# Political uncertainty and cash holdings: Evidence from China<sup>\*</sup>

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# Abstract

We examine the relation between political uncertainty and cash holdings for firms in China. We document that, during the first year of a new city government official's appointment, a firm, on average, holds less cash, which is consistent with the grabbing hand hypothesis of politician. Our results are robust to alternative measures of cash holdings, sub-samples without firms in four major cities, a matched sample approach, and placebo tests. We also find that if the newly appointed official is from a different (the same) city, a firm's cash holdings decrease significantly (do not change). Similarly, if the appointment is an expected (unexpected) one, a firm's cash holdings decrease significantly (do not change). Furthermore, we show that a firm keeps significantly less cash in periods of political uncertainty if it faces higher political extraction risk. In addition, after the 18<sup>th</sup> National Congress of the Communist Party of China, the impact of the political uncertainty on firm cash holdings becomes insignificant due to the strong anti-corruption campaign. We report that when a firm has strong twin agency conflicts, it holds less cash during political uncertainty periods than firms with weak agency conflicts, suggesting that firms with bad agency problems are susceptible to political extraction. Lastly, our extended results suggest that the market value of cash holdings is significantly negative during periods of political uncertainty and firms hide their cash by moving it to related firms via related party transactions.

Keywords: Political uncertainty, cash holdings, twin agency problem, China

JEL Classification: G32; G38

## Political uncertainty and cash holdings: Evidence from China

## 1. Introduction

Political connections play an important role in many economic activities. While they are not necessarily good for an economy, they are sometimes very good for a firm. A firm can use political connections to enhance its operations and increase its value (Fisman, 2001; Faccio, 2006; Faccio et al., 2006; Bunkanwanicha and Wiwattanakantang, 2009). Specifically, emerging market studies, such as those on China, document that a firm's political connections are critical for favorable decisions in corporate litigation (Firth et al., 2011), the approval and promotion of initial public offerings (Liu et al., 2013; Piotroski and Zhang, 2014), and family firm success (Xu et al., 2015), among other things. These studies suggest that political connections can be helpful and play the role of a helping hand to a firm.

In contrast, political connections can sometimes harm a firm, especially in emerging markets with weak formal institutions and high levels of corruption. The literature (e.g., Frye and Shleifer, 1997; Shleifer and Vishny, 2002) generally describes a grabbing hand phenomenon, in which government officials extract resources from a firm for personal gain through user fees, taxes, regulations, and bribes or even seize all assets via nationalization. Stulz (2005) shows that, facing expropriation by officials, firm owners will structure corporate assets to minimize the likelihood of loss from political extraction. Studying 109 countries and using firm cash holdings in 2005 as the dependent variable, Caprio et al. (2013) report that when a country's corruption level is high, a firm's cash holdings, on average, are low and vice versa. The authors contend that cash is the most liquid asset and government officials often target cash-rich firms for political extraction. While the findings of Stulz (2005) and Caprio et al. (2013) are insightful, they focus

on expropriation by corrupt officials, which is the undesirable outcome of the grabbing hands process of officials. The role of the helping hand perspective of political connections regarding a firm's cash holdings is unclear. In addition, the literature primarily examines the impact of having political connections, not changes in political connections, on firm value and cash holdings. A change in political connections due to political turnover creates political uncertainty. The political uncertainty is a shock that enhances or weakens the firm's existing political connections and subsequently affects its cash holding decisions.

The objective of our study is to examine the relation between cash holdings and political uncertainty in China. Using political uncertainty created by political turnover in a city in which a firm located, we examine the competing helping and grabbing hand hypotheses of politicians on cash holdings. We argue that a firm has two possible reactions to political uncertainty in its city. Under the helping hand hypothesis, a firm considers politicians helpful. Political uncertainty means opportunity for the firm, because the new official can help the firm to enhance its value. Hence, the firm needs to respond aggressively to a newly appointed official's initiatives and policies to secure the official's help or government resources. For instance, a newly appointed official might want to expand a city's economic development. It is then in the best interest of a firm to respond positively and promptly to such an initiative to take advantage of government subsidies in the name of economic development. By doing so, the firm will be able to obtain the government's help and, more importantly, can maintain or exceed its political connections established in the previous political regime to enhance the firm's future. Accordingly, the firm opportunistically needs more cash in a period of political uncertainty to respond quickly to the newly appointed official, which is similar to the speculative motive for holding cash (Almeida et al., 2004; Francis et al., 2014). Moreover, a newly appointed official, while very friendly and

helpful to local firms, may take time to materialize help to firms in terms of financing. That is, a helpful hand takes time to be effective. Thus, it is in a firm's best interest to maintain more cash to ease temporary financial constraints due to political uncertainty. This is a precautionary motive for holding cash (e.g., D'Mello et al., 2008; Bates et al., 2009). Therefore, during a new political appointee's first year in a city, political uncertainty leads to more cash holdings for local firms.

In contrast, under the grabbing hand hypothesis, firms expect politicians to extract resources from them. When a political turnover occurs, the firm perceives the political uncertainty as just another opportunity for the newly appointed official to extract its assets. The firm considers the new official's initiatives and policies only as means of political extraction. Under political uncertainty and the grabbing hand assumption, it is safer for a firm to hide its assets, especially liquid assets such as cash, to minimize loss from political extraction. The firm will then reduce cash holdings in a period of political uncertainty. The grabbing hand hypothesis under political uncertainty echoes the argument of Stulz (2005) and Caprio et al. (2013) that a firm holds less cash when facing a highly corrupt government. Hence, in the first year of a new political appointee in a city, the cash holdings of local firms are lower. All things considered, whether firms will keep more or less cash in a period of political uncertainty is an empirical question.

