

Decoding the impact of political uncertainty on IPO underpricing in China

Yamin Xie

*SILC Business School, Shanghai University, Shanghai, China and
UTS Business School, University of Technology Sydney, Sydney, Australia*

Zhichao Li

*SILC Business School, Shanghai University, Shanghai, China and
Huawei Technologies Co., Ltd., Shanghai, China*

Wenjing Ouyang

*Eberhardt School of Business, University of the Pacific,
Stockton, California, USA, and*

Hongxia Wang

Wall College of Business, Coastal Carolina University, Conway, South Carolina, USA

Abstract

Purpose – Political factors play a crucial role in China's initial public offering (IPO) market due to its distinctive institutional context (i.e. "economic decentralization" and "political centralization"). Given the significant level of IPO underpricing in China, we examine the impact of local political uncertainty (measured by prefecture-level city official turnover rate) on IPO underpricing.

Design/methodology/approach – Using 2,259 IPOs of A-share listed companies from 2001 to 2019, we employ a structural equation model (SEM) to examine the channel (voluntarily lower the issuance price vs aftermarket trading) through which political uncertainty affects IPO underpricing. We check the robustness of the results using bootstrap tests, adopting alternative proxies for political uncertainty and IPO underpricing and employing subsample analysis.

Findings – Local official turnover-induced political uncertainty increases IPO underpricing by IPO firms voluntarily reducing the issuance price rather than by affecting investor sentiment in aftermarket trading. These relations are stronger in firms with pre-IPO political connections. The effect of political uncertainty on IPO underpricing is also contingent upon the industry and the growth phase of an IPO firm, more pronounced in politically sensitive industries and firms listed on the growth enterprise market board.

Originality/value – Local government officials in China usually have a short tenure and Chinese firms witness significantly severe IPO underpricing. By introducing the SEM model in studying China IPO underpricing, this study identifies the channel through which local government official turnover to political uncertainty on IPO underpricing.

Keywords Political uncertainty, IPO underpricing, Political connections, Local official turnover

Paper type Research paper

1. Introduction

Political turnovers heighten political uncertainty. Due to political centralization, local government officials in China are appointed by higher-level officials, which is usually

JEL Classification — G30, G32, G38

© Yamin Xie, Zhichao Li, Wenjing Ouyang and Hongxia Wang. Published in *China Accounting and Finance Review*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/legalcode>



unpredictable due to the opaque political system (Cao, Chen, & Zhang, 2022; Luo & Qin, 2021; Yang, Xu, & Li, 2023). Meanwhile, economic decentralization in China empowers local governments with the authority in formulating and implementing local policies (Xu, Xu, & Yuan, 2013; Qin, Luo, & Wang, 2021; Luo & Zhang, 2022). This unique political and government structure exerts significant effects on local leaders and firms under their jurisdiction. On the one hand, incoming leaders have strong incentives and enormous power to boost their local economic growth (An, Chen, Luo, & Zhang, 2016). On the other hand, incoming leaders can have very different policy preferences and favored economic outcomes as well as diverse ability to promote local economic growth (Yao & Zhang, 2015). Their incentives can also affect the form and nature of capital market development and firm performance (Piotroski & Zhang, 2014) [1]. Local leadership change can bring huge policy uncertainty, which may significantly affect IPO pricing.

IPO underpricing is a worldwide phenomenon. From 1998 through 2018, the average IPO is underpriced by 34.9%, with the highest first-day return of 482.4% (Boulton, 2022) [2]. Chinese firms are among those experiencing the highest IPO underpricing in the world (Tian, 2011; Joshipura, Mathur, & Gwalani, 2023) [3]. Given its extent of IPO underpricing and the distinctive market regulation structure, China provides a unique arena for IPO pricing research. Additionally, unlike the stock markets in the United States and other countries regulated under the market-oriented disclosure-based regime, China's stock markets are regulated under a merit-review regime. The China Securities Regulatory Commission (CSRC) controls access to Chinese stock markets through selective scrutiny (Wang & Yao, 2021), and the government plays a significant role in approving IPO applications (Li & Zhou, 2015). Government officials in China generally have a shorter tenure (Wang, Zhang, & Zhou, 2020; Luo & Qin, 2021; Yang *et al.*, 2023) [4]. We argue that frequent local official turnovers may help explain the deep discount on the IPO market in China.

Information asymmetry plays a significant role in IPO pricing (Jamaani & Alidarous, 2019). To strategically deal with the political uncertainty due to official turnover, IPO candidate firms may withhold disclosure of related information. Since firms tend to lower the offer price to compensate investors for their valuation uncertainty due to information asymmetry (Rock, 1986; Benveniste & Spindt, 1989), political uncertainty will contribute to higher IPO underpricing during periods of political turnover due to less related information disclosure from IPO firms.

Furthermore, information asymmetry among investors will cause IPO underpricing through aftermarket trading. Possession of different amounts of related information leads to divergence among investors' valuation of an IPO issuance, which causes IPO underpricing when short sales are constrained (Miller, 1977). Since information asymmetry inflates opinion divergence (Barry & Brown, 1985), political uncertainty can also cause IPO underpricing through the channel of aftermarket trading. Recognizing this type of irrational behavior, Wang and Yao (2021) argue that investor sentiment also contributes to IPO underpricing. Since information asymmetry interacts with investor sentiment to exacerbate asset mis-valuation (Chen, Jiang, Kim, & McNish, 2003; Zhang & Zhang, 2023), we conjecture that IPO underpricing in Chinese firms results from lower pricing or investor sentiment or both when official turnover-led political uncertainty increases.

The effects of political uncertainty on IPO underpricing are expected to be more severe for politically connected firms. Government officials in China are important determinants of the accessibility of stock markets, and political connections create value for firms (Francis, Hasan, & Sun, 2009; Li & Zhou, 2015). When political connections are disrupted due to local officials' turnover, the consequence can be detrimental to these IPO candidate firms. Such firms may become more cautious and conservative in information disclosure during local official changes, which further increases information asymmetry among all parties involved in IPO issuance. We posit that the impact of official turnover-induced political uncertainty on IPO underpricing is more evident in politically connected firms.

Existing studies usually measure IPO underpricing with the percentage difference between the IPO offer price and its first trading day close price (offer-to-close price), which does not differentiate the underpricing due to the issuer voluntarily lowering the offer price before issuance or the investors' sentiment in the aftermarket trading (Clarke, Khurshed, Pande, & Singh, 2016; Ranganathan & Veeraraghavan, 2023). We employ the structural equation model (SEM) first proposed by Baron and Kenny (1986) to explore the mechanism through which political uncertainty affects IPO underpricing.

A couple of recent studies have provided evidence that political uncertainty in China affects IPO activities (Luo, Tong, & She, 2017; Zhang, Zhou, Su, Tsai, & Zhai, 2020). Different from Luo *et al.* (2017), who employ a dummy variable of local official turnover, we use nationwide local political turnover rate to measure the extent of political uncertainty. In the highly regulated financial markets in China, the CSRC controls the approval of IPO applications. The CSRC has been well-known for intentionally adjusting the pace of security offerings in accordance with market conditions (Huang, 2011). Therefore, IPO underpricing can be affected by the overall political uncertainty in the country. In addition, Luo *et al.* (2017) employed political turnover in 178 municipal cities in China, we use local official turnovers in 298 prefectural-level cities given that prefectures are the key units of China's economic development (Luo & Qin, 2021) [5]. Zhang *et al.* (2020) measure political uncertainty using the uncertain tone of government authoritative media in China. Different from Çolak, Durnev, and Qian (2017) that examines the uncertainty influence from local politicians' soft channel, our measure of political uncertainty reflects the influence from the regulatory and administrative channel of the government.

Using 2,259 IPOs of A-share listed companies and prefecture-level official turnovers from 2001 to 2019, we find that official turnover-induced political uncertainty significantly increases IPO underpricing [6]. Furthermore, our results show that the underpricing observed is mainly driven by IPO firms voluntarily reducing the offering price, not by investor sentiment in aftermarket trading. Our main findings hold up across diverse robustness checks, including various model specifications, alternative proxies for political uncertainty and IPO underpricing, and subsample analysis. We also find that the effect of political uncertainty on IPO underpricing is more pronounced for firms with prior political connections and in the politically sensitive industries, and for those listed on the Growth Enterprise Market (GEM) board.

We contribute to the finance literature in several aspects. First, researchers have reported that across-firm and/or industry variance in IPO underpricing are related to various factors such as industry characteristics (Killins, Ngo, & Wang, 2020), underwriter-issuer personal connections (Khatami, Marchica, & Mura, 2023), trademarks (Yang & Yuan, 2022), and investor sentiment and issuance cost (Wang & Yao, 2021), among others [7]. Extending this line of the literature, we document that political uncertainty affects IPO underpricing in China where financial markets are regulated under a merit-review regime. In addition, compared to recent studies linking political uncertainty to Chinese IPO underpricing (Luo *et al.*, 2017; Zhang *et al.*, 2020), our paper employs the turnover rate based on prefectural-level government officials and is the first to introduce the SEM model in exploring the channel through which political uncertainty affects IPO underpricing in China.

Second, we enrich the literature of the effects of political uncertainty on firm decisions. Prior studies report that political uncertainty is associated with various corporate decisions, such as cash holdings (Hankins, Stone, Cheng, & Chiu, 2020; Goodell, Goyal, & Urquhart, 2021; Duong, Nguyen, Nguyen, & Rhee, 2020; Heeney, Yang, Chowdhury, & Tan, 2023), working capital management (Yu, Jia, & Zheng, 2023), capital investment (Elmassri, Harris, & Carter, 2016; Chen, Cihan, Jens, & Page, 2023; Yao, Jiang, & Guo, 2023), voluntary disclosure (Bird, Karolyi, & Ruchti, 2023), earnings management (Yung & Root, 2019; Dai & Ngo, 2021; Chauhan & Jaiswall, 2023), corporate textual disclosure (Jiang, Pittman, & Saffar,

2022), tax behavior (Li, Maydew, Willis, & Xu, 2022), and innovations (Guan, Xu, Huo, Hua, & Wang, 2021; Luo & Zhang, 2022). Since China has the highest IPO underpricing in the world (Tian, 2011; Joshipura *et al.*, 2023) and its government official appointment is solely administered by the upper-level government, examining the impact of official turnover-induced political uncertainty on IPO underpricing provides important implications to local officials and IPO candidate firms.

Third, we add to the literature of the effects of political connections on firm decisions and outcomes. The existing literature document that political connections affect various firm decisions and outcomes, such as tax rates (Adhikari, Derashild, & Zhang, 2006), access to financing (Claessens, Feijen, & Laeven, 2008), investment opportunities (Chow, Fung, Lam, & Sami, 2012), financial costs and investment level (Riahi & Loukil, 2023), outward foreign direct investment (Guo, Li, Wang, & Zhang, 2022), M&A performance (Brahma, Zhang, Boateng, & Nwafor, 2023), and operating performance (Boubakri, Cosset, & Saffar, 2008, 2012). In addition, political connections directly affect IPO activities (Francis *et al.*, 2009; Li & Zhou, 2015; Chen, Guan, Zhang, & Zhao, 2017; Liu, Uchida, & Gao, 2012). To the best of our knowledge, this study is the first that reports not only the direct impact of political connections on IPO underpricing but also its moderating effect on the association between the two.

The rest of the paper is organized as follows. Section 2 reviews the literature and develops our testable hypotheses. Section 3 describes our research design. Section 4 presents the results, and Section 5 concludes the paper.

2. Literature review and hypothesis development

2.1 Political history, political turnover, and IPOs in China

In the 1980s, China carried out the economic reform by transitioning from a planning economy to a market one. The Chinese government is composed of five hierarchies: the central, provincial, prefectural, county, and township. China also implemented a reform of the personnel management system in late 1970s, marking a significant change in the criteria of promotion of government officials. In addition to political loyalty, young age, good education, and administrative management expertise have become important criteria for higher-level officials to evaluate lower-level officials, among which local economic outcomes are the most important metrics (Li & Zhou, 2005) [8]. In other words, personnel control is an important tool for the Chinese government to achieve its desirable economic outcomes.

China is characterized by a politically centralized hierarchy and regionally decentralized economic system (Xu, 2011). As noted by Chen, Chen, Wang, and Zheng (2018), local government officials in China have significant control over economic activities. They have the ultimate authority in allocating economic resources in their jurisdiction and play a central role in their local economic development. Different from western countries where government officials are elected by voters, local government officials in China are selected and appointed by upper-level governments in a process that is far from being transparent and the timing of local official turnover is unforeseeable (Cao, Chen, & Zhang, 2022), which undoubtedly adds uncertainty to firms in the affected jurisdictions.

Since local leaders have both the great power over local economies and political career incentives, undoubtedly, they can significantly influence the form and nature of capital market development, and hence the local economies and firm decisions. Wu, Wu, Zhou, and Wu (2012) argue that the Chinese economy is more relational in nature than those in most democratic countries, and due to this unique institutional setting, politically connected firms benefit. Given the role of local officials, their turnovers can bring significant policy uncertainty and redefine the overall economic environment where firms in their jurisdictions operate, prompting the firms take actions to manage such uncertainty. Empirical studies

have documented ample evidence on the effects of political turnovers on corporate actions and outcomes in China [9]. In the IPO market, Piotroski and Zhang (2014) document that firms accelerate their listing decisions in advance of political turnover for the benefit of either the local politicians or the listing firm. Luo *et al.* (2017) found that the number of IPOs at the city level decreases during city-level politician turnover periods.

As mentioned earlier, the CSRC has the ultimate authority over an IPO and exchange listing. Chinese firms must file IPO applications with the CSRC for approval. In theory, only financially healthy firms that simultaneously meet all financial requirements have access to the IPO market [10]. However, the Chinese IPO market is characterized by significant political impact. As indicated in Piotroski and Zhang (2014), Chinese IPOs are a scarce resource controlled by the central government and IPO quotas were historically applied to achieve various government objectives such as enhanced market development and politician rewards; firms need the support and approval from local officials to engage in an IPO; and politically connected firms enjoy the preferential approval in the IPO process. Studies including Francis *et al.* (2009), Li and Zhou (2015), and Chen *et al.* (2017) report empirical evidence that IPO firms benefit from political connections in the IPO process. The IPO market characteristics and the tournament-style promotion system in China not only create strong incentives for local officials to exert influence on IPOs and but also induce IPO candidate firms to establish connections with their local officials.

