, fictitious profits, and major omissions.

3.3.2. Returnee directors

In line with previous studies (e.g. Giannetti et al., 2015; Zhang et al., 2018; Wen et al., 2020), we consider a director to be a returnee and have obtained foreign experience if they: (i) are Chinese nationals, (ii) studied and/or worked outside mainland China, and (iii) currently reside in China. It is noteworthy that these (returnee) directors are different from foreign directors who tend to be foreigners (i.e. non-Chinese nationals). As noted earlier, most foreign directors in Chinese firms are from Asian countries such as Hong Kong, Macao, Taiwan, Japan, Singapore, and Korea (Du et al., 2017). Our definition of returnee directors excludes foreign directors and only considers directors who are Chinese nationals but return home after obtaining foreign experience, either through overseas education or work. To capture the contribution of returnee directors to fighting fraud, we use *Returnee_No* (i.e. the number of returnee directors on the board) and *Returnee_Pro* (i.e. the proportion of returnee directors to the total number of directors) as our variables of interest.

3.3.3. Control variables

In line with existing studies on corporate fraud, we also controlled for variables such as board structure, ownership structure, regional development level, and other firm-level economic variables related to corporate fraud (e.g. Wu et al., 2016; Zhang, 2018). The board-level variables include foreign board directorships (*Board_Foreign*), board size (*Board_Size*), board independence (*Board_Independence*), board gender diversity (*Board_Female*), and CEO duality

(*CEO_Duality*). The ownership structure variables include institutional ownership (*Institution_Owner*) and state-owned enterprises (*SOE*). The regional development variable is *Region_Development* and the firm-level economic variables include performance (*ROA*), age (*Firm_Age*), size (*Firm_Size*), growth opportunity (*Firm_Opportunity*), leverage (*Financial_Leverage*), and audit quality (*Audit_Quality*). Additionally, we control for year- and industry-fixed effects. Appendix 1 provides the detailed definitions of all the variables.

4. Results and discussion

4.1. Descriptive statistics

Descriptive statistics are presented in Panel A of Table 1, Columns 1-4. *Fraud* has a mean of 0.084, implying that approximately 8.4% of the sampled firms faced an enforcement action for fraud or regulatory violations over the study period. This statistic is higher than that of prior studies in China (see, e.g. Chen et al., 2016) and the US (e.g. Kuang and Lee, 2017) which report rates of 4.5% and 5.3%, respectively, indicating an increase in corporate fraud in China since 2016. The average firm has 1.163 returnee directors on its board (*Returnee_No*) and the proportion of returnee directors (*Returnee_Pro*) has a mean of 0.113, indicating that approximately 11.3% of the total number of directors have prior study or work experience outside China. *Board_Foreign* has a mean of 0.116, suggesting that 11.6% of the sample firms have foreign (non-Chinese) directors. The average board in our sample has about 10 members (*Board_Size*= 10.181) which is higher than the 8.47 reported by Zalata et al. (2016) in the UK, implying that relative to UK firms, Chinese firms have larger boards. Nevertheless, larger boards translate to only 37.8% (*Board_Independence*= 0.378) of independent directors, compared to 50.7% in the UK (Zalata et al., 2016). This finding suggests that board independence and monitoring may be weaker in Chinese firms than in UK firms.

Further, the levels of gender diversity, CEO duality, and institutional ownership (*Board_Female*, *CEO_Duality*, and *Institution_Owner*) have mean values of 0.134, 0.270, and 0.067, respectively. Interestingly, *SOE* and *Region_Development* have means of 0.398 and 0.686, respectively. Thus, approximately 39.8% of the sampled firms are state-owned, whilst 68.6% are located in the developed regions of China. Other firm characteristics, such as *ROA*, *Firm_Age*, *Firm_Size*, *Firm_Opportunity*, and *Financial_Leverage* have means of 0.044, 2.671, 22.109, 2.044, and 0.432, respectively, similar to those reported in previous Chinese studies (see Liu et al., 2014; Chen et al., 2016). Our sample firms are younger, highly leveraged, and have better growth opportunities than do UK firms (Agyei-Boapeah, 2019).

[PLEASE INSERT TABLE 1 HERE]

Columns 5-7 of Table 1 (Panel A) present the univariate analyses of the variables for firms with and without returnee directors. We find that *Fraud* has a higher mean in firms without returnee directors (0.086) than in those with returnee directors (0.080). More importantly, the t-statistic for the mean difference was statistically significant, indicating that the incidence of fraud is higher in firms without returnee directors. Interestingly, firms with returnee directors have twice as many foreign directors as those without returnee directors (0.168 vs. 0.082). In terms of the other control variables, firms with returnee directors have larger boards, higher levels of board independence and institutional ownership, and lower levels of female directors and CEO duality than firms without returnee directors. These statistics suggest stronger monitoring in firms with returnee directors than in those without. Additionally, although returnee director firms are larger, they are relatively younger than non-returnee director firms.

In Panel B of Table 1, we report the results of the univariate analyses of the main subsamples utilised to test *H2b* and *H3c*. Columns 1-3 show the analysis for developed (cosmopolitan) versus less-developed (conservative) regions, whilst Columns 4-6 present the results for SOEs versus POEs. Fraud is significantly higher in the less-developed (conservative) regions than in cosmopolitan areas (0.103 vs. 0.075), suggesting that special expertise (e.g. local/cultural knowledge) may be required to tackle fraud in these conservative regions. However, there are significantly fewer returnees and foreign directors in these regions, implying that directors with foreign experience prefer to work in cosmopolitan areas than in the conservative regions of China. Interestingly, we find more returnee directors in conservative regions than foreign directors, suggesting that the local/cultural knowledge of returnees makes them feel more comfortable living and working amongst conservative Chinese.

In Columns 4-6, the analysis indicates that approximately 9% of POEs were subjected to enforcement actions for fraud or regulatory violations (*Fraud* = 0.090) relative to 7.4% (*Fraud* = 0.074) of SOEs. This finding suggests that fraud is more likely to be an acute problem for POEs than for SOEs. The analysis also shows that POEs are more likely to have returnee directors (*Returnee_Pro* = 0.129) than are SOEs (*Returnee_Pro* = 0.089). Similarly, POEs have more foreign directors than SOEs, suggesting that directors with foreign experience prefer to work in environments with less political interference. Finally, whilst board independence and gender diversity indicate that monitoring may be stronger in POEs, the statistics on CEO duality and institutional shareholdings suggest otherwise.

We present Pearson's bivariate correlation matrix in Appendix 2 to check for multicollinearity. Liu et al. (2014) argue

that a correlation greater than 0.7 could indicate potential multicollinearity problems in a multivariate regression framework. However, Field (2005) notes that a slightly higher threshold (0.8) could rather indicate potential multicollinearity. The highest correlation coefficient is 0.939, relating to the alternative measures of returnee directors (i.e. the proportion of returnee directors, *Returnee_Pro* and the number of returnee directors, *Returnee_No*), which are included in different regressions. Apart from the correlation between the alternative measures of returnee directors, all the correlation coefficients are less than 0.4. Thus, we conclude that multicollinearity may not pose a serious econometric problem in our multivariate regression results presented in the next section.

4.2. Multivariate regression results

4.2.1. The relative importance of returnee, foreign, and independent directors

Columns 1 and 2 in Table 2 present the regression results for the relationship between returnee directors and fraud. The results in Column 1 indicate that the number of returnee directors (*Returnee_No*) is negatively and (statistically) significantly related to corporate fraud ($\beta = -0.0035$, $z\text{-stat} = -2.64$). Thus, returnee directors (as measured by the number of returnee directors) are associated with lower corporate fraud. Specifically, a one-standard-deviation increase in *Returnee_No* [(i.e. from no returnee directors to approximately 2 (specifically, 1.62) returnee directors on the board)] is associated with a 0.57% lower probability of fraud, which represents about a 6.59% proportional decline in fraud relative to the baseline likelihood of 8.6%. This finding is also economically significant.

Moreover, in Column 2, the proportion of returnee directors (*Returnee_Pro*) is negatively and significantly related to fraud ($\beta = -0.0329$, $z\text{-stat} = -2.43$), implying that a one-standard-deviation increase in *Returnee_Pro* (i.e. from no returnee directors to 15.2% of the board being returnee directors) is associated with a 0.50% lower probability of fraud, which represents about a 5.8% proportional decline relative to the baseline fraud likelihood of 8.6%. These results remain qualitatively unchanged when we concentrate exclusively on returnee directors by dropping *Board_Foreign* and *Board_Independence* from our regression analyses in Columns 3 and 4 (i.e. $\beta = -0.0032$, $z\text{-stat} = -2.59$ in Column 3; $\beta = -0.0307$, $z\text{-stat} = -2.40$ in Column 4) of Table 2. The results suggest that returnee directors may still be able to check fraud, even when foreign and independent directors are ignored.

Overall, these results are consistent with *H1a*, implying that firms with returnee directors are more likely to discourage fraudulent activities. These results also provide some support for the reputational cost hypothesis and social

connection perspective on corporate fraud. According to the reputational cost hypothesis, returnee directors are generally perceived to have superior ability because of their foreign experiences and therefore face greater reputational risk when fraud occurs in their firms (Wen et al., 2020). Similarly, the social connection perspective argues that collusion to perpetrate fraud is minimal when employees are loosely connected with little or no affective bonds (Free and Murphy, 2015; Kuang and Lee, 2017). Given that returnee directors spend more time overseas, they are unlikely to have strong ties with firm managers. Consequently, a plausible explanation for the *negative returnee director-corporate fraud relationship* is that returnee directors have a greater need to reduce their reputational risk. Therefore, armed with loose connections with managers, they monitor managers intensely and instil discipline in Chinese firms to reduce fraudulent activities.

Notably, in the baseline models in Columns 1 and 2, the impact of foreign directors on fraud is statistically insignificant ($\beta = 0.00461$, z-stat= 0.71; $\beta = 0.00389$, z-stat= 0.60). Similarly, the coefficients on *Board_Independence* are statistically insignificant at conventional levels in the baseline regressions ($\beta = -0.0261$, z-stat= -1.07; $\beta = -0.0264$, z-stat= -1.08). These results imply that foreign and independent directors play no significant role in mitigating fraud in Chinese firms. This conclusion on foreign and independent directors continues to hold in Columns 5-7, even when we exclude returnee directors from the analyses. Collectively, the results in Columns 5-7 and a comparison of the coefficients for the different types of directors (i.e. returnee, foreign, and independent directors) in the baseline results in Columns 1 and 2 strongly support Hypotheses *H2a* and *H3a*.