Our paper is interesting for two reasons. First, the cross-country study of Caprio et al. (2013) specifically examines cash holdings and corruption and does not directly study cash holdings and political uncertainty. Thus, the authors assume the grabbing hand nature of politicians and an adverse impact of political connections (in the context of corruption) rather than political uncertainty. Our paper fills this gap by examining political uncertainty and

5

considers both the helping and grabbing hand hypotheses. Second, the widely different cultural and economic development among the 109 countries studied by Caprio et al. (2013) naturally allows for only highly aggregated data in their analysis. By focusing on China, we are able to include more firm-level control variables and moderating factors, such as politically connected executives, firm scale, changes in corporate debt, local fiscal deficits, and changes in general political climate to examine the relation between cash holdings and political uncertainty. That is, by using a single-country study, we are able to control for differences in cultural and economic impact across the country and provide additional insights on moderating factors.

China's environment is particularly suitable for examining the helping versus the grabbing hand hypothesis of politician and cash holdings for several reasons. First, unlike other countries, China has rich data for analysis. It has undergone frequent political turnover because the Chinese government has a policy of appointing new political leaders in a city every several years to empower career politicians and prevent local officials from building up too much power. Both officials and firms are used to the political uncertainty created by government official turnover. Second, the compensation of Chinese officials is generally low relative to that in other countries and relative to private industry in China.<sup>1</sup> It is natural for officials to seek alternative compensation in monetary and non-monetary forms. The helping hand hypothesis suggests that officials enjoy helping firms for non-monetary rewards, such as *guanxi* (personal connections) and/or better political advancement opportunities to supplement their low monetary compensation. Alternatively, the grabbing hand hypothesis explains that officials use their political power to engage in political extraction to enhance their low monetary compensation.

<sup>&</sup>lt;sup>1</sup> On April 29, 2013, the *International Business Times* reported that Xi Jinping, China's president, made US\$19,000 a year (compared to US President Barack Obama's US\$400,000 a year). Jiang Jianqing, chairman of the Industrial and Commercial Bank of China, made US\$185,000 a year, which is almost 10 times as much as Xi (<u>http://www.ibtimes.com/chinas-high-ranking-officials-businessmen-salaries-still-too-high-critics-1223295</u>, accessed October 29, 2015).

Both helping and grabbing hand phenomena are possible. Hence, China is a good testing ground for examining political uncertainty and cash holdings. Third, China is a relational economy. *Guanxi* is important for anyone to achieve a goal or task in China (Xin and Pearce, 1996; Tsang, 1998). Among the different kinds of *guanxi*, political connections are among the most important. Recent evidence from Firth et al. (2011), Liu et al. (2013), and Piotroski and Zhang (2014) illustrates the importance of political connections. When there is political uncertainty due to government official turnover, a firm's political uncertainty and position themselves accordingly. Depending on whether the newly appointed official plays the role of a helping or a grabbing hand, firms react differently in terms of cash holdings. These characteristics make China a good environment for examining the impact of political uncertainty on cash holdings.

Our comprehensive analyses offer a number of interesting findings. First, ceteris paribus, during the first year under new city political leadership, a firm holds less cash, which is consistent with the political extraction explanation of Stulz (2005) and Caprio et al. (2013) and supports the grabbing hand hypothesis of politician. The findings are robust to alternative measures of cash holdings, sub-samples without firms in four major cities, a matched sample approach, and placebo tests.

Second, we find that if the newly appointed official is from a different (the same) city, firm cash holdings decrease significantly (do not change) in the first year of the new appointment. The results suggest that if a firm is unable (able) to assess the political intention of the new appointee, its cash holdings decrease significantly (remain stable). That is, a different city official's new appointment means more political uncertainty for a firm and, hence, the firm responds by significantly lowering its cash holdings. Similarly, if the government official appointment is expected (unexpected), the cash holdings decrease significantly (do not change) in the first year of the appointment, suggesting a firm lowers (does not change) its cash holdings if it foresees (does not foresee) a political uncertainty. These additional results collaborate with the base finding that cash holdings will decrease when a firm faces political uncertainty.

Third, we document that, on average, a firm keeps significantly less cash in a period of political uncertainty if it (a) does not have politically connected executives, (b) is smaller (c) has less debt, or (d) is located in a city with a large fiscal deficit. Our findings suggest that there are several moderating factors in the relation between cash holdings and political uncertainty. These moderating factors are primarily related to a firm's vulnerability to political extraction. In addition, we find that the impact of political uncertainty on firm cash holdings becomes insignificant for the sub-samples in 2013 and 2014. We attribute this finding to a change of political climate after 2012. During the 18<sup>th</sup> National Congress of the Communist Party of China in late 2012, China President Xi Jinping made a strong emphasis on anti-corruption and put together though rules for government officials to follow.

Fourth, we report that when a firm has strong twin agency conflicts, it holds significantly less cash during a period of political uncertainty than those with weak twin agency conflicts, indicating that a firm with a strong twin agency problem is susceptible to political extraction. This finding is consistent with Stulz's (2005) prediction. When a firm has a strong twin agency problem, its executives and/or major shareholders have more resources (especially cash) at their disposal in normal times. When the firm anticipates political uncertainty and believes a newly appointed official may have a grabbing hand with regard to the firm, it reduces cash holdings as a strategic precautionary response.

Lastly, our extended results suggest that the market value of cash holdings is significantly negative during periods of political uncertainty, suggesting that the market value of cash to a firm is lower due to the potential loss of cash to political extraction. Moreover, we document that a firm hides its cash by moving it to related firms via related party transactions (RPTs) instead of using it to acquire fixed assets or pay out large dividends. This finding is consistent with those of Julio and Yook (2012) and An et al. (2015), who document that firms reduce their investments during periods of political uncertainty, but different from that of Caprio et al. (2013), who find firms hide cash by acquiring more fixed assets via investment and paying higher dividends.