2.2 Hypotheses development

Among theories on IPO underpricing, information asymmetry provides one of the most compelling explanations (Jamaani & Alidarous, 2019) [11]. Given that an issuing firm is more aware of its intrinsic value than its investors, to compensate investors for valuation risk due to information asymmetry, the issuer deliberately lowers the offer price that leads to IPO underpricing (Rock, 1986; Benveniste & Spindt, 1989). Jhavar and Seal (2023) note that political uncertainty has shown its influence in all phases of the IPO process. In pricing the IPO issuance, Pástor and Veronesi (2013) establish a theoretical basis to demonstrate that investors require a risk premium to offset the effects of political uncertainty [12]. Çolak *et al.* (2017) and Çolak, Gounopoulos, Loukopoulos, and Loukopoulos (2021) provide empirical evidence supporting the argument that political uncertainty increases risk premium as reflected in the abnormal first-day IPO return. This phenomenon can be more evident in periods of local official turnover in China due to the following reasons.

First, the capital market faces more policy uncertainty in times of official turnover, which can increase overall information asymmetry among all participants in the capital market. This is because incoming leaders are expected to introduce new policies or adjust existing ones. However, the market is not quite sure what changes might be due to possible delays or lack of information transparency. Incoming officials may be more cautious and hesitant to share their policy directives in advance due to concerns about possible negative outcomes of their policies and the impact of these policies on their political career. It is difficult for the capital market to achieve market efficiency since it takes time to fully digest such policy changes. Due to increased overall information asymmetry, investors, in general, may be unwilling or become more hesitant, to provide capital unless they are promised higher abnormal returns (Agarwal, Aslan, Huang, & Ren, 2022) [13].

Second, political uncertainty can exacerbate information asymmetry between the issuing firm and investors. In periods of political turnover, firms must navigate through policy uncertainty and can become more cautious when facing unclear policy guidance. Yan, Xiong, Meng, and Zou (2019) find that disclosure of uncertainty related information causes more IPO abnormal returns required by investors. Lei and Luo (2023) find that firms strategically

change their disclosure practices in periods of increased political uncertainty. [Chen et al. \(2018\)](#) document that Chinese listed firms tend to reduce the net supply of firm specific information during periods of local political leadership turnover. We argue that such a phenomenon may also be observed in IPO listing candidates, even to a greater degree, given that they are usually young firms who lack market experience. To compensate investors for increased valuation uncertainty due to reduced amount of related information, IPO firms may voluntarily lower their offer price. Although reducing the offering price increases issuance costs and decreases financing scale, firms can recoup the losses through future stock issuance ([Allen & Faulhaber, 1989](#); [Grinblatt & Hwang, 1989](#)).

H1. Political uncertainty increases IPO underpricing through a declined issuance price.

In addition to information asymmetry between IPO candidate firms and investors, information asymmetry among investors is also associated with IPO underpricing. Due to possession of different amounts of firm related information, investors' valuations of an issuing firm diverge, which leads to IPO underpricing when short sales are constrained ([Miller, 1977](#)). Available firm-related information helps investors form congruent valuations and reduce opinion divergence ([Barry & Brown, 1985](#)). If IPO candidate firms withhold related information due to political uncertainty, investor opinion divergence will be widened, which will lead to higher IPO underpricing. Furthermore, studies on behavioral finance argue that investor sentiment also contributes to IPO underpricing (e.g. [Wang & Yao, 2021](#)). Since information asymmetry can interact with investor sentiment to exacerbate asset misvaluation ([Chen et al., 2003](#); [Zhang & Zhang, 2023](#)), political uncertainty may also increase IPO underpricing due to investor sentiment when less firm disclosure intensifies information asymmetry.

H2. Political uncertainty increases IPO underpricing through investor sentiment in aftermarket trading.

Given that politicians can affect firms through regulations, administrative actions, and other soft channels, companies in a highly politicized environment (i.e. weak institutions and marketization) seek to establish strong connections with their local governments ([Fisman, 2001](#); [Piotroski & Zhang, 2014](#)). Political connections facilitate access to the IPO market. Studies show that Chinese firms with political connections are more likely to be approved for IPOs, achieve a higher offering price-to-earnings ratio, and are less likely to be selected for pre-IPO on-site auditing ([Li & Zhou, 2015](#)), and that political connections significantly alleviate the IPO underpricing of non-state-owned enterprises ([Cao, Chen, Zeng, & Zhang, 2022](#)). Political connections can also reduce information asymmetry. For example, [Brockman, Rui, and Zou \(2013\)](#) document that politically connected bidders obtain better information about target firms from their political connections in countries with a weak legal system and high levels of corruption.

However, when local officials undergo changes, enterprises reliant on individual political connections may experience unexpected shocks, disrupting the stable political-corporate system ([Xu et al., 2013](#)). Disruption of existing political connections can further increase uncertainties in future firm performance and the potential for intensified political scrutiny. Since re-establishing political connections with new officials can be costly and time-consuming, the political uncertainty caused by government official turnovers would affect politically connected firms more than those without such connections. Empirically, [Chen et al. \(2018\)](#) found that political turnover deteriorates the information environment of politically dependent firms, suggesting that politically connected IPO candidate firms can experience a higher level of information asymmetry due to official turnover-induced connection disruption, and hence greater IPO underpricing.

3. Research design

3.1 Data screening and sample selection

We utilize a sample of A-share stocks listed on the Shanghai and Shenzhen Stock Exchanges from January 2001 to December 2019. To minimize research biases, we exclude financial sector stocks, stocks with significant data omissions or anomalies in specific years, and those with ST or ST* designations [14]. We apply a 1% winsorization to mitigate the influence of extreme values. Our final sample includes 2,259 firm-year observations. All other data are obtained from the China Stock Market and Accounting Research Database (CSMAR) except official turnover data used to construct the proxy of political uncertainty. Mayor and municipal party secretary turnover data are obtained from “Choose City Network” and officials’ biographies as in Xiao, Gong, and Zhang (2015) and Cao, Yang, Zhao, and Chi (2017) [15]. For cases with unclear turnover dates, we manually supplemented the information using official documents issued by provincial and municipal governments [16].

3.2 Variable definition

3.2.1 IPO underpricing. We define IPO underpricing as the market-adjusted underpricing (IPO_UP_i) of the offer price compared to the close price of the first trading day (Mok & Hui, 1998).

$$IPO_UP_i = \frac{P_{i,1} - P_{i,0}}{P_{i,0}} - \frac{P_{i,m_1} - P_{i,m_0}}{P_{i,m_0}}$$

Where $P_{i,1}$ represents the close price of stock i on its first day of trading, $P_{i,0}$ denotes the offer price of stock i , P_{i,m_1} corresponds to the close price of the Shanghai/Shenzhen Composite Index on the first day of trading for stock i , and P_{i,m_0} is the close price of Shanghai/Shenzhen Composite Index on the issuance day of stock i .

From 2014, the first day return limit after IPO issuance is set to be 44% [17]. The close price of the first trading day might not reflect the actual IPO underpricing if it is capped. Wang and Wang (2021) find that this return cap affects post-IPO long-term performance. To capture the real extent of IPO underpricing after 2014, we accumulate the market-adjusted return until the first trading day with the daily return within the return cap. The formula IPO_UP_i is as follows:

$$IPO_UP_i = \frac{P_{i,t} - P_{i,0}}{P_{i,0}} - \frac{P_{i,m_t} - P_{i,m_0}}{P_{i,m_0}}$$

Where $P_{i,t}$ represents the close price of stock i on the first trading day within a return limit, while P_{i,m_t} denotes the close price of the Shanghai/Shenzhen Composite Index on the same day.

3.2.2 Political uncertainty. Government official turnovers can lead to political uncertainty. The existing literature primarily uses a dummy variable to proxy for political uncertainty, constructed based on whether municipal-level officials have changed (Luo et al., 2017; Dong, Wang, Zhang, & Zhong, 2022; Yang et al., 2023; Zhang & Qian, 2022). However, the main business operations of listed companies are not solely confined to municipal-level cities, but to the national-level macro-environment. Thus, we measure political uncertainty with the nation-wide government official turnover rate, as in Xiao et al. (2015).

$$EPU_CHN_i = \frac{\text{change}_i}{N_i}$$

Where change_i represents the number of prefecture-level cities with mayor or party secretary changes in China within one month prior to stock i 's issuance, while N_i denotes the total number of prefecture-level administrative officials in the month of stock i 's IPO issuance [18]. We use local official turnovers in 298 prefectural-level cities since prefectures have become the key units of China's economic development (Luo & Qin, 2021).

3.2.3 Political connections. Following Deng, Wu, and Xu (2019), we define political connections (PLINK) as instances where the firm's top manager is currently serving or has served in the government, or as a National People's Congress (NPC) delegate or a Chinese People's Political Consultative Conference (CPPCC) member. Data is obtained from executive personal profiles in the CSMAR database. PLINK is a dummy variable that equals 1 for IPO firms with political connections, and 0 otherwise.

3.3 Model specifications

We use Model (1) to examine the impact of political uncertainty on IPO underpricing.

$$IPO_UP_i = \beta_0 + cEPU_CHN_i + \beta_i \sum CV_i + \varepsilon_i \quad (1)$$

Where IPO_UP is the market-adjusted actual listing return, and EPU_CHN is the turnover rate of nation-wide prefectural-level city mayors or party secretaries one month prior to the issue, as defined in Section 3.2. CV_i refers to a set of control variables. The ordinary least squares (OLS) method was employed to conduct the multiple regression analysis of Model (1).

We select a set of control variables associated with the IPO underpricing (Fan, Wong, & Zhang, 2007, 2014; Wang & Yao, 2021; Gupta, Singh, & Yadav, 2023; Li, Liu, Zhang, & Zhang, 2021). Engelen and Van Essen (2010) document that younger and smaller firms have higher IPO underpricing due to more *ex ante* uncertainty about the firm value. We control firm size (SIZE), constructed as the natural logarithm of total assets in the preceding year of the IPO. Firms with better pre-IPO financial performance are more likely to deliver value to investors. Return on assets (ROA) is net profits divided by the total assets of the year before the IPO. Li and Zhou (2015) find that firms with lower financial leverage have less IPO underpricing because of lower financial risk. We measure leverage (DEBT) as total liabilities divided by total assets in the preceding year of the IPO. Carter and Manaster (1990) report that IPO offerings with prestigious underwriters are associated with lower perceived risk from uninformed investors and thus offer lower rate of returns as compensation for risk taking. SU10 is a dummy variable that equals 1 for IPOs with one of the top ten underwriters, and 0 otherwise. Since the CSRC controls the approval of IPO applications and is well-known for intentionally adjusting the pace of securities offerings in accordance with market conditions (Huang, 2011), we, therefore, control the issuance atmosphere (IPOMKT), defined as the natural logarithm of the total number of IPOs in the market during the firm's IPO month. IPO underpricing is associated with investor sentiment and issuance cost (Wang & Yao, 2021). Market sentiment (MARKET) is measured by the return on the Shanghai Stock Exchange (SSE) Composite Index on the day of the IPO. The underwriting fee rate (FEE) is calculated as the underwriting fee divided by the actual dollar amount raised in the IPO. BM is the ratio of the book value of assets over the predicted market value of assets. Chang, Chen, Chi, and Young (2008) found that IPO companies audited by Big Four auditors experienced higher first-day returns (i.e. more underpricing), suggesting that quality auditors serve a

signaling effect for uninformed investors. AF4 is a dummy variable that equals 1 when one of the Big Four accounting firms serves as the auditor, and 0 otherwise.

To examine the channel through which political uncertainty affects IPO underpricing, we adopt the structural equation model (SEM) of [Baron and Kenny \(1986\)](#) as listed below.

$$< PE, TURN, WIN > = \beta_0 + a EPU_CHN + \beta_i \sum CV_i + \varepsilon_i \tag{2}$$

$$IPO_UP = \beta_0 + c' EPU_CHN + b_1 PE + b_2 TURN + b_3 WIN + \beta_i \sum CV_i + \varepsilon_i \tag{3}$$

where PE is the price-to-earnings ratio, TURN is the natural logarithm of the stock's turnover rate in the first trading day [\[19\]](#), and WIN is the ratio of the number of stocks issued to the total valid number of subscription shares. A lower PE ratio suggests more underpricing through lowering the offer price, while a higher value of TURN and a lower value of WIN indicate greater investor sentiment ([Chang et al., 2008](#); [Li et al., 2021](#); [Wang & Yao, 2021](#)). We use Models (2) and (3) to examine the mediation effects of stock issuance prices and investor sentiment on the association between political uncertainty and IPO underpricing. We then jointly examine the results of the three models. If *c* in Model (1), and *a* and *b_i* (*i* = 1, 2, or 3) in Models (2) and (3) are significant simultaneously and *|c'|* in Model (3) is less than *|c|* in Model (1), the mediation effect is significant [\[20\]](#).

4. Empirical analysis

4.1 Descriptive statistics and correlation analysis

[Table 1](#) displays the descriptive statistics of the sample. The mean value of IPO_UP is 176.4%, with a standard deviation of 202.3%, indicating a high level and substantial variance of IPO underpricing. This observation is comparable to other studies on Chinese IPO underpricing, such as [Li et al. \(2021\)](#) and [Zhao, Shen, and Huang \(2023\)](#). The mean value of EPU_CHN is 0.08, with a standard deviation of 0.06 and a range of 0.003 to 0.31, indicating

Variable	N	Mean	STD	Min	Median	Max
IPO_UP	2,259	1.76	2.02	−0.09	1.10	10.80
EPU_CHN	2,259	0.08	0.06	0.00	0.06	0.31
PLINK	2,259	0.28	0.45	0	0	1
PE	2,259	33.65	18.07	12.95	22.99	98.67
TURN	2,259	0.34	0.26	0.00	0.45	0.70
WIN	2,259	0.01	0.013	0.00	0.00	0.09
FEE	2,259	0.01	0.03	0.01	0.06	0.15
SIZE	2,259	20.47	1.03	18.73	20.28	24.36
DEBT	2,259	0.43	0.18	0.07	0.44	0.83
BM	2,259	0.14	0.09	0.02	0.12	0.50
ROA	2,259	0.08	0.06	−0.00	0.07	0.27
IPOMKT	2,259	3.07	0.60	1.39	3.30	3.87
MARKET	2,259	6.97e-06	0.12	−0.05	0.00	0.04
AF4	2,259	0.05	0.21	0	0	1
SU10	2,259	0.34	0.47	0	0	1

Note(s): This table presents the descriptive statistics of variables. The sample includes 2,259 IPOs of A-share listed companies on the Shanghai and Shenzhen Stock Exchanges in China from 2001 to 2019. Refer to [Appendix 1](#) for detailed variable definitions. All continuous variables are winsorized at the upper and lower 1% of the sample distribution

Source(s): Authors' own work

Table 1.
Descriptive statistics

that the average monthly official change rate in prefecture-level cities is 8% from 2001 and 2019. The mean value of PLINK is 0.28, i.e. 28% of our sample firms have political connections. The average PE ratio is 33.65, its median is 22.99 and the standard deviation is 18.07, comparable to those in Li *et al.* (2021) [21].

