Journal of Corporate Finance 99 (2026) 103007

Contents lists available at ScienceDirect

Journal of Corporate Finance

journal homepage: www.elsevier.com/locate/jcorpfin

Political network and muted insider trading

Wei Chen [a], Xian Gu [b], Iftekhar Hasan [c,*], Hao Zhao [b], Yun Zhu [d]

[a] Microsoft, 11 Times Sq, New York, NY 10036, United States
[b] Department of Finance, Durham University Business School, Durham University, Mill Hill Lane, Durham DH1 3LB, United Kingdom
[c] Fordham University, Bank of Finland, and University of Sydney, 45 Columbus Avenue, New York, NY 10023, United States
[d] The Peter J. Tobin College of Business, St. John's University, 101 Astor Place, New York, NY 10003, United States

ARTICLE INFO

Editor: E Lyandres

JEL code:
G14
G38
D72
L14

Keywords:
Political network
Insider trading
State ownership
Informal governance

ABSTRACT

This paper examines how political networks influence insider trading in China. Using biographical data to construct chairman–politician social networks, we find that firms with stronger political networks engage in significantly less insider trading. The effect is stronger for non-state-owned enterprises (non-SOEs) and for long-standing or high-ranking connections. The *muted* trading persists during periods when insiders possess valuable private information, including prior to M&A announcements and major policy events. The evidence suggests that personal political networks function as informal governance mechanisms that discipline managerial opportunism when formal governance through state ownership is absent.

1. Introduction

Political networks between private firms and politicians constitute relational contracts, an informal agreement sustained by the value of future relationships rather than legal enforcement (Baker et al., 2002). Firms benefit by maintaining the relational contracts, including lower cost of capital (Francis et al., 2014; Waisman et al., 2015; Çolak et al., 2017; Ashraf and Shen, 2019; Datta et al., 2019; Kaviani et al., 2020), more government investment and preferable policy (Goldman et al., 2009; Cohen et al., 2011; Duchin and Sosyura, 2012), better information transmission (Acemoglu et al., 2016; Gao and Huang, 2016), reduced litigation risk (Yu and Yu, 2011; Kim and Zhang, 2016; Fisman and Wang, 2015, 2017; Jia and Nie, 2017), and better firm performance (Faccio, 2006; Cooper et al., 2010; Zhou, 2017).

However, political connections also impose reciprocal obligations. Corporate financial policy is constrained by the need to honor "implicit claims" held by non-investor stakeholders, including connected politicians (Cornell and Shapiro, 1987). The favorable treatment a firm receives generates an expectation of reciprocity. In a democratic society where political support is often transactional, such reciprocity typically takes explicit forms, including campaign contributions and lobbying expenditures. Politicians may also pressure affiliated firms to deploy corporate resources in ways that enhance electoral prospects, often at the expense of firm efficiency, leading to lower profits (Faccio, 2006) or altered employment decisions to boost regional job numbers during election years (Bertrand

* Corresponding author.
E-mail addresses: wchen84@fordham.edu (W. Chen), xian.gu@durham.ac.uk (X. Gu), ihasan@fordham.edu (I. Hasan), hao.zhao@durham.ac.uk (H. Zhao), zhuy@stjohns.edu (Y. Zhu).

https://doi.org/10.1016/j.jcorpfin.2026.103007
Received 21 September 2025; Received in revised form 22 March 2026; Accepted 6 April 2026
Available online 7 April 2026

et al., 2018).

The trade-off is both more pronounced and more subtle in China where institutional voids and the absence of standardized lobbying channels fundamentally alter the nature of political capital. Political connections are not transactional assets renewed through electoral cycles; they are highly illiquid, relationship-specific assets that require long-term cultivation.[1] Their replacement cost is therefore exceptionally high. As a result, the implicit claims imposed on firms extend beyond financial transfers to behavioral compliance and reputational alignment.[2] Because politicians face significant career risk, even allegations of misconduct by an affiliated firm can threaten their advancement.[3] This counterparty risk gives politicians a powerful implicit claim over connected firms, operating as an *informal* governance mechanism (Jiang and Kim, 2020). To preserve the value of this illiquid political asset, managers must avoid actions that could trigger regulatory scrutiny, as any investigation may destroy the political capital embedded in the relationship.

In this paper, we investigate the *informal* governance of relational contracts through the lens of insider trading.[4] This setting offers a sharp theoretical tension: while equity compensation is designed to align managerial interests, superior information often tempts managers toward opportunism. Existing literature suggests that political connections can weaken external enforcement by *shielding* insiders from regulatory or litigation risk,[5] allowing them to time trades for maximum profit (e.g., Bourveau et al., 2016). However, within the highly illiquid relational contracts in China, we posit that managers will suppress insider trading, not merely as compliance, but as a voluntary bonding cost (Jensen and Meckling, 1976) incurred to guarantee the integrity of the political alliance. China's unique compensation structure offers an optimal setting for our test. On the one hand, Chinese managers receive significantly lower compensation than their U.S. counterparts (Conyon and He, 2011), creating a strong financial incentive to seek extra compensation through insider trading. On the other hand, the pervasive implicit state control and the potential pathway for managers to transition into political careers (Cao et al., 2019) elevate the value of political reputation. This setting allows us to isolate the *disciplinary* role of political networks from the *shielding* effect.

We first build a firm's political network based on social networks between its chairman and politicians using biographical data, rather than relying on coarse proxies like state ownership.[6] This enables us to capture detailed information on political connections, including the type and duration of political linkages, the rank of connected politicians, etc. We find that a stronger political network discourages insider trading, in contrast to the prevailing view that connections act as a litigation shield that encourages opportunism (e.g., Bourveau et al., 2016). The effect is also economically substantial: for example, a one-standard-deviation increase in network links (equivalent to connections to 164 additional politicians) is associated with a 21.8% decrease in trading shares. Consistent with our relational contract framework, this suppression effect is most pronounced in non-SOEs and among long-standing or high-ranking ties where the "bonding cost" is highest. These patterns suggest that managers internalize the value of political capital and rationally trade off private trading gains against the risk of jeopardizing the political alliance.

We exploit two shocks to firms' political ties and one shock to enforcement risk to identify the disciplinary effect of political network on insider trading. The first two shocks alter the strength or structure of political networks. (i) Turnovers of provincial governors and party secretaries, which are centralized personnel decisions by the CCP that exogenously reshape local networks and bring direct shocks to how existing ties operate; and (ii) promotion-driven increases in high-level political networks within a chairman's tenure, where a connected politician is elevated to a higher-level position under CCP personnel adjustments, mechanically increasing the value of the connection without being driven by firm behavior. The third shock affects enforcement intensity. (iii) Scheduled provincial inspection visits by the Central Commission for Discipline Inspection (CCDI) generate temporary periods of heightened political scrutiny, increasing the reputational and regulatory risks faced by connected firms.

Across all three settings, the same logic applies: when political networks become more valuable, more uncertain, or more exposed to scrutiny, the continuation value of the relational contract rises, strengthening managerial incentives to avoid opportunistic trading. In each case, we observe significantly lower insider trading among politically connected firms. The results are robust across specifications.

We further validate the disciplinary mechanism by examining high-stakes scenarios where the temptation for informed trading is

[1] A Chinese career politician navigating a centralized career path within the Chinese Communist Party (CCP), where appointments and promotions are determined by organizational bureaucracy. Under optimal conditions, it takes 25 to 30 years for an entry-level official to reach provincial leadership. For example, President Xi Jinping joined the CCP in 1974, began working in the State Council in 1979, and attained the rank of provincial minister in 2002 as Party Secretary of Zhejiang Province. This trajectory took 23 years.

[2] Political connections can induce inefficiencies such as higher tax and infrastructure burdens (Jian et al., 2012; Lei, 2023), executive entrenchment and nepotism (You and Du, 2012; Cao et al., 2017; Colonnelli et al., 2020), or costly social and business transactions (Fan et al., 2007; Zhang et al., 2016; Lei and Nugent, 2018).

[3] We collected 22 cases where legal investigations began with executive misconduct, including insider trading, illegal operations, bribery, and abuse of power (Online Appendix Table B.1). These probes extended to connected politicians, most of whom faced criminal charges and fines. In all cases, their political careers ended.

[4] Online Appendix Section OA-1 provides institutional details on China's insider trading legal framework under the Securities Law and Criminal Law, and documents the evolution of CSRC enforcement statistics.

[5] U.S. evidence links insider trading to social ties (Ahern, 2017), audit dates (Arif et al., 2022), and pre-disclosure debt violations (Griffin et al., 2014), while Correia (2014) notes that political connections reduce enforcement risk. Globally, laws differ from enforcement; Bhattacharya and Daouk (2002) note that global enforcement lags behind legislation. Despite U.S. regulations (est. 1934) and internal firm controls (Bettis et al., 2000; Jagolinzer et al., 2020), insider trading accounted for 10% of 2018 SEC enforcement actions.

[6] In China, political ties are commonly measured by state ownership (e.g., Dollar and Wei, 2007; Hsieh and Song, 2015; Harrison et al., 2019; Jiang and Kim, 2020), or by whether the CEO or chairman has served as a government official (e.g., Fan et al., 2007).

particularly strong.[7] Our framework predicts that if political ties operate through the preservation of relational capital, connected managers should be most restrained precisely when private trading gains are largest. We therefore analyze trading behavior during the sensitive window prior to M&A announcements and the period following the November 2008 *"Four-Trillion"* Stimulus Plan, where connected insiders likely possessed superior private information. In both instances, stronger political networks are associated with reduced trading activity. This suggests that managers voluntarily forgo substantial trading gains during sensitive periods to avoid the appearance of impropriety, highlighting the role of political networks as a mechanism of *informal* governance that disciplines managerial opportunism even when formal legal constraints may be weak.

We further examine potential economic outcomes associated with restrained insider trading within political networks. Specifically, we analyze firm growth, performance, and government subsidies. The interaction between strong political networks and restrained insider trading is positive across these outcomes and statistically significant for government subsidies among non-SOEs. In contrast, the corresponding effects are small and statistically insignificant for SOEs, where formal governance through state ownership is already in place. These patterns are consistent with our interpretation that personal political connections operate as implicit relational contracts: when managers refrain from opportunistic trading, firms may be better positioned to sustain valuable political relationships and access associated benefits.

Overall, this study offers a generalized framework for understanding the role of informal governance through political networks in China. We show that in environments characterized by institutional voids, political networks function not merely as transactional ties, but as binding relational contracts. We find that firms with stronger political networks actively refrain from insider trading. This suppression represents a voluntary bonding cost incurred to honor the implicit covenants of the alliance and mitigate counterparty risk for political patrons. More broadly, these findings suggest that informal governance through chairmen's personal political networks can discipline managerial opportunism in firms where formal governance through state ownership is absent.

Our study makes two distinct contributions to the literature. First, we contribute to the literature on informal governance and managerial discipline through political networks, adding to the well-documented corporate governance mechanisms (Jiang and Kim, 2020). While existing work emphasizes ownership structure, boards, incentives, and legal enforcement as mechanisms that constrain managerial behavior (e.g., Cull and Xu, 2005; Giannetti et al., 2015; Groves et al., 1994; La Porta et al., 1997), we show that relational contracts with powerful non-investor stakeholders can discipline managers even in the absence of formal control rights. Managers internalize the continuation value of these relationships and voluntarily forgo private financial benefits to preserve them. Importantly, this governance mechanism is fully consistent with prior evidence that political connections deliver economically valuable benefits, such as preferential access to credit and government resources (Faccio, 2006; Duchin and Sosyura, 2012), as well as China-based evidence that political ties strengthen property rights enforcement, reduce reputational scrutiny, and improve acquisition outcomes (Miao et al., 2024; Schweizer et al., 2025; Brahma et al., 2023). These benefits enhance the continuation value of political relationships and thereby strengthen, rather than weaken, the incentives for managers to behave conservatively. In this sense, the disciplining role of political networks arises precisely because political connections are economically valuable, not despite it.

Second, our results complement the prevailing *political shield* hypothesis in the law and finance literature. The consensus in Western contexts is that political ties reduce enforcement risk, effectively subsidizing insider trading (Bourveau et al., 2016; Jagolinzer et al., 2020). We document the opposite in China where political networks act as a binding constraint (Jensen and Meckling, 1976). We show that in regimes characterized by centralized political careers and high counterparty risk, the fear of reputational contagion compels connected managers to trade less than their unconnected peers, to signal reliability. This reversal contributes to the literature by establishing that the interaction between politics and financial misconduct is not universal but varies across institutional settings.

The rest of the paper proceeds as follows. In section 2 we review related theoretical frameworks and propose testable hypotheses. We cover the data, key measurements, and the sample in section 3. In section 4 we present the main results, conduct robustness checks, and investigate and discuss the underlying mechanisms for the main findings. Section 5 concludes.

2. Theoretical framework and hypotheses

Standard corporate finance theory views insider trading as a form of managerial rent extraction that arises when insiders possess superior information and face imperfect monitoring (Leland, 1992; Denis and Xu, 2013).[8] Managers trade off the private benefits from exploiting informational advantages against the expected costs of detection, including regulatory enforcement, litigation risk, and reputational damage. While firms adopt internal policies to mitigate this risk (Bettis et al., 2000; Jagolinzer et al., 2011), the

[7] Note that this paper does not intend to locate the information channel across private and public sectors, as Jagolinzer et al. (2020) have pinpointed a relation between political connections and informed trading during the period in which Troubled Asset Relief Program (TARP) funds were disbursed.

[8] In the U.S., illegal insider trading involves trading on material nonpublic information in breach of a fiduciary duty (Section 10(b), Securities Exchange Act of 1934). The "abstain or disclose" rule emerged in SEC v. Cady, Roberts & Co. (1961) and was affirmed in SEC v. Texas Gulf Sulphur Co. (1968), though later narrowed to fiduciary relationships (e.g., Chiarella v. U.S., 1980; Dirks v. SEC, 1983). The 1988 Insider Trading and Securities Fraud Act substantially increased penalties and authorized informant rewards, while 2000 regulations extended coverage to independent analysts.

enforcement of insider trading remains inconsistent, often depending on the insider's ability to shield their activities from scrutiny.[9][10]

A prominent strand of the literature argues that political connections weaken these constraints by reducing expected enforcement costs. In this *political shield* view, political capital lowers the probability of investigation or the severity of penalties, thereby expanding insiders' opportunity set for informed trading. Consistent with this perspective, prior studies show that politically connected firms face weaker regulatory scrutiny and benefit from reduced detection or prosecution risk, particularly during periods of heightened information asymmetry (Yu and Yu, 2011; Kim and Zhang, 2016; Bourveau et al., 2016). Under this framework, political connections effectively subsidize insider trading by lowering its expected cost.

However, this interpretation treats political connections as a static source of protection. In many settings, especially where political access is relationship-specific and not governed by transparent, repeatable market mechanisms, political capital is a dynamic, fragile and high-value asset that imposes strict behavioral constraints on managers. To capture this alternative mechanism, we draw on the theory of *relational contracts* (Baker et al., 2002) and interpret political networks as informal governance arrangements sustained by the value of future interaction rather than legal enforcement. In this framework, private firms rely on ongoing relationships with politicians to secure regulatory accommodation, access to resources, or policy stability. These relationships resemble non-integrated relational contracts, that is, the firm does not internalize political authority (as in state ownership), but instead depends on repeated interaction with external counterparts.[11] Because such contracts are self-enforcing, their continuation depends on each party's confidence that the other will not engage in actions that jeopardize the relationship. This creates an incentive for the firm's manager to incur bonding costs[12] to sustain the relationship over time (Jensen and Meckling, 1976), in the form of voluntary actions that credibly signal restraint and reliability.