Our results imply that the effect of returnee directors on reducing fraudulent activities in Chinese firms dominates the role played by foreign and independent directors in fighting fraud. Although foreign directors, like returnee directors, possess international expertise, the former may be less effective in curbing fraud in Chinese firms than the latter. Perhaps language- and culture-specific knowledge confer some advantages to returnee directors, as they are natives of China (Hooghiemstra et al., 2019), thus making them more effective than foreign directors in fighting fraudulent corporate activities. Independent directors (without foreign experience) have an insignificant impact on fraud, perhaps because they lack the expertise (education and/or experience) to fight fraud, which is becoming increasingly complicated and international.

The results for the other control variables are generally intuitive and consistent with theory and prior studies (e.g. Jensen and Meckling, 1979; Haubrich, 1994; Garen, 1994). *Board Size*, *CEO duality*, and *Firm Age* exhibit positive and statistically significant relationships with fraud, consistent with the agency theory argument that larger boards have

coordination problems and are unable to monitor effectively. Similarly, the positive CEO duality-corporate fraud relationship suggests that the concentration of power in the CEO increases the probability of fraud, which is also supported by agency theory. Older firms may be larger and more complex to run, making violations relatively easy. *Regional_Development*, *SOE*, and *ROA* have negative relationships with fraud, implying that firms located in more-developed regions, government-controlled firms, and firms with superior performance are less likely to commit fraud.

[PLEASE INSERT TABLE 2 HERE]

4.2.2. *Why are returnee directors effective monitors?*

Thus far, the results suggest that returnees are more effective at fighting fraud in Chinese firms than both foreign and independent directors. We now turn to the factors that may make returnee directors better monitors than other types of directors. As outlined in Section 2.4, a combination of factors – *relevant skillset*, *cultural sensitivity*, and *greater independence* – may explain why returnee directors are in a better position to monitor management intensely and, consequently, reduce fraud. We express this idea in Hypotheses *H1b*, *H2b*, *H3b*, *H3c*, and *H3d*, which we empirically test here.

First, we examine *H1b* (the relevant/practical skills hypothesis), which posits that returnee directors with foreign work experience and those with foreign educational experience affect fraud differently. Given that a potential source of value for returnee directors is their ability to bridge the knowledge gap by transferring superior know-how from Western or developed countries to emerging markets, we expect work experience to have a greater impact on firms than educational experience alone. This is because returnees who work abroad often do so after completing their education there; thus, they obtain longer and richer experience abroad by acquiring the relevant practical skills required to improve firms' internal control and governance structures. In contrast, returnees with only educational experience had a limited stay abroad and did not have the opportunity to obtain practical (workplace) experience; thus, they may possess limited transformational expertise to export to their home country.

To test these issues, we create measures for returnee directors that separately reflected the foreign education experience (*Returnee_Education_No* and *Returnee_Education_Pro*) and foreign work experience of returnees (*Returnee_Work_No* and *Returnee_Work_Pro*). We rerun the baseline models by replacing *Returnee* with the new variables and report the results in Columns 1-4 of Table 3. In Columns 1 and 2, the coefficients for *Returnee_Education_No* and *Returnee_Work_No* have negative and statistically significant relationships with fraud, respectively. Based on the magnitude

of the coefficients (-0.00380 vs. -.00620), we may infer that the returnee director's foreign work experience has a greater impact on fraud reduction than a foreign educational experience. Similarly, *Returnee_Education_Pro* and *Returnee_Work_Pro* exhibit negative relationships with fraud in Columns 3 and 4, respectively, although only *Returnee_Work_Pro* is statistically significant.

These results indicate that returnee directors with foreign work and educational experience help reduce fraud, although the effect of foreign educational experience is weaker and sometimes non-existent. The weaker effect of educational experience may also be because most Chinese spend only a brief period abroad (usually 1–3 years) on advanced (undergraduate or postgraduate) education. Meanwhile, those with work experience were likely to have lived abroad for a relatively long period, and possibly found work abroad after schooling. Such individuals with foreign work experience are likely to possess a greater depth of foreign experience and could potentially contribute more to curbing corporate fraud when hired by Chinese firms.

Second, we test *H2b (the cultural sensitivity hypothesis)*, which contends that returnee directors in firms located in more-developed regions may have a minimal impact on fraud because developed regions have more effective external regulatory environments and governance structures that can substitute for the monitoring role of returnee directors. Nevertheless, in less-developed regions where the external corporate regulatory environment is weak, firms may need to rely more on their internal governance mechanisms to check fraud, thus making the role of returnee directors more crucial in such regions. Moreover, the less-developed regions of China are less cosmopolitan (more conservative) and more culturally sensitive, thereby making the local and cultural knowledge of returnee directors more relevant in implementing changes in such regions.

We test these predictions by re-running Eq. (1) for firms located in the more- or less-developed regions of China. Columns 5-8 of Table 3 present the results. For more-developed regions, the results in Columns 1 and 2 show that both *Returnee_No* and *Returnee_Pro* assume a negative sign, but only *Returnee_No* is statistically significant. In contrast, the coefficients of *Returnee_No* and *Returnee_Pro* are all negative and statistically significant (see Columns 3 and 4) when the sample includes only firms in less-developed regions. Hence, returnee directors may be more effective in reducing fraud in less cosmopolitan regions and in settings with weaker external regulatory environments, where firms may need to build and rely on their internal governance structures to fight fraud.

[PLEASE INSERT TABLE 3 HERE]

Third, we conducted three related analyses to test the greater independence hypotheses (*H3b*, *H3c*, and *H3d*). These tests examine whether the effectiveness of returnee directors in reducing fraud varies between executive and independent (non-executive) directors. As argued earlier, the social connection theoretical lens (Free and Murphy, 2015; Kuang and Lee, 2017) implies that returnee directors can reduce corporate fraud better because they have loose social/political connections as a result of spending years abroad. Therefore, returnees are expected to exercise greater independence and monitor management more intensely. In this case, we expect the negative relationship between returnee directors and fraudulent activities to be stronger when returnees are independent directors than when they are executive directors. This is because affective bonds develop easily between executive directors and the management, which could make returnee executive directors less effective than returnee independent directors.

To conduct this analysis, we replace *Returnee_No* in the baseline model with *Returnee_Exc_No* and *Returnee_Ind_No* and replace *Returnee_Pro* with *Returnee_Exc_Pro* and *Returnee_Ind_Pro*. Panel A of Table 4 presents the results of these analyses. The results show that although *Returnee_Exc_No* (Column 1) and *Returnee_Exc_Pro* (Column 4) have a negative relationship with *Fraud*, this relationship is not statistically significant. Thus, the number and proportion of executive returnee directors do not affect the probability of a firm committing fraud. Instead, the results in Columns 2 and 5 show that *Returnee_Ind_No* and *Returnee_Ind_Pro* have negative and statistically significant effects on fraud.

Notably, the results in Columns 3 and 6 that our conclusions relating to the different impacts of executive and independent returnee directors remain unchanged when we include both variables (e.g. *Returnee_Exc_No* and *Returnee_Ind_No* in Column 3) in the same regression. Overall, the results in Panel A of Table 4 suggest that returnee directors are not a homogeneous group and that the negative returnee director-corporate fraud relationship is conspicuous only when returnee directors are independent. This finding supports both our reputational costs and social connection arguments by suggesting that although returnee directors may have higher reputational costs that may motivate them to monitor intensely, their monitoring incentives diminish when they are corporate insiders (appointed as executive directors) and, therefore, develop affective bonds with other senior managers.

Next, we examine *H3c*, the relationship between returnee directors and corporate fraud is stronger when returnees have a free hand to operate and are free from political interference. We expect returnees to be more effective in POEs than in SOEs. Panel B of Table 4 provides the results. Columns 1 and 2 show the results for the SOEs. In Column 1, the coefficient of *Returnee_No* is positive and statistically insignificant ($\beta = 0.000$, $z\text{-stat} = 0.04$). Next, although the coefficient of

Returnee_Pro assumes a negative relationship with *Fraud* in Column 2, the relationship is not statistically significant ($\beta = -0.0017$, $z\text{-stat} = -0.08$). However, statistically significant results are documented in Columns 3 and 4 for POEs. In Column 3, the coefficient of *Returnee_No* obtains a negative and statistically significant relationship ($\beta = -0.0045$, $z\text{-stat} = -2.71$). Similarly, the coefficient of *Returnee_Pro* is negative and statistically significant at the 1% level in Column 4 ($\beta = -0.0419$, $z\text{-stat} = -2.58$).

These results support *H3c* and imply that returnee directors are effective in reducing fraud in POEs, but not in SOEs. Prior studies (Chen et al., 2006; Fan et al., 2007; Li and Zhang, 2010; Zhang et al., 2018) suggest that board monitoring effectiveness may differ between SOEs and POEs. SOEs are prone to government interference via boards and other senior management appointments which are often based on political considerations (Chen et al., 2006). Such considerations may manifest in the appointment of politically connected executives and independent directors. Therefore, the insignificant (significant) results for SOEs (POEs) may be because the returnee directors in SOEs are different from, and perhaps less competent and more socially and politically connected than, those in POEs. Thus, with its ownership, the government may appoint returnee directors who are not sufficiently independent of insiders and political class. Consequently, returnee directors in SOEs may be disincentivised from monitoring managers, who may be political cronies. Moreover, returnee directors in SOEs who are less competent and more socially and politically connected may face a relatively lower reputational cost than their counterparts in POEs because they can rely on their political/social connections to mitigate any costs associated with committing fraud. For example, their political/social connections could help them escape punishment when fraud occurs or could help them obtain other board appointments.

We finally test the greater independence hypothesis by examining whether token returnee directors have any impact on corporate fraud. Glazer and Kristol (1976) argue that directors with unique features or characteristics can have a greater impact on firm-level outcomes when they have similar colleagues on the board. Given that returnees are highly regarded in the Chinese labour market, some firms may be tempted to use them as mere tokens to boost their corporate image. We expect marginalisation and tokenism to be less likely when boards have multiple returnees who can act together to form a critical mass to have a stronger voice in the boardroom. Having more returnees on the board may also safeguard their independence and encourage them to institute radical reforms to mitigate the risk of fraud and corruption.

