



This is a repository copy of *Hierarchical political power and the value of cash holdings*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/220523/>

Version: Published Version

---

**Article:**

Lu, J., Talavera, O., Yin, S. et al. (1 more author) (2025) Hierarchical political power and the value of cash holdings. *British Journal of Management*. ISSN 1045-3172

<https://doi.org/10.1111/1467-8551.12893>

---

**Reuse**

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here:

<https://creativecommons.org/licenses/>



**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

# Hierarchical Political Power and the Value of Cash Holdings

Jia Liu,<sup>1</sup> Oleksandr Talavera,<sup>2</sup> Shuxing Yin <sup>3</sup> and Mao Zhang <sup>4</sup>

<sup>1</sup>School of Accounting, Economics and Finance, University of Portsmouth, Portsmouth, PO1 3DE, UK, <sup>2</sup>Department of Economics, University of Birmingham, Birmingham, B15 2TT, UK, <sup>3</sup>Management School, University of Sheffield, Sheffield, S10 1FL, UK, and <sup>4</sup>Department of Finance, Business School, University of St Andrews, St Andrews, KY16 9RJ, UK

Corresponding author email: mz71@st-andrews.ac.uk

**This study examines the relationship between hierarchical political power and the value of cash holdings. To model the power structure, we utilize the hierarchical civil service system in China to distinguish between the holders of high- and low-level political power. We establish that directors with high-level political power increase the market value of cash, whereas those with low-level political power have no impact. Such effects are more pronounced in non-state-owned firms, in regions where politicians are subject to higher political pressure and in firms experiencing stronger agency conflicts. Further analysis shows that directors with high-level political power can increase the value of cash holdings through improved investment efficiency. Among directors with high-level political power, shareholders benefit most from the presence of those ranked at the Bureau-Department level. Our study provides original evidence that political hierarchy holds significance for investors' valuation of cash holdings and emphasizes the importance of the heterogeneous nature of boards' political capital in determining corporate value.**

## Introduction

Resource dependence theory emphasizes firms' reliance on the external environment for critical resources (Pfeffer and Salancik, 1978). Among diverse external agents, governments are particularly influential, as they introduce uncertainties that can significantly impact corporate operations. Appointing politically connected directors is a key strategy for managing these challenges, but their influence on firm outcomes remains debatable. While some research suggests that political directors leverage their government expertise and networks to reduce uncertainties and transaction costs, benefiting the firm (Goldman, Rocholl and So, 2009, 2013; Hillman, 2005; Zattoni, Bozzolan and Di Donato, 2023), other studies argue that they may engage in opportunistic behaviour or make suboptimal decisions due to limited business expertise, possibly harming the firm (Sun, Hu and Hillman, 2016; Wang and Xu, 2022; Zhang and Truong, 2019). In this study, we aim to resolve this issue by examining the heterogeneity of board political capital. Specifically, we consider individual political power

as a key differentiator and examine its impact on the value of cash holdings.

We focus on cash value, as cash represents a significant element of corporate wealth, affecting a company's financial flexibility, investment capacity and risk management strategies (Acharya, Davydenko and Strebulaev, 2012; Denis and Sibilkov, 2010; Dittmar and Mahrt-Smith, 2007; Rapp, Schmid and Urban, 2014). As suggested by resource dependence theory, directors, particularly those with specialized expertise or influential connections, may bring unique perspectives to cash management. Thus, understanding the interplay between board capital and cash holdings raises a critical research question. Prior studies have examined the value of cash and its determinants, focusing on the benefits and costs associated with cash reserves (Chen *et al.*, 2020; Faulkender and Wang, 2006; Sun, Yin and Zeng, 2022; Xu *et al.*, 2016). Seminal research posits that the market value of cash is influenced by adverse selection between firms and outsiders (Myers and Majluf, 1984) and the moral hazard between managers and shareholders (Jensen and Meckling, 1976). However, it remains

unclear whether cash is advantageous or detrimental, as this may depend on the resources available to the board and the overall quality of corporate governance. We address this gap by studying how heterogeneity in board political power shapes market perceptions of cash management efficiency, reflected in the market value of cash holdings.

We propose that the value of cash depends on whether political directors possess sufficient political influence and drive to maximize corporate performance. Prior research often treats all political directors as of equal value to firms, overlooking differences in their political power. This oversight may stem from the complexity of quantifying political directors' individual power. In this study, we address this challenge by modelling political power heterogeneity through the civil service system in China, which features a hierarchical ranking structure from entry-level positions to senior leadership roles. These different levels of political authority reflect political directors' diverse incentives and capabilities in resource provision (Chan and Suizhou, 2007). High-ranking political directors (HRPDs) with significant political embeddedness and authority may reduce transaction costs, secure more critical policy resources and protect cash assets from local government exploitation compared to lower-ranking political directors (LRPDs). This capability could empower their firms to optimize cash reserves, meet future investment demand and capitalize on investment opportunities, enhancing investor perceptions of the firm's market value as cash holding increases. Conversely, LRPDs may face limitations in accessing government resources, potentially compromising their independence and exposing them to collusion with rent-seeking officials. Thus, we hypothesize that the presence of HRPDs is more likely to increase the value of cash than LRPDs.

Analysing a panel of Chinese listed companies with 16,706 firm-year observations from 2008 to 2017, we find that appointing HRPDs significantly increases the market value of cash, whereas we observe no impact from the presence of LRPDs. The positive impact of HRPDs is more pronounced in non-state-owned enterprise (non-SOE) firms where the demand for political resources is higher in regions with heightened political pressures. Additionally, their influence is stronger in firms experiencing acute agency conflicts. Our results hold the following robustness tests, including a difference-in-differences analysis utilizing an exogenous regulatory shock, controlling for other omitted factors and considering alternative measures of expected cash changes.

Our research makes three original contributions to the literature. First, the mixed effects of political directors on firms highlight the need for further research to fully understand the complex dynamics involved, as a simple examination of the main effects

may fail to capture organizational complexities (Kumar and Zattoni, 2018). Hence, we employ a contingency approach to better understand how political connections enhance corporate wealth, augmenting previous research identifying optimal conditions, including life-cycle stages, firm size and regulatory environments (Fiegener *et al.*, 2000; Zahra and Pearce, 1989; Zattoni, Bozzolan and Di Donato, 2023). We demonstrate that political directors can positively affect cash value, an effect magnified by a firm's geopolitical location and government interdependence.

Second, this study improves understanding of the political resources and capabilities embedded in board political capital. The prevailing theory has advanced very little beyond the fact that firms should 'select resource-rich directors' (Boyd, 1990). However, a director's human and social capitals are vital to the board's resource provision function (Hillman and Dalziel, 2003). Research on corporate boards tends to view political directors as a homogeneous group (Faccio, 2010; Hu *et al.*, 2020), with few scholars distinguishing directors' local-government connections from their central-government connections (Sun *et al.*, 2015). However, China's political system, like those of many other countries, can grant a local politician equal – or even greater – power than that of a politician in the central government.<sup>1</sup> Therefore, we employ the hierarchical civil service system to model the political power structure and document the varying contributions of high- and low-level political directors to corporate wealth.

Finally, prior research on the market value of cash has focused on financial constraints (Faulkender and Wang, 2006), information asymmetry (Drobotz, Grüninger and Hirschvogel, 2010), CEO overconfidence (Aktas, Louca and Petmezas, 2019) and various facets of corporate governance, including institutional monitoring (Dittmar and Mahrt-Smith, 2007), product market competition (Alimov, 2014) and internal control (Chen *et al.*, 2020). However, investors' valuation of each additional dollar is influenced by their perceptions of the board's ability to resource and monitor the efficient use of cash. By integrating the role of political directors on the board, we can discern how differences between these directors in terms of their political power shape market perceptions, as evidenced by the market value of cash. A similar study by Chang *et al.* (2021) used the 2013 depoliticization regulation (Regulation 18) as a source of exogenous variation to demonstrate that firms hold more cash following political directors' resignations. However, our study differs from

<sup>1</sup>The positions of all politicians and administrators in the civil service, whether in local or central government, are reflective of the power they wield. For example, the city mayors and the directors of national-level ministry departments hold the 'Bureau-Department' rank in the civil service system.

theirs in three important respects. First, we categorize political directors based on their spectrum of political power, instead of treating them homogeneously. Second, rather than focusing solely on independent directors, as Chang *et al.* (2021) did, we broaden our scope to include all directors, highlighting the significant influence of non-independent directors. Third, our analysis underscores the augmented market value of cash, adopting a forward-looking valuation perspective.

## Institutional background

In China, the government's role extends beyond traditional regulation to influence resource distribution and investment strategies. It exerts considerable control over financial resources through state-owned banks, land allocation and issuing licences and permits necessary for business operations (Allen, Qian and Qian, 2005). These resources are often channelled towards sectors and firms that support the government's strategic priorities, such as innovation-driven enterprises or those contributing to large-scale national projects, like the Belt and Road Initiative. In the financial sector, state-owned banks dominate and serve as instruments of the government's policies (Chen *et al.*, 2011). The state's strategic interests often dictate the flow of capital, ensuring that industries vital to national security or economic stability receive priority access to financial resources. Additionally, the government's control over capital markets is reinforced by its ability to directly influence corporate behaviour and investment decisions (Hao and Lu, 2018). In this way, the government's role extends into corporate financial strategy, influencing not only where companies can invest but also how they manage their internal resources, such as cash holdings.

Political directors with strong government connections play a crucial role in this environment. Their influence can help firms navigate regulatory complexities, secure resources and align corporate strategies with government priorities (Du, Zeng and Du, 2014; Hu *et al.*, 2020; Wang, 2015). By obtaining favourable loan terms, government contracts, subsidies, tax breaks or priority in strategic investments, political directors can enhance the firm's financial flexibility, reduce transaction costs and optimize cash reserves. In such an ethos, political directors can significantly affect how firms manage their cash reserves and optimize them to meet both business and political demands. However, political directors may prioritize politically driven projects over value-maximizing investments, potentially leading to an inefficient use of cash.

Not all political directors hold equal importance in China's hierarchical political system. The Civil Servant Law of China specifies ten distinct leadership ranks, each representing different levels of

authority: State, Vice-State, Provincial-Ministerial, Vice Provincial-Ministerial, Bureau-Department, Vice Bureau-Department, County-Section, Vice County-Section, Township-Division and Vice Township-Division (see details in Appendix A). Generally, positions at the Bureau-Department level or higher are considered as high-ranking, while those below are considered as low-ranking. Under this structure, high-ranking politicians and low-ranking officials differ in decision-making power and influence based on their responsibilities, authority, compensation and benefits. This hierarchy underscores the varying degrees of impact that political directors have on firms, depending on their rank and connections within the government.

## Theoretical background and hypothesis development

### *Resource dependence theory and political directors*

Resource dependence theory (Pfeffer and Salancik, 1978) emphasizes that organizations rely on external resources to survive, and boards play a crucial role in managing these dependencies. Boards provide strategic advice, lend legitimacy and grant access to vital resources, helping firms mitigate uncertainties and reduce transaction costs. These benefits are closely linked to improved firm performance (Hillman, 2005). One of the most significant external dependencies for firms is the government (Hillman, Nicholson and Shropshire, 2008). Uncertainty in business-government relations can impose substantial transaction costs on firms (Williamson, 1991). Understanding the complex political environment is challenging, requiring specialized expertise to navigate regulations and policies efficiently. Without such guidance, firms may face high costs and lower returns on investments due to regulatory uncertainties.

Appointing political directors is a strategic response to external challenges. Owing to their unique political capital and expertise, such directors can help firms minimize uncertainty, transaction costs and external dependencies by accessing critical resources and navigating the political landscape (Goldman, Rocholl and So, 2013). Their regulatory knowledge can reduce uncertainty and their influence in securing government contracts and engaging with key officials can lower transaction costs. This gives firms a cost advantage over competitors, helping them operate efficiently in a politically charged environment.