Table 2 displays the results of the Spearman correlation analysis [22]. IPO_UP is significantly and positively correlated with EPU_CHN, suggesting that political uncertainty associated with government official turnovers increases IPO underpricing. PLINK, PE, WIN, and TURN are negatively correlated to IPO_UP, but not significant. PE is significantly and negatively correlated with EPU_CHN, whereas investor sentiment variables (TURN and WIN) are not significantly correlated to EPU_CHN. The correlation analysis suggests that the pathway of political uncertainty on IPO underpricing is the offer price rather than investor sentiment.

4.2 Political uncertainty on IPO underpricing

We run the baseline regression Model (1) on the relation between political uncertainty and IPO underpricing and conduct the mediation analysis using the system of equations of Models (2) and (3). Panel A of Table 3 displays the results. Columns (1) and (2) show the baseline results and Columns (3)-(6) display the results of the mediation analysis.

Column (1) shows that the coefficient of EPU_CHN is positive and significant at the 1% level when other factors are not considered. Column (2) shows that the coefficient of IPO_UP barely changes and remains statistically significant at the 1% level after incorporating the control variables. These results support the idea that political uncertainty increases IPO underpricing.

In mediation analysis, Column (3) shows that EPU_CHN significantly reduces the PE ratio, indicating that greater political uncertainty results in a lower offering price. Political uncertainty does not significantly affect investor sentiment, as evidenced by the insignificant coefficients of EPU_CHN in Columns (4) and (5) where WIN and TURN are dependent variables, respectively. Column (6) shows the results by including all three mediating variables in the regression of IPO underpricing. The coefficient of EPU_CHN is 1.67, smaller than the one in the baseline regression (1.98 in Column (2)), and statistically significant at the 1% level. The coefficient of PE remains negative and significant. Collectively, the results suggest that political uncertainty increases IPO underpricing by lowering the offer price. The findings that the coefficient of WIN is negative, but the coefficient of TURN is not positive suggest that investor sentiment is not a pathway of political uncertainty affecting IPO underpricing.

Next, we check for potential multi-collinearity among the independent variables in the regression. Panel B of Table 3 reports the variance inflation factor (VIF) of independent variables in Model (6) of Panel A. The VIF ranges from 1.02 to 2.44, with an average of 1.51. These numbers are smaller than the critical value of 10, suggesting that the results in Panel A are not subject to multi-collinearity issues.

We further conducted Bootstrap tests by performing 1,000 random samples of the original data and conducting stepwise regressions on the sampled data. Panel C of Table 3 displays the results. The indirect effect of PE is 0.38, with a corresponding Z-statistic of 2.48. The confidence intervals based on both normal distribution and bias correction do not contain zero, confirming the significant mediating effect of the PE ratio. The indirect effects of WIN and TURN are -0.03 and 0.11, respectively, with corresponding Z-statistics of -0.11 and 1.06. The confidence intervals based on normal distribution and bias correction contain 0, suggesting insignificant mediating effects of WIN or TURN. Collectively, the results support H1 but do not support H2, indicating that the discounted issuance price is the underlying channel through which political uncertainty affects IPO underpricing.

Table 2.
Spearman correlation
coefficients

Variable	IPO_UP	EPU_ CHN	PE	PLINK	TURN	WIN	FEE	SIZE	DEBT	BM	ROA	IPOMKT	MARKET	AF4	SU10
IPO_UP	1.00***	0.05**	-0.40	-0.11	-0.41	-0.34	0.44	-0.03	-0.15	0.48	-0.14	0.10	0.06***	-0.03	0.03
EPU_ CHN	0.05**	1.00***	-0.05**	0.00	-0.01	0.01	0.02	-0.02	0.10	0.01	0.00	0.00	0.00	0.02	-0.04**
PE	-0.40	-0.05**	1.00***	0.11	0.46	0.18	-0.20	-0.24	-0.04**	-0.54	0.14	0.22	-0.10	-0.06***	0.02
PLINK	-0.11	0.00	0.11	1.00***	0.12	0.10	-0.09	0.03	0.11	-0.06***	-0.04*	-0.01	-0.01	-0.02	-0.04**
TURN	-0.41	-0.01	0.46	0.12	1.00***	0.16	-0.38	-0.11	0.18	-0.46	-0.01	-0.20	-0.08***	0.02	-0.02
WIN	-0.34	0.01	0.18	0.10	0.16	1.00***	-0.18	0.11	0.11	-0.12	0.09	-0.04*	-0.03	0.05**	0.01
FEE	0.44	0.02	-0.20	-0.09	-0.38	-0.18	1.00***	-0.29	-0.27	0.35	-0.04*	0.27	0.06***	-0.15	0.00
SIZE	-0.03	-0.02	-0.24	0.03	-0.11	0.11	-0.29	1.00***	0.43	0.39	-0.24	-0.08***	-0.03	0.37	0.17
DEBT	-0.15	0.10	-0.04**	0.11	0.18	0.11	-0.27	0.43	1.00***	-0.01	-0.40	-0.18	-0.01	0.07***	0.01
BM	0.48	0.01	-0.54	-0.06***	-0.46	-0.12	0.35	0.39	-0.01	1.00***	-0.32	0.03	0.09	0.11	0.05**
ROA	-0.14	0.00	0.14	-0.04*	-0.01	0.09	-0.04*	-0.24	-0.40	-0.32	1.00***	0.07***	-0.02	-0.08***	0.01
IPOMKT	0.10	0.00	0.22	-0.01	-0.20	-0.04*	0.27	-0.08***	-0.18	0.03	0.07***	1.00***	-0.01	-0.14	0.00
MARKET	0.06***	0.00	-0.10	-0.01	-0.08***	-0.03	0.06***	-0.03	-0.01	0.09	-0.02	-0.01	1.00***	-0.03	-0.02
AF4	-0.03	0.02	-0.06***	-0.02	0.02	0.05**	-0.15	0.37	0.07***	0.11	-0.08***	-0.14	-0.03	1.00***	0.11
SU10	0.03	-0.04**	0.02	-0.04**	-0.02	0.01	0.00	0.17	0.01	0.05**	0.01	0.00	-0.02	0.11	1.00***

Note(s): This table presents the Spearman correlation coefficients of the main variables. Refer to [Appendix 1](#) for detailed variable definitions. Asterisks indicate significance at the 0.01 (***), 0.05 (**), and 0.10 (*) levels

Source(s): Authors' own work

Variable	IPO_UP (1)	IPO_UP (2)	PE (3)	WIN (4)	TURN (5)	IPO_UP (6)
<i>Panel A: multivariate regressions</i>						
EPU_CHN	1.74*** (3.16)	1.98*** (4.19)	−19.99*** (−3.08)	0.001 (−0.19)	−0.08 (−1.21)	1.67*** (3.51) −0.012* (−2.20) −13.38*** (−3.03) −0.88*** (−3.32) 12.00*** (5.21) 6.48*** (9.41) −0.15 (−0.66) −0.25*** (−5.88) −1.07 (−1.57) 0.01*** (2.84) −2.27 (−0.85) 0.15 (0.92) 0.14** (2.04) 6.27*** (7.00)
PE						
WIN						
TURN						
FEE		11.87*** (5.14)	−26.92* (−1.75)	−1.63*** (−4.22)	−1.83*** (−9.10)	
BM		9.02*** (9.36)	−84.21*** (−8.92)	−0.93*** (−5.99)	−1.02*** (−12.81)	
DEBT		−0.47* (−1.89)	−2.84 (−1.22)	0.23*** (3.37)	0.16*** (4.70)	
SIZE		−0.26*** (−5.79)	−1.56*** (−3.06)	0.04*** (2.70)	−0.03*** (−5.05)	
ROA		−1.55** (−2.15)	23.07*** (−3.39)	0.92*** (4.45)	−0.48*** (−5.49)	
IPOMKT		0.01** (2.15)	0.34*** (13.11)	−0.01 (−0.03)	−0.01*** (−7.35)	
MARKET		−0.08 (−0.03)	−63.91** (−2.43)	−0.69 (−1.00)	−0.83* (−2.46)	
AF4		0.05 (0.27)	2.98* (1.63)	0.03 (0.50)	0.05** (1.97)	
SU10		0.13* (1.68)	2.01*** (2.96)	−0.02 (−0.73)	0.01 (0.94)	
Intercept	1.69*** (30.91)	4.86*** (5.45)	77.84*** (7.93)	−0.38 (−1.27)	1.32*** (10.59)	
Year&Industry	No	Yes	Yes	Yes	Yes	Yes
N	2,259	2,259	2,259	2,259	2,259	2,259
Adjust R^2	0.01	0.32	0.34	0.09	0.32	0.43

Variable	EPU_CHN	PE	PLINK	TURN	WIN	FEE	SIZE
<i>Panel B: variance inflation factor (VIF) values</i>							
VIF	1.03	2.10	1.04	1.73	1.11	1.66	2.25
Variable	DEBT	BM	ROA	IPOMKT	MARKET	AF4	SU10
VIF	1.69	2.44	1.43	1.35	1.02	1.21	1.05

Variable	Coef	Z	$p > Z $	N [95% Conf. Interval]	BCA [95% Conf. Interval]
<i>Panel C: bootstrap tests</i>					
PE	0.38**	2.48	0.03	(0.04, 0.72)	(0.06, 0.72)
WIN	−0.03	−0.11	0.91	(−0.51, 0.46)	(−0.54, 0.41)
TURN	0.11	1.06	0.29	(−0.09, 0.31)	(−0.07, 0.34)

Note(s): Panel A presents the regression results of political uncertainty on IPO underpricing. In columns (1), (2), and (6), the dependent variable is IPO_UP. The dependent variables in columns (3), (4) and (5) are PE, WIN and TURN, respectively. Refer to [Appendix 1](#) for detailed variable definitions. All specifications include year and industry dummies. The values of the t -statistics are indicated in brackets. Standard errors are robust to heteroskedasticity and firm clustering. Asterisks indicate significance at the 0.01 (***), 0.05 (**), and 0.10 (*) levels. Panel B reports the variance inflation factor (VIF) in the regression model (6). Panel C presents the results of Bootstrap tests. N means the confidence interval based on normal distribution and BCA means the confidence interval based on bias correction

Source(s): Authors' own work

Table 3.
Political uncertainty
and IPO underpricing

4.3 Political uncertainty, political connections, and IPO underpricing

To examine the impact of firms' political connections on the association between political uncertainty and IPO underpricing, we split the sample into two subsamples using political connections. Panel A of [Table 4](#) presents the univariate test results of IPO underpricing in the

				Mean	IPO_UP	Median
<i>Panel A: mean and median IPO underpricing by political connections</i>						
W/P.C. (N = 635)				1.42		0.67
W/O P.C. (N = 1,624)				1.90		1.29
Difference in mean (T-test)					−0.47 ^{***} (5.03)	
Difference in median (Wilcoxon rank-sum test)					−0.62 ^{***} (7.62)	
Matching method	Sample	Treatment group	Control group	Mean difference	Standard deviation	T-value
<i>Panel B: average treatment effects on the treated (ATT) values of IPO underpricing</i>						
Nearest-neighbor	Pre-match	1.42	1.90	−0.47 ^{***}	0.09	−5.03
	Post-match	1.42	1.63	−0.21 ^{**}	0.11	−1.99
Radius	Pre-match	1.42	1.90	−0.47 ^{***}	0.09	−5.03
	Post-match	1.42	1.66	−0.24 ^{**}	0.09	−2.56
Kernel	Pre-match	1.42	1.90	−0.47 ^{***}	0.09	−5.03
	Post-match	1.42	1.67	−0.25 ^{**}	0.09	−2.65

Note(s): This table presents the univariate test results. The numbers reported in the table are IPO underpricing. Panel A presents the descriptive statistics by political connection groups: W/P.C. (with political connection) vs W/O P.C. (without political connection). Panel B reports tests of difference between firms with/without political connections. The *t*-values/*z*-values for the mean *T*-tests/Wilcoxon rank-sum tests are shown in brackets. Panel B presents the average treatment effect on the treated (ATT) values of IPO underpricing obtained through three matching methods. Pre-match and Post-match refer to samples before and after the propensity score matching, respectively. Treatment/Control Group refers to firms with/without political connections. Asterisks indicate significance at the 0.01 (***) and 0.05 (**) levels

Source(s): Authors' own work

Table 4.
Political connections
and IPO underpricing

two subsamples. 635 IPO firms or 28.1% of the sample firms on the A-share market have political connections. The average IPO underpricing is 142%/190% for firms with/without political connections. The mean difference in IPO underpricing between the two types of firms is statistically significant at the 1% level. The medians of IPO underpricing for the two subsamples also show that politically connected firms have significantly less underpricing. The results provide preliminary evidence that political connections mitigate IPO underpricing.

We further utilize the Propensity Score Matching (PSM) methods to compare IPO underpricing between firms with versus without political connections. The matching variables are the control variables in the baseline analysis in Table 3 [23]. Panel B of Table 4 presents the average treatment effects on the treated (ATT) values obtained from nearest-neighbor, radius, and kernel matching methods, illustrating the relation between political connections and IPO underpricing. The treatment/control group refers to firms with/without political connections. Using the nearest-neighbor matching, the IPO underpricing in the treated group is 1.42, significantly lower than that of the control group (1.63), and the ATT value (−0.21) is significantly different from 0. The results confirm that politically connected firms exhibit lower IPO underpricing than those without political connections. A comparison reveals a noticeable reduction in the ATT value after matching, suggesting that the propensity score matching method effectively isolates the influence of political connections

on IPO underpricing. The results using radius and kernel matching are in line with those from the nearest-neighbor matching, further confirming that political connections mitigate the extent of IPO underpricing.