To test *H3d*, we create three dummy variables – *Returnee=1*, *Returnee=2*, and *Returnee>>=3*. The variable *Returnee=1* is a dummy variable equal to 1 if a firm has only one returnee director on the board and 0 otherwise. Similarly,

Returnee=2 takes the value of 1 if only two returnee directors sit on the board, whilst *Returnee* ≥ 3 is a dummy variable equal to 1 if a firm has at least three returnee directors on the board. We rerun three separate models by replacing *Returnee* in Eq. (1) with *Returnee=1*, *Returnee=2*, and *Returnee* ≥ 3 and report the results in Panel C of Table 4.

Column 1 of Table 4 (Panel C) shows that the coefficient of *Returnee=1* is positive but not statistically significant. In Column 2, when an additional returnee is recruited to the board, the coefficient of *Returnee=2* becomes negative, but remains statistically insignificant. However, in Column 3, the coefficient on *Returnee* ≥ 3 obtains a negative and statistically significant relationship. These results suggest that returnee directors mitigate corporate fraud only when the board has more than two returnees, which enables them to maintain a level of independence and have a stronger voice on the board. In other words, returnee directors appear to be less effective monitors when employed merely as tokens on a board. Instead, returnee directors are effective management monitors when they work in an environment in which they are likely to receive strong support from colleagues with similar mindsets, experiences, and perspectives.

[PLEASE INSERT TABLE 4 HERE]

4.3. Further analyses

4.3.1. Time series differences

The quality of returnee directors in China may differ over time, as the recent generation of returnees is likely to be different from the earlier generation. Additionally, the earlier generation of Chinese people who had the opportunity to study abroad were more talented and accumulated substantial experience abroad by spending more years abroad after their education. However, in recent years, it has become relatively easier for Chinese students to study abroad, and partly because of numerous provincial returnee policies, many of the recent generations of Chinese students are quick to return home after spending only one or two years studying abroad. Therefore, the recent generation of returnees may be less effective at mitigating fraud than the earlier generation.

We test this conjecture in two ways. First, we split our sample into two equal periods: early (2005-2011) and recent (2012-2018). Next, based on the years in which the provinces in China introduced returnee policies, we divided the sample into early and late adopters. The early adopter subsample includes firms in provinces that introduced returnee policies between 1992 and 2001, whilst firms in provinces that introduced such policies after 2001 are classified as late adopters.

This classification allows us to divide provinces into two nearly equal groups.⁵ We then rerun our baseline analysis for the subsamples and report the findings in Table 5. In Columns 1-4, the relationship between returnee directors and fraud remains significantly negative in both early and recent periods, although the effect appears to be stronger in the early periods. However, the results in Columns 5-8 show that returnee directors reduce fraud only for firms in the early adopter subsample. These results support the view that the quality of the recent generation of Chinese returnees may be lower than that of the earlier generations.

[PLEASE INSERT TABLE 5 HERE]

4.4. Robustness tests

Endogeneity may be an issue in our analyses. Wooldridge (2002) suggests three main sources of endogeneity: the omission of important variables, simultaneous causality, and errors in variables. In our study, the scarcity of returnee directors may offer them the luxury of serving on boards of firms with a lower probability of committing fraud. In this case, there will be an issue of simultaneous causality, where the incidence of fraud drives the appointment of returnee directors. Furthermore, because of the practical impossibility of controlling for everything, our regressions may not have controlled for an important variable, leading to omitted variable bias. Finally, our measure of returnee directors may have been imprecise, leading to errors in the variables. All these factors may have affected our regression estimates. We address endogeneity issues using two methods: propensity score matching (PSM) and the Oster (2019) test.

4.4.1. Endogeneity: Propensity score matching

Following existing studies (Lennox et al., 2012; Rosenbaum and Rubin, 1983; Usman et al., 2022; Yuan and Wen, 2018), we address the endogeneity problem using PSM. We first create the treatment and control groups. The former includes firm-year observations with at least one returnee director on the board, whereas the latter includes firms without returnee directors. To identify the propensity score-matched control sample, we first estimate a probit model using the full sample. We run a probit model based on all control variables to estimate the probability of a firm having returnee directors on its board (*Returnee_Dum*). *Returnee_Dum* is a dummy variable that equals 1 if a firm has at least one returnee director

⁵The early adopter provinces are Anhui, Beijing, Fujian, Guangdong, Hainan, Hebei, Henan, Hunan, Inner Mongolia, Jilin, Liaoning, Qinghai, Shanxi, Tianjin, Yunnan, and Zhejiang. The late adopter provinces are Chongqing, Gansu, Guangxi, Guizhou, Heilongjiang, Hubei, Jiangsu, Jiangxi, Ningxia, Shandong, Shanghai, Shanxi, Sichuan, Tibet, and Xinjiang.

serving on the board and 0 otherwise. We then calculate the propensity score for all firms in the sample and select the control firm which is the nearest neighbour to the treatment firm. The results of the first-stage regression to estimate the propensity scores are presented in Column 4 of Table 6, and are generally in line with expectations. For instance, large firms with more growth opportunities, more foreign directors, and more independent boards are likely to recruit returnee directors. In terms of ownership, institutional ownership increases the likelihood of appointing returnee directors, whilst state ownership makes it less likely that a returnee director will be appointed.

To ensure that the firm-year observations in the treatment and control groups are similar to those in the matched sample, we conduct a post-match univariate analysis of the means of the treatment and control samples and present the results in Table 6 (Columns 1-3). The results show that the t-statistics of the mean differences are statistically insignificant for all variables, except for *Fraud*. This result implies that the control and treated samples had similar characteristics. We then rerun the baseline regression of the effect of returnee directors on *Fraud* based on the matched sample of firm-year observations. In Columns 5 and 6 of Table 6, the coefficients of *Returnee_No* and *Returnee_Pro* exhibit negative and statistically significant relationships with *Fraud*. This finding is consistent with our prior results and indicates that our results are robust to observable differences between firm-year observations with more returnee directors and those with fewer or no returnee directors.

[PLEASE INSERT TABLE 6 HERE]

4.4.2. *Endogeneity: Oster (2019) tests*

We employ Oster's (2019) method to evaluate the susceptibility of our results to unobserved confounding factors. Specifically, we check for the presence of omitted variables bias by testing the stability of the coefficients of interest based on two main presumptions (Oster, 2019). First, the unobserved time-invariant and time-variant omitted variables have the same importance as the observed time-invariant and time-variant variables included in the main regressions. Second, the R-squared from the main regressions can be improved by 1.3 times if the unobserved time-invariant and time-variant omitted variables are included in the main regressions (Afrifa et al., 2019). Thus, using Oster's (2019) test, we can determine the extent to which the influence of unobservables can cause the coefficients of the variables of interest to be redundant. To conduct this test, we employ a linear version of Eq. (1).⁶ We calculate the Oster Delta using the *pscal* command in STATA

⁶The Oster (2019) *pscal* command is designed for linear equations. We are grateful to an anonymous reviewer for suggesting this test.

and obtain an Oster Delta of 15.12, which is above the benchmark of 1 (Oster, 2019). Therefore, we can rule out the possibility that our results might be influenced by an omitted variable.

5. Conclusions and implications

Within the context of a developing country, China, this study investigates whether and how returnee directors contribute to their firms by helping them reduce fraudulent activities. It draws from the corporate governance literature, particularly from the theoretical perspectives of directors' reputation and social connectedness, to hypothesise and test how the incidence of corporate fraud may be related to the presence of returnee directors, defined as board members who are Chinese natives with experience of studying or working abroad.

The findings, based on multivariate probit regressions that control for a wide range of firm-specific and other factors, suggest that firms with returnee directors on their boards are associated with a significantly lower likelihood of facing CSRC enforcement for fraud. This finding implies that recruiting returnee directors is a channel through which firms in developing countries can transfer superior knowledge and governance mechanisms from advanced economies to curb corporate fraud. The baseline results also support both the reputational hypothesis and the social connection theoretical lens. Furthermore, the study documents that, on average, returnee directors play a more dominant role in fighting fraudulent activities in firms than foreign and independent directors. We also find that the negative relationship between returnee directors and fraud is stronger for returnees with practical overseas work experience than for those with only educational work experience. In addition, we find the significant negative association between returnee directors and corporate fraud to be stronger in firms located in the conservative (less-developed) regions of China. This result implies that having returnee directors on the board has no significant impact on firms located in cosmopolitan (developed) regions of China, where the people are culturally diverse, and hence, less culturally sensitive. Similarly, we show that the significant negative association between returnee directors and corporate fraud is more pronounced in POEs. In other words, Chinese SOEs do not seem to be able to significantly curb fraud by hiring returnee directors. This finding suggests that the political interference observed in most SOEs in developing countries may minimise the effectiveness of returnee directors in monitoring management.

Another important finding is that the negative relationship between returnee directors and corporate fraud is more pronounced when returnees are hired as independent directors (rather than executive directors) and when the board has at least three returnee directors. These results provide further evidence that effective monitoring is a potential channel through

which returnee directors check corporate fraud. Overall, the findings suggest that knowledge and expertise alone are not sufficient to discharge directors' monitoring functions, especially for firms located in conservative (less cosmopolitan) societies; the ability to communicate with management in a culturally sensitive manner, and to maintain a level of professional independence are equally necessary. Therefore, firms that wish to strengthen their boards' monitoring capabilities should not merely consider bringing in foreign expertise; instead, they should ensure that the directors have sufficient cultural and local understanding, as well as the independence and freedom to utilise their overseas expertise. In sum, a practical way for firms to improve their board effectiveness and for emerging market countries to improve their corporate governance architecture is to pursue policies at both the firm- and national-levels that encourage *natives* to travel overseas for work experience, not just educational experience. Corporate managers and policymakers in emerging markets should note that foreign and returnee directors are not perfect substitutes, so they may not be able to rely on the foreign knowledge and expertise of foreigners (non-natives) to improve ethical behaviours in conservative communities. Importantly, when these natives with overseas experience are recruited on corporate boards, the firms need to allow them the freedom and professional independence to operate so that they can bring their knowledge and expertise to bear to effect change.