### *Hypothesis development*

According to resource dependence theory (Pfeffer and Salancik, 1978), political directors can help firms establish strong connections with governments and thus influence corporate policies. Empirical studies

demonstrate that firms with political directors obtain more government subsidies (Wang, 2015), more government procurement contracts (Goldman, Rocholl and So, 2013), preferential bank borrowing terms (Hu *et al.*, 2020), easier access to high-barrier industries (Du, Zeng and Du, 2014) and reduced taxation (Kim and Zhang, 2016). However, political connections also have disadvantages, as determined by the 'grabbing hand' hypothesis (Cheung, Rau and Stouraitis, 2010). Government officials may exploit connections to extract rents through licences, contracts or regulatory approvals (Caprio, Faccio and McConnell, 2013; Shleifer and Vishny, 1994). Moreover, agency theory (Jensen and Meckling, 1976) suggests that political directors may be less effective in monitoring management due to their lack of business expertise and time commitment compared to other board members (Shi, Xu and Zhang, 2018; Zhang and Truong, 2019).

Research on the relationship between cash holdings and political connections is limited but revealing. Firms with strong political ties, such as those heavily engaged in lobbying or with independent political directors, often have preferential access to credit and thus face fewer liquidity constraints, reducing the need for cash reserves (Chang *et al.*, 2021; Hill *et al.*, 2014). In contrast, firms operating in corrupt regions tend to hold less cash due to the risk of political extraction, although political connections can reduce this risk (Li, Xu and Gan, 2018). However, during periods of political uncertainty, firms may hold more cash to respond quickly to government initiatives and investment opportunities (Xu *et al.*, 2016). These mixed findings suggest that the value of political directors varies depending on the specific context of their influence and the resources they provide.

Combining resource dependence theory with the political director literature, we reason that the political power of connected directors affects the value of a firm's cash holdings. In China's hierarchical political system, leaders and ordinary politicians differ in power and influence, as reflected in their responsibilities, authority, compensation and benefits (Chan and Suizhou, 2007). We argue that this variation in political power may influence the firm's value of cash through following two channels: reduction in the cost and need for external finance and enhanced capitalization on investment opportunities.

Drawing on resource dependence theory (Pfeffer and Salancik, 1978), HRPDs offer significant advantages over LRPDs due to their extensive government experience and political networks. HRPDs are more effective in leveraging their political capital to secure government grants and investment opportunities at lower costs. Their political authority better empowers them to protect firms' cash from political exploitation, which is crucial, as cash is readily accessible and transferable by government officials (Caprio, Faccio and McConnell,

2013). Conversely, LRPDs may have weaker connections, limiting their access to government resources. Their close ties to local government, which holds great discretion in resource allocation (Chen *et al.*, 2011), may compromise their independence and expose them to collusion with rent-seeking officials. This imposes constraints on their ability to protect firms' cash assets from political extraction. Thus, HRPDs are more effective at optimizing cash reserves and enhancing investors' perceptions of corporate value by increasing the value of cash holdings. Therefore, we posit

**H 1.** *Firms with directors holding high-level political power have a higher value of cash than firms with directors holding low-level political power.*

According to resource dependence theory, the need for environmental connections, such as those facilitated by directors, is determined by the levels and types of dependence that organizations encounter (Hillman, Cannella and Paetzold, 2000; Pfeffer and Salancik, 1978). In China, state ownership is an important political characteristic. SOEs, with stakes held by central or local governments or their agencies, possess political connections due to their ownership structure. They are subject to rigorous state oversight and are often leveraged as instruments of political strategy (Firth, Fung and Rui, 2006). Given their direct and frequent interactions with the government, the influence of political connections on the decision-making processes of these firms is likely to be comparatively muted (Wu, Wu and Rui, 2012). Conversely, non-SOEs, free from direct government control, have limited political capital and restricted resource access. This limitation necessitates the establishment of political ties, notably through hiring political directors, to reduce external dependence on the government and reduce the costs of external transactions. Therefore, the strategic engagement of HRPDs can disproportionately benefit non-SOEs by reducing their external financing costs and needs and enhancing their capacity to capitalize on investments. Based on this rationale, we posit that appointing HRPDs adds more value to the cash holdings of non-SOEs. To test this conjecture, we explore whether the positive effects of high-ranking political power on the value of cash vary across ownership types, contending

**H 2.** *The relationship between hierarchical political power and the market value of cash is amplified in non-SOEs.*

Furthermore, external environmental factors can also impact political directors' contributions to mitigating resource dependence (Hillman, Cannella and Paetzold, 2000). One external factor that may highlight the value of heterogeneous political directors is political pressure from local governments.

The Chinese central government manages and motivates local officials through a cadre selection system, promoting leaders for their social, economic and political achievements (Gu, Tang and Wu, 2020). Economic growth, fiscal revenues and investment are prioritized, with success leading to political advancement (Green, 2013). Local officials are granted significant autonomy in resource allocation and often intervene in local companies to help them meet political objectives and alleviate pressure, facilitating access to resources and investment opportunities to boost economic performance and fiscal revenues in their region.

In high-pressure political environments, local officials have stronger incentives, significant power and the autonomy to drive local economic growth (An *et al.*, 2016). Consequently, they tend to intervene, promoting local investment and stimulating economic activity. In such circumstances, HRPDs are better positioned than LRPDs to facilitate their firms' prompt responses to government initiatives and policies by securing favourable investment opportunities. This can minimize transaction costs, optimize cash utilization and improve investors' perceptions of corporate value through increased cash holdings. Hence, we formulate

**H3.** *The relationship between hierarchical political power and the market value of cash is amplified in regions where politicians face greater political pressures.*

While the resource provision perspective is prominent in the board literature, agency theory can also explain board behaviours. Directors act as fiduciaries, overseeing management to ensure they operate in shareholders' interests (Fama and Jensen, 1983; Jensen and Meckling, 1976). Maintaining excess cash reserves enables firms to meet future investment demands but may incur agency costs. For example, excess cash can be more rapidly dissipated on less profitable investments, tunneled by controlling shareholders to other companies they own or utilized by managers to entrench themselves (Chen *et al.*, 2020). Previous studies have found that rigorous monitoring can mitigate agency costs and lead to more efficient use of cash, thereby enhancing investors' views of firm value (Dittmar and Mahrt-Smith, 2007).

Given their high-ranking positions, HRPDs probably have greater reputational concerns than LRPDs.<sup>2</sup> Consequently, they may distance themselves from firms involved in misconduct to safeguard their integrity (Lin

<sup>2</sup>We argue that the increased visibility, accountability, impact on policies, media scrutiny and public expectation associated with high-level politicians amplify the concern for reputation compared to their low-level counterparts. As a result, any missteps or controversies of high-level politicians are more likely to attract widespread attention.

*et al.*, 2012).<sup>3</sup> Conversely, the 'grabbing hand' hypothesis suggests that political directors might exploit firms for personal gain (Shleifer and Vishny, 1994). However, directors' rent-extracting capabilities vary according to their distance from the central government and information access. For example, remotely located political directors might more often exploit firms due to weaker government oversight, despite having fewer political resources. Thus, taking an agency perspective, we focus on monitoring incentives rather than capabilities.

In this context, we argue that HRPDs are strongly motivated to be more active monitors to signal to the market their adherence to responsible governance practices compared to LRPDs. Thus, in situations in which firms face significant agency conflicts, HRPDs' active engagement in monitoring could effectively prevent tunnelling and enhance the efficient use of cash, thereby increasing the confidence of external stakeholders. Hence, we argue

**H4.** *The relationship between hierarchical political power and the market value of cash is amplified in firms with stronger agency conflicts.*

## Research design

### *Data and sample*

The Wind Financial Database and China Stock Market and Accounting Research (CSMAR) database are our primary sources of company-level data. These include cash holdings, each director's political experience and corporate governance measures. The initial sample comprises all firms listed on the Main Board of the Shanghai or Shenzhen Stock Exchanges between 2008 and 2017. We begin sampling in 2008, the first-year information about an individual director's political experience becomes available and ends in 2017, beyond which political data are unavailable. We exclude financial firms due to their unique accounting characteristics and firms with less than two firm-year observations. Our final sample contains 16,706 firm-year observations.

<sup>3</sup>The reputation hypothesis contends that directors are motivated to establish reputations as diligent monitors, as this can lead to additional directorships, thus furthering their careers (Yermack, 2004). Conversely, associations with corporate wrongdoing can damage directors' reputations, subsequently reducing their chances of gaining future appointments (Fich and Shivdasani, 2007). Therefore, to maintain their professional standing, directors are likely to enforce self-discipline and enhance the quality of monitoring in their firms (Jiang, Wan and Zhao, 2016).

### Main regression specifications

To examine the impact of high- and low-ranking political directors on the value of cash holdings, we build on the well-established method developed by Faulkender and Wang (2006), which assesses the effect of changes in cash on changes in the market value of equity. We apply Faulkender and Wang's (2006) model to value cash, introducing measures of board political power and their interactions with changes in cash holdings to examine how they influence cash value.<sup>4</sup> The empirical model is constructed as follows:

$$\begin{aligned}
 r_{i,t} - R_{i,t}^B = & \alpha + \beta_1 \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} + \beta_2 \text{High\_PD}_{i,t} \\
 & + \beta_3 \text{High\_PD}_{i,t} * \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} + \beta_4 \text{Low\_PD}_{i,t} \\
 & + \beta_5 \text{Low\_PD}_{i,t} * \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} + \gamma_1 \frac{\Delta \text{Earn}_{i,t}}{M_{i,t-1}} \\
 & + \gamma_2 \frac{\Delta \text{NA}_{i,t}}{M_{i,t-1}} + \gamma_3 \frac{\Delta \text{Int}_{i,t}}{M_{i,t-1}} + \gamma_4 \frac{\Delta \text{Div}_{i,t}}{M_{i,t-1}} \\
 & + \gamma_5 \frac{\Delta \text{R\&D}_{i,t}}{M_{i,t-1}} + \gamma_6 \frac{\text{Cash}_{i,t-1}}{M_{i,t-1}} + \gamma_7 \frac{\text{NF}_{i,t}}{M_{i,t-1}} \\
 & + \gamma_8 \text{Lev}_{i,t} + \gamma_9 \frac{\text{Cash}_{i,t-1}}{M_{i,t-1}} * \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} \\
 & + \gamma_{10} \text{Lev}_{i,t} * \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} + \mu_i + \theta_t + \varepsilon_{i,t} \quad (1)
 \end{aligned}$$

where the dependent variable is the excess stock return.  $r_{i,t}$  is the stock return for firm  $i$  during fiscal year  $t$  and  $R_{i,t}^B$  is the return of firm  $i$ 's benchmark portfolio in year  $t$ . The benchmark portfolio is one of the value-weighted Fama and French's (1993) 25 size and B/M portfolios that a firm belongs to each year. To capture the impact of high- and low-ranking political directors on the market value of cash, we include HRPDs (High\_PD), LRPDs (Low\_PD) and their interaction terms with the change in cash position,  $\Delta \text{Cash}_{i,t}$ .  $\Delta$  indicates changes in variables from fiscal year  $t-1$  to  $t$ . All control variables, except leverage, are scaled by the 1-year lagged market value of equity ( $M$ ), enabling us to interpret the estimated coefficients as the change in firm value for one CNY change in cash holdings. Our main variable of interest is the interaction between the change in cash holdings and high- and low-level board political power measures. The key coefficients for testing the effect of hierarchical political power on the market value of cash are  $\beta_3$  and  $\beta_5$ . To control for unobserved firm heterogeneity, we employ a firm fixed effects estimator. Firm and year fixed effects are denoted by  $\mu_i$  and  $\theta_t$ , respectively.