Our paper contributes to the literature in several ways. First, our paper is related to the work of Stulz (2005) and Caprio et al. (2013), who study the impact of political corruption on cash holdings. Our study focuses on the impact of political uncertainty on cash holdings and complement these authors' findings by extending their argument of corruption to the impact of general political uncertainty on cash holdings. Second, our findings on firms' strong twin agency problems and lower cash holdings support Stulz's (2005) theoretical model. We support Stulz's prediction that a firm with a strong twin agency problem is susceptible to political extraction. Third, we document that political uncertainty can affect cash holding decisions in addition to other corporate decisions, such as investments (e.g., Julio and Yook, 2012; An et al., 2015) and tax avoidance (Chen et al., 2015a). Lastly, we report the additional possibility of using RPTs to hide cash in the event of political uncertainty. The use of RPTs among Chinese firms to hide cash differs from the use of investments or paying more dividends to hide cash described in the literature (Caprio et al., 2013).

## 2. Institutional background, literature review, and hypothesis development

## 2.1 Institutional background

There are five levels of political hierarchy in China: those of the central government, provinces, cities, counties, and townships. Cities are at the third level. According to the 2014 *China City Statistical Yearbook*, there are 290 cities across 31 provinces and four centrally administrated cities (Beijing, Shanghai, Tianjin, and Chongqing). The top two leaders at the city level are the city's Communist Party Secretary and the mayor, reflecting the dual presence of the Communist Party and the government at each level of China's political hierarchy (Li and Zhou, 2005). City official turnover is mainly controlled by the Organization Department of the Provincial Party Committee. Typically, a city official's tenure is five years<sup>2</sup> and their turnover occurs around the meetings of the National People's Congress of the People's Republic of China. However, many city officials do not complete the five-year terms and leave for other positions.

## 2.2 Literature review

This section discusses three strands of the literature: political connections, political uncertainty, and cash holdings.

#### 2.2.1 Political connections

Fishman (2001) tracks the stock price reactions of politically connected and unconnected firms with rumors of the Indonesian president's health and reports that the stock prices of politically connected firms react positively to good health rumors. Faccio (2006) examines firm value changes when a firm's executive is elected to an important government office. Faccio reports that firms in highly corrupt countries experience a significant rise in value in such

<sup>&</sup>lt;sup>2</sup> Regarding city officials' tenure, the Organization Department of the Central Committee of the Communist Party of China issued the "Provisional Regulations on Terms of Cadres of the Party and Government" in August 2006, which states that mayors and officials at the county level and above should serve five-year terms and that these terms should be relatively stable. An added regulation also stipulates that cadres may not serve in the same position for more than two terms (Article 6) and may not serve in positions of the same rank for more than 15 years (Article 7).

elections. Claessens et al. (2008) document that politically connected firms, on average, are able to obtain more loans from banks relative unconnected firms. In a 22-country study of mergers and acquisitions, Brockman et al. (2013) report that politically connected bidders outperform unconnected bidders by 20% in countries with a weak legal system and high levels of corruption, suggesting that connected bidders obtain better information about merger targets from their political connections. Infante and Piazza (2014) document that politically connected firms in Italy benefit from lower interest rates when their connections are at the local level and the effect is stronger in regions with high corruption. Correia (2014) finds that a politically connected firm is the target of less enforcement action from regulators in securities violations. In addition, the literature suggests that political connections are critical for a firm to benefit from favorable decisions in corporate litigation (Firth et al., 2011), the approval and promotion of initial public offerings (Liu et al., 2013; Piotroski and Zhang, 2014), and family firm success (Xu et al., 2015), among other things.

Besides the helping hand perspective, many studies discuss the grabbing hand of politicians and in many cases the connection has an adverse impact on firm value. Shleifer and Vishny (1994) study changes in firm behavior with political connections. Specifically, they suggest that firms under the influence of political connections employ more employees and pay them higher wages than firms without political connections. That is, political connections encourage firms to make suboptimal decisions, which destroy firm value. The model of Stulz (2005) and the indirect evidence of Caprio et al. (2013) suggest that politicians extract firm assets via corruptions. A number of studies examine the adverse impact of political connections on Chinese state-owned enterprises (SOEs). Wu et al. (2012) report that politically connected SOEs over-invest to please politicians. Tu et al. (2013) document that politically connected SOEs

are more likely to engage in tunneling during firm privatization in China. In sum, political connections can destroy firm value.

Overall, this body of literature suggests that political connections play the role of both a helping hand and a grabbing hand for firms. We note that these studies focus on political connections and not political uncertainty.

## 2.2.2 Political uncertainty

Roberts (1990) provides an early study on the impact of political uncertainty to a firm, examining stock price reactions to the sudden death of US Senator Henry Jackson in 1983. The author reports a general decline in stock prices for firms connected to the senator. When the senator died, political uncertainty drove stock prices down. Bertrand et al. (2006) examine the impact of city elections on corporate investment in France. During the politically uncertain election period, politically connected chief executive officers (CEOs) increased their investments, especially in politically contested cities, to help current city officials get re-elected. That is, political uncertainty may increase corporate investment. Fan et al. (2008) examine the impact on firm leverage and stock prices in China after the arrest of corrupt officials with political connections to firms. After the arrests, the connected firms faced political uncertainty. They then experienced a decline in leverage and stock price, indicating the adverse impact of political uncertainty on firm value.

Julio and Yook (2012) study corporate investment around the time of 248 national elections in 48 countries from 1980 to 2005. Given the political uncertainty during election years, Julio and Yook argue that an election can have a bad outcome for a firm. Hence, there is an option value of waiting to invest. The authors report that firms reduce their investments, on average, by 4.8% during political uncertainty periods, after controlling for other factors. An et al.

(2015) study the impact of political uncertainty on firm investment and report a decrease in investment during periods of government official turnover in cities in China. Bu et al. (2015) examine the impact of changes of provincial officials on the accounting conservatism of firms located in their provinces in China. The authors report that political uncertainty significantly reduces accounting conservatism and the effects are stronger for SOEs, in regions of low marketization, and when the incoming officials are from outside the province.

To summarize the literature, we take political uncertainty to a firm is the risk of losing existing political connections or getting adverse impact from a new government policy due to new local government officials. The impact of political uncertainty to a firm is real. With the exception of the work of Bertrand et al. (2006), the findings generally suggest that political uncertainty reduces corporate investments. In addition, some studies report lower stock prices and decreased accounting conservatism due to political uncertainty. With respect to cash holding decisions, it is unclear if political uncertainty leads to a firm holding more or less cash.