Another policy or practical implication of this study stems from our finding that provincial returnee policies in the 1990s and early 2000s were associated with lower fraud likelihood, but not those pursued after 2001. This finding implies that the prior policies in China to encourage Chinese nationals overseas to return home have been successful, but calls into question some potential differences in the new generation of returnees. It seems the new generation of returnees in China does not spend sufficient time abroad to hone their skills. They are quick to return home for the growing opportunities in China. Perhaps, recent foreign policy hostilities between China and other Western countries do not also present the right opportunities for the current crop of returnees to stay abroad long enough to acquire work experience. It is promising for future studies to explore why the new generation of returnees may be different.

Although this study provides important insights into how returnee directors influence corporate fraud, the analysis and conclusions are based on a Chinese sample. Therefore, these results should be applied outside of the Chinese context with caution. Accordingly, future studies can also extend this work by employing a global sample to examine the applicability of the findings outside China.

References

- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), 291-309.
- Afrifa, G. A., Gyapong, E., & Zalata, A. M. (2019). Buffer capital, loan portfolio quality and the performance of microfinance institutions: A global analysis. *Journal of Financial Stability*, 44, 100691.
- Agyei-Boapeah, H. (2019). Foreign acquisitions and firm performance: The moderating role of prior foreign experience. *Global Finance Journal*, 42, 100415. <https://doi.org/10.1016/j.gfj.2018.02.001>
- Agyei-Boapeah, H., Fosu, S., & Ntim, C. G. (2020a). Corporate multinationality and acquirer returns. *Abacus*, 56(2), 230-267.
- Agyei-Boapeah, H., Machokoto, M., Amankwah-Amoah, J., Tunyi, A., & Fosu, S. (2020b). IFRS adoption and firm value: African evidence. *Accounting Forum*, 44(3), pp.238-261.
- Agyei-Boapeah, H., Ntim, C.G., & Fosu, S. (2019). Governance Structures and the Compensation of Powerful Corporate Leaders in Financial Firms during M&As. *Journal of International Accounting, Auditing & Taxation*, 37, pp.1-20.
- Agyei-Boapeah, H., Osei, D., & Franco, M. (2019). Leverage deviations and acquisition probability in the UK: The moderating effect of firms' internal capabilities and deal diversification potential. *European Management Review*, 16(4), pp.1059-1077. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/emre.12307>
- Allen, F., Qian, J., Qian, M., (2005). Law, finance, and economic growth in China. *Journal of Financial Economics*, 77(1), 57–116.
- Ashraf, B. N., & Qian, N. (2021). The Impact of Board Internationalization on Real Earnings Management: Evidence From China. *SAGE Open*, 11(3), 21582440211032640.
- Andreason, S. (2011). Understanding Corporate Governance Reforms in South Africa: Anglo American Divergence, the King Reports and Hybridization. *Business and Society*, 50(4), 647–73
- Andrews, J., & Higson, H. (2008). Graduate employability, 'soft skills' versus 'hard' business knowledge: A European study. *Higher education in Europe*, 33(4), 411-422.
- Atif, M., Hossain, M., Alam, M. S., & Goergen, M. (2021). Does board gender diversity affect renewable energy consumption?. *Journal of Corporate Finance*, 66, 101665.
- Billett, S. (2009). Realising the educational worth of integrating work experiences in higher education. *Studies in Higher Education*, 34(7), 827–843. <https://doi.org/10.1080/03075070802706561>
- Black, B., Kim, W., 2012. The effect of board structure on firm value: A multiple identification strategies approach using Korean data. *J. Financ. Econ.* 104, 203–226.
- Cao, F., Sun, J. and Yuan, R. (2019). Board directors with foreign experience and stock price crash risk: Evidence from China. *J. Bus. Financ. Account.*, 46(9-10): 1144-1170.
- Chen, D., Chen, Y., Li, O. Z., & Ni, C. (2018). Foreign residency rights and corporate fraud. *Journal of Corporate Finance*, 51, 142-163.
- Chen, G., Firth, M., Gao, D. N., & Rui, O. M. (2006). Ownership structure, corporate governance, and fraud: Evidence from China. *Journal of Corporate Finance*, 12(3), 424-448.
- Chen, J., Cumming, D., Hou, W., & Lee, E. (2016). Does the external monitoring effect of financial analysts deter corporate fraud in China?. *Journal of Business Ethics*, 134(4), 727-742.
- Chen, J., Leung, W. S., & Goergen, M. (2017). The impact of board gender composition on dividend payouts. *Journal of Corporate*

finance, 43, 86-105.

- Chen, S., Sun, Z., Tang, S., Wu, D. (2011). Government intervention and investment efficiency: evidence from China. *J. Corp. Financ.* 17, 259–271.
- Chen, T. (2015). Institutions, board structure, and corporate performance: Evidence from Chinese firms. *Journal of Corporate Finance*, 32, 217-237.
- Coles, J. L., Daniel, N. D., & Naveen, L. (2014). Co-opted boards. *The Review of Financial Studies*, 27(6), 1751-1796.
- Cordeiro, J. J., He, L., Conyon, M., & Shaw, T. S. (2013). Informativeness of performance measures and Chinese executive compensation. *Asia Pacific Journal of Management*, 30(4), 1031-1058.
- Dai, Y., Kong, D. and Liu, S. (2018). Returnee talent and corporate investment: Evidence from China. *European Accounting Review*, 27(2), pp.313-337.
- Dobija, D., & Puławska, K. (2022). The influence of board members with foreign experience on the timely delivery of financial reports. *Journal of Management and Governance*, 26(1), 287-313.
- Du, X., Jian, W., & Lai, S. (2017). Do foreign directors mitigate earnings management? Evidence from China. *The International Journal of Accounting*, 52(2), 142-177.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, 26(2), 301-325.
- Fan, D. K., Lau, C. M., & Young, M. (2007). Is China's corporate governance beginning to come of age? The case of CEO turnover. *Pacific-Basin Finance Journal*, 15(2), 105-120.
- Fan, J. P., Wei, K. J., & Xu, X. (2011). Corporate finance and governance in emerging markets: A selective review and an agenda for future research. *Journal of Corporate Finance*, 17(2), 207-214.
- Fan, J., Wong, T.J., Zhang, T., 2007. Politically-connected CEOs, corporate governance, and post-IPO performance of China's newly partially privatized firms. *J. Financ.*
- Farrell, D., & Grant, A. (2005). Addressing China's looming talent shortage. McKinsey & Company.
- Fedaseyeu, V., Linck, J. S., & Wagner, H. F. (2018). Do qualifications matter? New evidence on board functions and director compensation. *Journal of Corporate Finance*, 48, 816-839.
- Fich, E. M., & Shivdasani, A. (2007). Financial fraud, director reputation, and shareholder wealth. *Journal of Financial Economics*, 86(2), 306-336.
- Field, A. (2005). *Discovering statistics using SPSS 2nd edn* Sage Publications.
- Free, C., & Murphy, P. R. (2015). The ties that bind: The decision to co-offend in fraud. *Contemporary Accounting Research*, 32(1), 18-54.
- Garen, J. E. (1994). Executive compensation and principal-agent theory. *Journal of political economy*, 102(6), 1175-1199.
- Giannetti, M., Liao, G., & Yu, X. (2015). The brain gain of corporate boards: Evidence from China. *The Journal of Finance*, 70(4), 1629-1682.
- Glazer, N. (1976), *Affirmative Discrimination* (New York: Basic Books).
- Gul, F. A., Kim, J. B., & Qiu, A. A. (2010). Ownership concentration, foreign shareholding, audit quality, and stock price synchronicity: Evidence from China. *Journal of Financial Economics*, 95(3), 425-442.

- Gyapong, E., Ahmed, A., Ntim, C. G., & Nadeem, M. (2019). Board gender diversity and dividend policy in Australian listed firms: the effect of ownership concentration. *Asia Pacific Journal of Management*, 1-41.
- Györy, C. (2020). The institutional context of financial fraud in a post-transition economy: the Quaestor scandal. *European Journal of Criminology*, 17(1), 31-49.
- Hooghiemstra, R., Hermes, N., Oxelheim, L., & Randøy, T. (2019). Strangers on the board: The impact of board internationalization on earnings management of Nordic firms. *International Business Review*, 28(1), 119-134.
- Haubrich, J. G. (1994). Risk aversion, performance pay, and the principal-agent problem. *Journal of Political Economy*, 102(2), 258-276.
- Hope, O., Lu, H., & Saiy, S. (2019). Director compensation and related party transactions. *Review of Accounting Studies*, 24(3), 1392-1426.
- Hughes, E. C. (1944). Dilemmas and Contradictions of Status. *American Journal of Sociology*, 50(5), 353–359.
- Iliev, P., & Roth, L. (2018). Learning from directors' foreign board experiences. *Journal of Corporate Finance*, 51, 1-19.
- Inceoglu, I., Selenko, E., McDowall, A., & Schlachter, S. (2019). (How) Do work placements work? Scrutinizing the quantitative evidence for a theory-driven future research agenda. *Journal of Vocational Behavior*, 110, 317-337.
- Jensen, M. C., & Meckling, W. H. (1979). Rights and production functions: An application to labor-managed firms and codetermination. *Journal of Business*, 469-506.
- Jiang, F., Kim, K.A. (2015). Corporate governance in China: a modern perspective. *Journal of Corporate Finance*, 32, 190–216.
- Kanter, R. (1977), *Men and Women of the Corporation* (New York: Basic Books).
- Khanna, V., Kim, E. H., & Lu, Y. (2015). CEO connectedness and corporate fraud. *The Journal of Finance*, 70(3), 1203-1252.
- Konrad, A. M., Kramer, V., & Erkut, S. (2008). The impact of three or more women on corporate boards. *Organizational dynamics*, 37(2), 145-164.
- Kuang, Y. F., & Lee, G. (2017). Corporate fraud and external social connectedness of independent directors. *Journal of Corporate Finance*, 45, 401-427.
- Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of political economy*, 106(6), 1113-1155.
- Piekkari, R., Oxelheim, L., & Randøy, T. (2015). The role of language in corporate governance: The case of board internationalization. *The Silent Board: How Language Diversity May Influence the Work Processes of Corporate Boards Corporate Governance: An International Review*, 23(1), 25-41.
- Lennox, C. S., Francis, J. R., & Wang, Z. (2012). Selection models in accounting research. *The Accounting Review*, 87(2), 589-616.
- Li, J., Li, P. and Wang, B (2016). Do cross-border acquisitions create value? Evidence from overseas acquisitions by Chinese firms. *International Business Review*, 25(2), 471-483.
- Li, W., Bruton, G.D. and Filatotchev, I. (2016). Mitigating the dual liability of newness and foreignness in capital markets: The role of returnee independent directors. *Journal of World Business*, 51, 787-799.
- Li, W., & Zhang, R. (2010). Corporate social responsibility, ownership structure, and political interference: Evidence from China. *Journal of Business Ethics*, 96(4), 631–645.
- Liao, J., Smith, D., & Liu, X. (2019). Female CFOs and accounting fraud: Evidence from China. *Pacific-Basin Finance Journal*, 53, 449-463.