<sup>4</sup>This approach has been widely applied in the literature regarding the value of cash (Alimov, 2014; Dittmar and Mahrt-Smith, 2007; Guo *et al.*, 2023; Sun *et al.*, 2022; Ward *et al.*, 2018).

### Dependent variable

Aligned with prior research, we measure the excess return as the difference between a firm's stock return and the benchmark return. Following Faulkender and Wang (2006), we use the benchmark portfolio based on Fama and French's (1993) 25 size and B/M portfolios to which a firm belongs each year. The return of the benchmark portfolio is a value-weighted return based on the market capitalization of each of the 25 Fama–French portfolios.

### Independent variables

The main variable of interest is the interaction of the change in cash holdings and board political power, categorized into high and low levels. China's political power structure has unique characteristics. In addition to government officers, leaders of not-for-profit public institutions (public universities) also have political power corresponding to their rank in the political hierarchy (Chen, Garel and Tourani-Rad, 2019). Therefore, we define politically connected directors as former or incumbent leaders of the following: (i) the Communist Party of China, central or local government or its agencies; (ii) the Chinese People's Political Consultative Conference (CPPCC); (iii) the National People's Congress (NPC); or (iv) non-profit (government-affiliated) public institutions.

According to the leadership ranks in the Civil Servant Law of China, we classify each connected director as either a high-ranking leader (i.e. Bureau-Department or higher) or a low-ranking leader (i.e. Vice Bureau-Department or lower). This classification is used by China's government (Fan, 2021). Following prior literature on board composition (Adams and Ferreira, 2009; Arifin, Hasan and Kabir, 2020), we employ two sets of widely used measures to capture aggregated high- and low-level board political power. The first set includes the following two binary indicators: High\_PD\_Dummy and Low\_PD\_Dummy. These assign a value of 1 for firms with at least one director with high-level political or low-level political power, respectively, indicating the presence of directors with varying boardroom political power. The second set of measures focuses on the percentage of high- and low-ranking political directors on a board (High\_PD\_Fraction and Low\_PD\_Fraction), calculated by dividing the number of high- or low-level political directors by the total number of directors. Using these two fractional measures, we capture the intensity of high- and low-level political capital within a board.

### Moderating variables

To test the moderating effect of ownership type (H2), local political pressure (H3) and agency conflicts (H4),

we construct the following variables. To assess state ownership, we identify the ultimate owner of each firm. Following previous studies (Li, Xu and Gan, 2018; Wang, Wong and Xia, 2008), a state firm is defined as one whose ultimate owner is either a local or central government (e.g. the Bureau of State Assets Management or the Ministry of Finance). A non-state firm is defined as one whose ultimate owner is a non-government unit.

We measure local political pressure using two pieces of city-level information. In China, a politician's career advancement hinges on attaining social, economic and political benchmarks (Gu, Tang and Wu, 2020), driving officials to promote regional economic growth and fiscal health (Chen and Kung, 2016). Therefore, we use local GDP growth and fiscal deficit ratios to assess political pressure. The variable GDP growth is measured as the annual growth rate of city-level GDP, while fiscal deficit is calculated as the difference between government expenditure and revenue, scaled by GDP.

In China, ownership is highly concentrated, with managers primarily accountable to controlling shareholders. This arrangement often leads to conflicts between controlling and minority shareholders, resulting in significant agency problems (Jiang and Kim, 2020). We measure agency conflicts using excess control, defined as the difference between control and cash flow rights (Cao, Pan and Tian, 2011).

#### Control variables

Since the idiosyncratic movements of firm characteristics could impact the cross-sectional fluctuations of firm returns (Dittmar and Mahrt-Smith, 2007), we follow Faulkender and Wang (2006) to include the same set of firm-specific control variables correlated with both firm returns and cash holdings. Given that the main emphasis is on how changes in stock value relate to changes in cash, we control for changes in profitability, financial policy and investment policy, as these factors could potentially affect expected cash flows. Specifically, we include the annual change in earnings before extraordinary items ( $\Delta$ Earn), as more profitable firms tend to achieve better performance. We also include two variables related to investment policies: the annual change in research and development expenditure ( $\Delta$ R&D) and the annual change in the net asset ratio ( $\Delta$ NA). Our model also takes corporate financing policies into account, including the interest-to-expenses ratio ( $\Delta$ Int), dividend payment ratio ( $\Delta$ Div), leverage ratio (Lev), cash ratio (Cash/M) and net financing ratio ( $\Delta$ NF). Like Faulkender and Wang (2006), we scale these firm-level variables by the 1-year lagged market value of equity.

We also incorporate corporate governance variables suggested by previous studies to account for their potential influence on cash holdings and firm returns. Regard-

ing board composition, we first control for board gender diversity using the percentage of female directors, as they can mitigate managerial agency problems related to excess cash holdings (Atif, Liu and Huang, 2019). Since independent directors are associated with more effective monitoring and could affect corporate cash policies (Liu *et al.*, 2015), we also control for the percentage of independent directors (Board Independence). Board age is calculated as the natural logarithm of the average age of all directors, as younger directors may bring more energy and risk tolerance, while older directors often bring experience and stability to board deliberations (Anderson *et al.*, 2011). We also account for directors' professional expertise by including the percentage of directors with a finance background (Finance Director) and the percentage of directors with prior industry experience (Industry Director), as these factors influence board functions and firm performance (Burak Güner, Malmendier and Tate, 2008; Von Meyerinck, Oesch and Schmid, 2016). Additionally, we consider two other corporate governance variables. CEO Duality is a dummy variable taking the value 1 if the CEO is also the chairperson, and 0 otherwise (Atif, Liu and Huang, 2019), as powerful CEOs can compromise board monitoring and negatively affect firm cash policies. We also include Institutional Ownership, measured as the percentage of shares owned by mutual funds and qualified foreign institutional investors, as these investors have strong incentives to monitor management and enhance the value of cash (Ward, Yin and Zeng, 2018).

#### Descriptive statistics

Table 1 summarizes the descriptive statistics for the main variables. Chinese firms tend to actively network with politicians, as 65.6% of firms in our sample have directors with a government background. Specifically, 17.4% of firms have at least one HRPD, whereas low-level political power is more widespread (61.8%). Regarding board composition, the percentage of HRPDs averages 2.0%, while the corresponding figure for LRPDs is 10.2%. Our financial variables are comparable to those of previous studies. For example, the median (mean) values of  $\Delta$  Cash/M and  $\Delta$ NA/M are 0.002 (0.010) and 0.057(0.097), respectively, while the corresponding values are 0.002 (0.017) and 0.060 (0.151) in Xu *et al.* (2016). The median value of the excess return is  $-0.053$  in our sample, while Xu *et al.* (2016) report a median value of  $-0.030$ .<sup>5</sup>

We report the correlation matrix in Table 2. The existing literature suggests that a correlation exceeding 0.7 in absolute value signifies a multicollinearity. Our

<sup>5</sup>In the Online Appendix, we present the correlation analysis in Table OA.1 and find no clear evidence of multicollinearity among the variables.



Table 1. Summary statistics

Variable	Mean	Std	P25	P50	P75	Obs.	Definition
Panel A: Heterogeneous political directors							
High_PD_Dummy	0.174	0.379	0.000	0.000	0.000	16,706	Equals 1 if the board has at least one politically connected director at the Bureau-Department level or higher (high level), and 0 otherwise.
Low_PD_Dummy	0.618	0.486	0.000	1.000	1.000	16,706	Equals 1 if the board has at least one politically connected director at the Vice Bureau-Department level or lower (low level), and 0 otherwise.
High_PD_Fraction	0.020	0.047	0.000	0.000	0.000	16,706	Number of high-ranking political directors divided by total number of directors.
Low_PD_Fraction	0.102	0.110	0.000	0.091	0.167	16,706	Number of low-ranking political directors divided by total number of directors.
Panel B: Other firm-level characteristics							
Cash	0.259	0.270	0.102	0.173	0.309	16,706	Cash and cash equivalents to net assets.
Excess return	-0.017	0.349	-0.206	-0.053	0.119	16,706	Stock return – benchmark return, where benchmark return is a value-weighted return based on the market capitalization of each of the 25 Fama–French portfolios.
$\Delta$ Earn/M	0.003	0.035	-0.007	0.003	0.013	16,706	Yearly change in earnings before extraordinary items, scaled by 1-year lagged market value of equity.
$\Delta$ Cash/M	0.010	0.067	-0.021	0.002	0.031	16,706	Yearly change in cash and cash equivalents, scaled by 1-year lagged market value of equity.
$\Delta$ NA/M	0.097	0.158	0.013	0.057	0.135	16,706	Yearly change in net assets, scaled by 1-year lagged market value of equity.
$\Delta$ Int/M	0.001	0.006	-0.001	0.000	0.003	16,706	Yearly change in interest expenses, scaled by 1-year lagged market value of equity.
Lev	0.436	0.201	0.276	0.434	0.591	16,706	Total liabilities to total assets.
$\Delta$ R&D/M	0.026	0.327	0.000	0.000	0.000	16,706	Yearly change in R&D expenditure, scaled by 1-year lagged market value of equity.
$\Delta$ Div/M	0.002	0.010	-0.002	0.001	0.005	16,706	Yearly change in dividends paid by the company, scaled by 1-year lagged market value of equity.
NF/M	0.047	0.100	-0.001	0.013	0.069	16,706	Total equity issuance minus repurchases plus debt issuance minus debt redemption, scaled by 1-year lagged market value of equity.
SOE	0.423	0.494	0.000	0.000	1.000	16,706	Equal to 1 if the ultimate controller is the state, and 0 otherwise.
GDP growth	10.593	13.604	7.690	9.075	11.970	14,990	Annual growth rate of GDP.
Fiscal deficit	-185.324	417.295	-0.016	0.012	0.032	14,481	Difference between government expenditure and government revenues scaled by GDP.
Excess control	1.548	6.006	1.000	1.000	1.569	15,828	Control rights/cash flow rights.
Investment	0.072	0.162	0.000	0.009	0.053	16,706	Sum of capital expenditure and R&D expenditure scaled by lagged value of total assets.
Board age	3.909	0.069	3.864	3.910	3.956	16,706	Natural logarithm of average age for all directors.
Female director	0.147	0.128	0.062	0.111	0.222	16,706	Percentage of female directors.
Board independence	0.340	0.071	0.300	0.333	0.375	16,706	Percentage of independent directors.
CEO duality	0.256	0.436	0.000	0.000	1.000	16,706	Equal to 1 if the CEO is also the chairman, and 0 otherwise.
Institutional ownership	0.050	0.070	0.004	0.022	0.066	15,751	Percentage of shares owned by mutual funds and qualified foreign institutional investors.

Table 1. (Continued)

Panel B: Other firm-level characteristics							
Industry director	0.205	0.193	0.071	0.167	0.300	16,706	Percentage of directors with industry background.
Finance director	0.122	0.128	0.000	0.100	0.200	16,706	Percentage of directors with finance background.

Note: This table reports descriptive statistics of variables used in this study based on firm-year observations between 2008 and 2017. All continuous variables are winsorized at the 1% and 99% levels.

analysis shows a correlation only between the metrics concerning measures of high- and low-ranking political directors (High\_PD\_Dummy and High\_PD\_Fraction, Low\_PD\_Dummy and Low\_PD\_Fraction). We observe no clear evidence of multicollinearity among the remaining variables.

## Empirical results and discussion

### Baseline estimates

We first assess how hierarchical political power influences the market value of cash, with findings detailed in Table 3. From columns 1–3, we observe that the coefficients on the interaction term (High\_PD\_Dummy \*  $\Delta$ Cash/M) are positive and significant at the 5% level, suggesting that HRPDs enhance the value of cash holdings. Specifically, in column 3 the marginal value of cash is about 0.281 CNY higher for firms with HRPDs. However, the coefficients of the interaction term (Low-level% \*  $\Delta$ Cash/M) are statistically insignificant, indicating that LRPDs do not affect the market value of cash. From columns 4–6, we use the alternative measures for heterogeneous political power. The coefficients on the interaction term (High\_level\_Fraction \*  $\Delta$ Cash/M) are positive and statistically significant, but the interaction terms with LRPDs remain insignificant. The consistent results across different specifications support H1.