From the manager's perspective, insider trading is particularly salient in this setting. While informed trading offers immediate private benefits, it also generates non-diversifiable counterparty risk for connected politicians in the form of regulatory scrutiny and reputational spillovers. When political relationships are valuable but fragile, even a small probability of scandal can impose large expected losses by threatening the continuation value of the relationship. As such, managers may optimally suppress insider trading as a form of bonding, voluntarily forgoing trading profits to reduce the risk of actions that could be perceived as opportunistic or improper by political counterparts.

This disciplining effect is expected to be strongest when political relationships are (i) relationship-specific rather than transactional, (ii) costly to replace, and (iii) associated with high reputational sensitivity. Under these conditions, political connections do not function as a shield against enforcement but instead raise the shadow cost of managerial misconduct. Importantly, this mechanism generates predictions that contrast sharply with the political shield hypothesis, even though both operate through political connections.

These two competing frameworks yield opposite empirical implications for insider trading behavior. If political networks primarily reduce enforcement risk, politically connected managers should trade more aggressively, particularly when private information is most valuable. Conversely, if political networks function as relational contracts that require bonding, stronger political connections should be associated with more restrained insider trading.

H1a (Political shield): Stronger political networks are associated with more active insider trading.

H1b (Relational contract): Stronger political networks are associated with more restrained insider trading.

The distinction between these mechanisms is particularly sharp during periods of elevated information asymmetry, when the private gains from informed trading are highest but so are the potential reputational and regulatory consequences. If political connections primarily lower enforcement risk, connected insiders should increase trading intensity during such periods. If, instead, political networks impose bonding requirements, connected insiders should further suppress trading to avoid actions that could endanger the relationship.

H1a (Political shield): Stronger political networks are associated with more active trading when insiders possess superior private information.

H1b (Relational contract): Stronger political networks are associated with more restrained trading when insiders possess superior private information.

[9] In the U.S., SEC Rule 10b5–1 (2000) allows insiders of public firms to prearrange share sales. It permits selling a set number of shares at a set time. Many executives adopt these plans to avoid insider trading claims. They must also file Form 144 when planning to sell over 5000 shares or more than $50,000 within any three-month period.

[10] For example, in the 2018 annual report for the SEC's division of enforcement, only 56 individuals allegedly misappropriated or traded unlawfully on material, nonpublic information.

[11] Note that politicians do not impose explicit disciplinary rules on their private sector allies, such as restrictions on insider trading. Discipline operates more subtly; politicians align more with those who understand and follow implicit norms.

[12] In the context of the Chinese political economy, this bonding cost is exceptionally high due to the counterparty risk faced by the politician. Career politicians in China operate within a centralized career path where even rumors of misconduct can terminate a carefully cultivated career. As documented in our hand-collected sample of 22 cases (see Online Appendix Table B.1), investigations into corporate executives frequently escalate into political purges that end the careers of connected officials.

3. Data and summary statistics

3.1. Sample construction

We compile data from multiple sources. Politician profiles come from the Chinese Political Elite Database (CPED), which provides biographical characteristics, education, and work histories for over 4000 politicians at the central, provincial, city, and county levels from the late 1990s to 2015.[13] Chairman CVs for Chinese listed firms (1990–2017) and insider-trading records (2007–2017) come from the iFind Database. We focus on chairmen rather than CEOs, because in Chinese listed firms, the board chair typically performs an executive role and is widely viewed as the primary decision-maker (e.g., Chen et al., 2006). Firm financial data are from CSMAR and iFind. In constructing the firm-year panel, we match insider trading in year *t* with political-network measures and other firm information in year *t-1*. The merged data yield a firm-year panel of 2216 listed firms from 2007 to 2017.

3.1.1. Measuring chairman's political network

Chairman CVs from iFind cover 2834 listed firms by 2017, and contain biographical information including name, gender, nationality, date of birth, education histories with start/end dates for each institution, as well as work histories with start/end dates for each position. Given these CVs are unstructured text, we use text-mining algorithms to process the original files and extract the variables used in the analyses.

Politician CVs from CPED are structured and cover 4057 politicians across 31 provinces at the central, provincial, city, or county level. They provide biographical information including name, gender, nationality, date of birth and detailed education and work histories. Following the network literature (Jackson, 2011; Jackson, 2009),[14] we use chairman and politician CVs to map links between chairmen and politicians and identify each chairman's connected politicians. We use the chairman's political network as a proxy for the firm's political network (e.g., Fan et al., 2007; Cao et al., 2018).[15] Fig. 1 visualizes the chairman-politician network using a random sample of 570 chairmen. The figure contains 6819 chairman-politician connections and 1524 politicians, and education links account for 60.1% and work links account for 39.9%.

Online Appendix Fig. B.1 describes the identification of connections. An education connection is created only if a chairman and a politician attended the same university/college, either in the same years or in different years through alumni networks. Work connections are created in four cases: (1) if a chairman has past work experience in government or government entities, we assume the chairman knows politicians in the same workplace; (2) if a chairman worked in an SOE as a top manager, we assume SOE networks connect the chairman to provincial or central-government politicians; (3) if a chairman worked in an SOE as a junior manager, we assume SOE networks connect the chairman to city or county-level politicians; and (4) if a chairman worked in a non-SOE firm as a top manager, we assume the chairman knows city or county-level politicians. Once created, a connection lasts through the end of the sample period.

Fig. B.2 in the Online Appendix provides an example of education-based networks. The central green node denotes the chairman. Surrounding nodes denote connected politicians, clustered by administrative rank. To measure network strength, we also weight connections by politicians' administrative ranks and the length of the relationship when aggregating the network. Online Appendix Table B.2 lists politicians' ranks in China's government system.

3.1.2. Insider trading

The insider trading data report transaction-level details: firm name, transaction date, insider name and position, transaction reason and type, shares/value traded, equity holdings before and after the trade, and average trading price. The sample covers 74,397 transactions for 2687 listed firms from 2007 to 2017.[16] Overall, 61.5% (38.5%) are sales (purchases), and 72.6% (27.4%) are direct (indirect) trades by insiders, including family and other related individuals. For the main analysis, we aggregate transactions to the firm-year level.

3.2. Variables

3.2.1. Political network variables

We construct three baseline measures of chairman political networks: *Log educ link*, *Log work link* and *Log network link*, defined as the logarithm of the number of connections formed through education, through work experience, and in total (education + work),

[13] Since 2017, the Chinese government has curtailed disclosure of politicians' backgrounds, omitting exact education dates, specific work experience, and at times entire segments of work history.

[14] Note that due to the lack of explicit political campaign and election, it is not possible to capture chairman's political contribution and other unobservable links, such as bribery induced connection.

[15] Using a similar method, we construct network variables for CEOs and CFOs. In our sample of 2216 firms, there are 3994 chairmen, 5659 CEOs, and 4925 CFOs, covering 234,534 CEO-politician and 157,272 CFO-politician connections. Education information for CEOs and CFOs is sparse and often missing from CVs. Among CEO-politician links, 0.96% are based on education and 99.04% on work. For CFO-politician links, 0.75% are education-based and 99.25% are work-based.

[16] This paper focuses on how political network may affect the disclosed insider trading activities. We do not attempt to examine potential misreporting or undisclosed trading.

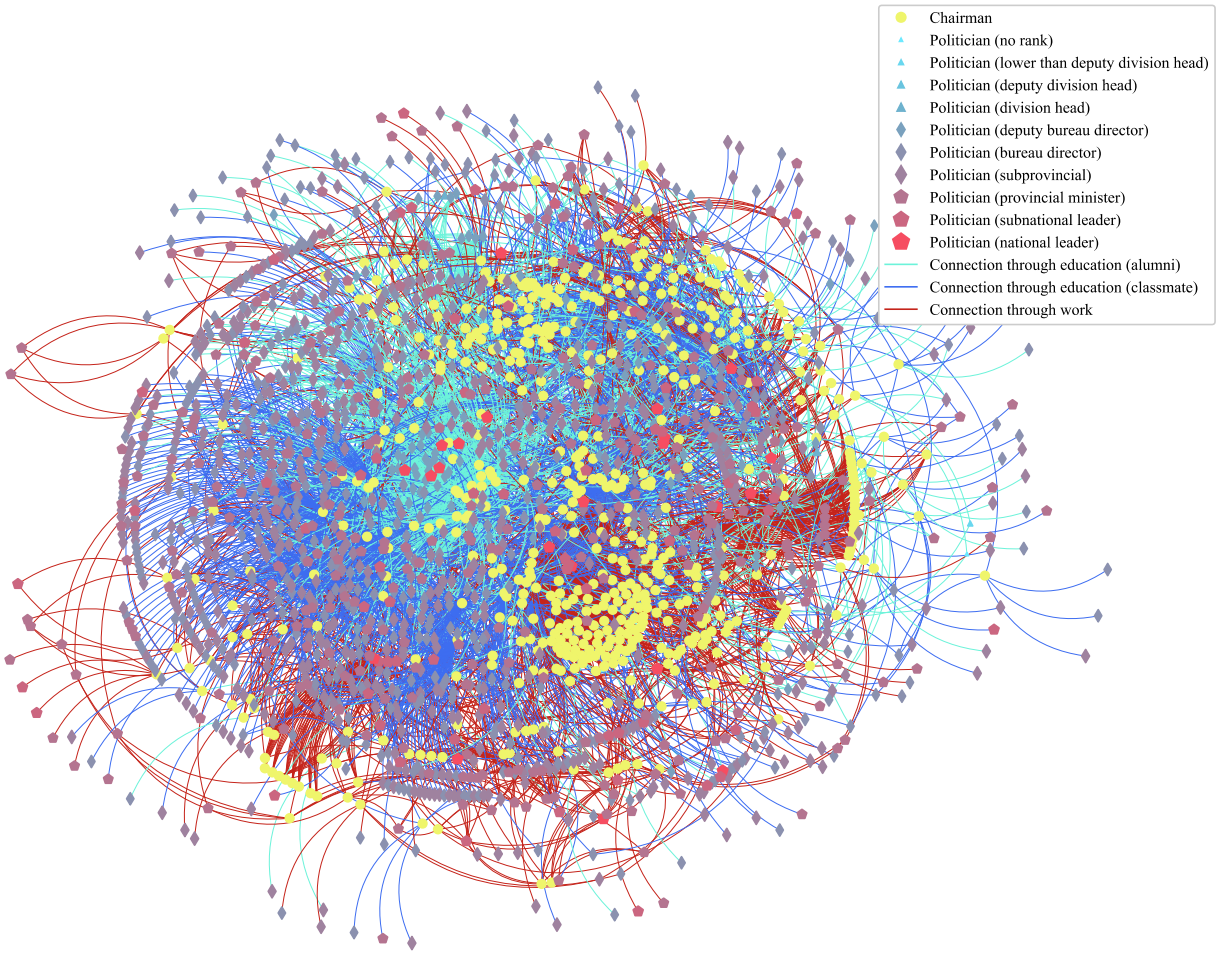

Fig. 1. Chairman's political network.
This figure visualizes the chairman's political network using a random sample of 570 chairmen from the full sample. It covers 6819 chairman-politician connections and 1524 politicians. The yellow nodes denote the selected chairmen; other nodes denote politicians, with different color/size indicating administrative ranks. Edges denote the connections between chairmen and politicians. The politicians with the administrative ranks of "Bureau Director", "Subprovincial" and "Provincial Minister" account for 89% of all the connected politicians. Among all the chairman-politician connections, those through education account for 60.1% and those through work experience account for 39.9%. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

respectively. For education links, we further distinguish schoolmate versus alumni ties, i.e., whether the chairman and politician attended the same university/college in the same year versus different years through alumni networks.[17] We also construct the same set of network variables for CEOs and CFOs.

To capture the influence of connections, we incorporate connection length and politicians' administrative rank. *Log network link (long)* and *Log network link (short)* are the logarithms of the number of connections longer than versus shorter than five years. *Log network link (high)* and *Log network link (low)* are the logarithms of the number of connections to politicians above versus below "Bureau director" level.

Alternatively, we build weighted measures that jointly incorporate rank and duration. *Log educ link (weighted)* is the logarithm of the weighted sum of education-based connections, where weights equal the squared value of a politician's position rank multiplied by the connection length (in years). *Log work link (weighted)* and *Log network link (weighted)* are defined analogously.

3.2.2. Insider trading and other firm characteristics

We consider the three variables for insider trading, *Log trading shares*, *Log trading amount* and *Log trading permille*. *Log trading shares*

[17] Connection timing is based on the start of overlapping education or work experience. For example, if Chairman A studied from 1990 to 1995 and Politician B from 1993 to 1996 at the same school, the connection starts in 1993. If they are alumni without overlap, the start year is the later of the two entrance years.

is the logarithm of holding changes in thousand shares; *Log trading amount* is the logarithm of holding changes in thousand RMB amount; and *Log trading permille* is the logarithm of holding changes in permille.

Control variables include *Firm size* measured as the logarithm of total assets, *Net cash flow* measured as net cash flow from operating activities scaled by total assets, *EBITDA* measured as earnings before interest, taxes, depreciation, and amortization scaled by total assets, *Leverage* measured as total liabilities scaled by total assets, and *Stock volatility* measured as the standard deviation of daily log returns within the year. We also include ownership indicators for *Central SOE* and *Local SOE*. In addition, we construct the Herfindahl-Hirschman Index of market concentration as the sum of squared shareholding proportions among the top 10 major shareholders.

3.2.3. Chairman personal characteristics

Chairman controls include *List 985*, an indicator for graduating from a "985" university; *Education abroad*, an indicator for studying outside mainland China; *Work abroad*, an indicator for working outside mainland China; *Female*, a gender indicator; *Log age*, the logarithm of age; *Foreign citizenship*, an indicator for non-mainland China citizenship; and *Education level*, an ordinal measure for the highest degree attained below bachelor's, bachelor's, master's, or doctorate. We define the same set of personal characteristics for CEOs and CFOs. Online Appendix Table A.1 provides detailed variable definitions.

3.3. Descriptive statistics

Table 1 reports summary statistics for the variables used in our analyses. Insider trading measures are highly left-skewed due to low trading frequency for many firms. At the firm-year level, *Trading shares* have a mean of 2.18 million, with a standard deviation of 12.53 million and a maximum of 588.51 million. *Trading amount* has a mean of 26.17 million RMB, with a standard deviation of 134.50 million RMB and a maximum of 5.35 billion RMB. *Trading permille* has a mean of 4.4‰, with a standard deviation of 20.95‰. Political network measures are also left-skewed. *Education link* ranges from 0 to 2367, with a mean of 36.14 and a standard deviation of 139.73. *Work link* ranges from 0 to 937, with a mean of 21.49 and a standard deviation of 66.14. *Network link* ranges from 0 to 2417, with a mean of 57.63 and a standard deviation of 163.92. On average, a chairman is connected to 36 politicians through education and 21 through work experience, and the most well-connected chairman has 2417 total connections.