- Liu, Y., Miletkov, M.K., Wei, Z., Yang, T., 2015. Board independence and firm performance in China. *J. Corp. Financ.* 17, 259–271.
- Liu, Y., Wei, Z., & Xie, F. (2014). Do women directors improve firm performance in China?. *Journal of Corporate Finance*, 28, 169-184.
- Masulis, R.W., Wang, C., and Xie, F. (2012). Globalizing the boardroom—The effects of foreign directors on corporate governance and firm performance. *Journal of Accounting and Economics*, 53(3), 527–554.
- Nee, V. (2003). New institutionalism, economic and sociological. *Handbook for Economic Sociology*, 1-7.
- Ntim, C. G., Opong, K. K., & Danbolt, J. (2012). The relative value relevance of shareholder versus stakeholder corporate governance disclosure policy reforms in South Africa. *Corporate Governance: An International Review*, 20(1), 84-105.
- Oxelheim, L., Gregorič, A., Randøy, T., & Thomsen, S. (2013). On the internationalization of corporate boards: The case of Nordic firms. *Journal of International Business Studies*, 44(3), 173-194.
- Roberts, M. R., & Whited, T. M. (2011). Endogeneity in Empirical Corporate Finance, vol. 2 of Handbook of the Economics of Finance, Eds. George Constantinides, Milton Harris, and Rene Stulz.
- Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, 70(1), 41-55.
- Shen, S., Jia, J., 2005. Will the independent director institution work in China? Loyola Los Angeles International and Comparative Law Review, pp. 223–248
- Shi, W., Sun, S. L., & Peng, M. W. (2012). Sub-national institutional contingencies, network positions, and IJV partner selection. *Journal of Management Studies*, 49(7), 1221-1245.
- Sila, V., Gonzalez, A., & Hagendorff, J. (2016). Women on board: Does boardroom gender diversity affect firm risk?. *Journal of Corporate Finance*, 36, 26-53.
- Usman, M., Gull, A. A., Zalata, A. M., Wang, F., & Yin, J. (2022). Female board directorships and related party transactions. *British Journal of Management*, 33(2), 678-702
- Uysal, V. B. (2011). Deviation from the target capital structure and acquisition choices. *Journal of Financial Economics*, 102, 602-620.
- Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics*, 20, 431-460.
- Wen, W., Cui, H., & Ke, Y. (2020). Directors with foreign experience and corporate dobi avoidance. *Journal of Corporate Finance*, 62, 101624.
- Wooldridge, J.M., 2002. Econometric analysis of cross section and panel data MIT press. *Cambridge, MA*, 108.
- Wu, W., Johan, S. A., & Rui, O. M. (2016). Institutional investors, political connections, and the incidence of regulatory enforcement against corporate fraud. *Journal of Business Ethics*, 134(4), 709-726.
- Yuan, R., & Wen, W. (2018). Managerial foreign experience and corporate innovation. *Journal of Corporate Finance*, 48, 752-770.
- Zalata, A., & Roberts, C. (2016). Internal corporate governance and classification shifting practices: An analysis of UK corporate behavior. *Journal of Accounting, Auditing & Finance*, 31(1), 51-78.
- Zhang, J. (2018). Public governance and corporate fraud: Evidence from the recent anti-corruption campaign in China. *Journal of Business Ethics*, 148(2), 375-396.
- Zhang, J., Kong, D., & Wu, J. (2018). Doing good business by hiring directors with foreign experience. *Journal of Business Ethics*, 153(3), 859-876.

Table 1: Descriptive statistics and Univariate analysis**Panel A:**

Variable	Descriptive statistics for whole sample				Univariate analysis of firms with and without returnee directors		
	Mean	Standard Deviation	Minimum	Maximum	Mean of firms with returnee director	Mean of firms without returnee director	Compare mean t-statistics
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Fraud	0.084	0.277	0.000	1.000	0.080	0.086	(1.65)*
Returnee_No	1.163	1.620	0.000	19.000	-	-	-
Returnee_Pro	0.113	0.152	0.000	1.000	-	-	-
Board_Foreign	0.116	0.321	0.000	1.000	0.168	0.082	(-21.01)***
Board_Independence	0.378	0.071	0.167	0.800	0.385	0.374	(-12.71)***
Board_Size	10.181	2.692	4.000	27.000	10.701	9.838	(-25.19)***
Board_Female	0.134	0.116	0.000	0.455	0.126	0.139	(8.29)***
CEO_Duality	0.270	0.444	0.000	1.000	0.265	0.273	(1.43)***
Institution_Owner	0.067	0.080	0.000	0.751	0.075	0.062	(-12.31)***
SOE	0.398	0.489	0.000	1.000	0.397	0.399	(0.36)
Region_Development	0.686	0.464	0.000	1.000	0.727	0.659	(-11.32)***
ROA	0.044	0.065	-0.319	0.235	0.047	0.043	(-4.32)***
Firm_Age	2.671	0.446	0.000	3.932	2.659	2.679	(3.54)***
Firm_Size	22.109	1.465	13.763	30.952	22.382	21.929	(-24.24)***
Firm_Opportunity	2.044	1.347	0.889	9.163	2.030	2.053	(1.28)
Financial_Leverage	0.432	0.217	0.000	0.960	0.451	0.452	(0.10)
Audit_Quality	0.031	0.029	0.000	0.172	0.029	0.031	(7.03)***
N	25103	25103	25103	25103	9987	15116	-

Panel B:

Variable	Univariate analysis of firms located in developed and less developed regions			Univariate analysis of SOEs and POEs		
	Mean of firms located in more developed regions	Mean of firms located in less developed regions	Compare mean t-statistics	Mean of SOEs	Mean of POEs	Compare mean t-statistics
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Fraud	0.075	0.103	(7.26)***	0.074	0.090	(4.37)***
Returnee_No	1.292	0.880	(-18.81)***	1.010	1.264	(12.17)***
Returnee_Pro	0.126	0.084	(-20.24)***	0.089	0.129	(20.44)***
Board_Foreign	0.137	0.073	(-14.71)***	0.076	0.143	(16.206)***
Board_Independence	0.380	0.375	(-5.52)***	0.366	0.386	(21.80)***
Board_Size	10.078	10.408	(9.03)***	10.951	9.673	(-37.86)***
Board_Female	0.139	0.123	(-9.59)***	0.107	0.151	(29.88)***
CEO_Duality	0.299	0.207	(-15.35)***	0.105	0.379	(50.35)***
Institution_Owner	0.066	0.069	(2.68)***	0.072	0.064	(-7.14)***
SOE	0.344	0.517	(26.39)	-	-	-
Region_Development	-	-	-	0.592	0.748	(26.39)***
ROA	0.047	0.038	(-10.04)***	0.035	0.051	(19.34)***
Firm_Age	2.657	2.702	(7.387)***	2.749	2.619	(-22.81)***
Firm_Size	22.113	22.100	(-0.63)	22.682	21.730	(-53.11)***
Firm_Opportunity	2.040	2.052	(0.68)	1.809	2.199	(22.65)***
Financial_Leverage	0.424	0.466	(14.18)***	0.525	0.404	(-11.20)***
Audit_Quality	0.032	0.027	(-12.44)***	0.022	0.037	(41.69)***
N	17224	7879	-	9991	15112	-

Note: The description of variables is given in Appendix 1. T-statistics are reported in parenthesis. *, **, *** represent significance at $p < 0.10$, $p < 0.05$ and $p < 0.01$ levels, respectively.

Table 2: Exploring the effect of *foreign directors*, *independent directors* and *returnee directors* on fraud (H1a, H1b and H1c)