### 2.2.3 The rationale behind holding cash

There are many studies on the rationale behind holding cash. We only provide a brief discussion here. Opler et al. (1999) summarize the tradeoff theory of holding cash. Specifically, they suggest that holding cash can benefit a firm but also incurs opportunity costs. For instance, Baumol (1952) suggests that when a firm holds more cash, it can reduce transaction costs by avoiding raise funds frequently or liquidate non-cash assets for operating and financing activities. D'Mello et al. (2008) study cash allocation in spin-offs. They report that a firm allocates more cash to its spin-off when the spin-off is smaller and has higher R&D expense. Bates et al. (2009) attribute the increase in cash among US firms to the growing liquidity demand to buffer against cash flow shock. That is, cash allows a firm to maintain financial flexibility and to minimize

damage due to financial distress from adverse cash flow shocks. This is the precautionary motive of holding cash.

Holding cash can also allow a firm able to promptly accepting positive net present value projects. For instance, Almeida et al. (2004) develop a model showing that financially constrained firms keep more cash than those of unconstrained firms, suggesting firms keep more cash for investments. Bill et al. (2014) document that, after interstate banking deregulation in the US, nonfinancial firms hold less cash. The needs for nonfinancial firms to promptly using cash can be met by a more competitive banking market and therefore the need to hold more cash is less. This group of literature suggests that holding cash for a speculative motive.

The cost of holding cash is its low return relative to other assets. In addition to tradeoff theory, Jensen (1986), Kim et al. (1998), and Dittmar et al. (2003) provide an agency cost perspective of cash holdings. They suggest that keeping a large amount of cash is the result of an agency problem where executives have discretion to use cash. When cash is available, executives are likely to spend it as part of their private benefits.

Taking together, the cash holding literature considers economic uncertainty (e.g., cash flow shocks due to a firm's own business operation or when a firm decides to make prompt business decisions to use cash) and agency problem as the rationales in holding cash. This body of literature seldom considers the impact of political uncertainty on cash holdings at firm level, however. Our study fills this void.

## 2.3 Hypothesis development

Based on the literature and the helping hand hypothesis of political uncertainty, we predict that a firm will hold more cash to take advantage of new government officials' initiatives. It is in the best interests of a firm to respond quickly to the new initiatives. Hence, a firm will

hold more cash for precautionary and speculative purposes when anticipating political uncertainty. In contrast, the grabbing hand hypothesis of politician suggests that a new government official is likely to extract assets from the firm. Political uncertainty creates the risk of extraction. Among many assets, cash is the easiest to extract. Hence, it is a good strategy to hold less cash to minimize such a risk. In sum, we do not know if the helping or the grabbing hand hypothesis prevails. Hence, whether a firm will hold more cash under political uncertainty is an empirical question. Our testable hypotheses are the following.

H1A: During a period of political uncertainty, a firm holds more cash.

H1B: During a period of political uncertainty, a firm holds less cash.

## 3. Research design

3.1 Data

We use the China Stock Market and Accounting Research (CSMAR) database and the Wind Financial Database (WindDB) as primary sources for cash holdings, financial data, and other basic information on Chinese public firms. We obtain RPT data from the CSMAR database. Our sample period is from 1998 to 2014. We start with 1998 because it is the first year cash flow statements were subject to mandatory disclosure requirements in China.

To capture the impact of local political uncertainty, we manually obtained detailed information on mayors and Communist Party secretaries, such as their names, positions, tenure terms, ages, and r ésum és, from city government official websites. These r ésum és also contained detailed personal information such as education and work experience prior to the appointment. If the information was not readily available, we hand-collected it from the Baidu search engine (www.baidu.com), which is China's most popular search engine. After collecting the officials' personal data, we then merged the personal data with firm data from CSMAR and WindDB by matching the province, city, and fiscal year. Following the literature (e.g., Cull and Xu, 2005; Ayyagari et al., 2010; Lin et al., 2010; Becker et al., 2011), we classified the city where a firm belonged according to the location of the firm's corporate headquarters.

After merging all the above data, we excluded the following: (a) firms in the financial industry, (b) officials whose r śum ś were not available, and (c) firms with missing related financial information. In addition, we manually collected information on politically connected executives from firm prospectuses and annual reports. We also collected city data from the China Economic Information Network (CEInet) Statistics Database, which includes the names of the cities in each province, their gross domestic product growth rates, and their fiscal deficit data.<sup>3</sup> Our final sample has 23,955 firm–year–official observations. In our analyses, the sample size may vary due to missing values for some explanatory variables in different regression models.

## 3.2. Variable definitions

### 3.2.1 Dependent variables

#### 3.2.1.1 Cash holdings

Following Opler et al. (1999), Dittmar et al. (2003), and Harford et al. (2008), we use the logarithm of a firm's cash ratio as the dependent variable, which is defined as the amount of cash and cash equivalents divided by total assets net of cash and cash equivalents. In the robustness check, we use two other measures to proxy for cash holdings. The first is a firm's cash ratio without cash equivalents. The second measure is excess cash holdings, defined as the difference between actual and predicted cash holdings. We estimate predicted cash holdings using the

<sup>&</sup>lt;sup>3</sup> The CEInet Statistics Database includes two sub-databases: the China Economic Statistics Database and the World Economic Statistics Database. The former consists of five sections: macro monthly data, yearly data, industry data, custom data, and city–year data. The latter consists of two sections: Organization for Economic Co-operation and Development monthly and yearly data.

method outlined by Opler et al. (1999) and Fresard and Salva (2010), presented in detail in Appendix A.

## 3.2.1.2 Excess return

When we examine the market value of cash, we need to calculate a firm's excess return. Excess return is the firm's stock return minus a benchmark return. We follow Faulkender and Wang (2006) to use one of the 25 Fama–French portfolios formed on size and the book to market (B/M) as our benchmark return. The benchmark portfolio return is a value-weighted return based on market capitalization within each of the 25 portfolios. For each year, we group each firm into one of 25 size and B/M portfolios based on the intersection between the size and B/M independent sorts.