With respect to other control variables, we obtain results comparable to prior studies (Ward, Yin and Zeng, 2018; Yu and Wang, 2020). In line with Faulkender and Wang (2006), we find that the value of cash decreases with an improved cash position and greater leverage because firms with limited cash reserves derive the greatest benefit from hoarding funds when external financing is expensive. Consistent with other studies on China (Xu *et al.*, 2016; Yu and Wang, 2020), we also find that changes in profitability and investment are positively related to excess returns, whereas an increase in net financing can reduce excess returns.

In columns 7 and 8 we re-estimate the model after including an additional set of corporate-governance variables as a robustness test. The coefficient estimates for the interaction terms (High\_PD\_Dummy \*  $\Delta$ Cash/M and High\_level\_Fraction \*  $\Delta$ Cash/M) are still positive

and statistically significant. These findings provide robust support for our results.

### Addressing endogeneity

Our study considers the possibility that endogeneity influences the positive relationship between HRPDs and the market value of cash, since firms with a higher market value of cash are more likely to hire and attract HRPDs. To isolate the causal effects of HRPDs and LRPDs concerning the value of cash, we utilize an exogenous regulatory shock, Regulation 18.

On 19 October 2013 the Organization Department of the Central Committee of the Communist Party of China (CPC) introduced Regulation 18 to separate business from politics, aiming to reduce corruption and promote transparency. The regulation forbids current officials to hold corporate roles and bars recent government retirees from joining firms in areas they once served.<sup>6</sup> Its enforcement led to a wave of resignations from politically affiliated directors, causing affected firms to lose political capital. Thus, by utilizing this exogenous regulatory shock, we apply the difference-in-differences estimator to identify the impact of the loss of HRPDs and LRPDs on the value of firms' cash holdings.

Using the WIND database, we track directors' resignations post-Regulation 18, identifying 2848 cases.<sup>7</sup> Among these, 642 had political experience and cited Regulation 18 as their reason for resigning. We further differentiate 153 high-ranking from 489 low-ranking resignations in 510 firms, excluding financial firms or those with missing data. Firms are grouped into high-treatment (loss of at least one HRPD), low-treatment (loss of LRPDs only) and control groups (firms without political directors). To estimate political power's impact on cash value, we employ propensity score matching (PSM) to pair high-treatment (low-treatment)

<sup>6</sup>Specifically, the first key provision of Regulation 18 stipulates that incumbent government officials are strictly prohibited from holding any positions within companies. The second provision is that individuals who have retired from official government positions within the past 3 years are not allowed to accept positions in companies located within the jurisdictions where they had previously worked.

<sup>7</sup>We focus on the period between 19 October 2013 and 31 December 2015.

Table 2. Correlation table

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
(1) High_PD_Dummy	1.00																					
(2) Low_PD_Dummy	0.15***	1.00																				
(3) High_PD_Fraction	0.91***	0.12***	1.00																			
(4) Low_PD_Fraction	0.16***	0.73***	0.15***	1.00																		
(5) Excess return	-0.01	-0.02*	-0.00	-0.02*	1.00																	
(6) ΔCash/M	-0.01	0.03***	-0.01	0.03***	0.10***	1.00																
(7) ΔEarn/M	-0.01	0.01	-0.01	0.01	0.19***	0.15***	1.00															
(8) ΔNA/M	0.04***	0.03***	0.03***	0.02**	0.17***	0.13***	0.17***	1.00														
(9) ΔInt/M	0.02**	0.02*	0.02*	0.02**	-0.01	0.05***	-0.09***	0.25***	1.00													
(10) ΔDiv/M	0.02*	0.02**	0.01	0.03***	0.03***	0.08***	0.00	0.27***	0.27***	1.00												
(11) ΔR&D/M	-0.00	-0.00	-0.00	-0.01	-0.01	0.01	0.00	0.04***	0.03***	0.02**	1.00											
(12) Cash	0.05***	0.05***	0.04***	0.04***	0.16***	-0.07***	0.01	0.25***	0.05***	0.12***	0.01	1.00										
(13) NF/M	0.02**	0.02**	0.01	0.03***	0.09***	0.45***	-0.02**	0.59***	0.28***	0.26***	0.02**	0.13***	1.00									
(14) Lev	0.02*	0.09***	0.00	0.09***	-0.02*	0.17***	-0.01	0.26***	0.24***	0.15***	0.01	0.18***	0.28***	1.00								
(15) Board age	0.09***	0.14***	0.07***	0.15***	-0.03***	0.02**	-0.01	0.00	0.02**	-0.00	-0.00	0.09***	0.01	0.03***	1.00							
(16) Female director	-0.02*	-0.06***	-0.01	-0.04***	0.01	-0.02**	0.01	-0.01	-0.02*	0.00	-0.01	-0.05***	-0.01	-0.08***	-0.09***	1.00						
(17) Board independence	0.05***	0.03***	0.05***	0.04***	0.01	-0.01	-0.00	0.01	0.01	-0.00	0.00	-0.00	0.00	-0.05***	0.11***	0.04***	1.00					
(18) CEO duality	-0.02**	-0.08***	0.02**	-0.07***	0.01	-0.04***	0.00	-0.01	-0.01	-0.01	0.02*	-0.03***	-0.01	-0.12***	-0.07***	0.12***	0.06***	1.00				
(19) Institutional ownership	-0.00	-0.01	-0.01	-0.02**	0.08***	0.09***	0.11***	0.08***	-0.02*	0.03***	0.02*	-0.05***	0.05***	0.00	-0.05***	-0.01	0.02*	-0.00	1.00			
(20) Industry director	0.01	-0.04***	0.03***	-0.06***	0.02**	-0.02*	0.01	-0.02*	-0.01	-0.02**	0.03***	-0.05***	-0.02**	-0.10***	0.02*	0.01	0.09***	0.09***	-0.00	1.00		
(21) Finance director	0.06***	0.12***	0.05***	0.14***	-0.01	0.01	0.02*	0.03***	0.01	0.04***	-0.00	0.02**	0.03***	0.04***	-0.07***	-0.01	0.01	0.02**	0.01	-0.04***	1.00	

Note: This table presents the correlation among main variables in the sample. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively.

Table 3. High- and low-level political power and the value of cash

	Excess return							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\Delta$ Cash/M	1.557*** (0.148)	1.601*** (0.159)	1.576*** (0.159)	1.548*** (0.148)	1.624*** (0.153)	1.585*** (0.152)	1.483*** (0.160)	1.498*** (0.153)
High_PD_Dummy	-0.008 (0.010)		-0.008 (0.010)				-0.012 (0.011)	
High_PD_Dummy * $\Delta$ Cash/M	0.275** (0.118)		0.281** (0.119)				0.265** (0.123)	
Low_PD_Dummy		-0.005 (0.008)	-0.004 (0.008)				-0.003 (0.008)	
Low_PD_Dummy * $\Delta$ Cash/M		-0.004 (0.096)	-0.037 (0.097)				0.005 (0.096)	
High_PD_Fraction				-0.075 (0.088)		-0.070 (0.088)		-0.102 (0.093)
High_PD_Fraction * $\Delta$ Cash/M				2.841*** (0.954)		3.032*** (0.976)		2.903*** (1.043)
Low_PD_Fraction					-0.035 (0.036)	-0.031 (0.036)		-0.023 (0.039)
Low_PD_Fraction * $\Delta$ Cash/M					-0.318 (0.398)	-0.506 (0.402)		-0.299 (0.402)
$\Delta$ Earn/M	1.474*** (0.099)	1.478*** (0.099)	1.474*** (0.099)	1.474*** (0.099)	1.478*** (0.099)	1.474*** (0.099)	1.497*** (0.106)	1.498*** (0.106)
$\Delta$ NA/M	0.292*** (0.033)	0.291*** (0.033)	0.292*** (0.033)	0.292*** (0.033)	0.290*** (0.033)	0.292*** (0.033)	0.253*** (0.032)	0.253*** (0.032)
$\Delta$ Int/M	0.111 (0.546)	0.121 (0.546)	0.104 (0.547)	0.101 (0.546)	0.114 (0.546)	0.082 (0.546)	0.206 (0.558)	0.187 (0.558)
$\Delta$ Div/M	0.118 (0.329)	0.112 (0.329)	0.121 (0.329)	0.125 (0.329)	0.114 (0.329)	0.129 (0.329)	0.218 (0.327)	0.226 (0.327)
$\Delta$ R&D/M	-0.001 (0.007)	-0.002 (0.007)	-0.002 (0.007)	-0.001 (0.007)	-0.002 (0.007)	-0.001 (0.007)	0.001 (0.007)	0.002 (0.007)
L.Cash/M	1.165*** (0.047)	1.162*** (0.047)	1.165*** (0.047)	1.166*** (0.047)	1.161*** (0.047)	1.166*** (0.047)	1.311*** (0.052)	1.313*** (0.052)
NF/M	-0.125*** (0.047)	-0.121** (0.047)	-0.125*** (0.047)	-0.126*** (0.047)	-0.119** (0.047)	-0.124*** (0.047)	-0.147*** (0.048)	-0.147*** (0.048)
Lev	-0.019 (0.033)	-0.019 (0.033)	-0.019 (0.033)	-0.019 (0.033)	-0.019 (0.033)	-0.021 (0.033)	-0.007 (0.036)	-0.008 (0.036)
$\Delta$ Cash/M * L.Cash/M	-1.371*** (0.331)	-1.357*** (0.332)	-1.366*** (0.331)	-1.364*** (0.331)	-1.345*** (0.333)	-1.344*** (0.331)	-1.407*** (0.337)	-1.390*** (0.338)
Lev * $\Delta$ Cash/M	-0.941*** (0.270)	-0.940*** (0.271)	-0.935*** (0.270)	-0.939*** (0.270)	-0.929*** (0.271)	-0.919*** (0.270)	-0.828*** (0.271)	-0.811*** (0.271)
Board age							0.164* (0.086)	0.169* (0.086)
Female directors							0.003 (0.045)	0.003 (0.045)
Board independence							0.050 (0.051)	0.049 (0.051)
CEO duality							-0.008 (0.011)	-0.008 (0.011)
Institutional ownership							0.012*** (0.001)	0.012*** (0.001)
Industry directors							0.012 (0.034)	0.013 (0.034)
Finance directors							-0.009 (0.036)	-0.008 (0.036)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	16,706	16,706	16,706	16,706	16,706	16,706	15,751	15,751
R <sup>2</sup>	0.125	0.125	0.125	0.126	0.125	0.126	0.163	0.163

Note: This table reports the results of regressions that examine the effect of high- and low-level political directors on the market value of cash. High\_PD\_Dummy is a dummy variable which equals 1 if the highest political connection of the board is Bureau-Department level or higher (high ranking), and 0 otherwise. Low\_PD\_Dummy is a dummy variable which equals 1 if the firm has at least one low-ranking political director. High\_PD\_Fraction and Low\_PD\_Fraction are percentages of high-ranking and low-ranking politically connected directors on the board,

Table 3. (Continued)

respectively. Constants are included in the estimation but not reported. The robust standard errors clustered at the firm level are reported in parentheses. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively. All the variables are defined in Table 1.

firms with similar control firms, pre-regulatory change. Matching is based on variables affecting the outcome (Caliendo and Kopeinig, 2008). This yields 757 high-level and 1494 low-level matched firm-year observations between 2012 and 2015.<sup>8</sup>