Table 5 reports the regression results of political uncertainty on IPO underpricing in subsamples classified by political connections. Columns (1) and (2) show the results using the two subsamples split by PLINK before propensity score matching. The coefficient of political uncertainty (EPU_CHN) for politically connected firms (2.10) is greater than that for non-politically connected firms (2.04). Columns (3) to (8) present the regression results using only successfully matched observations after applying the nearest-neighbor, radius, and kernel matching methods, respectively. The coefficients of EPU_CHN for politically connected firms remain larger than those for non-politically connected firms across all matching methods, confirming the prediction of H3 that political connections amplify the impact of political uncertainty on IPO underpricing.

4.4 Robustness tests

4.4.1 Endogeneity tests. Our findings may be subject to endogeneity interference due to omitted variables and measurement errors. To mitigate endogeneity concerns, we follow

Dependent variable = IPO_UP

	Before matching		Nearest neighbor matching		Radius matching		Kernel matching	
	W/P.C. (1)	W/O P.C. (2)	W/P.C. (3)	W/O P.C. (4)	W/P.C. (5)	W/O P.C. (6)	W/P.C. (7)	W/O P.C. (8)
EPU_CHN	2.10** (2.32)	2.04*** (3.32)	2.57** (-1.99)	1.65* (1.79)	2.21** (1.97)	1.89** (2.18)	2.10** (2.35)	1.77*** (2.75)
FEE	23.48*** (7.54)	12.84*** (7.16)	21.09*** (6.28)	11.17*** (3.88)	23.52*** (7.57)	12.89*** (7.13)	24.14*** (6.38)	13.29*** (5.63)
BM	6.03*** (6.40)	10.98*** (17.13)	-0.03 (-0.32)	-0.29*** (-3.96)	6.11*** (6.49)	11.19*** (17.19)	0.03 (0.34)	-0.38*** (-5.57)
DEBT	-1.46*** (-2.68)	-0.12 (-0.39)	-1.41*** (-2.63)	-0.35 (-0.87)	-1.49*** (-2.74)	-0.16 (-0.51)	-1.54*** (-2.58)	-0.18 (-0.6)
SIZE	0.01 (0.13)	-0.37*** (-6.02)	7.13*** (6.01)	9.85*** (9.83)	0.01 (0.05)	-0.39*** (-6.26)	5.99*** (5.18)	11.22*** (9.36)
ROA	-3.29*** (-2.09)	-1.31 (-1.59)	-1.66 (-1.11)	-1.44 (-1.21)	-3.22*** (-2.04)	-1.40* (-1.7)	-3.12 (-1.8)	-1.35 (-1.49)
IPOMKT	0.011 (1.57)	0.01 (1.61)	0.04 (0.31)	0.01 (0.06)	0.01 (1.57)	0.01* (1.67)	0.06 (0.52)	0.03 (0.4)
MARKET	0.64 (0.13)	-1.70 (-0.48)	-0.97 (-0.19)	0.79 (0.16)	0.35 (0.07)	-1.75 (-0.5)	0.69 (0.15)	-2.23 (-0.63)
AF4	0.19 (0.46)	-0.04 (-0.2)	0.22 (0.49)	-0.34 (-1.17)	0.22 (0.52)	0.04 (0.19)	0.12 (0.27)	0.01 (0.02)
SU10	-0.35** (-2.23)	0.34*** (3.53)	-0.29** (-2.12)	0.36*** (2.86)	-0.34** (-2.17)	0.37*** (3.7)	-0.39** (-2.51)	0.35*** (3.36)
Intercept	-0.38 (-0.20)	6.92*** (5.7)	-0.88 (-0.40)	8.70*** (4.17)	-0.24 (-0.13)	7.23*** (5.94)	-0.67 (-0.39)	7.18*** (5.63)
Year&Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	635	1,624	600	917	634	1,618	633	1,622
Adjust R ²	0.30	0.32	0.27	0.35	0.29	0.32	0.29	0.32

Note(s): This table reports the regression results of political uncertainty on IPO underpricing in subsamples classified by political connections. Columns (1) and (2) show the results obtained by applying the full sample to Model (1) before propensity score matching. Columns (3) to (8) present the regression results using only successfully matched observations after applying nearest-neighbor, radius, and kernel matching, respectively. Refer to Appendix 1 for detailed variable definitions. All specifications include year and industry dummies. *T*-values are indicated in brackets. Standard errors are robust to heteroskedasticity and firm clustering. Asterisks indicate significance at the 0.01 (***), 0.05 (**), and 0.10 (*) levels

Source(s): Authors' own work

Table 5. Political uncertainty, political connection, and IPO underpricing

Wilkins (2018) and Gu, Venkateswaran, and Erath (2023) to employ the two-period lagged political uncertainty and two-period lagged global economic uncertainty index as instrumental variables for political uncertainty (EPU_CHN) and employ 2SLS regressions [24]. In addition, we employ a limited information maximum likelihood estimation (LIML) that is less sensitive to weak instruments. Table 6 presents the results. In both the 2SLS and LIML estimations, the coefficients of political uncertainty remain significantly positive at the 1% level for the full sample and the two subsamples based on political connections, corroborating our previous findings.

	Dependent variable = IPO_UP					
	Full sample		W/P.C.		W/O P.C.	
	2SLS (1)	LIML (2)	2SLS (3)	LIML (4)	2SLS (5)	LIML (6)
EPU_CHN*	9.07*** (5.04)		10.36*** (4.15)		6.57*** (2.61)	
EPU_CHN		10.09*** (5.03)		11.16*** (4.15)		7.36*** (2.58)
FEE	14.97*** (8.7)	14.96*** (8.7)	21.44*** (6.51)	21.33*** (6.49)	12.63*** (6.33)	12.68*** (6.33)
BM	9.29*** (15.05)	9.28*** (15.04)	6.85*** (6.01)	6.82*** (6)	10.06*** (13.86)	10.03*** (13.86)
DEBT	-0.91*** (-3.25)	-0.91*** (-3.25)	-1.59*** (-2.69)	-1.55*** (-2.71)	-0.58*** (-2.07)	-0.69*** (-2.07)
SIZE	-0.21*** (-4.31)	-0.21*** (-4.3)	0.011 (0.11)	0.01 (0.14)	-0.24*** (-5.17)	-0.28*** (-5.17)
ROA	-1.92*** (-2.56)	-1.92*** (-2.56)	-2.57* (-1.71)	-2.62* (-1.73)	-1.85*** (-2.18)	-1.88*** (-2.18)
IPOMKT	0.01 (0.13)	0.01 (0.13)	0.06 (0.54)	0.06 (0.54)	-0.01 (-0.07)	-0.01 (-0.07)
MARKET	-0.14 (-0.05)	-0.14 (-0.05)	1.78 (0.37)	1.92 (0.4)	-1.46 (-0.39)	-1.46 (-0.39)
AF4	-0.10 (-0.53)	-0.10 (-0.53)	0.11 (0.25)	0.14 (0.23)	-0.20 (-0.99)	-0.21 (-0.99)
SU10	0.15** (1.98)	0.15** (1.99)	-0.28** (-2.05)	-0.27** (-2.02)	0.30*** (3.28)	0.32*** (3.28)
CONSTANT	3.63*** (3.79)	3.61*** (3.78)	-0.63 (-0.34)	-0.72 (-0.38)	5.16*** (4.67)	5.16*** (4.67)
Year&Industry	Yes	Yes	Yes	Yes	Yes	Yes
N	2,259	2,259	635	635	1,624	1,624
Overidentification test	$\chi^2_{(1)} = 0.83$ $p = 0.36$		$\chi^2_{(1)} = 3.39$ $p = 0.18$		$\chi^2_{(1)} = 0.03$ $p = 0.86$	
Weak instrument variable test	$F(2, 2,247) = 135.16$ $p < 0.01$		$F(2, 2,247) = 50.61$ $p < 0.01$		$F(2, 2,247) = 87.62$ $p < 0.01$	
Hausman test	$\chi^2_{(1)} = 13.31$ $p < 0.01$		$\chi^2_{(1)} = 5.71$ $p = 0.02$		$\chi^2_{(1)} = 9.19$ $p < 0.01$	

Note(s): This table presents the 2SLS and limited information maximum likelihood (LIML) regression results. EPU_CHN* is the instrumental value of EPU_CHN from the 1st stage of the 2SLS regression. Refer to Appendix 1 for detailed variable definitions. All specifications include year and industry dummies. *T*-values are indicated in brackets. Standard errors are robust to heteroskedasticity and firm clustering. The table encompasses the outcomes of instrumental variables' validity tests, including the under-identification, weak identification, and over-identification tests. Asterisks indicate significance at the 0.01 (*), 0.05 (**), and 0.10 (*) levels

Source(s): Authors' own work

Table 6.
Endogeneity tests

To ensure the appropriateness of the instrument selection, we adopted over-identification, weak instrument, and Hausman tests, with the null hypotheses being “all instruments are exogenous”, “weak instruments are present” and “political uncertainty is an endogenous explanatory variable”, respectively. As shown in Column (1), the over-identification test has a p -value of 0.36, affirming the strong exogeneity of the instrumental variable under the null hypothesis. The p -value of the weak instrument test is less than 0.01 and the F -statistics (robust) exceed 10, rejecting the null hypothesis that weak instruments are present. The Hausman test’s p -value also rejects the null hypothesis and supports the appropriateness of the instrumental variables.

4.4.2 Alternative measures of political uncertainty. To further check the robustness of our results, we use four alternative measures of political uncertainty and report the results in Panel A of Table 7. First, the extent of government official changes within a province may also result in political uncertainty, and hence affect IPO pricing within the province [25]. Therefore, we employ a provincial political turnover ratio (EPU_PRO). EPU_PRO is constructed as the percentage of prefecture-level cities with local official turnover in the month of the IPO issuance in the province where a focal firm is headquartered. This measure provides more information about provincial political risk. Column (1) shows that the coefficient of EPU_PRO is 2.41 and significant at the 1% level, suggesting that provincial political uncertainty significantly increases IPO underpricing.

Second, we measure political uncertainty using dummy variables that equal one if there is any prefecture-level city official turnover in the nation (EPU_DCHN) or in the province where an IPO firm is headquartered (EPU_DPRO). Columns (2) and (3) of Panel A report the results. The coefficients of EPU_DCHN and EPU_DPRO are positive and significant. Specifically, IPO underpricing increases by 0.38 and 0.23 in the presence of a political turnover in the nation and the province, respectively.

Third, the macro environmental uncertainty induced by political turnover throughout the entire issuance year may affect IPO underpricing due to information leakage and variance in the IPO approval process. In Column (4), we use the percentage of prefecture-level cities in China with local official turnover in the year of an IPO issuance (EPU_CHNY) to proxy for political uncertainty. EPU_CHNY is positively associated with IPO underpricing. In Column (5), we add political uncertainty in the nation one year prior to (EPU_CHNY01) and one year after (EPU_CHNY1) the IPO issuance to Column (4). The positive association between EPU_CHNY and IPO underpricing continues to hold. Furthermore, IPO underpricing decreases with EPU_CHNY01 but increases with EPU_CHNY1. One possible explanation is that political uncertainty has been largely resolved one year after a new leader takes office, which is reflected in IPO pricing. However, rumors about future political turnovers may increase political uncertainty and thus inflate IPO underpricing. These analyses using alternative measures of political uncertainty reinforce our main finding that political uncertainty at the macro level increases IPO underpricing.

4.4.3 Alternative measures of IPO underpricing. In this section, we examine whether our main results are robust to alternative measures of IPO underpricing and report the results in Panels B and C in Table 7. Following Wang and Yao (2021), we use longer time windows after IPO issuance, 30 days and 60 days, to construct two alternative measures of IPO underpricing, IPO_UP30 and IPO_UP60, respectively.

$$\text{IPO_UP}b_i = \frac{P_{i,b} - P_{i,0}}{P_{i,0}} - \frac{P_{m,b} - P_{m,0}}{P_{m,0}}, \quad (b = 30 \text{ and } 60 \text{ days, respectively})$$

By covering longer time windows, IPO_UP30 and IPO_UP60 address the concern of market underreaction to IPO issuance due to the IPO first day return limit. Panels B and C show that all measures of political uncertainty except EPU_CHN are positively and significantly

Dependent variable = IPO_UP					
	(1)	(2)	(3)	(4)	(5)
<i>Panel A: alternative measures of political uncertainty</i>					
EPU_PRO	2.41*** (4.41)				
EPU_DCHN		0.38*** (5.35)			
EPU_DPRO			0.23*** (3.12)		
EPU_CHNY				1.24*** (0.00)	1.25*** (9.57)
EPU_CHNY01					-0.53** (-3.66)
EPU_CHNY1					0.98*** (6.49)
Controls	Yes	Yes	Yes	Yes	Yes
Year&Industry	Yes	Yes	Yes	Yes	Yes
N	2,259	2,259	2,259	2,259	2,259
Adjusted R ²	0.31	0.33	0.33	0.35	0.38
Dependent variable = IPO_UP30					
	(1)	(2)	(3)	(4)	(5)
<i>Panel B: alternative measures of IPO underpricing – IPO_UP30</i>					
EPU_CHN	-0.08 (-0.08)				
EPU_PRO		3.22*** (3.42)			
EPU_DCHN			0.24** (1.98)		
EPU_DPRO				0.28** (2.26)	
EPU_CHNY					1.21*** (5.27)
EPU_CHNY01					-1.76*** (-6.91)
EPU_CHNY1					-0.68** (-2.55)
Controls	Yes		Yes		Yes
Year&Industry	Yes		Yes		Yes
N	2,259	2,259	2,259	2,259	2,259
Adjusted R ²	0.05	0.06	0.05	0.05	0.08
Dependent variable = IPO_UP60					
	(1)	(2)	(3)	(4)	(5)
<i>Panel C: alternative measures of IPO underpricing – IPO_UP60</i>					
EPU_CHN	-0.75 (-0.74)				
EPU_PRO		3.64*** (3.84)			
EPU_DCHN			0.33*** (2.71)		
EPU_DPRO				0.37*** (2.99)	