Table 1 also summarizes firm and chairman characteristics. *Total assets* have a mean of 21.01 billion RMB. *Net cash flow* ranges from −0.40 to 0.57, with a mean of 0.08. *EBITDA* ranges from 0.01 to 0.36, with a mean of 0.08. *Leverage* has a mean of 0.44. *Stock volatility* ranges from 0.00 to 0.73, with a mean of 0.03. *HHI* has a mean of 0.49, and annual market returns have a mean of 0.09. *List 985*, *Education abroad*, *Work abroad*, and *Foreign citizenship* have means of 7.7%, 1.5%, 3.9%, and 2.2%, respectively; *Female* has a mean of 4.3%. *Education level* has a mean of 2.5, indicating that the average chairman holds a bachelor's degree.

Our political network measures are constructed from chairmen's individual experiences. Thus, they differ from measures based on government ownership, although the strength of a chairman's network may correlate with SOE status. Table 2 reports network differences across ownership types. On average, chairmen of central SOEs are connected to 138 politicians, those of local SOEs to 68, and those of non-SOEs to 36. While SOE status reflects the state's controlling power over the firm, the chairman's network measure more directly captures political connections and relationship-based capital that can support business activities and evolve over time. Given that it is difficult to calculate a precise state-ownership proportion for each Chinese firm (Allen et al., 2022), the chairman's political network also gives a better measure of the firm's political connections and resources.

4. Methodology and empirical results

4.1. Methodology

We start by examining the effects of a firm's political network on insider trading, using the model below:

$$\begin{aligned} \textit{Insider trading}_{i,t} = {} & \alpha_j + \gamma_q + \delta_t + \beta_0 + \beta_1 \bullet \textit{Political network}_{i,t-1} + \beta_2 \bullet (\textit{State ownership})_{i,t-1} + \beta_3 \bullet (\textit{Firm characteristics})_{i,t-1} + \beta_4 \\ & \bullet (\textit{Chairman characteristics})_{i,t-1} + \beta_5 \bullet (\textit{Stock return variables})_{i,t} + \varepsilon_{i,t} \end{aligned} \tag{1}$$

where *Insider trading* is the dependent variable and α_j, γ_q, δ_t are industry, province and year fixed effects respectively. The key explanatory variable is political network measures, where we expect a positive value of the coefficient β_1. We also incorporate an assortment of firm ownership and financial characteristics as control variables. Firm ownership variables included are the dummies *Central SOE* and *Local SOE*. Firm financial characteristics included are *Firm size*, *Net cash flow*, *EBIDTA*, *Leverage*; chairman personal characteristics included are *List 985*, *Education abroad*, *Work abroad*, *Female*, *Log age*, *Foreign citizenship,* and *Educational level*; stock return variables included are *Stock volatility*, *HHI*, *Annual market returns*. We incorporate year, province and industry fixed effects into all the regressions to consider time, geographical and industry-level heterogeneities.

4.2. Baseline results

Table 3 presents the results for the baseline regressions. We use *Log trading shares*, *Log trading amount,* and *Log trading permille* as dependent variables respectively. We find negative and significant coefficients on all three measures of the political network, in support of hypothesis H1b. The impact is economically significant. Take the estimates in columns (1) to (3), for example: a one-

Table 1
Summary statistics.

Variable	Obs	Mean	STD	Min	Max
Insider trading					
Trading shares (thousands)	18,547	2181.521	12,531.911	0	588,512.350
Trading amount (k RMB)	18,547	26,165.001	134,498.010	0	5,354,282.300
Trading permille (‰)	18,547	4.401	20.951	0	1350.040
Log trading shares	18,547	2.556	3.344	0	13.285
Log trading amount	18,547	3.725	4.416	0	15.493
Log trading permille	18,547	0.530	1.084	0	7.209
Firm network					
Education link	18,547	36.140	139.731	0	2367
Work link	18,547	21.491	66.137	1	937
Network link	18,547	57.631	163.917	1	2417
Log educ link	18,547	1.423	1.901	0	7.770
Log work link	18,547	1.675	1.357	0.693	6.844
Log network link	18,547	2.485	1.698	0.693	7.791
Log network link (long)	18,547	2.448	1.694	0	7.723
Log network link (short)	18,547	0.270	0.809	0	5.670
Log network link (high)	18,547	1.983	1.972	0	7.652
Log network link (low)	18,547	1.220	1.098	0	5.969
Log educ link (weighted)	18,547	3.093	3.821	0	12.110
Log work link (weighted)	18,547	6.999	2.355	2.197	13.568
Log network link (weighted)	18,547	7.590	2.280	2.565	13.718
Log alumni link	18,547	1.370	1.879	0	7.769
Log school friends link	18,547	0.308	0.770	0	5.727
Firm characteristics					
Central SOE	18,547	0.134	0.340	0	1
Local SOE	18,547	0.240	0.427	0	1
Total asset	18,547	21,095.180	315,282.520	0.051	19,570,060.000
Firm size	18,547	8.090	1.346	0.050	16.790
Net cash flow	18,547	0.082	0.153	−0.401	0.573
EBITDA	18,547	0.078	0.050	0.008	0.355
Leverage	18,547	0.438	0.220	0.034	1.000
Stock volatility	18,547	0.034	0.021	0.000	0.728
HHI	18,547	0.493	0.228	0.101	1.000
Annual market returns	18,547	0.085	0.388	−0.921	0.813
Chairman characteristics					
List 985	18,547	0.077	0.267	0	1
Education abroad	18,547	0.015	0.120	0	1
Work abroad	18,547	0.039	0.193	0	1
Female	18,547	0.043	0.203	0	1
Age	18,547	51.974	7.091	23	85
Log age	18,547	3.961	0.135	3.178	4.454
Foreign citizenship	18,547	0.022	0.146	0	1
Educational level	18,547	2.502	0.857	1	4

This table reports the summary statistics of our sample. The definition of variables is detailed in Appendix A.1.

Table 2
Network characteristics: Central SOE, local SOEs vs. non-SOEs.

	Central SOE	Local SOE	Non-SOE	Diff: Central -NonSOE	Diff: Local - NonSOE
	Mean (std. dev.)	Mean (std. dev.)	Mean (std. dev.)	Mean (std. err.)	Mean (std. err.)
Education link	75.900	46.346	23.758	−52.1422***	−22.5884***
	(228.614)	(179.323)	(84.775)	(2.7196)	(2.0935)
Obs.	2478	4447	11,622		
Work link	62.431	21.638	12.705	−49.7260***	−8.9329***
	(111.311)	(59.588)	(50.465)	(1.4469)	(0.9371)
Obs.	2478	4447	11,622		
Network link	138.331	67.984	36.463	−101.8682***	−31.5213***
	(269.121)	(199.991)	(101.305)	(3.2205)	(2.3977)
Obs.	2478	4447	11,622		

This table reports the difference of the network variables, including *Education link, Work link* and *Network link*, among central SOE, local SOE and non-SOEs.

Table 3
Political network and insider trading: Baseline results.

Dep. Var.	*Log trading shares*			*Log trading amount*			*Log trading permille*		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Log educ link	−0.0462**			−0.0781***			−0.0201***		
	(0.0200)			(0.0268)			(0.00597)		
Log work link		−0.0611**			−0.0735**			−0.0245***	
		(0.0261)			(0.0361)			(0.00757)	
Log network link			−0.0765***			−0.118***			−0.0298***
			(0.0223)			(0.0301)			(0.00682)
Central SOE	−1.641***	−1.578***	−1.566***	−1.955***	−1.894***	−1.845***	−0.426***	−0.402***	−0.399***
	(0.118)	(0.125)	(0.121)	(0.163)	(0.172)	(0.168)	(0.0314)	(0.0330)	(0.0321)
Local SOE	−1.497***	−1.461***	−1.463***	−1.844***	−1.802***	−1.792***	−0.421***	−0.407***	−0.408***
	(0.0963)	(0.0969)	(0.0967)	(0.131)	(0.132)	(0.132)	(0.0269)	(0.0271)	(0.0269)
Net cash flow	−0.271	−0.278	−0.281	−0.238	−0.243	−0.252	−0.178***	−0.180***	−0.181***
	(0.210)	(0.210)	(0.210)	(0.279)	(0.280)	(0.279)	(0.0633)	(0.0635)	(0.0634)
Firm size	0.123***	0.126***	0.124***	0.0942**	0.0983**	0.0970**	−0.0487***	−0.0474***	−0.0480***
	(0.0329)	(0.0329)	(0.0328)	(0.0437)	(0.0437)	(0.0436)	(0.00885)	(0.00885)	(0.00886)
EBITDA	−3.361***	−3.335***	−3.314***	−5.042***	−5.021***	−4.973***	−0.856***	−0.847***	−0.839***
	(0.647)	(0.649)	(0.647)	(0.887)	(0.892)	(0.888)	(0.187)	(0.188)	(0.188)
Leverage	−1.433***	−1.447***	−1.413***	−2.180***	−2.212***	−2.155***	−0.404***	−0.410***	−0.397***
	(0.175)	(0.174)	(0.175)	(0.236)	(0.236)	(0.236)	(0.0525)	(0.0525)	(0.0525)
Stock volatility	−13.61***	−13.59***	−13.65***	−16.84***	−16.78***	−16.89***	−3.112***	−3.100***	−3.125***
	(1.553)	(1.555)	(1.570)	(2.012)	(2.013)	(2.039)	(0.395)	(0.395)	(0.400)
HHI	−0.636***	−0.615***	−0.625***	−0.982***	−0.954***	−0.964***	−0.149***	−0.140***	−0.144***
	(0.151)	(0.150)	(0.150)	(0.199)	(0.199)	(0.199)	(0.0468)	(0.0467)	(0.0467)
Annual market returns	−4.599***	−4.607***	−4.659***	−6.556***	−6.541***	−6.642***	−1.582***	−1.584***	−1.604***
	(0.600)	(0.599)	(0.600)	(0.767)	(0.767)	(0.768)	(0.191)	(0.191)	(0.191)
List 985	0.321**	0.209	0.327**	0.475***	0.288*	0.469***	0.106**	0.0576	0.104**
	(0.138)	(0.130)	(0.134)	(0.183)	(0.175)	(0.178)	(0.0415)	(0.0395)	(0.0403)
Education abroad	−0.659***	−0.669***	−0.664***	−0.894***	−0.905***	−0.901***	−0.189***	−0.193***	−0.191***
	(0.254)	(0.254)	(0.253)	(0.345)	(0.346)	(0.344)	(0.0653)	(0.0648)	(0.0648)
Work abroad	0.174	0.144	0.164	0.349	0.303	0.330	−0.0321	−0.0448	−0.0371
	(0.178)	(0.177)	(0.179)	(0.228)	(0.227)	(0.229)	(0.0539)	(0.0532)	(0.0540)
Female	0.0229	0.0201	0.0250	−0.0719	−0.0785	−0.0697	−0.0193	−0.0207	−0.0188
	(0.160)	(0.160)	(0.160)	(0.208)	(0.209)	(0.207)	(0.0514)	(0.0518)	(0.0515)
Log age	0.342	0.338	0.321	0.513	0.514	0.482	0.0219	0.0207	0.0142
	(0.264)	(0.263)	(0.263)	(0.353)	(0.352)	(0.353)	(0.0838)	(0.0838)	(0.0838)
Foreign citizenship	−1.049***	−1.041***	−1.053***	−1.513***	−1.498***	−1.518***	−0.302***	−0.299***	−0.303***
	(0.240)	(0.238)	(0.236)	(0.315)	(0.312)	(0.310)	(0.0741)	(0.0736)	(0.0730)
Educational level	0.0157	0.00227	0.0176	0.0326	0.00991	0.0335	−0.0130	−0.0189	−0.0129
	(0.0451)	(0.0447)	(0.0449)	(0.0605)	(0.0602)	(0.0602)	(0.0139)	(0.0138)	(0.0138)
Cons.	1.453	1.556	1.647	2.743	2.844	3.035*	1.363***	1.403***	1.437***
	(1.290)	(1.291)	(1.291)	(1.744)	(1.746)	(1.745)	(0.357)	(0.358)	(0.358)
Industry & Province FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547
adj. R-sq	0.182	0.182	0.183	0.190	0.189	0.190	0.156	0.156	0.156

This table reports the baseline results of the regressions examining the effects of political network on insider trading. The dependent variable is insider trading, measured by *Log trading shares*, *Log trading amount* and *Log trading permille*, respectively. The key explanatory variables are the network measures, *Log educ link*, *Log work link* and *Log network link*, which are defined as the natural logarithm of number of chairman's political connections via education, work experience, and both, respectively. All variables are defined in Appendix Table A.1. Standard errors are clustered at the firm level and reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

standard-deviation increase in education link (being connected to 140 more politicians) is associated with 17.9% decrease in trading shares. Similarly, a one-standard-deviation increase in work links is associated with an 18.8% decrease in trading shares. Overall, a one-standard-deviation increase in total network links (or being connected to 164 more politicians) is associated with a 21.8% decrease in trading shares. State ownership is also significantly and negatively associated with insider trading. Take the estimates in column (1) for example: compared to non-SOEs, central SOEs tend to have lower trading shares by 164.1%, and local SOEs tend to have lower trading shares by 149.7%. Overall, the results suggest that controlling for government ownership, firms with stronger political networks tend to have less insider trading.

Looking at the control variables, we observe negative coefficients on *Stock volatility*, suggesting that insider trading tends to be lower when volatility is higher. In addition, we observe positive coefficients on *Firm size* when using *Log trading shares* or *Log trading amount* as the dependent variable, and negative coefficient on *Firm size* when using *Log trading permille* as the dependent variable, suggesting that larger firms tend to have higher trading shares or amount but lower trading permille. Interestingly, when the chairman has an education background from an elite (Project-985) university, the firm tends to have higher insider trading. When the chairman has education experience from abroad or foreign citizenship, the firm tends to trade less. Work experience of the chairman doesn't seem to have a significant effect on firms' insider trading. At the same time, neither gender nor age of the chairman has a significant effect on firms' insider trading. Overall, the baseline results suggest that all else equal, the stronger the chairman's political network is, the less the firm engages in insider trading.

Connections through education can be formed either through attending the same school in the same years, or through alumni networks, e.g., attending social events in the alumni networks. Presumably, the connections through the former can be stronger than those through the latter. Therefore, by going through the chairmen and politicians' CVs, we also decompose the education links and construct the variables *Log school friends link* and *Log alumni link*. By using these measures instead of *Log educ link*, we rerun our baseline models. The results, reported in Table B.5 in the Online Appendix, show that while both measures are negatively associated with insider trading, as expected, the effect of the network through school friends is economically larger than the effect through the alumni network, suggesting stronger muted insider trading effect for schoolmates, supporting hypothesis H1b. Economically, take the estimates in columns (1) and (2) for example: one-standard-deviation increase in the school friend connections is associated with 40.2% decrease in trading shares, while one-standard-deviation increase in alumni connections is associated with a 21.7% decrease in trading shares.

Then, we examine how the effects rely on the length and strength of the connections. We choose five (year) as a cut-off for long-term versus short-term connections and identify high-level connections if the connected politicians are at/above the "Bureau director" level.[18] In our sample, 97% of the chairmen have at least one political connection for longer than five years, and the mean value of the number of connections longer than five years is 55; 67% of the chairmen have at least one connection higher than "Bureau Director" level, across all years.

Table 4 reports the regression results, in two panels. In Panel A, we focus on the length of the connections, only including the log *network link (long)* in column (1) to (3) and *Log network link (short)* in column (4) to (6), and then include both in column (7) to (9). The pairwise correlation between *Log network link (long)* and *Log network link (short)* is over 40%. The results show that the effect of long-term connections is statistically more significant and economically larger, again supporting hypothesis H1b. When we have both *Log network link (long)* and *Log network link (short)* in the same regression, the effect of short-term connections becomes insignificant, while the coefficients on long-term connections change slightly. Take the estimates in column (7) for example: one-standard-deviation increase in *Network link (long)* is associated with a 22.2% decrease in trading shares. The *Chi-square* tests show that the difference in the effects of long-term and short-term connections is statistically significant.