	Effect of foreign directors, independent directors and returnee directors on fraud						
	Dependent variable = <i>Fraud</i>						
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Returnee_No	-0.0035*** (-2.64)	-	-0.0032*** (-2.59)	-	-	-	-
Returnee_Pro	-	-0.0329** (-2.43)	-	-0.0307** (-2.40)	-	-	-
Board_Foreign	0.0048 (0.75)	0.0042 (0.65)	-	-	-0.0004 (-0.07)	-0.0003 (-0.05)	-
Board_Independence	-0.0252 (-1.03)	-0.0253 (-1.04)	-	-	-0.0284 (-1.17)	-	-0.0284 (-1.16)
Board_Size	0.0023*** (3.36)	0.0019*** (2.82)	0.0023*** (3.48)	0.0020*** (2.98)	0.0019*** (2.86)	0.0020*** (2.97)	0.0019*** (2.86)
Board_Female	-0.0032 (-0.20)	-0.0033 (-0.21)	-0.0037 (-0.23)	-0.0038 (-0.24)	-0.0022 (-0.14)	-0.0027 (-0.17)	-0.0022 (-0.14)
CEO_Duality	0.0077* (1.81)	0.0077* (1.80)	0.0076* (1.77)	0.0075* (1.76)	0.0075* (1.75)	0.0073* (1.70)	0.0075* (1.75)
Institutional_Owner	-0.0091 (-0.36)	-0.0085 (-0.33)	-0.0089 (-0.35)	-0.0083 (-0.32)	-0.0103 (-0.40)	-0.0100 (-0.39)	-0.0103 (-0.40)
SOE	-0.0190*** (-4.16)	-0.0187*** (-4.11)	-0.0190*** (-4.17)	-0.0187*** (-4.12)	-0.0179*** (-3.92)	-0.0176*** (-3.87)	-0.0178*** (-3.93)
Region_Development	-0.0233*** (-5.28)	-0.0234*** (-5.31)	-0.0231*** (-5.25)	-0.0233*** (-5.28)	-0.0243*** (-5.47)	-0.0242*** (-5.47)	-0.0243*** (-5.49)
ROA	-0.4010*** (-15.09)	-0.4010*** (-15.09)	-0.4010*** (-15.11)	-0.4010*** (-15.12)	-0.4030*** (-15.11)	-0.4030*** (-15.13)	-0.4030*** (-15.13)
Firm_Age	0.0112** (2.05)	0.0112** (2.05)	0.0113** (2.08)	0.0113** (2.08)	0.0116** (2.13)	0.0119** (2.17)	0.0116** (2.13)
Firm_Size	-0.0012 (-0.63)	-0.0015 (-0.78)	-0.0012 (-0.63)	-0.0014 (-0.77)	-0.0021 (-1.11)	-0.0022 (-1.17)	-0.0021 (-1.13)
Firm_Oppertunity	0.0033** (1.98)	0.0033* (1.95)	0.0033** (1.97)	0.0033* (1.93)	0.0031* (1.81)	0.0030* (1.79)	0.0031* (1.82)
Financial_Leverage	0.0042* (1.74)	0.0042* (1.75)	0.0042* (1.74)	0.0042* (1.75)	0.0044* (1.78)	0.0044* (1.79)	0.0044* (1.79)
Audit_Quality	-0.0711 (-1.64)	-0.0730* (-1.66)	-0.0713* (-1.65)	-0.0732* (-1.67)	-0.0764* (-1.71)	-0.0775* (-1.73)	-0.0765* (-1.71)
Pseudo R ²	0.056	0.056	0.056	0.056	0.055	0.055	0.055
Year Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm-Clustered Standard Errors	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	25103	25103	25103	25103	25103	25103	25103

Note: The table tests the relative importance of the three types of directors (returnee directors, foreign directors, and independent directors) in fighting corporate fraud. The results suggest that returnee directors (relative to foreign directors and independent directors) play a more dominant role in mitigating fraud in Chinese firms. Columns 1-2 include all the three types of directors in the same regression; Columns 3-4 focus solely on the main independent variable (returnee directors); and Columns 5-7 exclude returnee directors from the analysis. The reported coefficients are marginal effects from a probit regression and z-statistics are in parenthesis. *, **, *** represent significance at p<0.10, p<0.05 and p<0.01 levels, respectively. All variables are as defined in Appendix 1.

Table 3: Returnee directors and fraud (education vs. work experience & more developed vs. less developed regions)

	Education vs. working experience (H1b)				More developed vs. less developed regions (H2b)			
	Dependent variable = <i>Fraud</i>							
	Whole Sample (N = 25103)				More developed regions (N = 17224)		Less developed regions (N = 7798)	
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Returnee_No	-	-	-	-	-0.0025* (-1.75)	-	-0.0055** (-1.97)	-
Returnee_Pro	-	-	-	-	-	-0.0215 (-1.46)	-	-0.0608** (-2.08)
Returnee_Education_No	-0.0039* (-1.85)	-	-	-	-	-	-	-
Returnee_Work_No	-	-0.0063*** (-2.83)	-	-	-	-	-	-
Returnee_Education_Pro	-	-	-0.0331 (-1.55)	-	-	-	-	-
Returnee_Work_Pro	-	-	-	-0.0625*** (-2.78)	-	-	-	-
Board_Foreign	0.0006 (0.10)	0.0055 (0.83)	0.0002 (0.03)	0.0050 (0.77)	0.0010 (0.15)	0.0003 (0.06)	0.0156 (1.00)	0.0157 (1.01)
Board_Independence	-0.0275 (-1.12)	-0.0280 (-1.14)	-0.0279 (-1.14)	-0.0279 (-1.14)	-0.0481* (-1.72)	-0.0486* (-1.74)	0.0136 (0.28)	0.0139 (0.29)
Board_Size	0.0021*** (3.08)	0.0021*** (3.19)	0.0018*** (2.77)	0.0018*** (2.71)	0.0020** (2.52)	0.0016** (2.13)	0.0027** (2.06)	0.0022* (1.73)
Board_Female	-0.0025 (-0.16)	-0.0040 (-0.25)	-0.0026 (-0.16)	-0.0042 (-0.26)	0.0016 (0.09)	0.0017 (0.09)	-0.0044 (-0.14)	-0.0046 (-0.14)
CEO_Duality	0.0075* (1.76)	0.0077* (1.80)	0.0075* (1.76)	0.0077* (1.79)	0.0049 (1.06)	0.0049 (1.05)	0.0170* (1.82)	0.0168* (1.80)
Institutional_Owner	-0.0075 (-0.29)	-0.0068 (-0.27)	-0.0074 (-0.29)	-0.0062 (-0.24)	0.0242 (0.84)	0.0245 (0.84)	-0.0892* (-1.77)	-0.0874* (-1.73)
SOE	-0.0184*** (-4.01)	-0.0186*** (-4.06)	-0.0182*** (-3.97)	-0.0184*** (-4.03)	-0.0190*** (-3.49)	-0.0188*** (-3.44)	-0.0194** (-2.21)	-0.0196** (-2.24)
Region_Development	-0.0244*** (-5.47)	-0.0240*** (-5.39)	-0.0245*** (-5.49)	-0.0241*** (-5.41)	-	-	-	-
ROA	-0.3950*** (-14.73)	-0.3950*** (-14.76)	-0.3950*** (-14.75)	-0.3950*** (-14.76)	-0.3860*** (-12.85)	-0.3870*** (-12.87)	-0.3740*** (-6.61)	-0.3740*** (-6.61)
Firm_Age	0.0110** (2.01)	0.0110** (2.02)	0.0110** (2.02)	0.0110** (2.01)	0.0072 (1.22)	0.0072 (1.21)	0.0206* (1.76)	0.0207* (1.77)
Firm_Size	0.0003 (0.15)	0.0005 (0.24)	0.0001 (0.03)	0.0002 (0.11)	-0.0017 (-0.73)	-0.0020 (-0.87)	0.0067 (1.42)	0.0066 (1.39)
Firm_Oppertunity	0.0017 (1.00)	0.0018 (1.06)	0.0017 (0.98)	0.0018 (1.06)	0.0023 (1.21)	0.0022 (1.19)	0.0019 (0.53)	0.0019 (0.53)
Financial_Leverage	0.0022 (1.16)	0.0021 (1.15)	0.0022 (1.16)	0.0021 (1.15)	0.0011 (0.68)	0.0011 (0.68)	0.0176 (1.48)	0.0176 (1.50)
Audit_Quality	0.0649 (0.72)	0.0722 (0.80)	0.0601 (0.67)	0.0659 (0.73)	0.0612 (0.63)	0.0545 (0.56)	0.101 (0.51)	0.0975 (0.50)
Pseudo R ²	0.055	0.056	0.055	0.055	0.058	0.058	0.051	0.052
Year Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm-Clustered Standard Errors	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: This table tests the relative importance of returnee directors' education and work experience in reducing fraud in Chinese firms and explore whether the effect of returnee directors on the probability of fraud is more pronounced in less developed regions of China. The results suggest that both returnee directors with work and study experience mitigate the probability of fraud (column 1 to 4), although work experience has a greater effect. In addition, the results reported in column 5-8 suggest that returnee directors mitigate the probability of fraud in both the developed and the less developed regions of China, although there is evidence of a greater impact in less developed (conservative) regions. The reported coefficients are marginal effects from a probit regression and z-statistics are in parenthesis. *, **, *** represent significance at p<0.10, p<0.05 and p<0.01 levels, respectively. All variables are as defined in Appendix 1.

Table 4: Returnee directors and fraud (Executive vs. independent directors; SOEs vs. POEs; token vs. critical mass)**Panel A: Executive vs. Independent (H3b)**

	Whole Sample (N= 25103)					
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Returnee_Exc_No	-0.0029 (-1.46)	-	-0.0023 (-1.18)	-	-	-
Returnee_Ind_No		-0.0052*** (-2.74)	-0.0049*** (-2.60)	-	-	-
Returnee_Exc_Pro	-	-	-	-0.0224 (-1.13)		-0.0181 (-0.91)
Returnee_Ind_Pro	-	-	-	-	-0.0512*** (-2.59)	-0.0498** (-2.51)
Board_Foreign	0.0021 (0.33)	0.0008 (0.14)	0.0033 (0.52)	0.0012 (0.19)	0.0006 (0.10)	0.0024 (0.38)
Board_Independence	-0.0320 (-1.31)	-0.0215 (-0.87)	-0.0236 (-0.96)	-0.0313 (-1.28)	-0.0220 (-0.89)	-0.0234 (-0.95)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R ²	0.056	0.056	0.056	0.055	0.056	0.056
Year Fixed	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed	Yes	Yes	Yes	Yes	Yes	Yes
Firm-Clustered Standard Errors	Yes	Yes	Yes	Yes	Yes	Yes

Panel B: SOEs vs. POEs (H3c)

	SOEs Sample (N = 9991)		POEs Sample (N = 15112)	
	Column 1	Column 2	Column 3	Column 4
Returnee_No	0.0000 (0.04)	-	-0.0045*** (-2.71)	-
Returnee_Pro	-	-0.0017 (-0.08)	-	-0.0419*** (-2.58)
Board_Foreign	-0.0172 (-1.50)	-0.0169 (-1.49)	0.0152** (2.00)	0.0146* (1.93)
Board_Independence	-0.0115 (-0.32)	-0.0113 (-0.31)	-0.0231 (-0.73)	-0.0233 (-0.74)
All Controls	Yes	Yes	Yes	Yes
Pseudo R ²	0.092	0.092	0.065	0.065
Year Fixed	Yes	Yes	Yes	Yes
Industry Fixed	Yes	Yes	Yes	Yes
Firm-Clustered Standard Errors	Yes	Yes	Yes	Yes

Panel C: Token vs. Critical Mass (H3d)

	Whole Sample (N= 25103)			
	Column 1	Column 2	Column 3	Column 4
Returnee=1	0.0044 (1.06)	-	-	0.0017 (0.39)
Returnee=2	-	-0.0009 (-0.19)	-	-0.0027 (-0.52)
Returnee≥3	-	-	-0.0105** (-2.05)	-0.0106* (-1.89)
Board_Foreign	-0.0008 (-0.14)	-0.0010 (-0.17)	0.0020 (0.32)	0.0023 (0.37)
Board_Independence	-0.0296 (-1.21)	-0.0297 (-1.21)	-0.0282 (-1.15)	-0.0276 (-1.13)
All Controls	Yes	Yes	Yes	Yes
Pseudo R ²	0.055	0.055	0.055	0.055
Year Fixed	Yes	Yes	Yes	Yes
Industry Fixed	Yes	Yes	Yes	Yes
Firm-Clustered Standard Errors	Yes	Yes	Yes	Yes

Note: The table tests the relative importance of executive returnee directors and independent returnee directors in reducing the probability of fraud in Chinese firms (Panel A). It also test whether the effect of returnee directors on the probability of fraud varies across SOEs and POEs (Panel B) and whether recruiting returnee directors as mere “tokens” impacts the probability of fraud (Panel C). The results suggest that it is the independent or critical mass of returnee directors that significantly mitigate the probability of fraud and returnee directors mitigate the probability of fraud in only in POEs. The reported coefficients are marginal effects from a probit regression and z-statistics are in parenthesis. *, **, *** represent significance at p<0.10, p<0.05 and p<0.01 levels, respectively. All variables are as defined in Appendix 1.