## 3.2.2 Main explanatory variables

### 3.2.2.1 Political uncertainty

We construct a dummy variable, *INDUCTION*, to examine how political uncertainty influences corporate cash holdings. For each firm–year–official observation, *INDUCTION* takes a value of one when the city where the firm's headquarters are located experiences a government official turnover (i.e., a mayor or Community Party Secretary is newly appointed) and zero otherwise. The variable *INDUCTION* indicates political uncertainty for a firm. For the exact dates of the newly appointed officials taking office, we follow Bo (1996) to construct the *INDUCTION* variable. Specifically, if an official took office between January 1 and June 30, then we define the current year as the official's first year and *INDUCTION* takes the value of one. If an official took office between July 1 and December 31, then we define the following year as the official's first year and *INDUCTION* takes the value of one For instance, Wang Qishan and Guo Jinlong were former mayors of Beijing, appointed in April 2003 and November 2007,

respectively. Hence, we define 2003 as the year Wang took office. For firms located in Beijing, *INDUCTION* takes a value of one whenever the firm–year observations are grouped in the year 2003. However, since Guo was appointed in the second half of the year, the next year is defined as Guo's induction year and *INDUCTION* takes a value of one for observations in 2008 for the Beijing group.

## 3.2.2.2 Moderating factors

We consider a number of moderating factors on the impact of political uncertainty on cash holdings. These moderating factors represent firm attributes that can change political extraction risk to a firm. First, we consider politically connected executives (*PC*). Following prior literature (Fan et al., 2007), executives are politically connected (*PC* = 1) if the CEO or chair is a former government official, a former military officer, a member of the National Committee of the Chinese People's Political Consultative Conference, or a member of the National Congress of the Communist Party of China. We expect a firm with politically connected executives to be subject to less political extraction relative to a firm with only unconnected executives.

Second, we follow Zimmerman (1983) and Wu et al. (2012) and use *SCALE* to capture a firm's importance in the local economy. The variable *SCALE* takes the value of one if the firm's total assets that year are greater than the median value of all firms in the same year. Stulz (2005) explains that firm executives may invest in projects essential to the local economy and their disruption would be costly to the city. Thus, when a firm is important and useful to a city, its risk of political extraction is smaller.

Third, we use a firm's change in corporate debt (*DD*) to capture the effect of leverage on political extraction risk. When leverage changes, political extraction risk changes (Stulz, 2005).

Specifically, when a firm carries more debt, it needs more cash obligations to pay interest expenses, subjecting the firm to lower political extraction risk during political uncertainty. The variable *DD* takes a value of one when the change in the corporate debt scale that year is greater than the median of all firms and zero otherwise.

Fourth, we use the city's fiscal situation to proxy for expropriation risk. We expect fiscal deficit to be positively correlated with the risk of expropriation by local government. Then, firms will reduce cash holdings to lower such a risk. We construct a city fiscal deficit dummy, *DEFICIT*, with a value of one if the fiscal deficit situation of the city where the listed firm is located is better than average and zero otherwise.

Lastly, in the 18<sup>th</sup> National Congress of the Communist Party of China on November 8, 2012, China President Xi Jinping emphasizes the importance of public trust and to avoid the isolation of the Communist Party and People. President Xi begins to take strong actions against corruption. For instance, several high profile officials, such as Zhou Yongkang<sup>4</sup>, fell from power and later jailed under the anti-corruption campaign. Therefore, we expect the general corruption in China level drops in 2013 and 2014. We use sub-samples on or before 2012 and on 2013 and after to examine the impact of the change in political climate on cash holdings under political uncertainty.

## 3.2.2.3 Variables that proxy for twin agency conflicts

Stulz (2005) specifically discusses the impact of twin agency conflicts on a firm's expropriation risk. We use three variables to capture twin agency conflicts: the control-ownership wedge, analyst coverage, and auditor quality. We define the control-ownership wedge as a firm's ultimate owners' control rights divided by their cash flow rights. The larger the

<sup>&</sup>lt;sup>4</sup> Zhou Yongkang was a senior leader of the Communist Party of China. He was a member of the Politurbo Standing Committee and the Party Secretary of the Central Political and Legal Affairs Commission, which oversees all the police and legal branches of China.

control-ownership wedge is, the higher the incentives for the controlling shareholder to expropriate minority shareholders will be (e.g., Claessens et al., 2000; Lin et al., 2011). Prior literature shows that analysts play an important role in corporate governance (Jensen and Meckling, 1976; Healy and Palepu, 2001; Irani and Oesch, 2013; Chen et al., 2015b). Firms with more analyst coverage face less agency conflict. We use an indicator variable, *AC*, that takes the value of one if the firm has analyst coverage and zero otherwise to proxy for analyst monitoring. Regarding auditor quality, if a firm is audited by a Big 4 international accounting firm, we consider it to have fewer agency conflicts (Gul et al., 2010, 2011). We use *BIG4*, an indicator variable that takes the value of one if the firm is audited by a Big 4 accounting firm in China and zero otherwise, to proxy for external auditing governance.