In Panel B, we examine the effect of high-level versus low-level connections. Similarly, in columns (1) to (3), we include only the *Log network link (high),* in columns (4) to (6) we include only the *Log network link (low),* and in columns (7) to (9) we include both. The pairwise correlation between *Log network link (high)* and the *Log network link (low)* is 42%. The results show that the effect of high-level connections is statistically more significant and economically larger. When we have both the *Log network link (high)* and *Log network link (low)* in the same regressions, the coefficient on the *Log network link (low)* turns positive in columns (7) and (8), although insignificant, while the coefficient on *Log network link (high)* stays negative and the economic magnitude becomes even larger, also supporting hypothesis H1b. Take the estimates in column (7) for example: a one-standard-deviation increase in *Network link (high)* is associated with a 23.2% decrease in trading shares. The results of the *Chi-square* tests show that the difference in the economic magnitude of the effects captured by the coefficients is statistically significant, except when using *Log trading permille* as the dependent variable.[19]

4.3. Heterogeneous effects: State ownership

Our measures of political network capture the chairman's individual political connections and are different from firms' government ownership. Hence, it is important to see how the effect of the personal level connections varies across central SOEs, local SOEs, and non-SOEs. To examine this, we include the interactions of *Central SOE* and *Local SOE* with the three main political network measures in

[18] The results are robust for "Subprovincial (Subministerial) level" and "Deputy bureau director" cut-off.

[19] In Online Appendix Table B.6, findings are consistent using alternative political network measures *Log educ link (weighted)*, *Log work link (weighted)*, and *Log network link (weighted)*, calculated as the sum of squared value of politician's position rank multiplied by the length (in years) of the connection between chairman and politician.

Table 4
Political network and insider trading: Influence of the connections.

Dep. Var. (Log)	Trading shares	Trading amount	Trading permille	Trading shares	Trading amount	Trading permille	Trading shares	Trading amount	Trading permille
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A. Long-term connections									
Log network link (long)	−0.0789***	−0.119***	−0.0286***				−0.0780***	−0.113***	−0.0286***
	(0.0220)	(0.0295)	(0.00670)				(0.0240)	(0.0320)	(0.00729)
Log network link (short)				−0.0598**	−0.107**	−0.0200***	−0.00469	−0.0265	0.000246
				(0.0293)	(0.0429)	(0.00761)	(0.0320)	(0.0459)	(0.00837)
Chi-sq							2.361	1.750	4.656**
(*P*-value)							(0.1244)	(0.1858)	(0.0310)
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547
adj. R-sq	0.183	0.190	0.156	0.182	0.189	0.155	0.183	0.190	0.156
Panel B. High-level connections									
Log network link (high)	−0.0735***	−0.110***	−0.0248***				−0.0790***	−0.114***	−0.0242***
	(0.0191)	(0.0258)	(0.00584)				(0.0208)	(0.0283)	(0.00624)
Log network link (low)				−0.0268	−0.0546	−0.0186**	0.0246	0.0197	−0.00287
				(0.0333)	(0.0449)	(0.00891)	(0.0364)	(0.0493)	(0.00949)
Chi-sq							4.561**	4.101**	2.675
(P-value)							(0.0327)	(0.0429)	(0.1020)
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547
adj. R-sq	0.183	0.191	0.156	0.181	0.189	0.155	0.183	0.191	0.156
Chairman & Firm Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry & Province FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES

This table reports the results of the regressions examining the effects of the importance of the political network on insider trading, including whether it is long-term vs. short term connections, and high-level vs. low-level connections. *Log network link (long)* or *Log network link (short)* is defined as the natural logarithm of the number of connections that are at least five years or shorter than five years, respectively. *Log network link (high)* or *Log network link (low)* is defined as the natural logarithm of the number of connections with politicians who are at/above or below "*Bureau director*" level (specified as Level 6 in Table A.2), respectively. Chairman level controls include *List 985*, *Education abroad*, *Work abroad*, *Female*, *Log age*, *Foreign citizenship*, and *Educational level*. Firm level controls include *Net cash flow*, *Firm size*, *EBITDA*, *Leverage*, *Stock volatility*, *HHI*, and *Annual market returns*. All variables are defined in Appendix Table A.1. Standard errors are clustered at the firm level and reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table 5
Heterogeneity: State ownership.

Dep. Var.	Log trading shares			Log trading amount			Log trading permille		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Log educ link	−0.0572**			−0.0955**			−0.0283***		
	(0.0291)			(0.0383)			(0.00935)		
Log work link		−0.128***			−0.156***			−0.0469***	
		(0.0402)			(0.0532)			(0.0128)	
Log network link			−0.108***			−0.164***			−0.0436***
			(0.0311)			(0.0407)			(0.0100)
Central SOE	−1.751***	−1.812***	−1.879***	−2.143***	−2.235***	−2.391***	−0.485***	−0.511***	−0.572***
	(0.141)	(0.201)	(0.222)	(0.200)	(0.279)	(0.320)	(0.0383)	(0.0520)	(0.0581)
Local SOE	−1.500***	−1.743***	−1.657***	−1.842***	−2.115***	−2.029***	−0.434***	−0.481***	−0.475***
	(0.116)	(0.150)	(0.160)	(0.157)	(0.207)	(0.218)	(0.0331)	(0.0408)	(0.0457)
Log educ link×Central SOE	0.0550			0.0930			0.0298**		
	(0.0478)			(0.0660)			(0.0127)		
Log educ link ×Local SOE	0.00437			0.00263			0.0104		
	(0.0401)			(0.0555)			(0.0114)		
Log work link×Central SOE		0.115*			0.160*			0.0488***	
		(0.0611)			(0.0852)			(0.0170)	
Log work link×Local SOE		0.161***			0.181**			0.0441***	
		(0.0599)			(0.0851)			(0.0163)	
Log network link×Central SOE			0.0950*			0.163**			0.0513***
			(0.0550)			(0.0784)			(0.0148)
Log network link×Local SOE			0.0770*			0.0965			0.0275**
			(0.0462)			(0.0643)			(0.0130)
Chairman & Firm Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry & Province FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Obs.	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547	18,547
adj. R-sq	0.182	0.183	0.183	0.190	0.190	0.191	0.156	0.156	0.157

This table reports the results of the regressions examining the heterogeneous effects of political network on insider trading for central SOEs, local SOEs and non-SOEs. Central SOE is defined as one if the firm is an SOE owned by the central government, and zero otherwise; local SOE is defined as one if the firm is an SOE owned by a local government, and zero otherwise. Chairman level controls include *List 985*, *Education abroad*, *Work abroad*, *Female*, *Log age*, *Foreign citizenship*, and *Educational level*. Firm level controls include *Net cash flow*, *Firm size*, *EBITDA*, *Leverage*, *Stock volatility*, *HHI*, and *Annual market returns*. All variables are defined in Appendix Table A.1. Standard errors are clustered at the firm level and reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

the regressions. Table 5 presents the results. The coefficients of network measures and SOE dummies stay negative and significant. More importantly, the coefficients of the interactions between network variables and SOE dummies are all positive and significant when we use *Log work link* and *Log network link* for the interactions. When we use *Log educ link* for the interactions, the coefficients are positive but less significant. This suggests that although firms with stronger political networks have lower insider trading, this effect is mitigated in central and local SOEs, especially when the network is built through work experience. Take the estimates in column (3), for example. For non-SOEs, firms with one standard deviation increase in political networks tend to have 30.7% lower trading shares. However, the marginal effect of political networks for central and local SOEs is largely mitigated: firms with one standard deviation increase in political network tend to have 3.7% lower trading shares for central SOEs and 8.8% lower trading shares for local SOEs. We find similar results when we use *Log trading amount* and *Log trading permille* as the dependent variable.

Overall, we find evidence that non-SOEs trade significantly less when the political network is stronger, while SOEs which are already closely integrated with the state through ownership, do not react further to the strength of political networks. This pattern is consistent with the view that personal political networks serve as a form of informal governance that disciplines managerial opportunism when formal governance through state ownership is absent.

4.4. Identification

There might be endogeneity concerns, such as unobservable factors related to firms' political networks and insider trading. We explore three events in this section: two shocks to firms' political networks and one shock to enforcement risk in political networks: (i) the turnovers of provincial leaders, (ii) promotion-driven increases in high-level political networks within a chairman's tenure, and (iii) provincial anti-corruption visits conducted by the Central Commission for Discipline Inspection.

4.4.1. Provincial leadership turnover

We first use a shock to political uncertainty, i.e. the turnovers of provincial leaders, and examine how firms' insider trading changes following these events. Turnover of provincial leadership in China is a political decision and, hence, is unlikely driven by a firm's political network. At the same time, provincial leadership changes can introduce substantial uncertainty into local political environments, potentially affecting how firms interact with existing political connections and adapt to new leadership, personnel reshuffling, and policy priorities.

In our sample, there are, in total, 102 turnovers of local provincial leaders (governors and party secretaries) in 28 provinces. During a provincial-leader turnover, the incumbent might be relocated to another province or be promoted to the central government or moved to a retirement role. Hence, for a specific firm, although the chairman's political network, i.e., the total number of connections to politicians, might not change, the local network power in the province can be altered greatly due to the leadership change. For example, the incoming provincial leader may lead to the shuffling of key local politician appointments, thus changing the existing political environment and increasing political uncertainty. Firms, especially those with strong networks before turnovers are likely to be more cautious in opportunistic behaviors including their insider trading in the years following the turnover. We therefore use the provincial leadership change as an exogenous shock to the local political environment and uncertainty, and examine how firms adjust their behavior in response to changes affecting the value and stability of their political networks.

We examine the two years around the provincial leadership turnovers across the country in our sample period and conduct the DiD tests by interacting the time indicator *P_Turnover* with *Log network link*. *P_Turnover* is a time indicator, defined as one for the two years after the turnovers of provincial leaders or zero for the two years before. We control all the specifications for industry, province and year-fixed effects. Table 6 presents the regression results. The treatment variable, *Log network link* itself, is negative but only significant

Table 6
Provincial leader turnovers.

Dep. Var.	Log trading shares	Log trading amount	Log trading permille
	(1)	(2)	(3)
Log network link	−0.0278	−0.0702*	−0.00371
	(0.0295)	(0.0410)	(0.00933)
P_Turnover	0.383***	0.409***	0.142***
	(0.117)	(0.154)	(0.0396)
Log network link×P_Turnover	−0.120***	−0.125***	−0.0458***
	(0.0323)	(0.0432)	(0.0105)
Chairman & Firm Controls	YES	YES	YES
Industry & Province FE	YES	YES	YES
Year FE	YES	YES	YES
Obs.	11,045	11,045	11,045
adj. R-sq	0.177	0.183	0.153

This table reports the results of the regressions examining the effects of political network on insider trading around the turnovers of provincial leaders. *P_Turnover* equals one for the two years post-turnover, and zero for the two years prior. All specifications include industry, province, and year fixed effects. Chairman level controls include *List 985*, *Education abroad*, *Work abroad*, *Female*, *Log age*, *Foreign citizenship*, and *Educational level*. Firm level controls include *SOE*, *Net cash flow*, *Firm size*, *EBITDA*, *Leverage*, *Stock volatility*, *HHI*, and *Annual market returns*. All other variables are defined in Appendix Table A.1. Standard errors are clustered at the firm level and reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

at the 10% level in column (2). The coefficients on *P_Turnover*, are positive and significant at the 1% level in all specifications, suggesting that after the turnovers of provincial leadership, insiders tend to trade more on average. More importantly, the coefficients on the interactions, *Log network link*×*P_Turnover* are negative and significant at the 1% level in all the specifications. This suggests that stronger politically connected firms trade significantly less after turnovers than those less politically connected ones.

Similarly, we also conduct dynamic DiD tests. Indicators *P_Turnover (t)* are defined as follows: *P_Turnover (0)* is defined as one for the year when turnover occurs and zero otherwise; *P_Turnover (+1)* is defined as one for the first year after turnover and zero otherwise; and so forth. *P_Turnover (−1)* is used as a benchmark in the regressions. For each period, we plot the point estimate of the time trend of the treatment effects and the 90% confidence interval in Fig. 2. The results show that the coefficients on the interactions, *Log network link*×*P_Turnover* are not significant in the years prior to the turnover or in the turnover year itself, supporting the parallel trends assumption between treatment and control firms. The coefficients of the interactions become negative and statistically significant in the two years following the turnover, indicating significantly less insider trading for firms strongly politically connected. These findings suggest that following a shock to political uncertainty, insiders in firms with stronger political networks trade more cautiously, in line with hypothesis H1b.

4.4.2. Promotion-driven increases in high-level political networks within a chairman's tenure

Next, we examine whether a positive shock to a firm's high-level political network within a chairman's tenure reduces insider trading. We focus on cases in which the firm's high-level network increases because a politician who is already connected to the firm is promoted into a senior-rank position (bureau director rank or above). This restriction sharpens identification relative to newly formed political ties, since the relationship already exists and the change is driven by the connected politician's career advancement rather than the firm's action. In our sample, 242 chairmen experience an increase in high-level political networks during their tenure driven by senior-rank promotions.

Senior-rank promotions in China are governed by the Communist Party of China's cadre management system and are decided within the Party-state personnel hierarchy rather than by firms (e.g., Shih et al., 2012; Pang et al., 2018). Evidence on political selection indicates that advancement reflects broader political and administrative evaluations, which limits firms' ability to forecast or influence the timing of promotion outcomes through firm-specific actions (e.g., Jia et al., 2015). In our setting, insiders' trading is an observable corporate action that may invite scrutiny of potential firm misconduct and its political ties, with potential exposure for the connected official. When the connected politician moves into a senior-level role, these risks become more salient, increasing the perceived cost of aggressive trading and motivating more cautious insider trading.

We define the treated group as chairmen whose high-level political network increases via political promotion during their tenure. *Treated_chairman* is a dummy equal to one for chairmen in this treated group and zero otherwise. We use one-to-one propensity score matching with a caliper of 0.015 to construct a matched control group based on chairman and firm characteristics, including *Log network link*, *Log network link (high), Firm size,* and *Leverage*.[20] The post indicator *Post high-level increase* is defined as one for the two years after the increase and zero for the two years before. To avoid overlapping event windows, we allow at most one promotion event per chairman. If a chairman's high-level political network increases via promotion in multiple years during the chairman's tenure, we keep only the first such year as event time 0 and drop subsequent promotion years for that chairman. Panel A of Table 7 reports summary statistics for treated and control chairmen in the pre-event period, and the differences in matching covariates are not statistically significant after matching.

We then estimate a DiD specification with the interaction *Treated_chairman* × *Post high-level increase*. Following the baseline specification, we include chairman and firm controls and add industry, province, and year fixed effects, as well as an interaction between *Post high-level increase* and a 2015 market crash dummy (= 1 in 2015, 0 otherwise) to absorb post-pre differences induced by the heightened trading variation during the 2015 Chinese stock market crash. The results are reported in Panel B of Table 7. The interaction coefficients are negative and statistically significant, indicating that insiders trade less following promotion-driven increases in high-level political networks within a chairman's tenure. After the promotion-driven increase in high-level political connections, treated firms reduce trading shares by 61%, trading amount by 73%, and trading permille by 17% relative to matched control firms. In Fig. 3, the dynamic treatment effect plot with *Log trading shares* as the dependent variable shows that pre-promotion coefficients are close to zero, supporting the parallel trends assumption. The differential effect is largest and statistically significant in the promotion year (event time = 0), and remains negative while not statistically significant in the subsequent years.