Table 5: Returnee directors and fraud (Time series variation, and early vs. late adopter)

	Returnee directors and fraud (Time series variation)				Returnee directors and fraud (Early adopter vs. later adopters)			
	Early sample period (2005-2011)		Later sample period (2012-2018)		Early adopter (1992-2001)		Late adopter (After 2001)	
	Dependent variable = <i>Fraud</i>							
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Returnee_No	-0.0037* (-1.77)	-	-0.0035** (-2.16)	-	-0.0046*** (-2.72)	-	-0.0020 (-0.94)	-
Returnee_Pro	-	-0.0384* (-1.95)	-	-0.0300* (-1.78)	-	-0.0445*** (-2.60)	-	-0.0164 (-0.76)
Board_Foreign	0.0077 (0.77)	0.0079 (0.80)	0.0037 (0.46)	0.0025 (0.32)	0.0092 (1.13)	0.0086 (1.06)	-0.0053 (-0.53)	-0.0060 (-0.61)
Board_Independence	0.0638* (1.73)	0.0641* (1.74)	-0.0491 (-1.61)	-0.0496 (-1.62)	-0.0298 (-0.97)	-0.0300 (-0.97)	-0.0147 (-0.37)	-0.0149 (-0.38)
Board_Size	0.0003 (0.34)	0.0001 (0.06)	0.0028*** (3.25)	0.0024*** (2.81)	0.0018** (2.10)	0.0013 (1.47)	0.0027*** (2.67)	0.0025** (2.52)
Board_Female	-0.0083 (-0.37)	-0.0088 (-0.39)	-0.0007 (-0.04)	-0.0007 (-0.04)	0.0040 (0.20)	0.0038 (0.19)	-0.0139 (-0.53)	-0.0140 (-0.53)
CEO_Duality	-0.0059 (-1.08)	-0.0059 (-1.09)	0.0134** (2.43)	0.0134** (2.42)	0.0164*** (2.97)	0.0164*** (2.95)	-0.0067 (-1.05)	-0.0067 (-1.05)
Institutional_Owner	-0.0116 (-0.37)	-0.0113 (-0.36)	-0.0002 (-0.01)	-0.0000 (-0.00)	-0.0018 (-0.06)	-0.0009 (-0.03)	-0.0220 (-0.54)	-0.0218 (-0.54)
SOE	-0.0163*** (-2.79)	-0.0163*** (-2.79)	-0.0210*** (-3.60)	-0.0207*** (-3.54)	-0.0130** (-2.22)	-0.0126** (-2.16)	-0.0274*** (-3.94)	-0.0273*** (-3.92)
Region_Development	-0.0123** (-2.19)	-0.0123** (-2.19)	-0.0273*** (-4.92)	-0.0275*** (-4.95)	-0.0149** (-2.48)	-0.0150** (-2.48)	-0.0352*** (-5.44)	-0.0353*** (-5.45)
ROA	-0.2140*** (-5.28)	-0.2130*** (-5.27)	-0.4060*** (-10.73)	-0.4060*** (-10.72)	-0.4060*** (-11.98)	-0.4060*** (-11.99)	-0.3300*** (-7.46)	-0.3300*** (-7.46)
Firm_Age	0.0006 (0.13)	0.0006 (0.13)	0.0164** (2.16)	0.0164** (2.16)	0.0163** (2.41)	0.0161** (2.39)	0.0030 (0.35)	0.0031 (0.36)
Firm_Size	-0.0059** (-2.14)	-0.0060** (-2.20)	-0.0003 (-0.11)	-0.0008 (-0.27)	-0.0001 (-0.03)	-0.0005 (-0.20)	0.0008 (0.23)	0.0007 (0.19)
Firm_Oppertunity	0.0021 (0.95)	0.0021 (0.92)	0.0009 (0.40)	0.0008 (0.38)	0.0044** (2.03)	0.0043** (2.01)	-0.0031 (-1.12)	-0.0031 (-1.12)
Financial_Leverage	-0.0003 (-0.36)	-0.0002 (-0.37)	0.0510*** (2.93)	0.0513*** (2.94)	0.0004 (0.29)	0.0004 (0.29)	0.0222* (1.74)	0.0223* (1.74)
Audit_Quality	-0.0706 (-0.70)	-0.0711 (-0.70)	0.1370 (1.11)	0.1260 (1.02)	0.0146 (0.13)	0.0054 (0.05)	0.1680 (1.11)	0.1640 (1.09)
Pseudo R ²	0.075	0.075	0.044	0.044	0.060	0.060	0.065	0.065
Year Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm-Clustered Standard Errors	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	6679	6679	18316	18316	15044	15044	10024	10024

Note: The table tests the impact of returnee directors on the propensity to commit fraud across different times. The results suggest that the negative association between returnee directors and the probability of fraud persists over time, although there is some evidence of greater impact in provinces that were early in adopting policies to attract returnees. Early adopters include sample firms from provinces that adopted policies to attract returnees in 1992-2001. Late adopters are sample firms from provinces that adopted policies to attract returnees after 2001. The reported coefficients are marginal effects from a probit regression and z-statistics are in parenthesis. *, **, *** represent significance at p<0.10, p<0.05 and p<0.01 levels, respectively. All variables are as defined in Table 1.

Table 6: Returnee directors and fraud (propensity score matching method)

	Matched sample univariate analysis of firms with and without returnee directors			PSM regression results		
	Mean of firms with returnee directors	Mean of firms without returnee directors	Compare mean (t-stat)	1st stage	2nd Stage	2nd Stage
	Returnee_Dum = 1	Returnee_Dum = 0		Dependent Variable = Returnee_Dum	Dependent Variable = Fraud	
	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Returnee_No	-	-	-	-	-0.0027* (-1.83)	
Returnee_Pro	-	-	-	-		-0.0299** (-2.00)
Board_Foreign	0.123	0.124	(0.183)	0.3800*** (14.51)	0.0054 (0.76)	0.0056 (0.79)
Board_Independence	0.382	0.382	(-0.044)	1.6220*** (13.76)	-0.0354 (-1.25)	-0.0349 (-1.23)
Board_Size	10.279	10.310	(0.772)	0.0683*** (20.08)	0.0020** (2.56)	0.0017** (2.16)
Board_Female	0.130	0.129	(-0.338)	-0.4990*** (-6.67)	-0.0071 (-0.37)	-0.0071 (-0.38)
CEO_Duality	0.272	0.277	(0.641)	-0.0051 (-0.26)	0.0075 (1.53)	0.0075 (1.54)
Institutional_Owner	0.070	0.070	(-0.349)	0.5490*** (4.82)	-0.0035 (-0.12)	-0.0031 (-0.11)
SOE	0.384	0.380	(-0.636)	-0.0806*** (-3.92)	-0.0218*** (-4.18)	-0.0217*** (-4.19)
Region_Development	0.707	0.700	(-0.941)	0.1540*** (8.27)	-0.0258*** (-4.97)	-0.0258*** (-4.98)
ROA	0.047	0.046	(-0.397)	0.2010 (1.40)	-0.3860*** (-9.55)	-0.3860*** (-9.55)
Firm_Age	2.656	2.652	(-0.693)	-0.1250*** (-5.71)	0.0048 (0.79)	0.0048 (0.79)
Firm_Size	22.122	22.123	(0.055)	0.1270*** (14.48)	-0.0018 (-0.70)	-0.0018 (-0.72)
Firm_Opportunity	2.047	2.050	(0.159)	0.0297*** (3.79)	0.0026 (1.34)	0.0026 (1.34)
Financial_Leverage	0.431	0.435	1.237)	-0.0915*** (-2.67)	0.0416** (2.24)	0.0416** (2.24)
Audit_Quality	0.031	0.029	(0.528)	0.0787* (1.77)	-0.0368 (-0.82)	-0.0368 (-0.82)
Pseudo R ²	-	-	-	0.063	0.064	0.064
Year Fixed	-	-	-	Yes	Yes	Yes
Industry Fixed	-	-	-	Yes	Yes	Yes
Firm-Clustered Standard Errors	-	-	-	No	Yes	Yes
N	8795	8795	-	25103	17594	17594

Note: The table presents results of the baseline analysis of the effect returnee directors on the probability of fraud using the PSM approach. Columns 1-3 compare statistics for the matched sample of firms with and without returnee directors and finds no statistically significant difference between the two samples. Column 4 presents the results for the first stage regression for predicting firms with returnees; and Columns 5-6 presents the PSM version of the baseline results. The PSM results confirm our baseline results that returnee directors significantly reduce corporate fraud. The reported coefficients are marginal effects from a probit regression and z-statistics are in parenthesis. *, **, *** represent significance at p<0.10, p<0.05 and p<0.01 levels, respectively. All variables are as defined in Table 1.