Table 7.
Additional
robustness tests

(continued)

Dependent variable = IPO_UP60					
	(1)	(2)	(3)	(4)	(5)
EPU_CHNY					1.26*** (5.43)
EPU_CHNY01					-1.95*** (-7.61)
EPU_CHNY1					-0.74*** (-2.78)
Controls	Yes		Yes		Yes
Year&Industry	Yes		Yes		Yes
N	2,259	2,259	2,259	2,259	2,259
Adjusted R ²	0.06	0.05	0.06	0.05	0.08

	Dependent variable = IPO_UP					
	Non-state-owned enterprises			IPO issuance year (2014–2019)		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full	W/P.C.	W/O P.C.	Full	W/P.C.	W/O P.C.
<i>Panel D: subsample evidence</i>						
EPU_CHN	2.02*** (3.47)	2.12*** (2.98)	1.97** (1.98)	6.75*** (6.9)	8.53*** (3.11)	6.10*** (6.14)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year&Industry	Yes	Yes	Yes	Yes	Yes	Yes
N	1,945	566	1,379	1,093	213	880
Adjust R ²	0.33	0.30	0.29	0.27	0.29	0.28

Note(s): This table presents the regression results for the robustness checks. In Panel A, EPU_PRO is the percentage of prefecture-level city official turnover in the province of an IPO firm's headquarters, EPU_DCHN and EPU_DPRO are dummy variables of the presence of prefecture-level city official turnover in the nation and the province of an IPO firm's headquarters, respectively. EPU_CHNY01 and EPU_CHNY1 refer to the levels of political uncertainty in the nation one year prior to and one year after IPO issuance. In Panel B (Panel C), the dependent variable is IPO_UP30 (IPO_UP60), the market-adjusted return in the 30 (60) trading days after issuance. Panel D reports the regression results in subsamples classified by state ownership and IPO issuance period. "Controls" are the same control variables as in previous tables, including FEE, BM, DEBT, SIZE, ROA, IPOMKT, MARKET, AF4, and SU10. Refer to [Appendix 1](#) for detailed variable definitions. All specifications include year and industry dummies. *T*-values are indicated in brackets. Standard errors are robust to heteroskedasticity and firm clustering. Asterisks indicate significance at the 0.01 (*), 0.05 (**), and 0.10 (*) levels.

Source(s): Authors' own work

Table 7.

associated with IPO underpricing. For example, Column (3) shows that any political turnover in the nation increases the market-adjusted IPO return in 30/60 days after the issuance by 0.24/0.33, and the impact is 0.28/0.37 in the presence of any political turnover in the province, as shown in Column (4). The adjusted R^2 is less than 0.10 in all regressions, much smaller than that in the regressions where IPO_UP is the dependent variable, suggesting that extending the time windows after IPO issuance increases noise in measuring IPO underpricing. Nonetheless, our main results stay mostly robust.

4.4.4 Subsample evidence. State-owned enterprises in China purposefully underprice IPOs for post-IPO benefits (Wang & Zhang, 2006), and their political connections do not break due to their government ownership. However, privately-owned firms rely on the IPO proceeds since they are often short of other economic resources, and they value local political connections more for growth. To test whether our findings apply to privately owned firms in China, we exclude state-owned enterprises and rerun the baseline regressions. Columns (1) to (3) of Panel D in [Table 7](#) display the results. The baseline results continue to hold in the full

sample of non-state-owned enterprises. Comparing the subsample with vs without political connections, Column (2) shows that the coefficient of EPU_CHN is 2.12, higher than 1.97 in Column (3), suggesting that the positive impact of political uncertainty on IPO underpricing is stronger for politically connected than non-politically connected private firms, consistent with our previous observations.

As indicated earlier, our measure of IPO underpricing is constructed differently before and after 2014 because the IPO first day return limit took effect in 2014. We further excluded observations before 2014 to perform the baseline regressions and report the results in Columns (4) to (6). The results are consistent with those in previous tables. Collectively, the results from subsamples in Panel D of Table 7 provide further support for our major findings.

4.5 Impact of other firm characteristics

We further investigate whether other firm characteristics affect the association between political uncertainty and IPO underpricing and report the results in Table 8. First, we follow Bouchkova, Doshi, Durnev, and Molchanov (2012) and classify firms into politically sensitive and non-politically sensitive industries [26]. We expect that firms in politically sensitive industries could have higher IPO underpricing induced by political uncertainty.

Variables	Politically sensitive industries		Non-politically sensitive industries	
	(1)	(2)	(3)	(4)
<i>Panel A: by industry</i>				
EPU_CHN	1.96** (2.28)		1.81*** (2.87)	
EPU_PRO		2.59*** (3.08)		2.39*** (3.91)
Controls	Yes	Yes	Yes	Yes
Year&Industry	Yes	Yes	Yes	Yes
N	675	675	1,584	1,584
Adjust R ²	0.32	0.32	0.32	0.32
Variable	Growth enterprise market		Small and medium enterprises	
	(1)	(2)	(3)	(4)
<i>Panel B: by listing composites</i>				
EPU_CHN	3.37*** (2.79)		1.09* (1.78)	
EPU_PRO		3.21*** (2.69)		2.47*** (3.73)
Controls	Yes	Yes	Yes	Yes
Year&Industry	Yes	Yes	Yes	Yes
N	720	720	846	846
Adjust R ²	0.35	0.35	0.28	0.28

Note(s): Panel A presents the regression results of subsamples classified by industry. Mining; metal, non-metal; electricity, gas, and water production and supply; petroleum, chemical, rubber, plastic; transportation, warehousing; information technology; real estate; and media industries are classified as politically sensitive industries, and other industries are classified as non-politically sensitive. Panel B presents the regression results for firms included in the GEM (Growth Enterprise Market) or SME (Small and Medium Enterprises) composites. Refer to Appendix 1 for detailed variable definitions. “Controls” refers to control variables, which are the same as those in Table 3. All specifications include year and industry dummies. *T*-values are indicated in brackets. Standard errors are robust to heteroskedasticity and firm clustering. Asterisks indicate significance at the 0.01 (***), 0.05 (**), and 0.10 (*) levels

Source(s): Authors’ own work

Table 8.
Regression results by
industry and listing
composite

Panel A shows the results for the two subsamples. For firms in politically sensitive industries, the coefficient of EPU_CHN/EPU_PRO is 1.96/2.59 and significant at the 5%/1% level. For firms in non-politically sensitive industries, the coefficients are smaller (1.81/2.39), consistent with our prediction.

Second, firms in the high growth phase might have higher IPO underpricing due to political uncertainty. We split the sample into subsamples classified by listing composites. Firms listed on the Growth Enterprise Market (GEM) composite are primarily high growth companies, while those listed on the Small and Medium Enterprises (SME) composite are primarily more mature enterprises. We rerun the baseline regressions and report the test results in Panel B of Table 8.

Columns (1) and (2) show that the coefficients of EPU_CHN and EPU_PRO for GEM-listed companies are 3.37 and 3.21, respectively, both significant at the 1% level. Columns (3) and (4) show that the coefficients of EPU_CHN and EPU_PRO for SME-listed companies are smaller (1.09 and 2.47, respectively). These results suggest that firms in the high growth phase and with greater demand for external resources suffer greater IPO underpricing due to political uncertainty.

5. Conclusions

Local governments in China play a crucial role in its economic development. Political uncertainty induced by official turnovers significantly increases information asymmetry among capital market participants (Dai & Ngo, 2021; Chen *et al.*, 2018; Piotroski, Wong, & Zhang, 2015). Using a sample of A-share listed IPOs in China, we empirically examine the impact and mechanisms of official turnover-induced political uncertainty on IPO underpricing. Though political connections can shield companies from external political fluctuations, such connections can be disrupted by local official turnovers, which may negatively affect a firm's value or perceived value significantly due to changes in information disclosure. We further examine the impact of political connections on the association between political uncertainty and IPO underpricing.

We find that political uncertainty significantly increases IPO underpricing by reducing the offer price and the impact is stronger for IPO issuers with political connections. The results are robust to alternative measures of political uncertainty and IPO underpricing, various model specifications, and subsample analysis. Additionally, we show that the positive impact of political uncertainty on IPO underpricing is more pronounced for firms in politically sensitive industries and those in the high growth development phase.

We enrich the literature on IPOs and political uncertainty (e.g. Çolak *et al.*, 2017, 2021; Luo *et al.*, 2017; Piotroski & Zhang, 2014; Chen *et al.*, 2018; Zhang *et al.*, 2020). Notably, our measure of political uncertainty, by factoring all city-level official turnover within one month prior to an IPO issuance into the construction of the variable, better captures the macro level political uncertainty. We innovatively employ the structural equation model to investigate the channel through which political uncertainty affects IPO underpricing.

Our findings provide important implications for both Chinese firms and local government officials. To effectively mitigate the impact of official turnover induced political uncertainty on IPO underpricing, it is important for Chinese enterprises to effectively communicate with various parties involved in the IPO process. Improving the information environment of a firm, such as increasing voluntarily firm disclosure, improving the quality of mandatory reporting, and strengthening unbiased intermediaries' coverage, may help mitigating information asymmetry among all parties involved and boosting the confidence of investors. We call for further research on the impact of official turnover related political uncertainty on other firm financing decisions, such as seasoned equity offering (SEOs) and bond issuance, to further warrant policy reform on the information environment, such as enforcing more mandatory disclosure.

Notes

1. If new political leaders are pro-business and capable, they will help boost the local economy by helping firms under their jurisdiction. If new leaders are more interested in power grabbing and their personal political career or goals by intensifying their scrutiny over local business, they will harm the local businesses.
2. An earlier study by [Loughran, Ritter, and Rydqvist \(1994\)](#) documents that the average country-level IPO underpricing ranges from 3.3% to 270.1% across 54 nations for three decades.
3. For instance, the U.S. stock market's IPO underpricing rate is 15% from 1990 to 1998 ([Loughran & Ritter, 2004](#)) and 24% from 1993 to 2008 ([Liu & Ritter, 2011](#)), while the average/median IPO underpricing rate of Chinese firms between 1992 and 2004 is 247%/122%, which is the highest among all major global markets ([Tian, 2011](#)). A recent study by [Joshi et al. \(2023\)](#) documents that the average first day returns are 17.5% in the U.S. during 1960–2021 and 170.7% in China during 1990–2021.
4. [Wang et al. \(2020\)](#) report that the average tenure for city leaders is about 3.7 years from 2000–2011. [Luo and Qin \(2021\)](#) find that around 72% of mayors and 80% of municipal party secretaries have a tenure of less than four years from 2000 to 2018. [Yang et al. \(2023\)](#) report that the average tenure of mayors and municipal party secretaries is only 2.56 years from 2009 to 2019.
5. Prefecture-level cities are larger administrative regions that include urban and rural areas and are crucial economic hubs within their provinces. County-level cities are smaller in scope, focusing on a specific urban area and surrounding rural regions, and serve as local centers within a prefecture.
6. The mayor of a city is at one level lower than the party secretary of the city though the mayor oversees the city economic growth.
7. Studies show that geographical distance from the Underwriter ([Wang, Chai, Yan, Shan, & Fan, 2022](#)), geographical proximity to major metropolitan areas ([Huang, Liu, & Ma, 2019](#)), peer firms' earnings quality ([Yu, Tuo, & Wu, 2019](#)), regulatory environments ([Killins, Ngo, & Wang, 2022](#)), political connections ([Francis et al., 2009](#)), local corruption ([Wang & Song, 2021](#)), and external shock ([Panda & Guha Deb, 2023](#)) affect IPO underpricing.
8. Empirically, [Li and Zhou \(2005\)](#) document that the likelihood of promotion/termination of provincial leaders increases/decreases with their economic performance.
9. Such as innovations ([Zhang, Luo, & Xiang, 2023](#)), cash holdings ([Xu, Chen, Xu, & Chan, 2016](#)), research and development ([Luo & Zhang, 2022](#)), information release ([Piotroski et al., 2015](#); [Chen et al., 2018](#)), corporate investment ([An et al., 2016](#); [Chen, 2022](#)), pollution discharge ([Deng et al., 2019](#)), and cost stickiness ([Pan, Zhang, & Zhang, 2022](#)).
10. In practice, this is not always the case given that some firms did successfully enter the IPO market even though they may not reach the CSRC criteria ([Piotroski & Zhang, 2014](#)).
11. Other theories, such as various institutional, ownership, and control theories, also provide some explanations for the IPO underpricing. However, none of these theories can fully capture information asymmetry among all three IPO parties (the Issuer, the Underwriter, and the Investor) and completely explain the IPO underpricing phenomenon. Refer to [Jamaani and Alidarous \(2019\)](#) for detailed discussions.
12. This theoretical framework has garnered empirical backing in the context of diverse financial assets, including bonds, stocks, options, and commodities ([Brogaard & Detzel, 2015](#); [Kelly, Pastor, & Veronesi, 2016](#); [Hou, Tang, & Zhang, 2020](#); [Waisman, Ye, & Zhu, 2015](#)).
13. [Agarwal et al. \(2022\)](#) find that households significantly reduce their market participation and reallocate funds to safer assets during periods of increased political uncertainty prior to gubernatorial elections in the United States.
14. ST and ST* designations are used to indicate firms identified by the CSRC that have serious financial distress and can be delisted if they go bankrupt. ST or ST* designations can be removed if they survive financial distress and become profitable ([Kim, Ma, & Zhou, 2016](#)).