4.4.3. Anti-corruption inspections as shocks to enforcement risk in political networks

Finally, we implement a test that relies on an enforcement-risk shock external to firms and their local political connections but is not chosen by firms or individual politicians. An ideal shock for this purpose should: be outside the control of the firm and the connected politician, have timing that is difficult to manipulate locally, and generate a discrete and time-bounded increase in perceived enforcement pressure.

We use China's provincial “central inspection” visits conducted by the Central Commission for Discipline Inspection (CCDI) as such a shock, which is centrally scheduled and targeted at provincial political systems rather than specific firms. Beginning in May 2013, the CCDI publicly announced and dispatched central inspection teams to provinces in staggered rounds through 2014, with each visit typically lasting about two months.[21] During each visit, the team conducts intensive on-site information collection on official discipline

[20] The results are robust to other choices of caliper, including 0.02 and 0.03.

[21] See Online Appendix Table B.3 for each province's inspection round and duration.

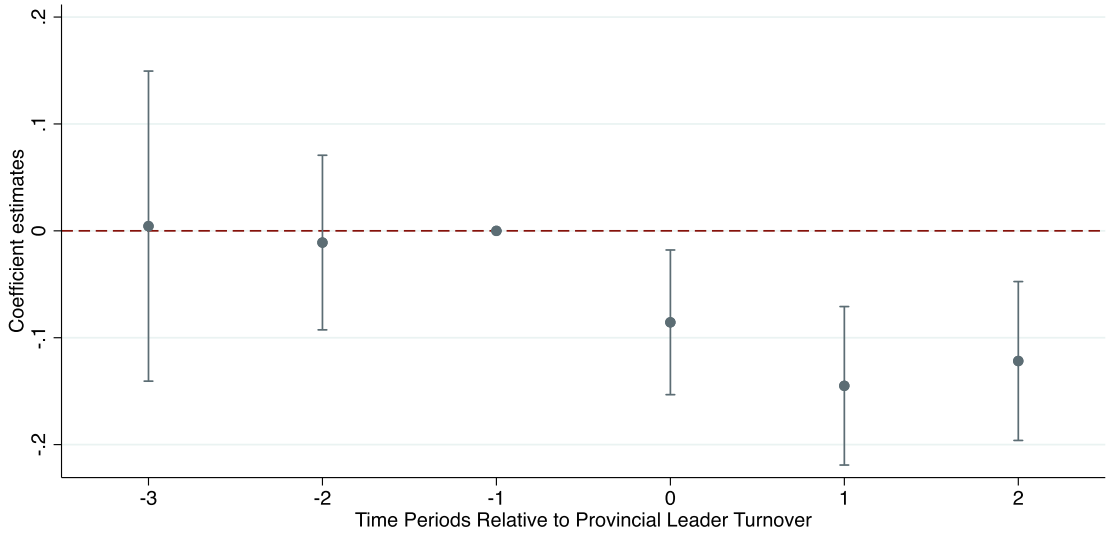

Fig. 2. Dynamic effects of political network on insider trading around provincial leader turnover This figure plots the time trend of the treatment effect estimates of political network on insider trading around the turnovers of provincial governors or party secretaries. Insider trading is measured by *Log trading shares*, the log value of the insider's holding changes in thousand shares for firm *i* in year *t*. Political network is measured by *Log network link*, which is defined as the natural logarithm of number of chairman's political connections via both education and work experience. For each period, we plot the point estimate (the solid circle) and the 90% confidence interval (the vertical lines intersecting the solid circles). Time indicators are defined for each year around a provincial leaders turnover. For instance, Time (0) denotes the year of the provincial leaders turnover; Time (−1) denotes the year before the provincial leaders turnover, and so forth.

violations, corruption, and abuse of power through interviews, document review, tip intake, and related field work, and then reports to the center for follow-up actions. The campaign generated substantial disciplinary and legal consequences. By the end of 2014, nearly 20,000 officials had been punished for breaches of the "*Eight-point Policy*" guidelines; among these, 4675 Party members across levels were implicated in 17,380 cases, and 59 provincial-level officials were charged and imprisoned. Inspection feedback and rectification notices frequently highlight misconduct concentrated in economically discretionary areas such as land transfer and use, real-estate development, engineering projects, and tendering/procurement, where politicians interact closely with local firms.[22]

Since the inspections target official misconduct that often involves interactions with local economy, firm-side behavior can become relevant when it raises questions about the underlying firm-politician relationship. Under the heightened scrutiny, observable corporate activities such as insiders' trading can attract attention and suspicion. Then any inquiry, whether initiated on the firm side or the politician side, might further expand to examine broader dealings between the firm and the connected politician. Substantiated investigations can impose direct costs on firms and reduce their intangible political assets, given the potentially severe career consequences for politicians. This logic implies that politically connected firms have stronger incentives to avoid attention-drawing trading during inspection windows. Prior evidence also supports the relevance of inspection windows for corporate behavior: Cao et al. (2018) show that firms in inspected provinces suppress the release of negative corporate information during inspections. We therefore treat the inspection window as an exogenous increase in enforcement risk, and test whether politically connected firms reduce insider trading during inspections using an event-study specification.

We construct a balanced firm-year-month panel centered on provincial CCDI visits and estimate a staggered event-study specification around the inspection start month. The post-event indicator *Post_inspection* equals one for the three months after each province's inspection start month to fully cover the duration of all inspections, which averages about two months and ranges from one to three months. *Post_inspection* equals zero for the three months prior to May 2013 (February–April 2013), which serve as a universal pre-inspection benchmark before any province is inspected. This choice avoids contamination after the first round of inspections begin in May 2013, when not-yet-inspected provinces may adjust behavior in anticipation or in response to increased discipline prompted by inspections elsewhere, which would weaken the validity of province-specific "pre" months as clean controls. The treated-group indicator *High_network (50%)* equals one for firms whose average political connections in the pre-event period (when *Post_inspection* = 0) are above the sample median, and zero otherwise. To avoid contamination from sudden changes in political connections, we drop firms that experience a chairman turnover at any point within the estimation window. We control for firm-year characteristics and chairman

[22] See, e.g., People's Daily Online, August 5, 2014, https://finance.people.com.cn/n/2014/0805/c66323-25401997.html; and People's Daily Overseas, October 16, 2014, https://paper.people.com.cn/rmrbhwb/html/2014-10/16/content_1488378.htm.

Table 7
Increases of high-level political network within a chairman's tenure.

Panel A. Characteristics of chairmen and firms before network increases: Matched sample

	Treated_chairman = 0 (control)		Treated_chairman = 1 (treated)		Diff: Treated-control
	Mean	Obs.	Mean	Obs.	Mean
	(std. dev.)		(std. dev.)		(std. err.)
Log network link	3.512	242	3.544	242	−0.0327
	(1.436)		(1.366)		(0.1274)
Log network link (high)	4.999	242	4.961	242	0.0383
	(1.604)		(1.508)		(0.1416)
Firm size	7.995	242	8.287	242	−0.2921
	(1.364)		(1.544)		(0.1324)
Leverage	0.515	242	0.543	242	−0.0278
	(0.258)		(0.243)		(0.0228)

Panel B. Regression analysis

Dep. Var.	Log trading shares	Log trading amount shares	Log trading permille
	(1)	(2)	(3)
Treated_chairman	0.0628	−0.0588	0.0834
	(0.214)	(0.292)	(0.0630)
Post high-level increase	0.298	0.377	0.0971
	(0.225)	(0.295)	(0.0688)
Treated_chairman	−0.616**	−0.725**	−0.174**
×Post high-level increase	(0.242)	(0.324)	(0.0729)
Chairman & Firm Controls	YES	YES	YES
Industry & Province FE	YES	YES	YES
Year FE	YES	YES	YES
Obs.	1896	1896	1896
adj. R-sq	0.206	0.212	0.193

This table reports the results of the regressions examining the effects of within-chairman changes in political network on insider trading using the increase of high-level political network via political promotion. We consider the scenario when there is a promotion of the high-level connected politicians (at/above "Bureau director" level, specified as Level 6 in Table A.3). *Treated_chairman* is defined as one for the chairmen in the treated group, whose high-level political network has increased in the sample because of political promotion of the connected politicians, and zero otherwise. *Post high-level increase*, a time indicator, is defined as one in the event year and the subsequent two years after the increase in high-level political network, and zero in the three years before. Then we use one-to-one propensity score matching with the caliper of 0.015 to define the control group of chairmen based on chairman and firm characteristics *Log network link*, *Log network link (high)*, *Firm size*, and *Leverage*. Panel A presents the summary statistics of chairman and firm characteristics of the treatment and control groups of chairmen before the network increase. Panel B reports the regression results on the effects of the high-level network increase on insider trading. Chairman level controls include *List 985*, *Education abroad*, *Work abroad*, *Female*, *Log age*, *Foreign citizenship*, and *Educational level*. Firm level controls include *SOE*, *Net cash flow*, *Firm size*, *EBITDA*, *Leverage*, *Stock volatility*, *HHI*, and *Annual market returns*. All specifications also include an interaction between *Post_high_increase* and a market crash time indicator, which equals one in 2015, to absorb any differential post- versus pre-event effects driven by the heightened trading variation during the 2015 Chinese stock market crash. All other variables are defined in Appendix Table A.1. Standard errors are clustered at the firm level and reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

characteristics, and include firm fixed effects to absorb time-invariant differences across firms, and province-year-month fixed effects to compare firms only within the same province and year-month, holding constant any province-level corruption conditions and enforcement intensity that vary over time.[23]

Table 8 shows that within the same firm, in the same province-year-month, highly politically connected firms reduce trading significantly more than less connected firms during inspection periods: trading shares fall by 26%, trading amount by 38%, and trading permille by 7%, compared to the months prior to the initial CCDI announcement in May 2013. To examine the dynamic treatment effects, we define event time in months relative to inspection. Accordingly, for the pre-inspection period, event time takes values −3, −2, and − 1 for February, March, and April 2013, the three months before the first CCDI announcement, so that pre-trend comparisons are free from spillover effects from staggered inspection rounds. For the post-inspection period, event time takes values 0 to 3 for the staggered inspection start month and the following three months relative to each province's inspection start month, which covers the typical inspection duration. The key comparison is again between firms with high and low political connections. Following the same

[23] Robustness check: results are robust in magnitude and remain statistically significant at the 1% level under alternative treated-group definitions using 33rd- and 25th-percentile cutoffs, alternative specifications that replace firm fixed effects with industry fixed effects and province-year-month fixed effects to include cross-firm variation while controlling for common industry and regional time trends, and clustering standard errors at the province level to allow for within-province correlation.

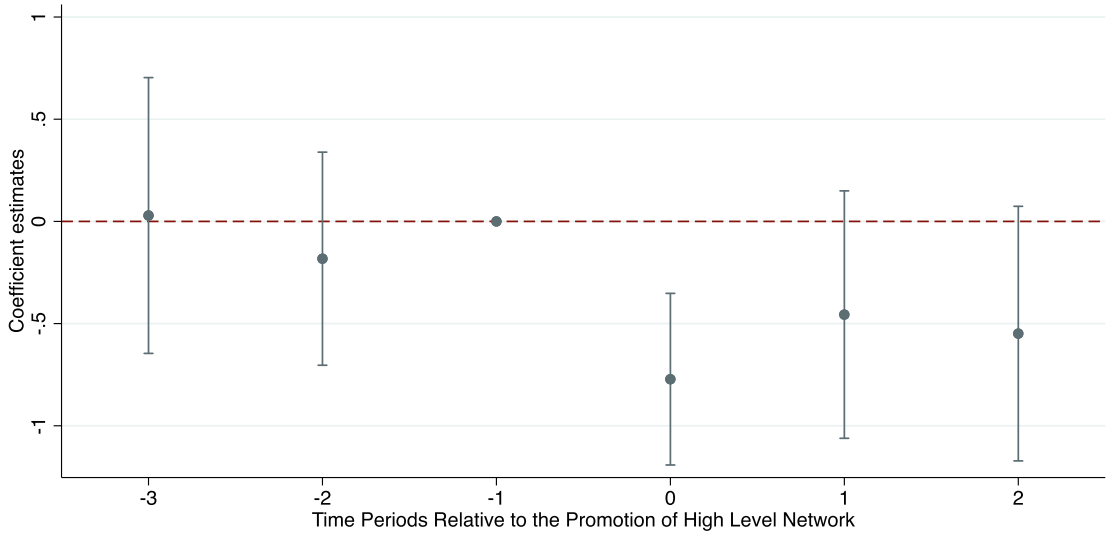

Fig. 3. Dynamic effects of political network on insider trading around high-level promotions This figure plots the time trend of the treatment effect estimates of how promotion-driven high-level political network increases affect insider trading. The treated group indicator *Treated_chairman* equals one for chairmen whose high-level political network increases via political promotion during their tenure. The outcome variable is *Log trading shares*, defined as the log of insiders' net shareholding changes (in thousands). For each event year, we plot the point estimates (solid circles) and 90% confidence intervals (vertical bars). Time indicators are centered around the year of network increase: Time (0) marks the year of high-level network increase; Time (−1) is the prior year, and so on.

Table 8
Anti-corruption inspections.

Dep. Var.	Log trading shares	Log trading amount	Log trading permille
	(1)	(2)	(3)
High_network (50%) × Post_inspection	−0.226***	−0.335***	−0.0608***
	(0.0848)	(0.120)	(0.0223)
Chairman & Firm Controls	YES	YES	YES
Firm FE	YES	YES	YES
Province-year-month FE	YES	YES	YES
Obs.	8454	8454	8454
adj. R-sq	0.173	0.186	0.106

This table reports the results of the regressions examining the effects of political network on insider trading around provincial visits by the Central Commission for Discipline Inspection (CCDI). *Post_inspection* equals one for three months after each province's inspection's start year-month, and zero for three months prior to May 2013 (initial round of inspection). *High_network (50%)* equals one for firms with average political connections above the median of the sample during the pre-event periods (when post indicator equals zero), and zero for firms with average political connections below the median. Chairman level controls include *List 985*, *Education abroad*, *Work abroad*, *Female*, *Log age*, *Foreign citizenship*, and *Educational level*. Firm level controls include *SOE*, *Net cash flow*, *Firm size*, *EBITDA*, *Leverage*, *Stock volatility*, *HHI*, and *Annual market returns*. All other variables are defined in Appendix Table A.1. Standard errors are clustered at the firm level and reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

specifications on fixed effects and control variables, Fig. 4 shows that in the inspection month (event time = 0), firms with higher political connections trade significantly less than firms with lower political connections, and this difference persists over the next three months (event time from 1 to 3). The timing of this response is consistent with the average inspection duration of about 60 days. Pre-inspection coefficients are close to zero, supporting the parallel-trends assumption. These results support interpreting CCDI inspections as temporary external shocks to enforcement risk that make politically connected firms to behave more cautiously and reduce insider trading.