We compare the market value of cash between the matched high-treatment (low-treatment) and control firms using the following equation:

$$\begin{aligned}
 r_{i,t} - R_{i,t}^B = & \alpha + \beta_1 \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} + \beta_2 \text{Post}_t * \text{High(Low)}_i * \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} \\
 & + \beta_3 \text{Post}_t * \text{High(Low)}_i + \beta_4 \text{Post}_t * \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} \\
 & + \beta_5 \text{High(Low)}_i * \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} + \gamma \frac{\Delta \text{Earn}_{i,t}}{M_{i,t-1}} \\
 & + \gamma_2 \frac{\Delta \text{NA}_{i,t}}{M_{i,t-1}} + \gamma_3 \frac{\Delta \text{Int}_{i,t}}{M_{i,t-1}} \\
 & + \gamma_4 \frac{\Delta \text{Div}_{i,t}}{M_{i,t-1}} + \gamma_5 \frac{\Delta \text{R\&D}_{i,t}}{M_{i,t-1}} \\
 & + \gamma_6 \frac{\text{Cash}_{i,t-1}}{M_{i,t-1}} + \gamma_7 \frac{\text{NF}_{i,t}}{M_{i,t-1}} \\
 & + \gamma_8 \text{Lev}_{i,t} + \gamma_9 \frac{\text{Cash}_{i,t-1}}{M_{i,t-1}} * \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} \\
 & + \gamma_{10} \text{Lev}_{i,t} * \frac{\Delta \text{Cash}_{i,t}}{M_{i,t-1}} + \mu_i + \theta_t + \varepsilon_{i,t}
 \end{aligned} \quad (2)$$

Similar to Equation (1), the dependent variable represents the excess return. High (Low) is the high-treatment (low-treatment) firm dummy, equalling 1 if the firm has one or more high-ranking (low-ranking only) political directors who resigned because of Regulation 18, and 0 otherwise. The post-treatment period is denoted as Post, with year and firm fixed effects captured by  $\mu_i$  and  $\theta_t$ , respectively.

Table 4 presents the results of the difference-in-differences regression. In column 1, the coefficient on High \* Post \*  $\Delta \text{Cash}/M$  is negative and statistically significant. The result suggests that after Regulation 18, firms with HRPDs saw a significant drop in cash value, reflecting lost political connections and an increased risk of cash mismanagement. In column 2, we extend our difference-in-differences sample period to between 2011 and 2016 and obtain similar results. Regarding the matched low-treatment sample in columns 3 and 4, the coefficients of interaction terms are both insignificant, indicating that after the regulatory change, the loss of LRPDs has no influence on the value of cash. The results provide robust evidence that the presence of

HRPDs benefits companies and helps them to optimize the perceived value of their cash holdings.<sup>9</sup>

### Ownership type

We next explore whether the effect of HRPDs on the cash value varies with company ownership. In Table 5, firms are grouped into state-owned and non-state-owned firms. In line with our H2, we observe the positive effect of HRPDs on the market value of cash only in the case of non-SOEs, as indicated by the positive coefficient of High\_PD\_Dummy \*  $\Delta \text{Cash}/M$  and High\_PD\_Fraction \*  $\Delta \text{Cash}/M$ . Specifically, in column 1 the marginal value of cash is about 0.451 CNY higher for non-SOEs with HRPDs. In column 3, a one-standard-deviation increase in High\_PD\_Fraction leads to a 0.182 CNY increase in the value of cash. Overall, our results support H2.

### Localized political pressure

In this section, we assess whether the relationship between cash value and political power is conditional on local political pressures. Cities with annual GDP growth below their sample medians – or fiscal deficit ratios above their sample medians – are categorized as high political pressure areas, and vice versa. Regression results in Table 6 show that the coefficients on High\_PD\_Fraction \*  $\Delta \text{Cash}/M$  and High\_PD\_Dummy \*  $\Delta \text{Cash}/M$  are positive and statistically significant in firms located in such high political pressure regions. Specifically, the marginal value of cash is about 0.423 CNY higher for firms with HRPDs in column 1, while a one-standard-deviation increase in High\_PD\_Fraction leads to a 0.204 CNY increase in the value of cash in column 3. In high fiscal deficit regions, the corresponding values are 0.077 CNY and 0.089 CNY in columns 5 and 7, respectively. These findings support H3, which posits that political power can enhance cash value, particularly in politically pressured regions.

### Agency conflicts

We next investigate the impact of HRPDs from the agency perspective. A firm is assigned to the strong (weak) agency conflict subgroup if excess control is above (below) the annual median value. Table 7 presents the subgroup analysis. We find that the coefficient of

<sup>8</sup>In Appendix Table A2, we report the univariate test of the difference in key variables for high-level and low-level matched groups.

<sup>9</sup>In the Online Appendix, we perform a dynamic difference-in-differences regression to test the pre-trend assumption. The coefficient estimates plotted in Figure OA.1 suggest a pre-existing similar trend between treated and control firms and exhibit a gradual reduction in the value of cash for high-treated firms compared to control firms following the regulatory shock.

Table 4. Effects of regulatory shock

	Excess return 2012–2015 (1)	Excess return 2011–2016 (2)	Excess return 2012–2015 (3)	Excess return 2011–2016 (4)
$\Delta$ Cash/M	2.236** (1.087)	1.439** (0.684)	1.665** (0.790)	1.547*** (0.472)
High * Post * $\Delta$ Cash/M	-2.189* (1.303)	-1.631* (0.926)		
High * $\Delta$ Cash/M	-0.231** (0.095)	0.067 (0.054)		
Post * $\Delta$ Cash/M	-0.169 (0.655)	-0.299 (0.435)		
High * Post	0.201 (1.230)	0.496 (0.833)		
Low * Post * $\Delta$ Cash/M			0.851 (0.803)	-0.127 (0.517)
Low * $\Delta$ Cash/M			0.024 (0.051)	-0.022 (0.040)
Post * $\Delta$ Cash/M			-0.210 (0.489)	-0.071 (0.319)
Low * Post			-0.634 (0.723)	0.118 (0.426)
$\Delta$ Earn/M	2.251*** (0.636)	1.751*** (0.414)	1.155*** (0.355)	1.690*** (0.290)
$\Delta$ NA/M	0.308* (0.177)	0.083 (0.119)	0.383** (0.156)	0.199** (0.093)
$\Delta$ Int/M	0.237 (1.806)	-2.669 (2.418)	-1.065 (1.641)	0.857 (1.586)
$\Delta$ Div/M	-0.981 (1.922)	1.743* (1.051)	-0.643 (1.250)	-0.096 (1.077)
L.Cash/M	2.254*** (0.389)	1.243*** (0.161)	1.576*** (0.228)	1.393*** (0.176)
NF/M	-0.068 (0.258)	-0.017 (0.192)	-0.143 (0.217)	-0.097 (0.130)
$\Delta$ R&D/M	-0.063 (0.132)	-0.078* (0.046)	-0.042 (0.075)	0.001 (0.029)
Lev	0.352 (0.348)	-0.084 (0.136)	0.447** (0.220)	0.062 (0.114)
$\Delta$ Cash/M * L.Cash/M	-1.692 (2.155)	-0.374 (1.352)	-0.822 (1.475)	0.517 (1.070)
Lev * $\Delta$ Cash/M	-0.683 (1.392)	0.054 (1.025)	-0.661 (0.742)	-1.428** (0.657)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Obs.	757	1097	1494	2184
R <sup>2</sup>	0.229	0.148	0.146	0.147

Note: This table reports the results of the difference-in-differences regressions that examine the effect of losing high- and low-ranking political directors on the market value of cash following the imposition of Regulation 18. Columns 1 and 3 show the results between 2012 and 2015, while columns 2 and 4 show the results between 2011 and 2016. High (low) is the high-treatment (low-treatment) firm dummy which equals 1 if the firm has one or more high-ranking (low-ranking only) political directors who resigned because of Regulation 18, and 0 otherwise. Post equals 1 for the post-treatment period, and 0 otherwise. Constants are included in the estimation but not reported. The robust standard errors clustered at the firm level are reported in parentheses. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively. All other variables are defined in Table 1.

the interaction term (High\_PD\_Dummy \*  $\Delta$ Cash/M) is positive and significant at the 10% level only in firms with strong agency conflicts. While the interaction term (High\_PD\_Fraction \*  $\Delta$ Cash/M) also carries a positive coefficient in column 4, the magnitude and significance levels are lower than those in column 3. In summary, our results demonstrate significant support for H4: when firms are exposed to acute agency conflicts, the

stronger reputational concerns and sense of responsibility of HRPDs motivate them to undertake diligent monitoring, increasing the value of cash.

#### The role of political director characteristics

We examine how political directors' characteristics moderate the link between political power and cash

Table 5. Ownership type

	Excess return		Excess return	
	Non-state firms (1)	State firms (2)	Non-state firms (3)	State firms (4)
$\Delta\text{Cash}/M$	1.850*** (0.232)	1.114*** (0.227)	1.913*** (0.226)	1.135*** (0.217)
High_PD_Dummy	-0.005 (0.015)	-0.013 (0.014)		
High_PD_Dummy * $\Delta\text{Cash}/M$	0.451*** (0.174)	0.179 (0.158)		
Low_PD_Dummy	-0.000 (0.010)	-0.008 (0.012)		
Low_PD_Dummy * $\Delta\text{Cash}/M$	0.003 (0.141)	0.043 (0.139)		
High_PD_Fraction			-0.087 (0.123)	-0.085 (0.125)
High_PD_Fraction * $\Delta\text{Cash}/M$			3.876*** (1.360)	2.110 (1.395)
Low_PD_Fraction			0.012 (0.052)	-0.064 (0.049)
Low_PD_Fraction * $\Delta\text{Cash}/M$			-0.763 (0.689)	0.055 (0.517)
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Obs.	9643	7063	9643	7063
R <sup>2</sup>	0.166	0.115	0.167	0.115

Note: This table reports the results of high- and low-ranking political directors by ownership type (state ownership and non-state ownership). High\_PD\_Dummy is a dummy variable which equals 1 if the highest political connection of the board is at the Bureau-Department level or higher (high ranking), and 0 otherwise. Low\_PD\_Dummy is a dummy variable which equals 1 if the firm has at least one low-ranking political director and no high-ranking directors. High\_PD\_Fraction and Low\_PD\_Fraction are percentages of high-ranking and low-ranking politically connected directors on the board, respectively. Constants and control variables are included in the estimation but not reported. The robust standard errors clustered at the firm level are reported in parentheses. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively. All other variables are defined in Table 1.

value. Specifically, we analyse directors' age, gender and tenure to estimate variations in reputational incentives and resource provision by HRPDs. We calculate the average tenure, age and percentage of female directors for high- and low-ranking directors, conducting a triple interaction terms regression analysis.

In column 1 of Table 8, the estimated coefficient on High\_PD\_Fraction \*  $\Delta\text{Cash}/M$  \* Characteristics\_for\_High\_PD is positive and statistically significant, suggesting that the positive impact of a high level of political power and cash value is stronger when the HRPDs are more experienced (have longer board tenures), probably due to their better understanding of the firm's operations and more effective resource provision and monitoring roles. Notably, the directors' age and gender do not significantly alter this relationship.

#### Investment efficiency

Our evidence on the importance of high-level political power for the value of cash indicates that the political influence of HRPDs may give them the ability to secure

extra investment opportunities, enabling firms to utilize cash more efficiently. To evaluate this contention, we assess investment efficiency by calculating the deviation of actual investments from expected levels (Biddle, Hilary and Verdi, 2009), using the following model:

$$\text{Investment}_{i,t} = \alpha + \beta_1 \Delta\text{Sales}_{i,t-1} + \varepsilon_{i,t} \quad (3)$$

where Investment is the sum of capital expenditure and R&D expenditure is scaled by the lagged value of total assets.  $\Delta\text{Sales}$  is the annual percentage change of sales. We then define Investment Efficiency as the absolute value of the residuals from model (3) multiplied by  $-1$ .