15. “Choose City Network” (“择城网”, <http://www.hotelaahc.com>).
16. Like provincial government officials, the administrative status of a municipality is under the direct control of the central government. We exclude observations pertaining to turnovers of the municipalities.
17. Between 2004 and 2009, the Chinese government implemented window guidance for listed firms, indirectly influencing their issuance prices. Although no explicit price ceiling was set, the issuance price-earnings ratio seldom exceeded 30 times. From 2009 to 2014, despite the Chinese stock market achieving marketization of pricing, there were substantial incidences of new stock failures, as well as high issuance prices, high price-earnings ratios, and high over-fundraising phenomena on the Growth Enterprise Market (GEM). In 2014, the CSRC once again regulated the pricing of new stocks, limiting the price-earnings ratio and the range of return on the first trading day to be 44%, and the daily return limit after IPO issuance is set to be at 10%. In 2019, the registration system was introduced, abolishing the limitations on the price-earnings ratio and the first-day price fluctuation range for firms listed on the Science and Technology Innovation Board and the GEM registration system.
18. A prefecture-level city is one of China’s administrative divisions. Its administrative status is equivalent to that of a region, autonomous prefecture, or league, making it a prefecture-level administrative division. Such cities, with an administrative setup similar to that of a region, are under the jurisdiction of a province or autonomous region. A prefecture-level city may govern several counties and/or county-level cities.
19. It can also be a period between the stock’s first trading day and the first non-trading-limit day if the first trading day’s price change hits the 44% cap after 1/1/2014.
20. See details of the stepwise testing regression coefficient method in [Baron and Kenny \(1986\)](#) and [Judd and Kenny \(1981\)](#).
21. [Li et al. \(2021\)](#) document that the average/median PE ratio of Chinese IPO firms in different subperiods from 2001 to 2015 varies between 21.11 and 41.91/19.55 and 37.93.
22. Since some of the variables are dummy and ratio variables, we choose the Spearman correlation.
23. [Appendix 2](#) shows that, prior to nearest-neighbor matching, significant differences exist in the mean values of all variables except for issuance atmosphere (IPOMKT), market sentiment (MARKET), and the presence of one of the big four accounting firms (AF4). After matching, the mean differences of all variables are no longer significant. Additionally, the standardized biases of the variables decrease significantly and are less than 5%, indicating that the nearest-neighbor matching has passed the parallelism assumption test. We compare the differences between the treated (politically connected) and the control (non-politically connected) groups before and after matching using Kernel density plots. [Figures 1 and 2](#) in [Appendix 2](#) show the samples before and after matching, respectively. [Figure 2](#) displays a closer density function between the control and treated groups than [Figure 1](#), suggesting that the financial and listing characteristics of the two groups of firms are more similar after matching.
24. The two-period lagged local political uncertainty and two-period lagged global economic uncertainty indices influence political uncertainty that the focal firms are exposed to, but do not affect their IPO pricing directly, satisfying both the relevance and exogeneity conditions of instrumental variables. Global economic uncertainty index data are obtained from the following website: http://www.policyuncertainty.com/global_monthly.html.
25. In the five hierarchies of the state administration of China, the provincial level is right above the prefectural level.
26. [Boutchkova et al. \(2012\)](#) investigate the role of political risk on industry return volatility and find that politically sensitive industries experience greater return volatility in higher local political risk. Politically sensitive industries are those sensitive to government policies, including mining, metal, electricity, gas, water production and supply, petroleum, chemical, rubber, plastic, transportation, warehousing, information technology, real estate, and media.

References

- Adhikari, A., Derashild, C., & Zhang, H. (2006). Public policy, political connections, and effective tax rates: Longitudinal evidence from Malaysia. *Journal of Accounting and Public Policy*, 25(5), 574–595. doi: [10.1016/j.jaccpubpol.2006.07.001](https://doi.org/10.1016/j.jaccpubpol.2006.07.001).
- Agarwal, V., Aslan, H., Huang, L., & Ren, H. (2022). Political uncertainty and household stock market participation. *Journal of Financial and Quantitative Analysis*, 57(8), 2899–2928. doi: [10.1017/s0022109022000114](https://doi.org/10.1017/s0022109022000114).
- Allen, F., & Faulhaber, G. R. (1989). Signaling by underpricing in the IPO market. *Journal of Financial Economics*, 23(2), 303–323. doi: [10.1016/0304-405x\(89\)90060-3](https://doi.org/10.1016/0304-405x(89)90060-3).
- An, H., Chen, Y., Luo, D., & Zhang, T. (2016). Political uncertainty and corporate investment: Evidence from China. *Journal of Corporate Finance*, 36, 174–189. doi: [10.1016/j.jcorpfin.2015.11.003](https://doi.org/10.1016/j.jcorpfin.2015.11.003).
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. doi: [10.1037//0022-3514.51.6.1173](https://doi.org/10.1037//0022-3514.51.6.1173).
- Barry, C. B., & Brown, S. J. (1985). Differential information and security market equilibrium. *Journal of Financial and Quantitative Analysis*, 20(4), 407–422. doi: [10.2307/2330758](https://doi.org/10.2307/2330758).
- Benveniste, L. M., & Spindt, P. A. (1989). How investment bankers determine the offer price and allocation of new issues. *Journal of Financial Economics*, 24(2), 343–361. doi: [10.1016/0304-405x\(89\)90051-2](https://doi.org/10.1016/0304-405x(89)90051-2).
- Bird, A., Karolyi, S. A., & Ruchti, T. G. (2023). How do firms respond to political uncertainty? Evidence from U.S. Gubernatorial elections. *Journal of Accounting Research*, 61(4), 1025–1061. doi: [10.1111/1475-679x.12482](https://doi.org/10.1111/1475-679x.12482).
- Boubakri, N., Cosset, J. C., & Saffar, W. (2008). Political connections of newly privatized firms. *Journal of Corporate Finance*, 14(5), 654–673. doi: [10.1016/j.jcorpfin.2008.08.003](https://doi.org/10.1016/j.jcorpfin.2008.08.003).
- Boubakri, N., Cosset, J. C., & Saffar, W. (2012). The impact of political connections on firms' operating performance and financing decisions. *Journal of Financial Research*, 35(3), 397–423. doi: [10.1111/j.1475-6803.2012.01322.x](https://doi.org/10.1111/j.1475-6803.2012.01322.x).
- Boulton, T. J. (2022). Economic policy uncertainty and international IPO underpricing. *Journal of International Financial Markets, Institutions and Money*, 81, 101689. doi: [10.1016/j.intfin.2022.101689](https://doi.org/10.1016/j.intfin.2022.101689).
- Boutchkova, M., Doshi, H., Durnev, A., & Molchanov, A. (2012). Precarious politics and return volatility. *Review of Financial Studies*, 25(4), 1111–1154. doi: [10.1093/rfs/hhr100](https://doi.org/10.1093/rfs/hhr100).
- Brahma, S., Zhang, J., Boateng, A., & Nwafor, C. (2023). Political connection and M& performance: Evidence from China. *International Review of Economics and Finance*, 85, 372–389. doi: [10.1016/j.iref.2023.01.026](https://doi.org/10.1016/j.iref.2023.01.026).
- Brockman, P., Rui, O. M., & Zou, H. (2013). Institutions and the performance of politically connected M&s. *Journal of International Business Studies*, 44(8), 833–852. doi: [10.1057/jibs.2013.37](https://doi.org/10.1057/jibs.2013.37).
- Brogaard, J., & Detzel, A. (2015). The asset-pricing implications of government economic policy uncertainty. *Management Science*, 61(1), 3–18. doi: [10.1287/mnsc.2014.2044](https://doi.org/10.1287/mnsc.2014.2044).
- Cao, W., Yang, D., Zhao, C., & Chi, Q. (2017). Local political power transfer and the investment cycle of corporate social capital. *Finance and Economics Research*, 43(1).
- Cao, Y., Chen, Y., & Zhang, Y. (2022). Political uncertainty, innovation-driven strategy, and corporate R&D. *Research in International Business and Finance*, 60, 101612. doi: [10.1016/j.ribaf.2021.101612](https://doi.org/10.1016/j.ribaf.2021.101612).
- Cao, Z., Chen, Y., Zeng, J., & Zhang, Q. (2022). Political connection, family involvement, and IPO underpricing: Evidence from the listed non-state-owned enterprises of China. *Pacific Economic Review*, 27(2), 105–130. doi: [10.1111/1468-0106.12358](https://doi.org/10.1111/1468-0106.12358).

- Carter, R., & Manaster, S. (1990). Initial public offerings and underwriter reputation. *The Journal of Finance*, 45(4), 1045–1067.
- Chang, E., Chen, C., Chi, J., & Young, M. (2008). IPO underpricing in China: New evidence from the primary and secondary markets. *Emerging Markets Review*, 9(1), 1–16. doi: [10.1016/j.ememar.2007.06.002](https://doi.org/10.1016/j.ememar.2007.06.002).
- Chauhan, Y., & Jaiswall, M. (2023). Economic policy uncertainty and incentive to smooth earnings. *International Review of Economics and Finance*, 85, 93–106. doi: [10.1016/j.iref.2023.01.014](https://doi.org/10.1016/j.iref.2023.01.014).
- Chen, Y. (2022). Does political turnover affect corporate investment? Evidence from China. *Emerging Markets Review*, 51, 100865. doi: [10.1016/j.ememar.2021.100865](https://doi.org/10.1016/j.ememar.2021.100865).
- Chen, J. H., Jiang, C. X., Kim, J. C., & McInish, T. H. (2003). Bid-ask spreads, information asymmetry, and abnormal investor sentiment: Evidence from closed-end funds. *Review of Quantitative Finance and Accounting*, 21(4), 303–321. doi: [10.1023/b:requ.0000004781.54733.67](https://doi.org/10.1023/b:requ.0000004781.54733.67).
- Chen, D., Guan, Y., Zhang, T., & Zhao, G. (2017). Political connection of financial intermediaries: Evidence from China's IPO market. *Journal of Banking and Finance*, 76, 15–31. doi: [10.1016/j.jbankfin.2016.11.023](https://doi.org/10.1016/j.jbankfin.2016.11.023).
- Chen, Y., Chen, D., Wang, W., & Zheng, D. (2018). Political uncertainty and firms' information environment: Evidence from China. *Journal of Accounting and Public Policy*, 37(1), 39–64. doi: [10.1016/j.jaccpubpol.2018.01.005](https://doi.org/10.1016/j.jaccpubpol.2018.01.005).
- Chen, Z., Cihan, M., Jens, C. E., & Page, T. B. (2023). Political uncertainty and firm investment: Project-level evidence from M&A activity. *Journal of Financial and Quantitative Analysis*, 58(1), 71–103. doi: [10.1017/s0022109022000904](https://doi.org/10.1017/s0022109022000904).
- Chow, C. K. W., Fung, M. K. Y., Lam, K. C., & Sami, H. (2012). Investment opportunity set, political connection and business policies of private Enterprises in China. *Review of Quantitative Finance and Accounting*, 38(3), 367–389. doi: [10.1007/s11156-011-0231-6](https://doi.org/10.1007/s11156-011-0231-6).
- Claessens, S., Feijen, E., & Laeven, L. (2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics*, 88(3), 554–580. doi: [10.1016/j.jfineco.2006.11.003](https://doi.org/10.1016/j.jfineco.2006.11.003).
- Clarke, J., Khurshed, A., Pande, A., & Singh, A. K. (2016). Sentiment traders & IPO initial returns: The Indian evidence. *Journal of Corporate Finance*, 37, 24–37. doi: [10.1016/j.jcorpfin.2015.10.007](https://doi.org/10.1016/j.jcorpfin.2015.10.007).
- Çolak, G., Durnev, A., & Qian, Y. (2017). Political uncertainty and IPO activity: Evidence from US gubernatorial elections. *Journal of Financial and Quantitative Analysis*, 52(6), 2523–2564. doi: [10.1017/s0022109017000862](https://doi.org/10.1017/s0022109017000862).
- Çolak, G., Gounopoulos, D., Loukopoulos, P., & Loukopoulos, G. (2021). Political power, local policy uncertainty and IPO pricing. *Journal of Corporate Finance*, 67, 101907. doi: [10.1016/j.jcorpfin.2021.101907](https://doi.org/10.1016/j.jcorpfin.2021.101907).
- Dai, L., & Ngo, P. (2021). Political uncertainty and accounting conservatism. *European Accounting Review*, 30(2), 277–307. doi: [10.1080/09638180.2020.1760117](https://doi.org/10.1080/09638180.2020.1760117).
- Deng, Y., Wu, Y., & Xu, H. (2019). Political turnover and firm pollution discharges: An empirical study. *China Economic Review*, 58, 101363. doi: [10.1016/j.chieco.2019.101363](https://doi.org/10.1016/j.chieco.2019.101363).
- Dong, Z., Wang, X., Zhang, T., & Zhong, Y. (2022). The effects of local government leadership turnover on entrepreneurial behavior. *China Economic Review*, 71, 101727. doi: [10.1016/j.chieco.2021.101727](https://doi.org/10.1016/j.chieco.2021.101727).
- Duong, H. N., Nguyen, J. H., Nguyen, M., & Rhee, S. G. (2020). Navigating through economic policy uncertainty: The role of corporate cash holdings. *Journal of Corporate Finance*, 62, 101607. doi: [10.1016/j.jcorpfin.2020.101607](https://doi.org/10.1016/j.jcorpfin.2020.101607).
- Elmassri, M. M., Harris, E. P., & Carter, D. B. (2016). Accounting for strategic investment decision-making under extreme uncertainty. *The British Accounting Review*, 48(2), 151–68. doi: [10.1016/j.bar.2015.12.002](https://doi.org/10.1016/j.bar.2015.12.002).