4.5. Insider trading when there is private information

The evidence so far shows that the insiders in firms with stronger political networks trade less on average, and the insiders in SOEs tend to react less to political networks and trade more compared to their peers in non-SOEs when the chairman's political network is strong. However, it may not reflect the pattern of insider trading when there is private information and whether the trades are informed. In this section, we examine how corporate insiders react to two types of information by conducting event studies: firm-related information before M&As and macro-level information around the announcement of the *"Four-Trillion"* Stimulus Plan in

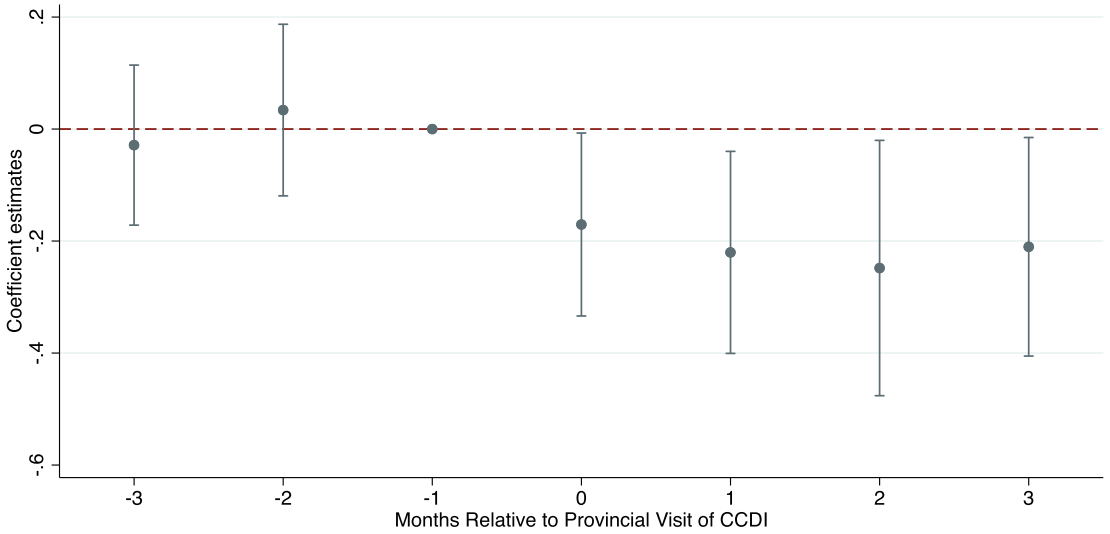

Fig. 4. Dynamic effects of political network on insider trading around anti-corruption inspections This figure plots the time trend of the treatment effect estimates of political network on insider trading around the China's provincial "central inspection" visits conducted by the Central Commission for Discipline Inspection (CCDI). Insider trading is measured by *Log trading shares*, the log value of the insider's holding changes in thousand shares for firm *i* in year *t*. The treated group indicator *High_network (50%)* equals one for firms whose average political connections in the pre-event period are above the sample median, and zero otherwise. For each period, we plot the point estimate (the solid circle) and the 90% confidence interval (the vertical lines intersecting the solid circles). The post-event indicator *Post_inspection* equals one for the three months after each provinces inspection start month to fully cover the duration of all inspections, which averages about two months (ranging from one to three months). *Post_inspection* equals zero for the three months prior to May 2013 (February–April 2013), which serve as a universal pre-inspection benchmark before any province is inspected.

November 2008 in response to the Global Financial Crisis.

4.5.1. Firm-related information: M&As

We first examine the trading behavior of corporate insiders before the announcements of M&As, when the insiders are supposed to have private information about the details of the transactions. Trading in a very short window before the announcements can trigger suspicion from the public and lead to significant risks. Hence, we expect insiders would avoid doing so, especially when they have a stronger political network and prefer to preserve the political network for future goals.

To test this, we focus on insider trading within two short windows, i.e., 15 days before M&A announcements versus within 30 to 90 days before M&A announcements. The time indicator, *M&A,* is defined as one for 15 days before the announcements or zero for 30 to 90 days before the announcements. We keep firms with valid insider transactions at least 60 days before M&A announcements and calculate the average insider trading for each firm at time windows 0 or 1 (when *M&A* equals 0 or 1).[24]

Table 9 reports the results. The dependent variable is the average insider trading for the two periods before M&A announcements. In columns (1), (3), and (5), we have the double interaction *Log network link*×*M&A*, and in columns (2), (4), and (6), we further have the triple interaction of *Log network link*, *M&A*, and SOE dummies. The coefficients on *Log network link*×*M&A* are negative and significant in all the specifications. This suggests that within a short window of 15 days before M&A announcements, corporate insiders at firms with stronger political networks trade significantly less, supporting hypothesis H1b. In columns (2), (4) and (6), the coefficients on the triple interactions *Log network link*×*M&A* × *Central SOE* are all positive, although less significant in column (4), and those on *Log network link*×*M&A* × *Local SOE* are all positive too, although less significant in column (6). This suggests that when firms have strong political connections, insiders in SOEs, compared to non-SOEs, tend to trade more in the short window before M&A announcements. This further indicates that for firms with stronger political networks, corporate insiders behave more cautiously in trading during sensitive periods before the information about M&As becomes public.

We then examine the buy-and-hold abnormal returns (BHARs) for the purchase trades within these two windows. If the insiders' trades are based on private information before M&A announcements, the future returns should be higher. The top panel of Fig. 5 plots the median of the BHARs within 90 days from the purchases. We split the sample by the median of *Network link*. The blue (or orange) solid and dash lines denote the BHARs adjusted by market cumulative returns for the trading by firms with stronger political networks (or by firms with weaker political networks) in the windows [−15, 0] and [−90, −30] respectively. The figure shows that the gap between the two trading strategies by firms with stronger networks is consistently larger than the gap between those by firms with

[24] Alternatively, comparing 7 days before M&A announcements to the 30–90 days prior shows consistent results: firms with stronger political networks trade less. See Table B.7 in the Online Appendix.

Table 9
Political network, insider trading and M&As.

Dep. Var.	Log trading shares		Log trading amount		Log trading permille	
	(1)	(2)	(3)	(4)	(5)	(6)
Log network link	0.0420	0.0290	0.0192	0.00145	0.0157	−0.00123
	(0.0331)	(0.0420)	(0.0441)	(0.0554)	(0.0114)	(0.0148)
M&A	1.762***	1.999***	2.026***	2.296***	0.807***	0.882***
	(0.138)	(0.156)	(0.178)	(0.200)	(0.0532)	(0.0619)
Log network link×M&A	−0.244***	−0.221***	−0.300***	−0.255***	−0.101***	−0.0790***
	(0.0469)	(0.0608)	(0.0615)	(0.0781)	(0.0169)	(0.0229)
Central SOE		−0.812**		−0.913*		−0.341***
		(0.367)		(0.517)		(0.109)
Local SOE		−0.382		−0.334		−0.192**
		(0.240)		(0.335)		(0.0754)
Log network link×Central SOE		−0.0665		−0.0773		0.0115
		(0.0921)		(0.128)		(0.0266)
Log network link×Local SOE		−0.124		−0.150		−0.0187
		(0.0774)		(0.109)		(0.0233)
M&A × Central SOE		−1.784***		−1.918**		−0.837***
		(0.531)		(0.750)		(0.144)
M&A × Local SOE		−1.946***		−2.375***		−0.644***
		(0.363)		(0.487)		(0.110)
Log network link×M&A		0.242*		0.208		0.0975**
×Central SOE		(0.144)		(0.198)		(0.0407)
Log network link×M&A		0.244**		0.265*		0.0472
×Local SOE		(0.114)		(0.158)		(0.0330)
Chairman & Firm Controls	YES	YES	YES	YES	YES	YES
Industry & Province FE	YES	YES	YES	YES	YES	YES
Year FE	NO	NO	NO	NO	NO	NO
Obs.	10,778	10,778	10,778	10,778	10,778	10,778
adj. R-sq	0.0728	0.0770	0.0655	0.0695	0.112	0.118

This table reports the results of the regressions examining the effects of political network on insider trading around M&A announcements. *M&A* is defined as one if within 15 days before M&A announcements, and zero if within 30–90 days before M&A announcements. *Log trading shares*, *Log trading amount* and *Log trading permille* are taken daily average during these two periods (when the M&A indicator equals one or zero). Chairman level controls include *List 985*, *Education abroad*, *Work abroad*, *Female*, *Log age*, *Foreign citizenship*, and *Educational level*. Firm level controls include *Net cash flow*, *Firm size*, *EBITDA*, *Leverage*, *Stock volatility*, *HHI*, and *Annual market returns*. All variables are defined in Appendix Table A.1. Standard errors are clustered at the firm level and reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

weaker network over the 90 days after the trading. This indicates the informativeness of the trades by the politically more connected corporate insiders. Notably, our regression results show that during the 15-day window before M&A announcements, firms with stronger networks tend to trade less. Taken together, these results suggest that when there is private information about M&As and potential opportunity for profitable informed trading, insiders with stronger political connections trade less during information sensitive period, and such effect is stronger for non-SOEs where political network is more valuable.

4.5.2. Macro-level private information: The "four-trillion" stimulus in 2008

The second event we use is the *"Four-trillion"* Fiscal Stimulus Plan in 2008. In response to the Global Financial Crisis that originated in the U.S., the Chinese government announced the Stimulus Plan on November 8, 2008, to stimulate economic growth and increase liquidity. However, the details of the Stimulus Plan were not announced until later. In mid-November, it was revealed that the central government would only provide 1.2 trillion RMB funds, with the rest reallocated by provincial and city local governments. In March 2009, China's National Development Reform Commission (NDRC) announced a revision of the stimulus and published a breakdown of how the funds would be distributed. The fiscal stimulus eventually turned out to benefit Chinese SOEs significantly, with stronger connections with the government. Using the loan-level information for manufacturing firms, Cong et al. (2019) show that most loans flowed to and supported SOEs. Therefore, we assume that within a relatively short window after the initial announcement of the Stimulus Plan, there was an information advantage for top managers and directors in firms with better political connections regarding whether their firms would benefit specifically from the massive Fiscal Stimulus.

We focus on two periods: one within 60 days after the initial announcement of the Stimulus Plan on November 8; the other is 150 days to 90 days before the policy announcement as a benchmark period. We select the 60-day window after the initial announcement to capture the effect of information advantage regarding the details of whether the firm is to benefit from the stimulus rather than the impact of the announcement itself. Therefore, we define the time indicator, *Stimulus*, as one for 60 days (i.e. [0, 60]) after November 8, 2008, and zero for the 90 to 150 days before that (i.e. [−150, −90]). We also average insider trading during these two periods. We then

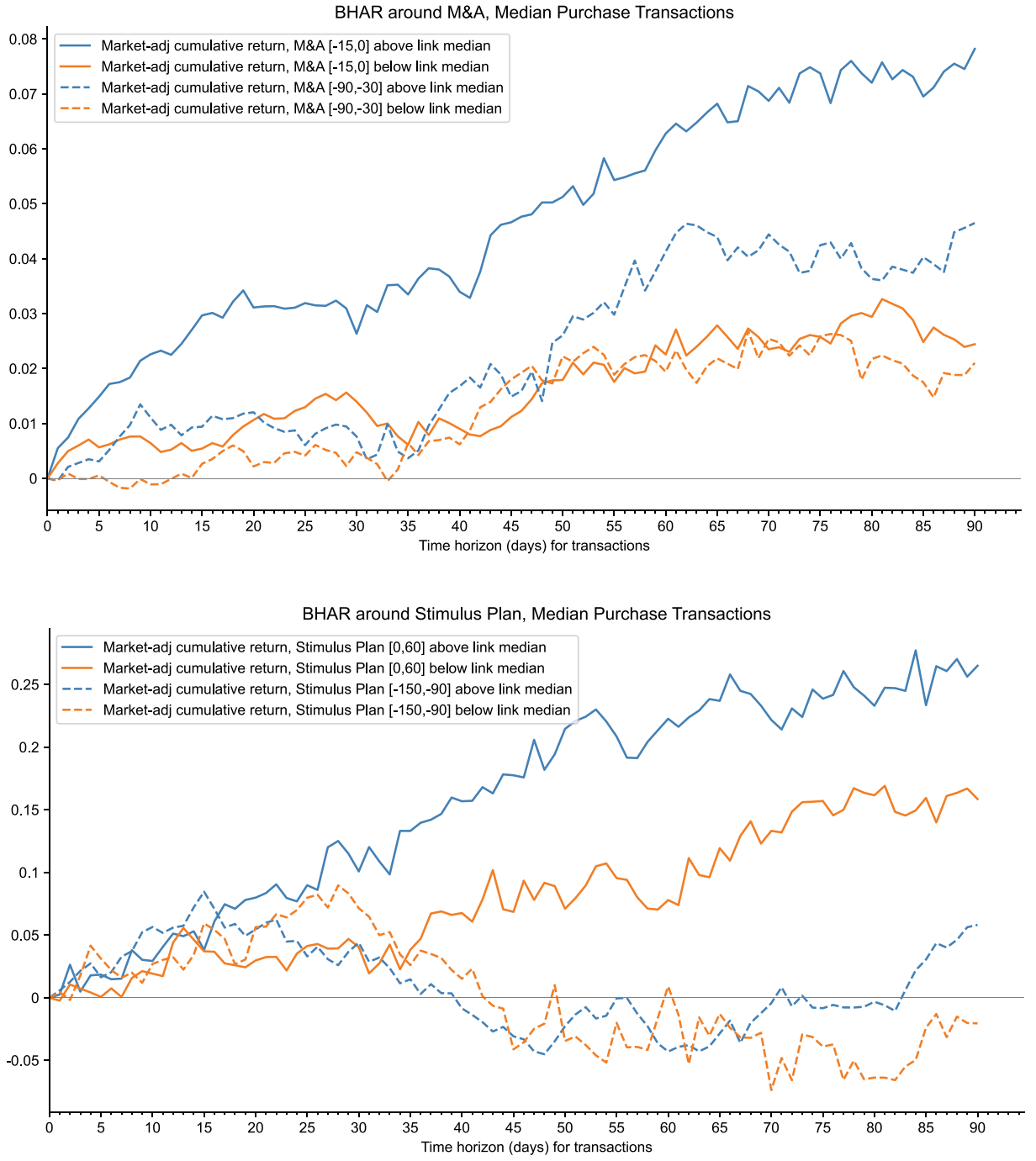

Fig. 5. Buy-and-hold abnormal return for M&As and the Stimulus Plan in 2008 This figure plots the buy-and-hold abnormal return within the 90 days of the transactions in the windows Day [−15, 0] vs [−90,-30] for the M&As and in the windows Day [0, 60] vs [−150, −90] for the Stimulus Plan announced on November 8, 2008.

examine how trading behavior changes after the initial policy announcement but before the details are published, as well as how the political network plays a role.[25]

Table 10 reports the results. The dependent variable is the average insider trading for the two periods defined above. In columns

[25] Alternatively, we also try the 90-day window after the announcement versus 150 days to 90 days before the announcement. The results are consistent and reported in Table B.8 in the Online Appendix.

Table 10
Political network, insider trading and the "Four-trillion" Stimulus in 2008.