Next, we estimate the following model to investigate the effect of the presence of HRPDs and LRPDs on investment efficiency:

$$\text{Investment Efficiency}_{i,t} = \alpha + \beta_1 \text{High\_PD}_{i,t-1} + \beta_2 \text{Low\_PD}_{i,t-1} + \mathbf{X}_{i,t-1} \delta + \theta_t + \mu_i + \varepsilon_{i,t} \quad (4)$$

Table 9 reports the regression results of model (4). In columns 1 and 2, we observe strong evidence of a positive relationship between HRPDs and investment effi-

Table 6. Local political pressure

	Excess return		Excess return		Excess return		Excess return	
	Low GDP growth (1)	High GDP growth (2)	Low GDP growth (3)	High GDP growth (4)	High fiscal deficit (5)	Low fiscal deficit (6)	High fiscal deficit (7)	Low fiscal deficit (8)
ΔCash/M	1.277*** (0.278)	1.714*** (0.196)	1.363*** (0.272)	1.691*** (0.187)	1.461*** (0.212)	1.796*** (0.236)	1.434*** (0.206)	1.840*** (0.225)
High_PD_Dummy	-0.040** (0.018)	0.017 (0.016)			-0.010 (0.014)	0.009 (0.017)		
High_PD_Dummy * ΔCash/M	0.423* (0.237)	0.178 (0.144)			0.426*** (0.158)	-0.052 (0.185)		
Low_PD_Dummy	-0.009 (0.013)	-0.003 (0.012)			-0.008 (0.011)	-0.004 (0.013)		
Low_PD_Dummy * ΔCash/M	0.102 (0.166)	-0.089 (0.130)			-0.081 (0.129)	-0.000 (0.151)		
High_PD_Fraction			-0.336** (0.166)	0.216 (0.134)			-0.109 (0.118)	0.117 (0.153)
High_PD_Fraction * ΔCash/M			4.330** (1.839)	2.089* (1.215)			4.217*** (1.223)	0.375 (1.654)
Low_PD_Fraction			-0.013 (0.063)	-0.054 (0.055)			-0.064 (0.049)	-0.030 (0.060)
Low_PD_Fraction * ΔCash/M			-0.681 (0.743)	-0.441 (0.520)			-0.372 (0.555)	-0.680 (0.651)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	7495	9211	7495	9211	9460	7246	9460	7246
R <sup>2</sup>	0.139	0.137	0.140	0.136	0.118	0.146	0.119	0.147

Note: This table reports the results of high- and low-level political directors by regional expropriation risk measured by economic and fiscal conditions, as captured by the annual GDP growth and the fiscal deficit ratio at the municipal level. High\_PD\_Dummy is a dummy variable which equals 1 if the highest political connection of the board is at the Bureau-Department level or higher (high ranking), and 0 otherwise. Low\_PD\_Dummy is a dummy variable which equals 1 if the firm has at least one low-ranking political director. High\_PD\_Fraction and Low\_PD\_Fraction are percentages of high-ranking and low-ranking politically connected directors on the board, respectively. Constants and control variables are included in the estimation but not reported. The robust standard errors clustered at the firm level are reported in parentheses. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively. All other variables are defined in Table 1.

ciency, which is in line with our prediction that they have the power and desire to optimize performance. However, we find no evidence that low-ranking political directors are associated with investment efficiency. Overall, the findings support our contention that HRPDs can increase the value of a firm’s cash holdings through improved investment efficiency.

In this section, we use a more granular approach to explore the heterogeneous effects of political power. Specifically, we drill down to five major leadership ranks and regroup political directors into each tier in Table 10.<sup>10</sup> In column 1 we observe a positive and significant coefficient of Bureau-Department\_level\_Dummy \* ΔCash/M, indicating that Bureau-Department-level political directors drive the positive relationship between HRPDs and the market value of cash. In column 2 we obtain consistent results using an alternative

measure. Further results show that political directors from the Vice Bureau-Department to the Township-Division tiers have no effect on the market value of cash. Overall, these results support our segregation of HRPDs and LRPDs in the primary specification. This reinforces our finding that shareholders benefit only from the presence of highly ranked political directors, particularly those at the Bureau-Department level. In contrast, the presence of political directors from various lower-ranking tiers has no influence on cash value.

## Discussion and conclusion

Our paper investigates how hierarchical political power affects the market value of corporate cash holdings. Based on a sample of Chinese listed firms, we distinguish between two categories of directors: those with high-level and those with low-level political power, utilizing the hierarchical civil service system in China. We find that the value of cash increases when a firm appoints high-ranking political directors, particularly

<sup>10</sup>We also re-categorize political directors according to the ten leadership ranks, ranging from State to Vice Township-Division level. Our analysis consistently shows that the presence of Bureau-Department-level directors is associated with an increased market value of cash holdings.



Table 7. Agency conflicts

	Excess return		Excess return	
	Strong agency conflicts (1)	Weak agency conflicts (2)	Strong agency conflicts (3)	Weak agency conflicts (4)
$\Delta$ Cash/M	1.516*** (0.228)	1.662*** (0.223)	1.573*** (0.218)	1.632*** (0.214)
High_PD_Dummy	-0.014 (0.014)	-0.013 (0.017)		
High_PD_Dummy * $\Delta$ Cash/M	0.336* (0.187)	0.238 (0.163)		
Low_PD_Dummy	-0.006 (0.011)	-0.004 (0.012)		
Low_PD_Dummy * $\Delta$ Cash/M	0.048 (0.139)	-0.072 (0.139)		
High_PD_Fraction			-0.143 (0.114)	-0.072 (0.144)
High_PD_Fraction * $\Delta$ Cash/M			3.889** (1.509)	2.326* (1.293)
Low_PD_Fraction			-0.014 (0.053)	-0.027 (0.054)
Low_PD_Fraction * $\Delta$ Cash/M			-0.517 (0.596)	-0.187 (0.544)
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Obs.	8539	8167	8539	8167
R <sup>2</sup>	0.136	0.125	0.137	0.125

Note: This table reports the results of high- and low-level political directors conditional on agency conflicts. High\_PD\_Dummy is a dummy variable which equals 1 if the highest political connection of the board is at the Bureau-Department level or higher (high ranking), and 0 otherwise. Low\_PD\_Dummy is a dummy variable which equals 1 if the firm has at least one low-ranking political director. High\_PD\_Fraction and Low\_PD\_Fraction are percentages of high-ranking and low-ranking politically connected directors on the board, respectively. Constants and control variables are included in the estimation but not reported. The robust standard errors clustered at the firm level are reported in parentheses. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively. All other variables are defined in Table 1.

those at the Bureau-Department political rank, whereas investors are indifferent to the involvement of low-ranking political directors when evaluating a firm's cash holdings. Further analysis reveals that such effects are greater in non-SOEs, in regions where politicians face heightened political pressure and in firms with more pronounced agency conflicts. The results indicate that the power conferred on political directors according to their government ranking is an important factor in determining corporate wealth.

### Theoretical contributions

This study addresses the complex and inconclusive relationship between corporate outcomes and political directors, contributing to the literature in several ways.

First, we extend resource dependence theory by demonstrating how individual attributes of political directors, particularly their hierarchical political power, influence their ability to provide resources and shape corporate political strategies. Resource dependence theory posits that firms seek directors adept at managing government-firm interdependence (Pfeffer and Salancik, 1978). Appointing politicians to boards reduces un-

certainties, transaction costs and dependencies. Unlike previous studies that treat political directors as a homogeneous entity (Hillman, 2005; Zhu and Yoshikawa, 2016), our research shows that their hierarchical power plays a crucial role in their effectiveness at managing government-firm interdependencies.

Second, our findings advance the resource dependence literature by contextualizing the influence of political directors. Prior research has examined optimal scenarios for firms to benefit from board-level resource provisions, often focusing on internal contingency factors such as lifecycle stages (Lynall, Golden and Hillman, 2003; Zahra and Pearce, 1989) and firm size (Daily *et al.*, 2002), or external factors such as industry regulation and national institutions (Zattoni, Bozzolan and Di Donato, 2023). We introduce geographical location and ownership type as critical contextual factors affecting the role of political directors in resource provision. Our research shows that firms in regions with strong political pressure and non-SOEs benefit more from the political power of these directors.

Third, we integrate agency theory with resource dependence theory to advance the understanding of

Table 8. Political director characteristics

	Tenure Excess return (1)	Female director Excess return (2)	Age Excess return (3)
$\Delta$ Cash/M	1.559*** (0.160)	1.591*** (0.151)	1.594*** (0.156)
High_PD_Fraction	-0.102 (0.108)	-0.062 (0.090)	0.202 (0.530)
High_PD_Fraction * $\Delta$ Cash/M	3.227* (1.739)	3.048*** (1.014)	10.007 (6.527)
Characteristics_for_High_PD	0.000 (0.005)	0.067 (0.090)	0.000 (0.000)
High_PD_Fraction * Characteristics_for_High_PD	0.006 (0.036)	-0.680 (0.881)	-0.006 (0.010)
$\Delta$ Cash/M * Characteristics_for_High_PD	-0.145** (0.072)	-1.528 (1.807)	-0.002 (0.005)
High_PD_Fraction * $\Delta$ Cash/M * Characteristics_for_High_PD	1.033* (0.592)	13.304 (15.495)	-0.105 (0.118)
Low_PD_Fraction	-0.058 (0.210)	-0.040 (0.039)	-0.087* (0.045)
Low_PD_Fraction * $\Delta$ Cash/M	1.781 (2.467)	-0.802* (0.429)	-0.000 (0.704)
Low_Characteristics_for_Low_PD	-0.000 (0.000)	-0.009 (0.030)	-0.001 (0.003)
Low_PD_Fraction * Low_Characteristics_for_Low_PD	0.001 (0.004)	0.124 (0.215)	0.024 (0.016)
$\Delta$ Cash/M * Low_Characteristics_for_Low_PD	0.002 (0.002)	-0.127 (0.511)	-0.022 (0.035)
Low_PD_Fraction * $\Delta$ Cash/M * Low_Characteristics_for_Low_PD	-0.047 (0.046)	3.226 (2.923)	-0.091 (0.244)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Obs.	16,706	16,706	16,706
R <sup>2</sup>	0.126	0.126	0.126

Note: This table reports the results of regressions that examine the moderating effects of high- and low-level political directors' characteristics. High\_PD\_Fraction and Low\_PD\_Fraction are percentages of high-ranking and low-ranking politically connected directors on the board, respectively. In column 1, Characteristics\_for\_High\_PD is the average board tenure for high-ranking political directors. Characteristics\_for\_Low\_PD is the average board tenure for low-ranking political directors. In column 2, Characteristics\_for\_High\_PD is the average percentage of female high-ranking political directors. Characteristics\_for\_Low\_PD is the average percentage of female low-ranking political directors. In column 3, Characteristics\_for\_High\_PD is the average age of high-ranking political directors. Characteristics\_for\_Low\_PD is the average age of low-ranking political directors. Constants are included in the estimation but not reported. The robust standard errors clustered at the firm level are reported in parentheses. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively. All other variables are defined in Table 1.

board political capital. While both theories serve as principal frameworks for board dynamics, neither fully captures how boards operate in reality. Despite the conceptual work of Hillman and Dalziel (2003), limited empirical studies integrate both theories. Our research bridges this gap by examining political directors' dual roles, spanning the 'helping hand' resourcing role to the reputational role in internal monitoring. This integrated approach enhances our understanding of how political capital on boards affects corporate governance and investor perceptions, particularly in relation to cash management.