## 3.3 Regression models

## 3.3.1 Main hypothesis

To examine the competing hypotheses H1A and H1B, we use the determinants of cash holdings framework of Opler et al. (1999), as follows:

$$Log(CASH_{i,t}) = \alpha + \beta_1 INDUCTION_{i,t} + \sum \gamma ControlVariables_{i,t} + \sum \varphi Industry + \sum \omega Year + \varepsilon_{i,t}$$
(1)

We follow the prior literature and use identified determinants of cash holdings variables as our control variables (e.g., Opler et al., 1999; Dittmar and Mahrt-Smith, 2007; Caprio et al., 2013). Specifically, these control variables include the market-to-book ratio of the firm (*MB*), net working capital (*NWC*), firm leverage (*LEVERAGE*), cash flow from operating activities (*CASHFLOW*), capital expenditure (*CAPEXP*), operating income growth rate (*GROWTH*), the natural logarithm of total assets (*SIZE*), the largest shareholder's shareholdings (*NO1*), cash flow volatility (*SIGMA*), and a dummy variable for dividend payout (*DIVIDEND*). We scale *NWC*,

*CASHFLOW, CAPEXP,* and *SIZE* by a firm's total assets. All these variables are as defined in the Appendix C. We also include the nature of government ownership in our models to control for the possibility that SOEs and non-SOEs exhibit different patterns in cash holdings decisions. Hence, we add *SOE*, a dummy variable to capture the impact of SOEs. Continuous variables are winsorized at 1% in both tails to mitigate the effect of extreme values. We include industry fixed effects as well as year dummy variables to control for the effect of time-related industry patterns and macroeconomic uncertainties (Dittmar and Mahrt-Smith, 2007). A positive (negative)  $\beta_1$  in Equation (1) suggests a positive (negative) impact of political uncertainty on a firm's cash holdings.

## 3.3.2 Political uncertainty and the market value of cash

To test how political uncertainty influences the market value of cash for a firm, we follow Faulkender and Wang (2006) and construct our empirical model as follows:

$$r_{i,t} - R_{i,t}^{B} = \alpha + \beta_{1} \frac{\Delta CASH_{i,t}}{M_{i,t-1}} + \beta_{2}INDUCTION_{i,t} + \beta_{3}INDUCTION_{i,t} \times \frac{\Delta CASH_{i,t}}{M_{i,t-1}} + \gamma_{1} \frac{\Delta E_{i,t}}{M_{i,t-1}} + \gamma_{2} \frac{\Delta NA_{i,t}}{M_{i,t-1}} + \gamma_{3} \frac{\Delta I_{i,t}}{M_{i,t-1}} + \gamma_{4} \frac{\Delta DIVIDEND_{i,t}}{M_{i,t-1}} + \gamma_{5} \frac{CASH_{i,t-1}}{M_{i,t-1}} + \gamma_{6} \frac{NF_{i,t}}{M_{i,t-1}} + \gamma_{7}L_{i,t} + \gamma_{8} \frac{CASH_{i,t-1}}{M_{i,t-1}} \times \frac{\Delta CASH_{i,t}}{M_{i,t-1}} + \gamma_{8}L_{i,t} \times \frac{\Delta CASH_{i,t}}{M_{i,t-1}} + \varepsilon_{i,t}$$
(2)

where the dependent variable is the excess stock return,  $r_{i,t} - R_{i,t}^B$ , with  $r_{i,t}$  the stock return for firm *i* during fiscal year *t*, and  $R_{i,t}^B$  is stock *i*'s benchmark return in year *t*. We include *INDUCTION* and its interaction term with  $\frac{\Delta CASH_{i,t}}{M_{i,t-1}}$  in Equation (2) to capture the impact of political uncertainty on the market value of cash. The variable  $\Delta CASH_{i,t}$  is a proxy for the change of firm *i*'s cash holdings during fiscal year *t*. Following prior literature, we use a set of control variables in Equation (2), where the symbol  $\Delta$  indicates changes in a variable from year t - 1 to t. These control variables are a firm's profitability using earnings before interest and extraordinary items ( $E_{i,t}$ ), changes in the firm's investment policy using total assets net of cash ( $NA_{i,t}$ ), interest expenses ( $I_{i,t}$ ), total dividends ( $DIVIDEND_{i,t}$ ), market leverage at the end of fiscal year  $t(L_{i,t})$ , the firm's net financing during fiscal year  $t(NF_{i,t})$ , and lagged cash holdings ( $CASH_{i,t-1}$ ). To prevent large firms from dominating the results, we deflate the firm-specific factors (except leverage) by the one-year lagged market value of equity ( $M_{i,t-1}$ ). Because stock return is the spread  $M_{i,t}-M_{i,t-1}$  divided by  $M_{i,t-1}$ , standardization enables us to interpret the estimated coefficients as the dollar change in value for a one dollar change in the corresponding independent variable. Additionally, following Faulkender and Wang (2006), we add the interaction terms  $\frac{CASH_{i,t-1}}{M_{i,t-1}} \times \frac{\Delta CASH_{i,t}}{M_{i,t-1}}$  and  $L_{i,t} \times \frac{\Delta CASH_{i,t}}{M_{i,t-1}}$ . Based upon the competing helping and grabbing hand hypotheses, if  $\beta_3$  is positive (negative), the market value of the extra cash accrued to shareholders will be higher (lower) during a period of political uncertainty due to the helping (grabbing) hand of the newly appointed official.

## 4. Empirical results

#### 4.1 Summary statistics

We present the frequency distribution of government official turnovers during 1998–2014 in Panel A of Table 1. There were a total of 2,227 government official turnovers over the sample period, with the largest numbers of 221, 216, and 207 turnovers in 2011, 2008, and 2013, respectively. In terms of provinces, Guangdong, Henan, and Sichuan are the top three, with 160, 139, and 129 turnovers, respectively. Panel B of Table 1 presents the distribution of government official turnovers in terms of origin, type, and tenure. Some new officials' origin cannot be confirmed and thus the number of samples in Panel B is less than those of Panel A. About 54.20% of the new appointees are from different cities and 63.36% are unexpected turnovers (i.e., the new official is taking over someone else's position in the middle of the typical five-year appointment). Appendix B presents the detail classification of expected and unexpected turnovers.

The descriptive statistics in Table 2 provide an overview of the sample. Among the 23,955 firm-year observations, 37.3% experienced a government official turnover during the sample period. For state ownership, 63.4% of the firm–years are those of SOEs.