- Engelen, P. J., & Van Essen, M. (2010). Underpricing of IPOs: Firm-issue-and country-specific characteristics. *Journal of Banking and Finance*, 34(8), 1958–1969. doi: [10.1016/j.jbankfin.2010.01.002](https://doi.org/10.1016/j.jbankfin.2010.01.002).
- Fan, J. P., Wong, T. J., & Zhang, T. (2007). Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics*, 84(2), 330–357. doi: [10.1016/j.jfineco.2006.03.008](https://doi.org/10.1016/j.jfineco.2006.03.008).
- Fan, J. P. H., Wong, T. J., & Zhang, T. (2014). Politically connected CEOs, corporate governance, and the post-IPO performance of China's partially privatized firms. *The Journal of Applied Corporate Finance*, 26(3), 85–95. doi: [10.1111/jacf.12084](https://doi.org/10.1111/jacf.12084).
- Fisman, R. (2001). Estimating the value of political connections. *The American Economic Review*, 91(4), 1095–1102. doi: [10.1257/aer.91.4.1095](https://doi.org/10.1257/aer.91.4.1095).
- Francis, B. B., Hasan, I., & Sun, X. (2009). Political connections and the process of going public: Evidence from China. *Journal of International Money and Finance*, 28(4), 696–719. doi: [10.1016/j.jimonfin.2009.01.002](https://doi.org/10.1016/j.jimonfin.2009.01.002).
- Goodell, J. W., Goyal, A., & Urquhart, A. (2021). Uncertainty of uncertainty and firm cash holdings. *Journal of Financial Stability*, 56, 100922. doi: [10.1016/j.jfs.2021.100922](https://doi.org/10.1016/j.jfs.2021.100922).
- Grimblatt, M., & Hwang, C. Y. (1989). Signaling and the pricing of new issues. *The Journal of Finance*, 44(2), 393–420. doi: [10.1111/j.1540-6261.1989.tb05063.x](https://doi.org/10.1111/j.1540-6261.1989.tb05063.x).
- Gu, T., Venkateswaran, A., & Erath, M. (2023). Impact of fiscal stimulus on volatility: A cross-country analysis. *Research in International Business and Finance*, 65, 101955. doi: [10.1016/j.ribaf.2023.101955](https://doi.org/10.1016/j.ribaf.2023.101955).
- Guan, J., Xu, H., Huo, D., Hua, Y., & Wang, Y. (2021). Economic policy uncertainty and corporate innovation: Evidence from China. *Pacific-Basin Finance Journal*, 67, 101542. doi: [10.1016/j.pacfin.2021.101542](https://doi.org/10.1016/j.pacfin.2021.101542).
- Guo, G., Li, J., Wang, D., & Zhang, L. (2022). Political connection, contract intensity, and OFDI: Evidence from China. *Journal of Economic Surveys*, 36(3), 534–557. doi: [10.1111/joes.12448](https://doi.org/10.1111/joes.12448).
- Gupta, V., Singh, S., & Yadav, S. S. (2023). Disaggregated IPO returns, economic uncertainty and the long-run performance of SME IPOs. *International Journal of Emerging Markets*, 18(10), 3847–3867. doi: [10.1108/ijem-09-2020-1098](https://doi.org/10.1108/ijem-09-2020-1098).
- Hankins, W. B., Stone, A. L., Cheng, C., & Chiu, C. (2020). Corporate decision making in the presence of political uncertainty: The case of corporate cash holdings. *Financial Review*, 55(2), 307–37. doi: [10.1111/fire.12205](https://doi.org/10.1111/fire.12205).
- Heeneey, L., Yang, S., Chowdhury, H., & Tan, K. J. K. (2023). Corporate cash holdings through economic policy uncertainty: An Australian study. *Pacific-Basin Finance Journal*, 79, 102008. doi: [10.1016/j.pacfin.2023.102008](https://doi.org/10.1016/j.pacfin.2023.102008).
- Hou, K., Tang, K., & Zhang, B. (2020). Political uncertainty and commodity markets. Fisher College of Business Working Paper.
- Huang, H. (2011). The regulation of securities offerings in China: Reconsidering the merit review element in light of the global financial crisis. *Hong Kong Law Journal*, 41(10), 310–343.
- Huang, Z., Liu, J., & Ma, G. (2019). Distance, transportation and the underpricing of IPOs. *Review of Quantitative Finance and Accounting*, 52(4), 991–1009. doi: [10.1007/s11156-018-0733-6](https://doi.org/10.1007/s11156-018-0733-6).
- Jamaani, F., & Alidarus, M. (2019). Review of theoretical explanations of IPO underpricing. *Journal of Accounting, Business and Finance Research*, 6(1), 1–18. doi: [10.20448/2002.61.1.18](https://doi.org/10.20448/2002.61.1.18).
- Jhawar, P., & Seal, J. (2023). Political uncertainty and initial public offerings: A literature review. *International Journal of Financial Studies*, 11(74), 1–17. doi: [10.3390/ijfs11020074](https://doi.org/10.3390/ijfs11020074).
- Jiang, L., Pittman, J. A., & Saffar, W. (2022). Policy uncertainty and textual disclosure. *Accounting Horizons*, 36(4), 113–131. doi: [10.2308/horizons-2019-515](https://doi.org/10.2308/horizons-2019-515).

- Joshiyura, M., Mathur, S., & Gwalani, H. (2023). Decrypting IPO pricing: An integrated bibliometric and content analysis approach. *Managerial Finance*, 49(1), 135–162. doi: [10.1108/mf-06-2022-0293](https://doi.org/10.1108/mf-06-2022-0293).
- Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in treatment evaluations. *Evaluation Review*, 5(5), 602–619. doi: [10.1177/0193841x8100500502](https://doi.org/10.1177/0193841x8100500502).
- Kelly, B., Pastor, L., & Veronesi, P. (2016). The price of political uncertainty: Theory and evidence from the option market. *The Journal of Finance*, 71(5), 2417–2480. doi: [10.1111/jofi.12406](https://doi.org/10.1111/jofi.12406).
- Khatami, S. H., Marchica, M., & Mura, R. (2023). The effect of “underwriter-issuer” personal connections on IPO underpricing. *The European Journal of Finance*, 29(6), 638–668. doi: [10.1080/1351847x.2022.2082311](https://doi.org/10.1080/1351847x.2022.2082311).
- Killins, R. N., Ngo, T., & Wang, H. (2020). The underpricing of sin stocks. *Journal of Investing*, 29(4), 67–76. doi: [10.3905/joi.2020.1.126](https://doi.org/10.3905/joi.2020.1.126).
- Killins, R. N., Ngo, T., & Wang, H. (2022). Financial institution IPOs and regulatory environments. *Finance Research Letters*, 46, 102503. doi: [10.1016/j.frl.2021.102503](https://doi.org/10.1016/j.frl.2021.102503).
- Kim, M. H. Y., Ma, S., & Zhou, Y. A. (2016). Survival prediction of distressed firms: Evidence from the Chinese special treatment firms. *Journal of the Asia Pacific Economy*, 21(3), 418–443. doi: [10.1080/13547860.2016.1176645](https://doi.org/10.1080/13547860.2016.1176645).
- Lei, L., & Luo, Y. (2023). Political/policy uncertainty, corporate disclosure, and information asymmetry. *Accounting Perspectives*, 22(1), 87–110. doi: [10.1111/1911-3838.12317](https://doi.org/10.1111/1911-3838.12317).
- Li, H., & Zhou, L.-A. (2005). Political turnover and economic performance: The incentive role of personnel control in China. *Journal of Public Economics*, 89(9), 1743–1762. doi: [10.1016/j.jpubeco.2004.06.009](https://doi.org/10.1016/j.jpubeco.2004.06.009).
- Li, G., & Zhou, H. (2015). Political connections and access to IPO markets in China. *China Economic Review*, 33, 76–93. doi: [10.1016/j.chieco.2015.01.009](https://doi.org/10.1016/j.chieco.2015.01.009).
- Li, M., Liu, D., Zhang, J., & Zhang, L. (2021). Volatile market condition, institutional constraints, and IPO anomaly: Evidence from the Chinese market. *Accounting and Finance*, 61(1), 1239–1275. doi: [10.1111/acfi.12609](https://doi.org/10.1111/acfi.12609).
- Li, Q., Maydew, E. L., Willis, R. H., & Xu, L. (2022). Corporate tax behavior and political uncertainty: Evidence from national elections around the world. *Journal of Business Finance and Accounting*, 49(9/10), 1605–1641. doi: [10.1111/jbfa.12605](https://doi.org/10.1111/jbfa.12605).
- Liu, X., & Ritter, J. R. (2011). Local underwriter oligopolies and IPO underpricing. *Journal of Financial Economics*, 102(3), 579–601. doi: [10.1016/j.jfineco.2011.01.009](https://doi.org/10.1016/j.jfineco.2011.01.009).
- Liu, J., Uchida, K., & Gao, R. (2012). Political connections and the long-term stock performance of Chinese IPOs. *Journal of International Financial Markets, Institutions and Money*, 22(4), 814–833. doi: [10.1016/j.intfin.2012.05.005](https://doi.org/10.1016/j.intfin.2012.05.005).
- Loughran, T., & Ritter, J. (2004). Why has IPO underpricing changed over time?. *Financial Management*, 5–37.
- Loughran, T., Ritter, J. R., & Rydqvist, K. (1994). Initial public offerings: International insights. *Pacific-Basin Finance Journal*, 2(2-3), 165–199. doi: [10.1016/0927-538x\(94\)90016-7](https://doi.org/10.1016/0927-538x(94)90016-7).
- Luo, W., & Qin, S. (2021). China’s local political turnover in the Twenty-First century. *Journal of Chinese Political Science*, 26(4), 1–24. doi: [10.1007/s11366-021-09739-2](https://doi.org/10.1007/s11366-021-09739-2).
- Luo, W., & Zhang, X. (2022). Political turnover and corporate research and development: Evidence from China. *Applied Economics Letters*, 29(7), 573–578. doi: [10.1080/13504851.2020.1813242](https://doi.org/10.1080/13504851.2020.1813242).
- Luo, D., Tong, N., & She, G. (2017). City-level political uncertainty and city-level IPO activities. *Accounting and Finance*, 27(5), 1447–1480. doi: [10.1111/acfi.12341](https://doi.org/10.1111/acfi.12341).
- Miller, E. M. (1977). Risk, uncertainty, and divergence of opinion. *The Journal of Finance*, 32(4), 1151–1168. doi: [10.1111/j.1540-6261.1977.tb03317.x](https://doi.org/10.1111/j.1540-6261.1977.tb03317.x).

- Mok, H. M., & Hui, Y. V. (1998). Underpricing and aftermarket performance of IPOs in Shanghai, China. *Pacific-Basin Finance Journal*, 6(5), 453–474.
- Pan, Z., Zhang, G., & Zhang, H. (2022). Political uncertainty and cost stickiness: Evidence from prefecture-city official turnover in China. *China Accounting and Finance Review*, 24(2), 142–171. doi: [10.1108/cafr-02-2022-0007](https://doi.org/10.1108/cafr-02-2022-0007).
- Panda, A., & Guha Deb, S. (2023). IPO underpricing and short-term performance: A comparative analysis during the COVID-19 pandemic and tranquil periods in a cross-country setting. *Emerging Markets Finance and Trade*, 59(7), 2145–2159. doi: [10.1080/1540496x.2022.2147780](https://doi.org/10.1080/1540496x.2022.2147780).
- Pástor, Ľ., & Veronesi, P. (2013). Political uncertainty and risk premia. *Journal of Financial Economics*, 110(3), 520–545. doi: [10.1016/j.jfineco.2013.08.007](https://doi.org/10.1016/j.jfineco.2013.08.007).
- Piotroski, J. D., & Zhang, T. (2014). Politicians and the IPO decision: The impact of impending political promotions on IPO activity in China. *Journal of Financial Economics*, 111(1), 111–136. doi: [10.1016/j.jfineco.2013.10.012](https://doi.org/10.1016/j.jfineco.2013.10.012).
- Piotroski, J. D., Wong, T. J., & Zhang, T. (2015). Political incentives to suppress negative information: Evidence from Chinese listed firms. *Journal of Accounting Research*, 53(2), 405–459. doi: [10.1111/1475-679x.12071](https://doi.org/10.1111/1475-679x.12071).
- Qin, S., Luo, W., & Wang, Y. (2021). Policy uncertainty and firm-level investment: Evidence from public-private partnership market in China. *Applied Economics Letters*, 29(8), 1–7. doi: [10.1080/13504851.2021.1883524](https://doi.org/10.1080/13504851.2021.1883524).
- Ranganathan, K., & Veeraraghavan, M. (2023). Pre-and-aftermarket IPO underpricing: Does use of proceeds disclosure matter?. *Journal of Contemporary Accounting and Economics*, 19(3), 100379. doi: [10.1016/j.jcae.2023.100379](https://doi.org/10.1016/j.jcae.2023.100379).
- Riahi, S., & Loukil, N. (2023). Does political connection influence corporate financial decisions in unstable political environment?. *Journal of Public Affairs*, 23(1), 1–15. doi: [10.1002/pa.2850](https://doi.org/10.1002/pa.2850).
- Rock, K. (1986). Why new issues are underpriced. *Journal of Financial Economics*, 15(1-2), 187–212. doi: [10.1016/0304-405x\(86\)90054-1](https://doi.org/10.1016/0304-405x(86)90054-1).
- Tian, L. (2011). Regulatory underpricing: Determinants of Chinese extreme IPO returns. *Journal of Empirical Finance*, 18(1), 78–90. doi: [10.1016/j.jempfin.2010.10.004](https://doi.org/10.1016/j.jempfin.2010.10.004).
- Waisman, M., Ye, P., & Zhu, Y. (2015). The effect of political uncertainty on the cost of corporate debt. *Journal of Financial Stability*, 16, 106–117. doi: [10.1016/j.jfs.2015.01.002](https://doi.org/10.1016/j.jfs.2015.01.002).
- Wang, X., & Song, D. (2021). Does local corruption affect IPO underpricing? Evidence from China. *International Review of Economics and Finance*, 73, 127–138. doi: [10.1016/j.iref.2021.01.007](https://doi.org/10.1016/j.iref.2021.01.007).
- Wang, Y., & Wang, G. (2021). IPO underpricing and long-term performance in China: The perspective of price limit policy. *Managerial Finance*, 47(9), 1233–1252. doi: [10.1108/mf-08-2020-0428](https://doi.org/10.1108/mf-08-2020-0428).
- Wang, Y., & Yao, J. (2021). Investor sentiment, issuance cost, and IPO underpricing: An empirical analysis of Shanghai Stock Exchange A-shares. *Applied Economics Letters*, 28(6), 508–511. doi: [10.1080/13504851.2020.1761530](https://doi.org/10.1080/13504851.2020.1761530).
- Wang, Y., & Zhang, X. (2006). Strategic IPO underpricing: The role of Chinese state ownership. In *Value Creation in Multinational Enterprise* (pp. 475–495). Emerald Group Publishing.
- Wang, Z., Zhang, Q., & Zhou, L. A. (2020). Career incentives of city leaders and urban spatial expansion in China. *The Review of Economics and Statistics*, 102(5), 897–911. doi: [10.1162/rest_a_00862](https://doi.org/10.1162/rest_a_00862).
- Wang, F., Chai, W., Yan, B., Shan, J., & Fan, W. (2022). Effect of geographical distance between underwriters and listed companies on IPO underpricing: Evidence from China's A-share market. *International Review of Economics and Finance*, 79, 340–352. doi: [10.1016/j.iref.2022.02.060](https://doi.org/10.1016/j.iref.2022.02.060).