Lastly, our findings contribute to the cash holding literature by highlighting the role of board political power in effective cash management, which is crucial to a firm's success. In a perfect capital market, firms would

hold only the cash needed for immediate operating requirements, relying on external capital for investments. However, various frictions and information asymmetry make external capital costly and difficult to obtain (Leland and Pyle, 1977). Cash reserves are an essential hedge against shocks, capitalize on investment opportunities and minimize transaction costs (Myers and Majluf, 1984), although large cash holdings can lead to agency problems (Jensen and Meckling, 1976). Despite this, the influence of interactions between firms and the external environment, particularly governments, on the value of cash has been largely overlooked. We examine the interplay between political governance and traditional corporate governance mechanisms, highlighting how the political environment influences cash management. Specifically, the presence of certain political

Table 9. Investment efficiency

	Investment efficiency (1)	Investment efficiency (2)
High_PD_Fraction	0.086** (0.034)	
Low_PD_Fraction	-0.012 (0.015)	
High_PD_Dummy		0.006* (0.004)
Low_PD_Dummy		-0.004 (0.003)
Board size	-0.006 (0.010)	-0.006 (0.010)
Duality	-0.006 (0.004)	-0.006 (0.004)
SOE	0.008** (0.003)	0.008*** (0.003)
Cash flow	-0.006 (0.006)	-0.006 (0.006)
Firm age	-0.026* (0.015)	-0.026* (0.015)
Tangibility	-0.026*** (0.007)	-0.026*** (0.007)
Debt ratio	0.036*** (0.013)	0.036*** (0.013)
ROA	0.037*** (0.011)	0.037*** (0.011)
Firm FE	Yes	Yes
Year FE	Yes	Yes
Obs.	11,816	11,816
R <sup>2</sup>	0.135	0.134

Note: This table reports the results of high- and low-level political directors on investment efficiency. High\_PD\_Dummy is a dummy variable which equals 1 if the highest political connection of the board is at the Bureau-Department level or higher (high ranking), and 0 otherwise. Low\_PD\_Dummy is a dummy variable which equals 1 if the firm has at least one low-ranking political director and no high-ranking directors. High\_PD\_Fraction and Low\_PD\_Fraction are percentages of high-ranking and low-ranking politically connected directors on the board, respectively. All independent variables are lagged by 1 year. Constants are included in the estimation but not reported. The robust standard errors clustered at the firm level are reported in parentheses. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively. All other variables are defined in Table 1.

directors can enhance a firm's ability to secure resources, improve governance and capitalize on investment opportunities, thereby increasing the value of corporate cash.

### Managerial and policy implications

Our study on the impact of directors' political power offers crucial insights for governments, regulatory bodies and companies seeking to strengthen corporate governance and optimize investment and growth strategies. It reveals how political directors, particularly those with high-level political connections, help firms secure key investments and manage cash efficiently, enhancing the perceived market value of cash holdings. This insight

helps boards and management to craft better political strategies and governance practices.

Decision-makers must recognize the multi-faceted nature of political authority in their decision-making processes. Instead of regarding political directors as a single class, firms can benefit from a clearer understanding of the diverse attributes of each individual, cultivating those whose political ties can best augment corporate value and operational efficiency. Our research is relevant internationally, including centralized and hierarchical governance systems typical of emerging economies, and in developed economies where political connections are strategic business assets.

Whilst our attention in this study concentrates primarily on political directors, we believe that the dimensions of human and social capital discussed could potentially be applied to director candidates from a range of professional backgrounds, including those with expertise in accounting, finance and legal fields. By considering a wider range of directors' heterogeneous human and social capital, boards and top management teams can access a richer pool of knowledge and skills, enhancing corporate governance and decision-making.

### Limitations and future research

While a direct comparison between China's political system and that of developed Western countries is infeasible, our analysis of China's hierarchical power structure suggests that similar complications may exist in various constitutional frameworks worldwide. This implies a need for further research in diverse institutional contexts to explore and clarify these dynamics.

Nevertheless, caution must be exercised when generalizing these results to other settings. From an agency theory perspective, our study endeavours to shed light on the 'helping hand' provided by political directors, highlighting variations in monitoring incentives – as opposed to monitoring the abilities of high-ranking and low-ranking political directors. We argue that the ability of political directors to manipulate resources for personal gain is inconsistent across political hierarchical levels, as this is influenced by external contingencies such as geographical proximity to central government and the extent of information asymmetry. For instance, despite their lower rank and limited access to political resources, political directors in regions distant from Beijing may find it more feasible to pursue personal interests at the corporation's expense, given the less-developed infrastructural system in more remote regions. This calls for a careful consideration of the applicability of our findings beyond the specific institutional context of our study.

Table 10. Five-tier administrative hierarchy

	Excess return (dummy) (1)	Excess return (fraction) (2)
$\Delta$ Cash/M	1.585*** (0.155)	1.573*** (0.152)
Provincial-Ministerial_level	0.016 (0.026)	0.177 (0.243)
Provincial-Ministerial_level * $\Delta$ Cash/M	-0.234 (0.376)	-0.502 (3.251)
Bureau-Department_level	-0.014 (0.011)	-0.151 (0.092)
Bureau-Department_level * $\Delta$ Cash/M	0.374*** (0.126)	4.111*** (1.143)
Vice Bureau-Department_level	-0.011 (0.009)	-0.051 (0.076)
Vice Bureau-Department_level * $\Delta$ Cash/M	-0.074 (0.112)	-0.073 (0.803)
County-Section_level	0.003 (0.007)	-0.010 (0.045)
County-Section_level * $\Delta$ Cash/M	-0.053 (0.095)	-0.790 (0.507)
Township-Division_level	-0.015* (0.009)	-0.075 (0.061)
Township-Division_level * $\Delta$ Cash/M	-0.034 (0.112)	0.282 (0.811)
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Obs.	16,706	16,706
R <sup>2</sup>	0.126	0.126

*Note:* This table reports the results of heterogeneous political directors by a five-tier leadership hierarchy. In column 1, Vice Provincial-Ministerial level to Township level are five dummies. Provincial-Ministerial\_level\_Dummy equals 1 if the firm has at least one Provincial-Ministerial or Vice Provincial-Ministerial-level political director. Bureau-Department\_level\_Dummy equals 1 if the firm has at least one Bureau-Department-level political director. Vice Bureau-Department\_level\_Dummy equals 1 if the firm has at least one Vice Bureau-Department-level political director. County-Section\_level\_Dummy equals 1 if the firm has at least one County-Section or Vice County-Section-level political director. Township-Division\_level\_Dummy equals 1 if the firm has at least one Township-Division or Vice Township-Division-level political director. In column 2, hierarchy in political connection is measured by the percentage of Vice Provincial-Ministerial to Township-Division-level political directors. Vice Provincial-Ministerial\_level\_Fraction is the percentage of Vice Provincial-Ministerial-level political directors. Bureau-Department\_level\_Fraction is the percentage of Bureau-Department-level political directors. Vice Bureau-Department\_level\_Fraction is the percentage of Vice Bureau-Department-level political directors. County-Section\_level\_Fraction is the percentage of County-Section or Vice County-Section-level political directors. Township-Division\_level\_Fraction is the percentage of Township-Division or Vice Township-Division-level political directors. Constants and control variables are included in the estimation but not reported. The robust standard errors clustered at the firm level are reported in parentheses. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively. All other variables are defined in Table 1.

To measure the heterogeneity of political directors' political capital, we have adopted a dichotomous approach, classifying positions at the Bureau-Department level or above as indicative of greater political power and others as suggestive of a lower level of power. While our methodology aligns with established practices in the field (i.e. Fan, 2021), we acknowledge the potential endogeneity in the power dynamics attributed to political directors, which can be shaped by a range of individual characteristics (e.g. tenure in the political system). Our inability to access comprehensive director-level data limits our analysis, underscoring the need for future research to enhance the robustness of our empirical evaluations.

## References

- Acharya, V., S. A. Davydenko and I. A. Strebulaev (2012). 'Cash holdings and credit risk', *The Review of Financial Studies*, **25**, pp. 3572–3609.
- Adams, R. B. and D. Ferreira (2009). 'Women in the boardroom and their impact on governance and performance', *Journal of Financial Economics*, **94**, pp. 291–309.
- Aktas, N., C. Louca and D. Petmezas (2019). 'CEO overconfidence and the value of corporate cash holdings', *Journal of Corporate Finance*, **54**, pp. 85–106.
- Alimov, A. (2014). 'Product market competition and the value of corporate cash: evidence from trade liberalization', *Journal of Corporate Finance*, **25**, pp. 122–139.
- Allen, F., J. Qian and M. Qian (2005). 'Law, finance, and economic growth in China', *Journal of Financial Economics*, **77**, pp. 57–116.