#### 4.2. Effect of political uncertainty on cash holdings

#### 4.2.1 Baseline results

We present the results of Equation (1) in Table 3. For robustness, we use six different empirical models to study the impact of political uncertainty on cash holdings. These models are based on different combinations of year, industry, and cluster effects, as well as a simplified model in Column (1). Consistently across all six models, the coefficients of *INDUCTION* are negative and significant at the 1%, 5%, or 10% level, suggesting that firms hold less cash during periods of political uncertainty. Our findings support H1B, not H1A. Politicians play a grabbing hand to expropriate cash from firms. Other control variables, if significant, carry the expected signs. For instance, the coefficients of *SOE, CASHFLOW, NWC, CAPEXP, LEVERAGE, SIGMA,* and *DIVIDEND* are all positive and significant, while those of *MB* and *NO1* are negative and significant. The signs are consistent with intuition. For instance, when a firm is a state-owned, it needs to respond quickly to the central government's initiatives and therefore holds more cash as a precaution. Similarly, when a firm has greater cash flow (*CASHFLOW*), net working capital (*NWC*), or capital expenditures (*CAPEXP*) or needs to pay dividends (*DIVIDEND*), it holds more cash.

Besides being statistically significant, the impact of political uncertainty on a firm's cash holdings is also economically significant. For instance, the coefficient of *INDUCTION* in Column (6) is -0.035. For an average firm with 6,810 million RMB total net assets, the decrease in cash holdings is 39.97 million RMB (or US\$6.15 million) in the year of a new government official appointment.

## 4.2.2 Robustness checks

## 4.2.2.1 Alternative measures of dependent variables and a sub-sample analysis

Panel A of Table 4 presents the results for Equation (1) using different measures for the cash ratio: Log (*CASH2*), excess cash (*EXCESSCASH*)<sup>5</sup>, a sub-sample without firms in the four major cities of Beijing, Shanghai, Tianjin, and Chongqing, and incorporate additional control factors in a city economy (GDP growth, lag value of city GDP growth, and the ratio of city-level investment to its GDP). We do not report the coefficients of the control variables in Equation (1) for brevity. All columns show that the coefficients of *INDUCTION* are negative and significant at the 5% or 1% level, suggesting that political uncertainty has a negative impact on cash holdings. *4.2.2.2 Matched sample* 

As a second robustness check, we use a matched sample approach. In Column (1) of Panel B of Table 4, we match each treatment firm (a firm facing political uncertainty) with a control firm (a firm in another city without government official turnover) with the closest market value, return on assets, and total assets and with the same two-digit Standard Industrial Classification industry code in the year of political uncertainty. Hence, we have two groups of firms with similar fundamentals but the treatment firms face political uncertainty. Thus, we can control for other factors that could affect a firm's cash holdings. The variable *MATCH* is an indicator variable equal to one if firm i is a treatment firm (with political uncertainty involved)

<sup>&</sup>lt;sup>5</sup> We follow the method in Opler et al. (1999) and Fresard and Salva (2010).

and zero if it is a control firm. The coefficients of *MATCH* are negative and significant at the 5% or 1% level in all columns in Panel B, indicating that when a firm is located in a city with political uncertainty, it reduces its cash holdings relative to a control firm.

## 4.2.2.3 Placebo tests

Panel C of Table 4 presents the results of placebo tests for robustness. Specifically, for each political uncertainty event due to government official turnover, we assume that the event recurs for the same firm in the next three years in the same city. We set up a simulated dummy variable for each year (using the same procedure as for *INDUCTION*). The three dummy variables are denoted *INDUCTION1, INDUCTION2*, and *INDUCTION3* for years t + 1, t + 1, and t + 3, respectively. Then, we use these simulated variables to replace *INDUCTION* and conduct the regression for the main results in Table 4 for each of the three simulated variables. If political uncertainty is the cause of the decrease in cash holdings, we expect the coefficients of *INDUCTION1, INDUCTION2*, and *INDUCTION3* not be significant. It is because in years t + 1, t + 1, and t + 3, political uncertainty is no longer exists and thus the firm does not make significant changes to its cash holdings in subsequent years. The findings in Panel C of Table 4 show that the coefficients of *INDUCTION1, INDUCTION1, INDUCTION1, INDUCTION2,* and *INDUCTION2*, and *INDUCTION3* are, as expected, not significant. Hence, political uncertainty matters in cash holdings decisions.

### 4.2.2.4 Different forms of appointment

We examine the possible different impact in new government official appointment as mayor only, Communist Party secretary only, or both. The results are presented in Panel D of Table 4. The coefficients of the corresponding variables (*INDUCTION\_Mayor, INDUCTION\_Secretary* and *INDUCTION\_Both*) are negative and significant at 5% or 1% level, which is consistent with those in Table 3.

## 4.3 Related results

If the grabbing hand hypothesis of politician explains a firm's cash holding decisions, we would expect factors that contribute to diminishing uncertainty about the new appointee to alleviate the relation. Ceteris paribus, we expect firms to face less political uncertainty if the new appointee is from the same city rather than from a different one. Panel A of Table 5 presents the results for political appointees of the same versus different city. As expected, if the appointee is from a different city (Columns (2) and (4)), *INDUCTION* is negative and significant. The marginal economic effect is a decrease of 59.99 million RMB (about US\$9.23 million) in cash for mayor and a decrease of 64.39 million RMB (about US\$9.91 million) for party secretary. In contrast, the results in Columns (1) and (3) do not show a significant relation between *INDUCTION* and Log (*CASH*) when the appointee is from the same city.

Some city officials receive their new appointments unexpectedly. Ceteris paribus, unexpected political appointments leave a firm no time to react to the political uncertainty. Therefore, we expect such unexpected new appointments to have no effect on a firm's cash holdings. In contrast, if the new appointment is expected, then the political uncertainty is also expected. Hence, we predict that only expected new appointments will have an impact on cash holdings. The results are presented in Panel B of Table 5. In Column (1), for an expected political appointment of mayor, the political uncertainty variable, *INDUCTION*, has a negative sign and is significant at the 1% level, while in Column (2), for an unexpected appointment of mayor, the same variable is not significant. The marginal economic effect in Column (1) is a decrease of 66.59 million RMB (about US\$10.24 million) in cash. We find qualitatively similar results for party secretary appointment in Columns (3) and (4).