- Wilkins, A. S. (2018). To lag or not to lag? Re-Evaluating the use of lagged dependent variables in regression analysis. *Political Science Research and Methods*, 6(2), 393–411. doi: [10.1017/psrm.2017.4](https://doi.org/10.1017/psrm.2017.4).
- Wu, W., Wu, C., Zhou, C., & Wu, J. (2012). Political connections, tax benefits and firm performance: Evidence from China. *Journal of Accounting and Public Policy*, 31(3), 277–300. doi: [10.1016/j.jaccpubpol.2011.10.005](https://doi.org/10.1016/j.jaccpubpol.2011.10.005).
- Xiao, J., Gong, L., & Zhang, Q. (2015). Changes in mayors and finance expenditure fluctuations: Inconsistency over time. *Financial Research*, 6, 94–110.
- Xu, C. (2011). The fundamental institutions of China's reforms and development. *Journal of Economic Literature*, 49(4), 1076–1151. doi: [10.1257/jel.49.4.1076](https://doi.org/10.1257/jel.49.4.1076).
- Xu, N., Xu, X., & Yuan, Q. (2013). Political connections, financing friction, and corporate investment, evidence from Chinese listed firms. *European Financial Management*, 19(4), 675–702. doi: [10.1111/j.1468-036x.2011.00591.x](https://doi.org/10.1111/j.1468-036x.2011.00591.x).
- Xu, N., Chen, Q., Xu, Y., & Chan, K. C. (2016). Political uncertainty and cash holdings: Evidence from China. *Journal of Corporate Finance*, 40, 276–295. doi: [10.1016/j.jcorpfin.2016.08.007](https://doi.org/10.1016/j.jcorpfin.2016.08.007).
- Yan, Y., Xiong, X., Meng, J. G., & Zou, G. (2019). Uncertainty and IPO initial returns: Evidence from the tone analysis of China's IPO prospectuses. *Pacific-Basin Finance Journal*, 57, 101075. doi: [10.1016/j.pacfin.2018.10.004](https://doi.org/10.1016/j.pacfin.2018.10.004).
- Yang, B., & Yuan, T. (2022). Trademark and IPO underpricing. *Financial Management*, 51(1), 271–296. doi: [10.1111/fima.12369](https://doi.org/10.1111/fima.12369).
- Yang, Y., Xu, G., & Li, R. (2023). Official turnover and corporate ESG practices: Evidence from China. *Environmental Science and Pollution Research*, 30(18), 51422–51439. doi: [10.1007/s11356-023-25828-6](https://doi.org/10.1007/s11356-023-25828-6).
- Yao, Y., & Zhang, M. (2015). Subnational leaders and economic growth: Evidence from Chinese cities. *Journal of Economic Growth*, 20(4), 405–436. doi: [10.1007/s10887-015-9116-1](https://doi.org/10.1007/s10887-015-9116-1).
- Yao, C., Jiang, F., & Guo, L. (2023). Fixed investment or financial assets investment: Evidence from political uncertainty in China. *Accounting and Finance*, 63(1), 427–450. doi: [10.1111/acfi.13039](https://doi.org/10.1111/acfi.13039).
- Yu, J., Tuo, L., & Wu, D. (2019). Industry peer firms' earnings quality and IPO underpricing. *Journal of Corporate Accounting and Finance*, 30(1), 36–62. doi: [10.1002/jcaf.22366](https://doi.org/10.1002/jcaf.22366).
- Yu, W., Jia, J., & Zheng, Y. (2023). Political uncertainty and corporate working capital in China. *Review of Quantitative Finance and Accounting*, 61(3), 927–966. doi: [10.1007/s11156-023-01171-2](https://doi.org/10.1007/s11156-023-01171-2).
- Yung, K., & Root, A. (2019). Policy uncertainty and earnings management: International evidence. *Journal of Business Research*, 100, 255–267. doi: [10.1016/j.jbusres.2019.03.058](https://doi.org/10.1016/j.jbusres.2019.03.058).
- Zhang, G., & Qian, X. (2022). The impact of officials' turnover on interregional capital flows: Evidence from China. *Applied Economics*, 54(7), 749–763. doi: [10.1080/00036846.2021.1965533](https://doi.org/10.1080/00036846.2021.1965533).
- Zhang, X., & Zhang, W. (2023). Information asymmetry, sentiment interactions, and asset price. *The North American Journal of Economics and Finance*, 67, 101920. doi: [10.1016/j.najef.2023.101920](https://doi.org/10.1016/j.najef.2023.101920).
- Zhang, F., Zhou, X. H., Su, J., Tsai, S. B., & Zhai, Y. M. (2020). Governance role of media information's uncertainty in IPO market-oriented pricing. *Kybernetes*, 49(12), 2849–2871. doi: [10.1108/k-01-2019-0066](https://doi.org/10.1108/k-01-2019-0066).
- Zhang, X., Luo, W., & Xiang, D. (2023). Political turnover and innovation: Evidence from China. *Journal of Chinese Political Science*, 28(3), 401–425. doi: [10.1007/s11366-022-09800-8](https://doi.org/10.1007/s11366-022-09800-8).
- Zhao, J., Shen, Z., & Huang, Y. (2023). IPO suspension and pricing: Evidence from China. *Accounting and Finance*, 63(5), 1–40. doi: [10.1111/acfi.13109](https://doi.org/10.1111/acfi.13109).

Appendix 1

Variable name (symbol)	Data source	Variable definition	Studies with similar measures
IPO underpricing (IPO_UP)	China Stock Market and Accounting Research Database (CSMAR)	Market-adjusted actual listing returns of the first trading day before 2014 or the accumulated market-adjusted return until the first trading day when the price change falls within the 44% limit after 2014	Mok and Hui (1998) , Chang <i>et al.</i> (2008) , Wang and Wang (2021) , Wang and Yao (2021)
IPO underpricing 30D (IPO_UP30)	CSMAR	Market-adjusted 30-day listing returns after IPO issuance	Wang and Yao (2021)
IPO underpricing 60D (IPO_UP60)	CSMAR	Market-adjusted 60-day listing returns after IPO issuance	Wang and Yao (2021)
National political uncertainty (EPU_CHN)	“Choose City Network” and officials’ biographies, with manually supplemented information using official documents issued by provincial and municipal governments	The percentage of prefecture-level cities in China with local official turnover (mayor or municipal party secretary) in the month of the IPO issuance	Xiao <i>et al.</i> (2015) , Cao <i>et al.</i> (2017)
National political uncertainty in the pre-/current/post-IPO year (EPU_CHNY01/EPU_CHNY/EPU_CHNY1)	“Choose City Network” and officials’ biographies, with manually supplemented information using official documents issued by provincial and municipal governments	The percentage of prefecture-level cities in China with local official turnover (mayor or municipal party secretary) in the year of pre-/current/post-IPO issuance	Xiao <i>et al.</i> (2015) , Cao <i>et al.</i> (2017)
Provincial political uncertainty (EPU_PRO)	“Choose City Network” and officials’ biographies, with manually supplemented information using official documents issued by provincial and municipal governments	The percentage of prefecture-level cities with local official turnover (mayor or municipal party secretary) in the month of the IPO issuance in the province where a focal firm is headquartered	Xiao <i>et al.</i> (2015) , Cao <i>et al.</i> (2017)
EPU_DCHN	“Choose City Network” and officials’ biographies, with manually supplemented information using official documents issued by provincial and municipal governments	An indicator variable that equals one with any prefecture-level cities having local official turnover in China in the month of an IPO, and zero otherwise	New measure
EPU_DPRO	“Choose City Network” and officials’ biographies, with manually supplemented information using official documents issued by provincial and municipal governments	An indicator variable that equals one with any prefecture-level city having a local official turnover in the province of an IPO firm’s headquarters in the month of the IPO, and zero otherwise	New measure
Political connection (PLINK)	CSMAR	An indicator variable that equals one for IPO firms where its chairman or general manager holds or has held positions as government officials, and zero otherwise	Fan, Wong, and Zhang (2014) , Deng <i>et al.</i> (2019)
Price-earnings ratio (PE)	CSMAR	Issuance price divided by the earnings in the preceding year of the IPO.	Li <i>et al.</i> (2021)

Table A1.
Variable definitions
and data source

(continued)

Variable name (symbol)	Data source	Variable definition	Studies with similar measures
Turnover rate (TURN)	CSMAR	Natural logarithm of the turnover rate between the stock's first trading day and the first non-limit up day	Wang and Yao (2021), Chang <i>et al.</i> (2008)
Winning rate (WIN)	CSMAR	Number of stocks issued divided by the total valid subscription shares	Wang and Yao (2021), Chang <i>et al.</i> (2008)
Underwriting fee rate (Fee)	CSMAR	Underwriting fee divided by the actual dollar amount raised in the IPO.	Wang and Yao (2021)
Firm size (Size)	CSMAR	Natural logarithm of total assets in the preceding year of the IPO.	Wang and Yao (2021), Chang <i>et al.</i> (2008)
Leverage (DEBT)	CSMAR	Total liabilities divided by total assets in the preceding year of the IPO.	Li and Zhou (2015)
Book-to-market ratio (BM)	CSMAR	Book value of assets divided by the predicted market value of assets	Wang and Yao (2021)
Return-on-assets (ROA)	CSMAR	Net profit divided by total assets in the preceding year of the IPO.	Wang and Yao (2021)
Issuance atmosphere (IPOMKT)	CSMAR	Natural logarithm of the total number of IPOs in the market during a firm's IPO month	Huang (2011)
Market sentiment (Market)	CSMAR	Return of the Shanghai Stock Exchange (SSE) Composite Index on the day of the IPO.	Wang and Yao (2021)
Big 4 accounting firm (AF4)	CSMAR	An indicator variable that equals one when one of the Big Four accounting firms serves as the auditor, and zero otherwise	Chang <i>et al.</i> (2008)
Lead underwriter (SU10)	CSMAR	An indicator variable that equals one for IPOs with one of the top ten underwriters, and zero otherwise	Wang and Yao (2021), Chang <i>et al.</i> (2008)

Source(s): Authors' own work

Table A1.

Table A2.
Comparison of variable
differences before and
after PSM matching

Appendix 2

Variable	Sample matching	Mean		Standardization deviation	T-test	
		Treatment group	Control group		T-value	p- value
SIZE	unmatched	20.526	20.449	7.5	1.69	0.100
	matched	20.526	20.529	-0.3	-0.05	0.961
DEBT	unmatched	0.46531	0.42149	25.1	5.3	0.000
	matched	0.46531	0.4628	1.4	0.26	0.795
BM	unmatched	0.12697	0.13963	-14	-2.97	0.003
	matched	0.12697	0.12897	-2.2	-0.41	0.683
ROA	unmatched	0.07602	0.08114	-9	-1.88	0.061
	matched	0.07602	0.07557	0.8	0.14	0.885
IPOMKT	unmatched	3.0614	3.0778	-2.8	-0.58	0.561
	matched	3.0614	3.0668	-0.9	-0.16	0.875
MARKET	unmatched	-0.00013	6.10e-05	-1.5	-0.34	0.737
	matched	-0.00013	-2.20e-06	-1	-0.18	0.859
FEE	unmatched	0.05948	0.06538	-19.8	-4.18	0.000
	matched	0.05948	0.05804	4.8	0.91	0.364
AF4	unmatched	0.04094	0.04865	-3.7	-0.78	0.435
	matched	0.04094	0.03307	3.8	0.74	0.458
SU10	unmatched	0.30866	0.35283	-9.4	-1.99	0.046
	matched	0.30866	0.32756	-4	-0.72	0.470

Source(s): Authors' own work

This table reports the statistics of the control variables in Model (1) before and after nearest-neighbor propensity score matching. The matching variables include company size (SIZE), debt-to-asset ratio (DEBT), book-to-market ratio (BM), profitability (ROA), issuance atmosphere (IPOMKT), market sentiment (MARKET), underwriting fees (FEE), accounting firms (AF4), and lead underwriters (SU10). [Figures 1 and 2](#) display the Kernel density functions between the control and treatment groups before and after matching, respectively.

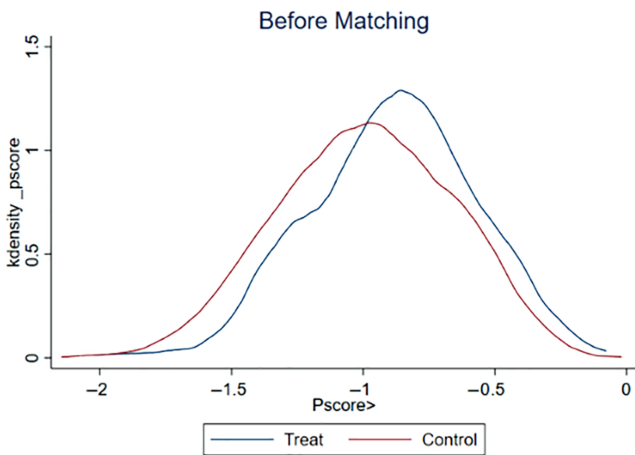
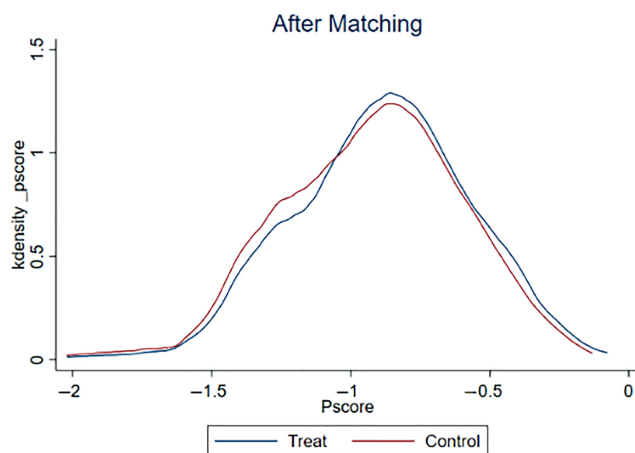


Figure A1.
Kernel density
function before
matching

Source(s): Authors' own work



Source(s): Authors' own work

Figure A2.
Kernel density
function after
matching

Corresponding author

Wenjing Ouyang can be contacted at: wouyang@pacific.edu

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com