- An, H., Y. Chen, D. Luo and T. Zhang (2016). 'Political uncertainty and corporate investment: evidence from China', *Journal of Corporate Finance*, **36**, pp. 174–189.
- Anderson, R. C., D. M. Reeb, A. Upadhyay and W. Zhao (2011). 'The economics of director heterogeneity', *Financial Management*, **40**, pp. 5–38.
- Arifin, T., I. Hasan and R. Kabir (2020). 'Transactional and relational approaches to political connections and the cost of debt', *Journal of Corporate Finance*, **65**, art. 101768.
- Atif, M., B. Liu and A. Huang (2019). 'Does board gender diversity affect corporate cash holdings?', *Journal of Business Finance & Accounting*, **46**, pp. 1003–1029.
- Biddle, G. C., G. Hilary and R. S. Verdi (2009). 'How does financial reporting quality relate to investment efficiency?', *Journal of Accounting and Economics*, **48**, pp. 112–131.
- Boyd, B. (1990). 'Corporate linkages and organizational environment: a test of the resource dependence model', *Strategic Management Journal*, **11**, pp. 419–430.
- Burak Güner, A., U. Malmendier and G. Tate (2008). 'Financial expertise of directors', *Journal of Financial Economics*, **88**, pp. 323–354.
- Caliendo, M. and S. Kopeinig (2008). 'Some practical guidance for the implementation of propensity score matching', *Journal of Economic Surveys*, **22**, pp. 31–72.
- Cao, J., X. Pan and G. Tian (2011). 'Disproportional ownership structure and pay–performance relationship: evidence from China's listed firms', *Journal of Corporate Finance*, **17**, pp. 541–554.
- Caprio, L., M. Faccio and J. J. McConnell (2013). 'Sheltering corporate assets from political extraction', *The Journal of Law, Economics, & Organization*, **29**, pp. 332–354.
- Chan, H. S. and E. L. Suizhou (2007). 'Civil service law in the People's Republic of China: a return to cadre personnel management', *Public Administration Review*, **67**, pp. 383–398.
- Chang, Y., X. Pan, J. Wang and Q. Zhou (2021). 'Depoliticization and corporate cash holdings: evidence from the mandated resignation of directors in China', *Journal of Corporate Finance*, **69**, art. 102004.
- Chen, C. J., Z. Li, X. Su and Z. Sun (2011). 'Rent-seeking incentives, corporate political connections, and the control structure of private firms: Chinese evidence', *Journal of Corporate Finance*, **17**, pp. 229–243.
- Chen, H., D. Yang, J. H. Zhang and H. Zhou (2020). 'Internal controls, risk management, and cash holdings', *Journal of Corporate Finance*, **64**, art. 101695.
- Chen, J., A. Garel and A. Tourani-Rad (2019). 'The value of academics: evidence from academic independent director resignations in China', *Journal of Corporate Finance*, **58**, pp. 393–414.
- Chen, T. and J. S. Kung (2016). 'Do land revenue windfalls create a political resource curse? Evidence from China', *Journal of Development Economics*, **123**, pp. 86–106.
- Cheung, Y. L., P. R. Rau and A. Stouraitis (2010). 'Helping hand or grabbing hand? Central vs. local government shareholders in Chinese listed firms', *Review of Finance*, **14**, pp. 669–694.
- Daily, C. M., P. P. McDougall, J. G. Covin and D. R. Dalton (2002). 'Governance and strategic leadership in entrepreneurial firms', *Journal of Management*, **28**, pp. 387–412.
- Denis, D. J. and V. Sibilkov (2010). 'Financial constraints, investment, and the value of cash holdings', *The Review of Financial Studies*, **23**, pp. 247–269.
- Dittmar, A. and J. Mahrt-Smith (2007). 'Corporate governance and the value of cash holdings', *Journal of Financial Economics*, **83**, pp. 599–634.
- Drobetz, W., M. C. Grüninger and S. Hirschvogel (2010). 'Information asymmetry and the value of cash', *Journal of Banking & Finance*, **34**, pp. 2168–2184.
- Du, X., Q. Zeng and Y. Du (2014). 'Do politically connected independent directors help Chinese listed private firms enter high-barrier industries?', *China Accounting and Finance Review*, **4**, pp. 1–60.
- Faccio, M. (2010). 'Differences between politically connected and non-connected firms: a cross-country analysis', *Financial Management*, **39**, pp. 905–928.
- Fama, E. F. and K. R. French (1993). 'Common risk factors in the returns on stocks and bonds', *Journal of Financial Economics*, **33**, pp. 3–56.
- Fama, E. F. and M. C. Jensen (1983). 'Separation of ownership and control', *The Journal of Law and Economics*, **26**, pp. 301–325.
- Fan, J. (2021). 'The effect of regulating political connections: evidence from China's board of directors ban', *Journal of Comparative Economics*, **49**, pp. 553–578.
- Faulkender, M. and R. Wang (2006). 'Corporate financial policy and the value of cash', *The Journal of Finance*, **61**, pp. 1957–1990.
- Fich, E. M. and A. Shivdasani (2007). 'Financial fraud, director reputation, and shareholder wealth', *Journal of Financial Economics*, **86**, pp. 306–336.
- Fiegen, M. K., B. M. Brown, D. R. Dreux and W. J. Dennis Jr (2000). 'The adoption of outside boards by small private US firms', *Entrepreneurship & Regional Development*, **12**, pp. 291–309.
- Firth, M., P. M. Fung and O. M. Rui (2006). 'Corporate performance and CEO compensation in China', *Journal of Corporate Finance*, **12**, pp. 693–714.
- Goldman, E., J. Rocholl and J. So (2009). 'Do politically connected boards affect firm value?', *The Review of Financial Studies*, **22**, pp. 2331–2360.
- Goldman, E., J. Rocholl and J. So (2013). 'Politically connected boards of directors and the allocation of procurement contracts', *Review of Finance*, **17**, pp. 1617–1648.
- Green, S. (2013). 'What makes 10 million local government officials tick?'. Research Report, Standard Chartered Bank. Available at <http://new.cf40.org.cn/plus/view.php?aid=7457> [accessed 21 June 2020].
- Gu, Z., S. Tang and D. Wu (2020). 'The political economy of labor employment decisions: evidence from China', *Management Science*, **66**, pp. 4703–4725.
- Guo, H., C. Yin and Y. Zeng (2023). 'How does firm-specific investor sentiment affect the value of corporate cash holdings?', *British Journal of Management*, **34**, pp. 410–441.
- Hao, Y. and J. Lu (2018). 'The impact of government intervention on corporate investment allocations and efficiency: evidence from China', *Financial Management*, **47**, pp. 383–419.
- Hill, M. D., K. P. Fuller, G. W. Kelly and J. O. Washam (2014). 'Corporate cash holdings and political connections', *Review of Quantitative Finance and Accounting*, **42**, pp. 123–142.
- Hillman, A. J. (2005). 'Politicians on the board of directors: do connections affect the bottom line?', *Journal of Management*, **31**, pp. 464–481.
- Hillman, A. J., A. A. Cannella and R. L. Paetzold (2000). 'The resource dependence role of corporate directors: strategic adaptation of board composition in response to environmental change', *Journal of Management Studies*, **37**, pp. 235–256.
- Hillman, A. J. and T. Dalziel (2003). 'Boards of directors and firm performance: integrating agency and resource dependence perspectives', *Academy of Management Review*, **28**, pp. 383–396.
- Hillman, A. J., G. Nicholson and C. Shropshire (2008). 'Directors' multiple identities, identification, and board monitoring and resource provision', *Organization Science*, **19**, pp. 441–456.
- Hu, R., K. Karim, K. J. Lin and J. Tan (2020). 'Do investors want politically connected independent directors? Evidence from their forced resignations in China', *Journal of Corporate Finance*, **61**, art. 101421.
- Jensen, M. C. and W. H. Meckling (1976). 'Theory of the firm: managerial behavior, agency costs and ownership structure', *Journal of Financial Economics*, **3**, pp. 305–360.
- Jiang, F. and K. A. Kim (2020). 'Corporate governance in China: a survey', *Review of Finance*, **24**, pp. 733–772.
- Jiang, W., H. Wan and S. Zhao (2016). 'Reputation concerns of independent directors: evidence from individual director voting', *The Review of Financial Studies*, **29**, pp. 655–696.

- Kim, C. and L. Zhang (2016). 'Corporate political connections and tax aggressiveness', *Contemporary Accounting Research*, **33**, pp. 78–114.
- Kumar, P. and A. Zattoni (2018). 'Corporate governance, boards of directors, and firm performance: avenues for future research', *Corporate Governance: An International Review*, **26**, pp. 394–396.
- Leland, H. E. and D. H. Pyle (1977). 'Informational asymmetries, financial structure, and financial intermediation', *The Journal of Finance*, **32**, pp. 371–387.
- Li, Y., X. Xu and W. Gan (2018). 'Political extraction and corporate cash holdings in China', *Asian-Pacific Economic Literature*, **32**, pp. 76–94.
- Lin, K., J. D. Piotroski, Y. G. Yang and J. Tan (2012). 'Voice or exit? Independent director decisions in an emerging economy'. Available at SSRN: <https://ssrn.com/abstract=2166876>.
- Liu, Y., M. K. Miletkov, Z. Wei and T. Yang (2015). 'Board independence and firm performance in China', *Journal of Corporate Finance*, **30**, pp. 223–244.
- Lynall, M. D., B. R. Golden and A. J. Hillman (2003). 'Board composition from adolescence to maturity: a multitheoretic view', *Academy of Management Review*, **28**, pp. 416–431.
- Myers, S. C. and N. S. Majluf (1984). 'Corporate financing and investment decisions when firms have information that investors do not have', *Journal of Financial Economics*, **13**, pp. 187–221.
- Pfeffer, J. and G. R. Salancik (1978). *The External Control of Organizations: A Resource Dependence Perspective*. Redwood City, CA: Stanford Business Books.
- Rapp, M. S., T. Schmid and D. Urban (2014). 'The value of financial flexibility and corporate financial policy', *Journal of Corporate Finance*, **29**, pp. 288–302.
- Shi, H., H. Xu and X. Zhang (2018). 'Do politically connected independent directors create or destroy value?', *Journal of Business Research*, **83**, pp. 82–96.
- Shleifer, A. and R. W. Vishny (1994). 'Politicians and firms', *The Quarterly Journal of Economics*, **109**, pp. 995–1025.
- Sun, P., H. W. Hu and A. J. Hillman (2016). 'The dark side of board political capital: enabling blockholder rent appropriation', *Academy of Management Journal*, **59**, pp. 1801–1822.
- Sun, P., K. Mellahi, M. Wright and H. Xu (2015). 'Political tie heterogeneity and the impact of adverse shocks on firm value', *Journal of Management Studies*, **52**, pp. 1036–1063.
- Sun, W., C. Yin and Y. Zeng (2022). 'Financial hedging, corporate cash policy, and the value of cash', *British Journal of Management*, **33**, pp. 1271–1303.
- Von Meyerinck, F., D. Oesch and M. Schmid (2016). 'Is director industry experience valuable?', *Financial Management*, **45**, pp. 207–237.
- Wang, L. (2015). 'Protection or expropriation: politically connected independent directors in China', *Journal of Banking & Finance*, **55**, pp. 92–106.
- Wang, Q., T. J. Wong and L. Xia (2008). 'State ownership, the institutional environment, and auditor choice: evidence from China', *Journal of Accounting and Economics*, **46**, pp. 112–134.
- Wang, X. and T. Xu (2022). 'Pay of political directors in China', *Pacific-Basin Finance Journal*, **74**, art. 101803.
- Ward, C., C. Yin and Y. Zeng (2018). 'Institutional investor monitoring motivation and the marginal value of cash', *Journal of Corporate Finance*, **48**, pp. 49–75.
- Williamson, O. E. (1991). 'Economic institutions: spontaneous and intentional governance', *The Journal of Law, Economics, and Organization*, **7**, pp. 159–187.
- Wu, W., C. Wu and O. M. Rui (2012). 'Ownership and the value of political connections: evidence from China', *European Financial Management*, **18**, pp. 695–729.
- Xu, N., Q. Chen, Y. Xu and K. C. Chan (2016). 'Political uncertainty and cash holdings: evidence from China', *Journal of Corporate Finance*, **40**, pp. 276–295.
- Yermack, D. (2004). 'Remuneration, retention, and reputation incentives for outside directors', *The Journal of Finance*, **59**, pp. 2281–2308.
- Yu, X. and P. Wang (2020). 'Government control and the value of cash: evidence from listed firms in China', *Review of Quantitative Finance and Accounting*, **55**, pp. 1341–1369.
- Zahra, S. A. and J. A. Pearce (1989). 'Boards of directors and corporate financial performance: a review and integrative model', *Journal of Management*, **15**, pp. 291–334.
- Zattoni, A., S. Bozzolan and F. Di Donato (2024). 'Political directors and company performance: an empirical investigation of industry-level and country-level moderating effects', *European Management Review*, **21**, pp. 337–357.
- Zhang, K. and C. Truong (2019). 'What's the value of politically connected directors?', *Journal of Contemporary Accounting & Economics*, **15**, art. 100161.
- Zhu, H. and T. Yoshikawa (2016). 'Contingent value of director identification: the role of government directors in monitoring and resource provision in an emerging economy', *Strategic Management Journal*, **37**, pp. 1787–1807.

Jia Liu is Professor of Accounting and Finance. Her research covers corporate finance, sustainable finance and accounting, governance and accountability and their roles in society and social value, informing public policy. She publishes in the *Journal of Business Ethics*, *Journal of Corporate Finance*, among others, and books on governance, sustainability and decision-making. Her research has won Best Paper Award, including the British Academy of Management (UK) and Southwestern Finance Association (US), and is featured in media such as *The Conversation* and Nasdaq News.

Oleksandr Talavera is Professor of Financial Economics in the Department of Economics, Birmingham Business School, University of Birmingham. He is broadly interested in empirical corporate finance, online prices, big data analytics, banking, international finance and emerging market economies. He has published in world-leading and internationally renowned journals (e.g. *American Economic Review*, *Journal of European Economic Association*, *Journal of Corporate Finance*, *Journal of Banking and Finance*).

Shuxing Yin is Professor of Finance at the University of Sheffield. Her main research interests are in the areas of corporate finance and corporate governance. She has published many articles in internationally renowned journals, such as the *Journal of Corporate Finance*, *Journal of Futures Market*, *Journal of Empirical Finance*, *Cambridge Journal of Economics*, *Journal of International Money and Finance* and *Human Resource Management*. Her research has been funded by the British Academy and the UK Economic and Social Research Council.

Mao Zhang is Lecturer in Banking and Finance at the Department of Finance, University of St Andrews. Her research interests are in the areas of empirical corporate finance, corporate governance, big data analytics and banking. She has published in the *Journal of Empirical Finance*, *Journal of Comparative Economics* and *International Business Review*.

## Supporting Information

Additional supporting information can be found online in the Supporting Information section at the end of the article.