Appendix 1: Description of variables

Variable	Description
Fraud	Fraud is a dummy variable that takes a value of 1 if the firm is subject to an enforcement action for fraud or violation of a regulation, and 0 otherwise.
Returnee_No	The number of Chinese nationals with foreign experience (study or work) on the board.
Returnee_Pro	The ratio (proportion) of Chinese nationals with foreign experience (study or work) to the total number of members on the board.
Returnee=1	Dummy of 1 if there is only one returnee director on the board, otherwise 0.
Returnee=2	Dummy of 1 if there are two returnee directors on the board, otherwise 0.
Returnee≥3	Dummy of 1 if there are three or more returnee directors on the board, otherwise 0.
Returnee_Exc_No	The number of executive returnee directors on the board.
Returnee_Ind_No	The number of independent returnee directors on the board.
Returnee_Exc_Pro	The ratio (proportion) of executive returnee directors on the board to the total number of directors.
Returnee_Ind_Pro	The ratio (proportion) of non-executive returnee directors on the board to the total number of directors.
Returnee_Education_No	The number of returnee directors with foreign education on the board.
Returnee_Work_No	The number of returnee directors with foreign work experience on the board.
Returnee_Education_Pro	The ratio (proportion) of returnee directors with foreign education on the board to the total number of directors.
Returnee_Work_Pro	The ratio (proportion) of returnee directors with foreign work experience on the board to the total number of directors.
Returnee_Industry	Defined as industry mean proportion of returnee directors.
Returnee_Province	Defined as province mean proportion of returnee directors.
Board_Foreign	Dummy of 1 if there is at least one foreign director on the board, i.e., a director of a foreign (non-Chinese) nationality and 0 otherwise.
Board_Independence	The ratio (proportion) of independent directors on the board to the total number of directors.
Board_Size	The number of board directors
Board_Female	The ratio (proportion) of female directors on the board to the total number of directors
CEO_Duality	A dummy variable that equals 1 if CEO also chairs the board and 0 otherwise
Institution_Owner	Proportion of shares held by institutions.
SOEs	A dummy variable that equals 1 if the ultimately owner is local or central government and 0 otherwise
Region_Development	A dummy variable which equals 1 if the company's headquarters is located in a developed region of China and 0 otherwise.
ROA	Net profit divided by total assets
Firm_Age	Log of number of years firm has been listed on the stock exchange
Firm_Size	Defined as log of total assets
Firm_Opportunity	Market to book ratio
Financial_Leverage	Total debt divided by total assets.
Audit_Quality	Audit fee paid to external auditor divided by total assets.

Appendix 2: Correlation matrix

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.Fraud	1																
2.Returnee_No	-0.013*	1															
3.Returnee_Pro	-0.018*	0.939*	1														
4.Board_Foreign	-0.004	0.369*	0.352*	1													
5.Board_Independence	-0.004	0.039*	0.070*	0.002	1												
6.Board_Size	0.029*	0.232*	0.022*	0.078*	-0.124*	1											
7.Board_Female	0.008	-0.020*	-0.010	0.000	0.053*	-0.063*	1										
8.CEO_Duality	0.017*	0.027*	0.061*	0.042*	0.097*	-0.141*	0.108*	1									
9.Institutional_Owner	-0.023*	0.094*	0.080*	0.041*	-0.005	0.055*	-0.020*	-0.035*	1								
10.SOE	-0.028*	-0.077*	-0.128*	-0.102*	-0.136*	0.232*	-0.185*	-0.303*	0.045*	1							
11.Region_Development	-0.046*	0.118*	0.127*	0.092*	0.035*	-0.057*	0.060*	0.096*	-0.017*	-0.164*	1						
12.ROA	-0.124*	0.031*	0.058*	0.054*	0.037*	-0.097*	0.023*	0.060*	0.169*	-0.121*	0.063*	1					
13.Firm_Age	0.038*	0.007	-0.021*	-0.040*	-0.029*	0.107*	0.045*	-0.081*	0.005	0.143*	-0.047*	-0.142*	1				
14.Firm_Size	-0.009	0.259*	0.154*	0.102*	-0.039*	0.337*	-0.118*	-0.165*	0.217*	0.318*	0.004	-0.056*	0.171*	1			
15.Firm_Opportunity	0.019*	-0.007	0.019*	0.009	0.059*	-0.085*	0.049*	0.054*	0.127*	-0.142*	-0.004	0.076*	0.055*	-0.417*	1		
16.Financial_Leverage	0.031*	0.001	-0.016*	-0.008	-0.013*	0.053*	-0.032*	-0.034*	0.018*	0.071*	-0.023*	-0.168*	0.054*	0.084*	0.024*	1	
17. Audit_Quality	0.004	-0.009	0.001	-0.002	0.011	-0.036*	0.009	0.017*	-0.024*	-0.044*	0.000	-0.049*	0.006	-0.146*	0.144*	-0.019*	1

Note: * Represent significance at $p < 0.05$ or lower. All variables are as defined in Appendix 1.

Appendix 3: Individuals and firms sanctioned by the World Bank for financial fraud

Rank	Country	Number	Percentage	Rank	Country	Number	Percentage
1	China	142	11.31%	63	Angola	3	0.24%
2	Canada	113	9.00%	64	Australia	3	0.24%
3	India	51	4.06%	65	Congo, Democratic Republic of	3	0.24%
4	Peru	51	4.06%	66	Egypt, Arab Republic of	3	0.24%
5	United States	49	3.90%	67	Fiji	3	0.24%
6	Guatemala	47	3.74%	68	France	3	0.24%
7	United Kingdom	47	3.74%	69	Ghana	3	0.24%
8	Nigeria	45	3.58%	70	Ireland	3	0.24%
9	Bolivia	38	3.03%	71	Japan	3	0.24%
10	Brazil	36	2.87%	72	Portugal	3	0.24%
11	Indonesia	34	2.71%	73	Saudi Arabia	3	0.24%
12	Mexico	24	1.91%	74	Tanzania	3	0.24%
13	Bangladesh	21	1.67%	75	Thailand	3	0.24%
14	Tajikistan	21	1.67%	76	Turkey	3	0.24%
15	Spain	19	1.51%	77	Algeria	2	0.16%
16	Vietnam	19	1.51%	78	Benin	2	0.16%
17	Honduras	17	1.35%	79	Burkina Faso	2	0.16%
18	Sweden	17	1.35%	80	Congo, Republic of	2	0.16%
19	Cambodia	16	1.27%	81	Korea, Republic of	2	0.16%
20	Panama	16	1.27%	82	Kosovo	2	0.16%
21	Uganda	16	1.27%	83	Lao People's Democratic Republic	2	0.16%
22	Haiti	15	1.19%	84	Libya	2	0.16%
23	Philippines	15	1.19%	85	Luxembourg	2	0.16%
24	El Salvador	13	1.04%	86	Mali	2	0.16%
25	Russian Federation	13	1.04%	87	Moldova	2	0.16%
26	Guyana	12	0.96%	88	Poland	2	0.16%
27	Netherlands	12	0.96%	89	Singapore	2	0.16%
28	Germany	11	0.88%	90	South Africa	2	0.16%
29	Nicaragua	11	0.88%	91	St. Lucia	2	0.16%
30	Ukraine	11	0.88%	92	Venezuela, Republica Bolivariana de	2	0.16%
31	Georgia	10	0.80%	93	Virgin Islands, British	2	0.16%
32	Argentina	9	0.72%	94	Yemen, Republic of	2	0.16%
33	Costa Rica	9	0.72%	95	Zambia	2	0.16%
34	Uzbekistan	9	0.72%	96	Armenia	1	0.08%
35	Azerbaijan	8	0.64%	97	Belarus	1	0.08%
36	Chile	8	0.64%	98	Belgium	1	0.08%
37	Colombia	8	0.64%	99	Belize	1	0.08%
38	Hong Kong SAR, China	8	0.64%	100	Burundi	1	0.08%
39	Nepal	8	0.64%	101	Cyprus	1	0.08%
40	Cayman Islands	7	0.56%	102	Dominican Republic	1	0.08%
41	Ecuador	7	0.56%	103	Eswatini	1	0.08%

42	Kenya	7	0.56%	104	Ethiopia	1	0.08%
43	Pakistan	7	0.56%	105	Finland	1	0.08%
44	Tunisia	7	0.56%	106	Gabon	1	0.08%
45	Liberia	6	0.48%	107	Greece	1	0.08%
46	Bahamas, The	5	0.40%	108	Macao SAR, China	1	0.08%
47	Bulgaria	5	0.40%	109	Malawi	1	0.08%
48	Denmark	5	0.40%	110	Malta	1	0.08%
49	Iraq	5	0.40%	111	Mozambique	1	0.08%
50	Kazakhstan	5	0.40%	112	Namibia	1	0.08%
51	Kyrgyz Republic	5	0.40%	113	New Zealand	1	0.08%
52	Madagascar	5	0.40%	114	Norway	1	0.08%
53	Malaysia	5	0.40%	115	Romania	1	0.08%
54	Mauritius	5	0.40%	116	Rwanda	1	0.08%
55	Sri Lanka	5	0.40%	117	Samoa	1	0.08%
56	United Arab Emirates	5	0.40%	118	Senegal	1	0.08%
57	Barbados	4	0.32%	119	Sierra Leone	1	0.08%
58	Cameroon	4	0.32%	120	Somalia	1	0.08%
59	Lebanon	4	0.32%	121	St. Kitts and Nevis	1	0.08%
60	Mongolia	4	0.32%	122	Togo	1	0.08%
61	Morocco	4	0.32%	123	Uruguay	1	0.08%
62	Afghanistan	3	0.24%		TOTAL	1256	100.00%

Source: Authors calculations using World Bank data

Appendix 4: Year-wise sample distribution

Serial Number	Year	Number of firms / Observations	Percent	Cumulative Percent
1	2005	292	1.16	1.16
2	2006	285	1.14	2.30
3	2007	308	1.23	3.53
4	2008	944	3.76	7.29
5	2009	1251	4.98	12.27
6	2010	1638	6.53	18.79
7	2011	2069	8.24	27.04
8	2012	2310	9.20	36.24
9	2013	2151	8.57	44.81
10	2014	2220	8.84	53.65
11	2015	2495	9.94	63.59
12	2016	2761	11.00	74.59
13	2017	3117	12.42	87.01
14	2018	3262	12.99	100.00
-	Total	25103	100.00	-