Dep. Var.	Log trading shares		Log trading amount		Log trading permille	
	(1)	(2)	(3)	(4)	(5)	(6)
Log network link	0.125	0.203	0.0565	0.0387	0.0738	0.0933
	(0.146)	(0.237)	(0.186)	(0.294)	(0.0529)	(0.0840)
Stimulus	2.236***	2.876***	2.541***	3.213***	0.769***	0.973***
	(0.692)	(0.898)	(0.849)	(1.072)	(0.230)	(0.319)
Log network link×Stimulus	−0.332	−0.648*	−0.314	−0.608	−0.140**	−0.221**
	(0.212)	(0.335)	(0.247)	(0.382)	(0.0612)	(0.103)
Central SOE		−0.325		−1.035		−0.273
		(1.637)		(2.318)		(0.370)
Local SOE		−1.370		−2.110		−0.461
		(0.974)		(1.311)		(0.316)
Log network link×Central SOE		−0.359		−0.163		−0.0801
		(0.402)		(0.550)		(0.110)
Log network link×Local SOE		−0.116		0.0829		−0.0511
		(0.288)		(0.385)		(0.0866)
Stimulus×Central SOE		−3.217		−3.799		−1.063***
		(2.428)		(3.224)		(0.380)
Stimulus ×Local SOE		−1.387		−1.378		−0.501
		(1.494)		(1.931)		(0.424)
Log network link×Stimulus		1.095*		1.198		0.300**
×Central SOE		(0.607)		(0.768)		(0.122)
Log network link×Stimulus		0.531		0.453		0.166
×Local SOE		(0.459)		(0.566)		(0.122)
Chairman & Firm Controls	YES	YES	YES	YES	YES	YES
Industry & Province FE	YES	YES	YES	YES	YES	YES
Year FE	NO	NO	NO	NO	NO	NO
Obs.	300	300	300	300	300	300
adj. R-sq	0.0729	0.0626	0.0706	0.0587	0.0952	0.0793

This table reports the results of the regressions examining the effects of political network on insider trading around the announcement of the "*Four-trillion*" Stimulus Plan in November 2008. *Stimulus* is defined as one for 60 days (i.e. [0,60]) after November 8, 2008 and zero for the 90 to 150 days before that (i.e. [−150, −90]). *Log trading shares*, *Log trading amount* and *Log trading permille* are taken daily average during these two periods (when *Stimulus* equals one or zero). Chairman level controls include *List 985*, *Education abroad*, *Work abroad*, *Female*, *Log age*, *Foreign citizenship*, and *Educational level*. Firm level controls include *Net cash flow*, *Firm size*, *EBITDA*, *Leverage*, *Stock volatility*, *HHI*, and *Annual market returns*. All other variables are defined in Appendix Table A.1. Standard errors are clustered at the firm level and reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

(1), (3), and (5), we have the double interaction, *Log network link*×*Stimulus,* and in columns (2), (4), and (6), we further have the triple interaction of *Log network link*, *Stimulus,* and SOE dummies. The coefficients on *Stimulus* are positive and significant, showing that within the two months after the initial announcement, on average, there are more trades. This is consistent with the positive implication of the Stimulus Plan. The coefficients on *Log network link*×*Stimulus* are negative but more significant when we incorporate the triple interactions in columns (2), (4), and (6). The coefficients on the triple interactions with *Central SOE* are positive and more significant. These suggest that although, on average, insiders trade more, those from firms with stronger political networks tend to be cautious in trading, supporting hypothesis H1b. However, insiders from central SOEs with strong political networks tend to trade more compared to those from non-SOEs. Taken together, these results suggest that when there is macro-related private information, insiders from firms with more substantial political networks trade less, and such an effect is more pronounced for non-SOEs.

Similarly, we look at the informativeness of the trades during these two periods for firms with stronger or weaker political networks. We split the sample using the median value of *Network link*. Specifically, we focus on purchases as the announcement of the Stimulus is positive news to the stock market. The bottom panel of Fig. 5 plots the median of the BHARs within 90 days from the purchase. Again, the blue (or orange) solid and dash lines denote the BHARs adjusted by market cumulative returns for the trading by firms with stronger political network (or by firms with weaker political networks) in the windows [0, 60] and [−150, −90] respectively. The figure shows that the gap between the two trading strategies by firms with stronger networks is consistently larger than the gap between those by firms with weaker networks over the 90 days after the trading, indicating stronger information for the trades by politically stronger connected corporate insiders. Overall, these suggest that when there is private information about the potential influence from a macro-level policy and, henceforth, an opportunity for profitable trades, politically stronger connected insiders are more cautious in trading during information-sensitive periods and the effect is stronger for non-SOEs where the network is more important.

4.6. Discussion on potential outcomes of muted insider trading

Since the underlying firm-politician interactions are unobserved and the benefits from political connections may materialize over longer horizons, this section provides descriptive evidence on firm-level outcomes potentially associated with the firm's implicit relational contract with political networks.

Table 11
Univariate tests: Potential outcomes of muted insider trading.

Panel A. Non-SOE subsample

	G1.*H-link & L-trade*	***G2***.*H-link & H-trade*	*Diff:* ***G1 – G2***	***G3***.*L-link & L-trade*	***G4***.*L-link & H-trade*	*Diff:* ***G3 – G4***
	Mean (std. dev.)	Mean (std. dev.)	Mean (std. err.)	Mean (std. dev.)	Mean (std. dev.)	Mean (std. err.)
Total assets growth	0.535	0.427	0.1079	0.353	0.365	−0.0116
	(3.922)	(1.074)	(0.2123)	(1.487)	(1.175)	(0.0998)
Obs.	369	369		363	363	
Avg. EBITDA	0.086	0.067	0.0183***	0.081	0.070	0.0107**
	(0.072)	(0.039)	(0.0043)	(0.065)	(0.064)	(0.0047)
Obs.	369	369		363	363	
Avg. Subsidy	0.006	0.004	0.0017*	0.004	0.005	−0.0007*
	(0.016)	(0.006)	(0.0009)	(0.006)	(0.005)	(0.0004)
Obs.	369	369		363	363	

Panel B. SOE subsample

	G1.*H-link & L-trade*	***G2***.*H-link & H-trade*	*Diff:* ***G1 – G2***	***G3***.*L-link & L-trade*	***G4***.*L-link & H-trade*	*Diff:* ***G3 – G4***
	Mean (std. dev.)	Mean (std. dev.)	Mean (std. err.)	Mean (std. dev.)	Mean (std. dev.)	Mean (std. err.)
Total assets growth	0.339	0.213	0.1265	0.176	0.230	−0.0542**
	(4.640)	(0.671)	(0.166)	(0.438)	(0.303)	(0.0258)
Obs.	799	799		406	406	
Avg. EBITDA	0.097	0.094	0.0032	0.105	0.086	0.0181***
	(0.073)	(0.104)	(0.0045)	(0.074)	(0.069)	(0.0051)
Obs.	799	799		406	406	
Avg. Subsidy	0.004	0.004	0.0000	0.003	0.004	−0.0004
	(0.007)	(0.005)	(0.0003)	(0.004)	(0.004)	(0.0003)
Obs.	799	799		406	406	

Panel C. Double differences

Dep. Var.	Total assets growth		Avg. EBITDA		Avg. Subsidy	
Subsample	Non-SOE	SOE	Non-SOE	SOE	Non-SOE	SOE
	(1)	(2)	(3)	(4)	(5)	(6)
H-link	0.0208	−0.0437	−0.00480	0.000857	−0.000333	0.0000935
	(0.0955)	(0.0610)	(0.00357)	(0.00318)	(0.000450)	(0.000317)
L-trade	0.0125	0.0167	−0.00334	−0.000531	−0.00112**	−0.000466
	(0.116)	(0.0741)	(0.00406)	(0.00239)	(0.000435)	(0.000309)
H-link×*L-trade*	0.129	0.118	0.000934	−0.000597	0.00184**	0.0000695
	(0.231)	(0.131)	(0.00444)	(0.00349)	(0.000854)	(0.000401)
Chairman & Firm Controls	YES	YES	YES	YES	YES	YES
Industry & Province FE	YES	YES	YES	YES	YES	YES
Year (chairman start) FE	YES	YES	YES	YES	YES	YES
Obs.	1464	2410	1464	2410	1464	2410
adj. R-sq	0.002	0.011	0.514	0.573	0.069	0.078

This table reports the firm-chairman-level performance outcomes for four groups formed by a 2 × 2 split on the chairman's political network strength (high vs. low) and insider trading intensity (high vs. low). The group assignments use sample medians after averagely aggregating both trading and network measures to the firm-chairman level. *Total assets growth* is the average annual growth rate in total assets over the chairman's tenure in a firm. *Avg. EBITDA* (and *Avg. Subsidy*) is the tenure-average of annual *EBITDA* (*Subsidy*) scaled by total assets. Groups are: *G1* (high network, low trading), *G2* (high network, high trading), *G3* (low network, low trading), and *G4* (low network, high trading). Within the high-network group (*G1* vs. *G2*) and within the low-network group (*G3* vs. *G4*), chairmen are matched using one-to-one propensity score matching on firm characteristics *Log network link*, *Log network link (high)*, *Firm size*, and *Leverage*, and chairman characteristics *List 985*, *Education abroad*, *Work abroad*, *Female*, *Log age*, *Foreign citizenship*, and *Educational level*, with a caliper of 0.015. Panel A reports group means (standard deviations) and the within-network differences G1 vs. G2 and G3 vs. G4 for non-SOE subsample. Panel B repeats Panel A for the SOE subsample. Panels A and B report pairwise *t*-tests. Panel C reports the double difference, (*G1 – G2*) – (*G3 – G4*), implemented as the coefficient on *H-link* × *L-trade*, where *H-link* equals one for chairmen in *G1* or *G2* and zero for chairmen in *G3* or *G4*, and *L-trade* equals one for chairmen in *G1* or *G3* and zero for chairmen in *G2* or *G4*. Results are reported separately for the non-SOE and SOE subsamples. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

If such implicit contracts are more strongly upheld when insiders restrain their trading, we should observe differences in firm outcomes across firms with similar political connections but different insider trading behavior. To examine this, Table 11 aggregates the data to the firm-chairman level and classifies chairmen into four groups by political network strength (*high* vs. *low*) and insider trading intensity (*low* vs. *high*), both defined using sample medians over the chairman's tenure. Within the high-network group (*G1* vs. *G2*) and within the low-network group (*G3* vs. *G4*), chairmen are matched using one-to-one propensity score matching on firm and chairman characteristics with a caliper of 0.015. We examine three tenure-level outcomes: average annual growth rate for total assets, average annual EBITDA scaled by total assets, and average annual government subsidies a firm received scaled by total assets. This grouping compares outcomes for low- versus high-trading chairmen within the same level of political connections.

Since private firms rely more on relationship-based access to local resources, Panel A of Table 11 presents the results for the non-SOE subsample, while Panel B presents the SOE subsample for comparison. Relative to the SOE subsample, the low-minus-high trading outcome gaps are larger for the high-network group and smaller for the low-network group. For high-network non-SOEs, both EBITDA and subsidy are significantly higher for low-trading than for high-trading chairmen.

Panel C reports the double-difference estimates, *(G1 – G2) – (G3 – G4)*, captured by the coefficient on *H-link* × *L-trade* in the regressions, where *H-link* equals one for chairmen in *G1* or *G2* and zero for chairmen in *G3* or *G4*, and *L-trade* equals one for chairmen in *G1* or *G3* and zero for chairmen in *G2* or *G4*. The specification includes firm and chairman controls (average values) and industry, province, and tenure-start-year fixed effects. In the non-SOE subsample, the interaction terms are all positive, and statistically significant in column (5) when we use *Subsidy* as the dependent variable. These patterns suggest that, among non-SOEs, muted insider trading is associated with more favorable firm outcomes, particularly greater government subsidies, when political connections are strong, consistent with private firms' stronger incentives to maintain implicit relational contracts with political networks that operate as a form of informal governance.

4.7. Alternative measures

This section checks whether our baseline results depend on how political connections are measured. We consider three alternatives: political networks of CEOs and CFOs, managers' prior work experience in the public sector, and provincial corruption as an additional control.

First, we construct the same CV-based network measures for CEOs and CFOs as for chairmen. In the sample of 2216 firms, we observe 3994 chairmen, 4952 CEOs, and 4361 CFOs. In Table B.9, re-estimating the baseline model using CEO or CFO networks yields coefficients that are generally negative but weaker and less statistically significant than those based on chairmen, and the CFO results are largely insignificant. This pattern is consistent with the institutional role of the chairman as the key decision maker in Chinese listed firms.

Second, we proxy political embeddedness using managers' prior public-sector work experience. We construct indicators for whether the chairman has public-sector experience and whether any of the chairman/CEO/CFO team has such experience, and re-estimate the baseline model. In Table B.10, these indicators are not significantly related to insider trading, either alone or when we also control for state ownership and the main network measures.

Third, we address the concern that corruption may influence a firm's political network. We add to the baseline model a province-level measure of corruption, defined as the natural logarithm of the number of corruption cases in each province.[26] In Table B.11, the corruption measure is insignificant and the network and SOE coefficients remain negative and significant, suggesting the baseline relationship is not driven by provincial corruption intensity.

5. Conclusion

This paper examines how political networks influence insider trading behavior in China. While political connections are often viewed as providing a "shielding effect" that weakens external enforcement and facilitates opportunistic behavior, we propose an alternative perspective. In environments where political relationships operate as long-term relational contracts, firms may restrain opportunistic actions to preserve valuable political capital. In this setting, personal political connections can function as a form of informal governance that disciplines managerial behavior.

Using detailed biographical information to construct chairman-politician social networks, we document that firms with stronger political networks engage in significantly less insider trading. This suppression of trading is particularly pronounced for connections that are long-standing or involve higher-ranking politicians, where the value of the political relationship is likely greater. The muted trading also persists during periods when insiders are likely to possess valuable private information, such as prior to M&A announcements and major policy events. Importantly, the effect is stronger among non-SOEs, while it is weaker among SOEs that are already embedded in the state through ownership. This pattern suggests that personal political networks play a stronger disciplinary role when formal governance through state ownership is absent.

To address identification concerns, we exploit three shocks to the value and stability of political networks, including provincial leadership turnovers, promotions of connected politicians, and centrally scheduled anti-corruption inspections. Across these settings, firms with stronger political networks exhibit more cautious insider trading behavior.

[26] At the firm or individual level, it is extremely difficult to obtain the information on corruption.

Overall, our findings highlight the role of political networks as a form of informal governance. Rather than merely shielding firms from enforcement, relational political ties can discipline managerial opportunism and shape corporate behavior in environments where formal institutions are limited.

CRediT authorship contribution statement

Wei Chen: Data curation. **Xian Gu:** Writing – original draft, Supervision, Investigation, Data curation. **Iftekhar Hasan:** Writing – review & editing, Project administration, Conceptualization. **Hao Zhao:** Writing – original draft, Supervision, Investigation, Data curation. **Yun Zhu:** Writing – original draft.

Appendix A

Table A.1
Variable definitions.

Variable	Definition	Source
Age	The age of the chairman. Log values are used in the regressions.	iFinD
Alumni link	Political connections formed when the chairman and a politician attended the same university or college at different times. Log values are used in the regressions.	CPED/iFinD
Annual market returns	Annualized monthly market returns with cash dividend reinvested (total-value-weighted).	CSMAR
BHARs	Buy-and-hold abnormal returns are computed as market-adjusted 90-day returns for each insider trade, then aggregated by trader group following Ravina and Sapienza (2010).	CSMAR/ iFinD
Central SOE	A dummy variable that equals 1 if a firm is a central state-owned enterprise, and 0 otherwise.	iFinD
Chairman_Pol	A dummy equal to 1 if the chairman held a public position at the city level or above.	
Corruption	Log of the number of corruption cases in the province-year.	
EBITDA	EBITDA scaled by total assets for firm *i* in year *t*.	CSMAR
Education abroad	A dummy variable that equals 1 if a chairman studied at a university/college outside mainland China, and 0 otherwise.	iFinD
Educational level	An ordinal variable (from 1 to 4) of the chairman's highest degree: less than bachelor's, bachelor's, master's, and PhD.	iFinD
Education link	Connections formed when the chairman and a politician attended the same university, regardless of overlap. Log values are used in the regressions.	CPED/iFinD
Education link (weighted)	Weighted sum of education-based connections, calculated as squared political rank times duration of connection.	CPED/iFinD
Female	A dummy equal to 1 if the chairman is female.	iFinD
Firm size	Natural logarithm of total assets (in million RMB).	CSMAR
Financial distress	A dummy equal to 1 if the firm had negative net income in the previous year.	CSMAR
Foreign citizenship	A dummy equal to 1 if the chairman holds a non-mainland Chinese citizenship.	iFinD
Gov't subsidy	Government subsidies received in the next fiscal year, scaled by total assets.	iFinD
HHI	Herfindahl-Hirschman Index of ownership concentration, based on top 10 shareholders.	iFinD
High_network (50%)	A dummy equal to 1 for firms whose average political connections in the pre-CCDI-inspection period are above the sample median, and 0 otherwise.	CPED/iFinD
Treated_chairman	A dummy equal to 1 for chairmen whose high-level political network increases via political promotion during their tenure.	CPED
Law institutions	A dummy equal to 1 if the number of law institutions in a province is in the top 1/3 of sample; 0 if in the bottom 1/3.	CNBS
Leverage	Total liabilities divided by total assets.	CSMAR
Link increase	A dummy equal to 1 if the average number of high-level political connections in the two years after a chairman turnover exceeds that in the two years before.	CPED
List 985	A dummy equal to 1 if the chairman graduated from a Project 985 university.	iFinD
Local SOE	A dummy equal to 1 if the firm is a local state-owned enterprise.	iFinD
Marketization	A provincial-level index for market versus government forces.	Fan's Index
M&A	A dummy equal to 1 if the trade occurred within 15 days before a firm M&A; 0 if within 30 to 90 days before.	
Net cash flow	Net cash flow from operating activities scaled by total assets.	CSMAR
Network link	The sum of education links and work links for firm *i* in year *t*. Log values (*Log network*) are used in the regressions.	CPED/iFinD
Network link (long)	Sum of connections (education + work) lasting more than five years. Log values are used in the regressions.	CPED/iFinD
Network link (short)	Sum of connections (education + work) lasting five years or less. Log values are used in the regressions.	CPED/iFinD
Network link (high)	Connections with politicians at or above Bureau Director level. Log values are used in the regressions.	CPED/iFinD
Network link (low)	Connections with politicians below Bureau Director level. Log values are used in the regressions.	CPED/iFinD
Network link (weighted)	Weighted sum of education and work-based connections, calculated as squared political rank times duration of connection. Log values are used in the regressions.	CPED/iFinD
Post high-level increase	A dummy equal to 1 for the two years after a high-level political network increase, and 0 for the two years before.	CPED
Post_inspection	A dummy equal to 1 for the three months after each province's CCDI inspection start month to fully cover the duration of all inspections, and 0 for the three months prior to May 2013 (February–April 2013).	
P_Turnover	A dummy equal to 1 for the two years after a provincial leader turnover, and 0 for the two years before.	
School friends link	Connections formed when the chairman and a politician attended the same school during overlapping periods.	CPED/iFinD
SOE	A dummy equal to 1 if the firm is state-owned.	iFinD
Stimulus	A dummy equal to 1 if the trade occurred within 60 days after the Nov 8, 2008 fiscal stimulus; 0 if 90 to 150 days before.	
Stock volatility	Standard deviation of daily log returns.	CSMAR
Trading amount	Insider trade value in thousand RMB. Log values are used in the regressions.	iFinD

(*continued on next page*)

Table A.1 (*continued*)

Variable	Definition	Source
Trading permille	Insider trading amount scaled by firm shares outstanding (permillage). Log values are used in the regressions.	iFinD
Trading shares	Insider trading volume in thousand shares. Log values are used in the regressions.	iFinD
Turnover	A dummy equal to 1 for the two years after a chairman turnover; 0 for the two years before.	iFinD
Work abroad	A dummy equal to 1 if the chairman worked outside mainland China.	iFinD
Work link	Connections through shared past work experiences. Log values are used in the regressions.	CPED/iFinD
Work link (weighted)	Weighted sum of work-based political connections, calculated as squared political rank times duration of connection. Log values are used in the regressions.	CPED/iFinD

Appendix B. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jcorpfin.2026.103007.

Data availability

Data will be made available on request.

References

Acemoglu, D., Johnson, S., Kermani, A., Kwak, J., Mitton, T., 2016. The value of connections in turbulent times: evidence from the United States. J. Financ. Econ. 121, 368–391. https://doi.org/10.1016/j.jfineco.2015.10.001.

Ahern, K.R., 2017. Information networks: evidence from illegal insider trading tips. J. Financ. Econ. 125, 26–47. https://doi.org/10.1016/j.jfineco.2017.03.009.

Allen, F., Cai, J., Gu, X., Qian, J., Zhao, L., Zhu, W., 2022. Centralization or decentralization? The evolution of state-ownership in China. https://doi.org/10.2139/ssrn.4283197.

Arif, S., Kepler, J.D., Schroeder, J., Taylor, D., 2022. Audit process, private information, and insider trading. Rev. Acc. Stud. 1–32.

Ashraf, B.N., Shen, Y., 2019. Economic policy uncertainty and banks' loan pricing. J. Financ. Stab. 44, 100695.

Baker, G., Gibbons, R., Murphy, K.J., 2002. Relational contracts and the theory of the firm. Q. J. Econ. 117, 39–84.

Bertrand, M., Kramarz, F., Schoar, A., Thesmar, D., 2018. The cost of political connections. Rev. Finance 22, 849–876.

Bettis, J.C., Coles, J.L., Lemmon, M.L., 2000. Corporate policies restricting trading by insiders. J. Financ. Econ. 57, 191–220.

Bhattacharya, U., Daouk, H., 2002. The world price of insider trading. J. Financ. 57, 75–108.

Bourveau, T., Coulomb, R., Sangnier, M., 2016. Political connections and insider trading. In: 2nd Annual Financial Institutions, Regulation and Corporate Governance Conference.

Brahma, S., Zhang, J., Boateng, A., Nwafor, C., 2023. Political connection and M&A performance: evidence from China. Int. Rev. Econ. Financ. 85, 372–389.

Cao, X., Pan, X., Qian, M., Tian, G.G., 2017. Political capital and CEO entrenchment: evidence from CEO turnover in Chinese non-SOEs. Finance 42, 1–14.

Cao, X., Wang, Y., Zhou, S., 2018. Anti-corruption campaigns and corporate information release in China. Finance 49, 186–203.

Cao, X., Lemmon, M., Pan, X., Qian, M., Tian, G., 2019. Political promotion, CEO incentives, and the relationship between pay and performance. Manag. Sci. 65, 2947–2965. https://doi.org/10.1287/mnsc.2017.2966.

Chen, G., Firth, M., Gao, D.N., Rui, O.M., 2006. Ownership structure, corporate governance, and fraud: evidence from China. Finance 12, 424–448.

Cohen, L., Coval, J., Malloy, C., 2011. Do powerful politicians cause corporate downsizing? J. Polit. Econ. 119, 1015–1060.

Çolak, G., Durnev, A., Qian, Y., 2017. Political uncertainty and IPO activity: Evidence from US gubernatorial elections. J. Financ. Quant. Anal. 52, 2523–2564.

Colonnelli, E., Prem, M., Teso, E., 2020. Patronage and selection in public sector organizations. Am. Econ. Rev. 110, 3071–3099.

Cong, L.W., Gao, H., Ponticelli, J., Yang, X., 2019. Credit allocation under economic stimulus: evidence from China. Rev. Financ. Stud. 32, 3412–3460.

Conyon, M.J., He, L., 2011. Executive compensation and corporate governance in China. Finance 17, 1158–1175.

Cooper, M.J., Gulen, H., Ovtchinnikov, A.V., 2010. Corporate political contributions and stock returns. J. Financ. 65, 687–724.

Cornell, B., Shapiro, A.C., 1987. Corporate stakeholders and corporate finance. Financ. Manag. 5–14.

Correia, M.M., 2014. Political connections and SEC enforcement. J. Account. Econ. 57, 241–262. https://doi.org/10.1016/j.jacceco.2014.04.004.

Cull, R., Xu, L.C., 2005. Institutions, ownership, and finance: the determinants of profit reinvestment among Chinese firms. J. Financ. Econ. 77, 117–146.

Datta, S., Doan, T., Iskandar-Datta, M., 2019. Policy uncertainty and the maturity structure of corporate debt. J. Financ. Stab. 44, 100694.

Denis, D.J., Xu, J., 2013. Insider trading restrictions and top executive compensation. J. Account. Econ. 56, 91–112.

Dollar, D., Wei, S.-J., 2007. Das (wasted) kapital: Firm ownership and investment efficiency in China. National Bureau of Economic Research.

Duchin, R., Sosyura, D., 2012. The politics of government investment. J. Financ. Econ. 106, 24–48.

Faccio, M., 2006. Politically connected firms. Am. Econ. Rev. 96, 369–386.

Fan, J.P.H., Wong, T.J., Zhang, T., 2007. Politically connected CEOs, corporate governance, and post-IPO performance of China's newly partially privatized firms. J. Financ. Econ. 84, 330–357. https://doi.org/10.1016/j.jfineco.2006.03.008.

Fisman, R., Wang, Y., 2015. The mortality cost of political connections. Rev. Econ. Stud. 82, 1346–1382.

Fisman, R., Wang, Y., 2017. The distortionary effects of incentives in government: evidence from China's "death ceiling" program. Am. Econ. J. Appl. Econ. 9, 202–218.

Francis, B.B., Hasan, I., Zhu, Y., 2014. Political uncertainty and bank loan contracting. J. Empir. Financ. 29, 281–286.

Gao, M., Huang, J., 2016. Capitalizing on capitol hill: informed trading by hedge fund managers. J. Financ. Econ. 121, 521–545. https://doi.org/10.1016/j.jfineco.2015.11.001.

Giannetti, M., Liao, G., Yu, X., 2015. The brain gain of corporate boards: evidence from China. J. Financ. 70, 1629–1682. https://doi.org/10.1111/jofi.12198.

Goldman, E., Rocholl, J., So, J., 2009. Do politically connected boards affect firm value? Rev. Financ. Stud. 22, 2331–2360.

Griffin, P.A., Lont, D.H., McClune, K., 2014. Insightful insiders? Insider trading and stock return around debt covenant violation disclosures. Abacus 50, 117–145.

Groves, T., Hong, Y., McMillan, J., Naughton, B., 1994. Autonomy and incentives in Chinese state enterprises. Q. J. Econ. 109, 183–209.

Harrison, A., Meyer, M., Wang, P., Zhao, L., Zhao, M., 2019. Can a tiger change its stripes? Reform of Chinese state-owned enterprises in the penumbra of the state. National Bureau of Economic Research.

Hsieh, C.-T., Song, Z.M., 2015. Grasp the large, let go of the small: The transformation of the state sector in China. National Bureau of Economic Research.

Jackson, M.O., 2009. Networks and economic behavior. Ann. Rev. Econ. 1, 489–511. https://doi.org/10.1146/annurev.economics.050708.143238.

Jackson, M.O., 2011. An overview of social networks and economic applications. Handbook Soc. Econ. 1, 511–585.

Jagolinzer, A.D., Larcker, D.F., Taylor, D.J., 2011. Corporate governance and the information content of insider trades: information content of insider trades. J. Account. Res. 49, 1249–1274. https://doi.org/10.1111/j.1475-679X.2011.00424.x.
Jagolinzer, A.D., Larcker, D.F., Ormazabal, G., Taylor, D.J., 2020. Political connections and the informativeness of insider trades. J. Financ. 75, 1833–1876.
Jensen, M.C., Meckling, W.H., 1976. Theory of the firm: managerial behavior, agency costs, and ownership structure. In: Brunner, K. (Ed.), Economics Social Institutions, Rochester Studies in Economics and Policy Issues. Springer Netherlands, Dordrecht, pp. 163–231. https://doi.org/10.1007/978-94-009-9257-3_8.
Jia, R., Nie, H., 2017. Decentralization, collusion, and coal mine deaths. Rev. Econ. Stat. 99, 105–118.
Jia, R., Kudamatsu, M., Seim, D., 2015. Political selection in China: the complementary roles of connections and performance. J. Eur. Econ. Assoc. 13, 631–668. https://doi.org/10.1111/jeea.12124.
Jian, M., Li, W., Zhang, H., 2012. How does state ownership affect tax avoidance? Evidence from China. School Account. 13–18.
Jiang, F., Kim, K.A., 2020. Corporate governance in China: a survey. Rev. Finance 24, 733–772.
Kaviani, M.S., Kryzanowski, L., Maleki, H., Savor, P., 2020. Policy uncertainty and corporate credit spreads. J. Financ. Econ. 138, 838–865.
Kim, C., Zhang, L., 2016. Corporate political connections and tax aggressiveness. Contemp. Account. Res. 33, 78–114.
La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R.W., 1997. Legal determinants of external finance. J. Financ. 52, 1131–1150.
Lei, Z., 2023. The political resource blessing or curse? Patronage networks, infrastructure investment, and economic development in China. Comp. Politic. Stud. 56, 1156–1188. https://doi.org/10.1177/00104140221139389.
Lei, Z., Nugent, J.B., 2018. Coordinating China's economic growth strategy via its government-controlled association for private firms. J. Comp. Econ. 46, 1273–1293.
Leland, H.E., 1992. Insider trading: should it be prohibited? J. Polit. Econ. 100, 859–887.
Miao, M., Tang, D.Y., Xu, L.C., Yan, X., 2024. Property rights, political connections, and corporate investment. Rev. Finance 28, 593–619.
Pang, B., Keng, S., Zhong, L., 2018. Sprinting with small steps: China's cadre management and authoritarian resilience. China J. 80, 68–93. https://doi.org/10.1086/696870.
Schweizer, D., Wang, X., Wu, G., Zhang, A., 2025. Political connections and media bias: evidence from China. Finance 94, 102835.
Shih, V., Adolph, C., Liu, M., 2012. Getting ahead in the communist party: explaining the advancement of central committee members in China. Am. Polit. Sci. Rev. 106, 166–187.
Waisman, M., Ye, P., Zhu, Y., 2015. The effect of political uncertainty on the cost of corporate debt. J. Financ. Stab. 16, 106–117.
You, J., Du, G., 2012. Are political connections a blessing or a curse? Evidence from CEO turnover in China. Corp. Gov. 20, 179–194. https://doi.org/10.1111/j.1467-8683.2011.00902.x.
Yu, F., Yu, X., 2011. Corporate lobbying and fraud detection. J. Financ. Quant. Anal. 46, 1865–1891.
Zhang, J., Marquis, C., Qiao, K., 2016. Do political connections buffer firms from or bind firms to the government? A study of corporate charitable donations of Chinese firms. Organ. Sci. 27, 1307–1324. https://doi.org/10.1287/orsc.2016.1084.
Zhou, Z., 2017. Government ownership and exposure to political uncertainty: evidence from China. J. Bank. Financ. 84, 152–165.