The findings in both Panels A and B of Table 5 suggest that political uncertainty matters. When political uncertainty is alleviated, its impact on cash holdings becomes insignificant.

## 4.4 Expropriation risk, political uncertainty, and cash holdings

The robust results in Sections 4.2 and 4.3 show that the grabbing hand hypothesis explains the negative impact of political uncertainty on cash holdings. If the grabbing hand hypothesis prevails, we expect several expropriation risk factors in the literature (e.g., Stulz, 2005) should moderate the relation between political uncertainty and cash holdings. We partition the full sample into sub-samples along the four expropriation risk factors (PC, SCALE, DD, and DEFICIT) discussed in Section 3.2.2.2 and reexamine Equation (1). We expect that in sub-samples in which (a) firms' executives are not politically connected (PC = 0), (b) firms are small (SCALE = 0), (c) firms have small changes in debt level (DD = 0); and (d) firms are located in high fiscal deficit cities (DEFICIT = 0), the negative impact of political uncertainty on cash holdings will remain strong because a firm with such characteristics face a high expropriation risk. In contrast, for sub-samples where PC = 1, SCALE = 1, DD = 1, and DEFICIT = 1, we expect the relation between political uncertainty and cash holdings to be weaker due to a low expropriation risk. We present the findings in Panel A of Table 6. As expected, for the sub-samples with PC = 0, SCALE = 0, DD = 0, and DEFICIT = 0 in Columns (2), (4), (6), and (8), respectively, the coefficients of *INDUCTION* are negative and significant at the 1% or 5% level, which is consistent with the results in Table 3. In contrast, in Columns (1), (3), (5), and (7), the same coefficients are insignificant. In sum, these expropriation risk factors moderate the relation between political uncertainty and cash holdings.

Similarly, when there is an exogenous political climate change, we expect the relation between political uncertainty and cash holding changes. In the 18<sup>th</sup> National Congress of the

Communist Party of China on November 8, 2012, China President Xi Jinping strongly advocated the anti-corruption. Hence, we expect the relation between political uncertainty and cash holding is weaker after 2012. We present the findings in Panel B of Table 6. As expected, the coefficient of *INDUCTION* is negative and significant at 5% level in 2012 or early in Column (1) but the same coefficient is insignificant in 2013 and 2014.

## 4.5 Twin agency problem

We use the control-ownership wedge, analyst coverage, and auditor quality to partition the full sample into sub-samples to examine Equation (1). We expect firms with strong twin agency conflicts (i.e., with a large control-ownership wedge, no analyst coverage, and a non-Big 4 auditor) to exhibit a negative relation between political uncertainty and cash holdings under the grabbing hand hypothesis. These firms with bad agency conflicts have plenty of economic rent available for political extraction. In a period of political uncertainty, these firms reduce cash holdings to minimize the expropriation risk. The results in Table 7 show that the coefficients of *INDUCTION* are, as expected, negative and significant at the 1% or 5% level in Columns (2), (4), and (6). In contrast, the sub-samples with smaller twin agency conflicts in Columns (1), (3), and (5) do not yield significant coefficients for *INDUCTION*. The marginal economic effects of political uncertainty in Columns (2), (4), and (6) are -74.23 million RMB, -58.89 million RMB, and -32.09 million RMB, respectively. Our findings are consistent with Stulz's (2005) prediction. *4.6 Political uncertainty and the market value of cash holdings* 

We present the results on political uncertainty and the market value of cash holdings in Panel A of Table 8 using Equation (2). Similar to Table 3, we provide four different models using various combinations of year and industry effects. The coefficients of the interaction variable (*INDUCTION*\* $\Delta$ *CASH*<sub>t</sub>) are negative and significant at the 10% level in three out of four models, suggesting changes in cash holdings during periods of political uncertainty are negatively correlated with firm excess stock returns. That is, the market value of cash decreases with political uncertainty, which is consistent with a grabbing hand hypothesis of politician. In terms of economic significance in Panel B, the model in Column (4) shows that, for an average firm facing (not facing) political uncertainty, the marginal value of cash is 0.504 (0.646) for every one RMB.

## 4.7 Where does the cash go?

When a firm reduces its cash holdings, it is interesting to examine where the cash goes. Caprio et al. (2013) show that firms in highly corrupted countries hide their cash by acquiring more assets and/or paying out dividends. Interestingly, in contrast, Julio and Yook (2012) and An et al. (2015) document that firms reduce their investments during periods of political uncertainty. In addition to investments and dividend decisions, we explore a third possibility, the use of related party transactions (RPTs), to hide cash. Specifically, we use two RPTs: (a) RPTs as a buyer minus the amount as a seller scaled by the firm's total assets (*NETRPT*) and (b) RPTs as a buyer scaled by the firm's total assets (*BUYRPT*). The variable *BUYRPT* measures a firm's RPTs without adjusting for its role as a seller, while *NETRPT* makes this adjustment. Within *BUYRPT* and *NETRPT* accounting rules, Chinese firms are required to identify RPTs as involving, for example, goods, assets, and leasing. The last RPT category is that of "others," that is, the firm provides no explanation of the RPT. Similar in spirit to Jiang et al. (2010), who use "other receivables" to measure tunneling by large shareholders, we use the others category of RPTs to gauge a firm's intention to hide its cash holdings.

Table 9 presents the results. We find the coefficients for both RPT variables (*BUYRPT* and *NETRPT*) in Columns (2) and (4) to be positive and significant at 1% only for the others

RPT category, indicating that, during political uncertainty, a firm boosts other RPTs to hide its cash. In contrast, when we use all RPTs, the same coefficients in Columns (1) and (3) are not significant. Similarly, the capital expenditure and dividend payout equations in Columns (5) and (6), respectively, do not show significant coefficients of *INDUCTION*, suggesting that investments and dividend payout do not change during periods of political uncertainty.

## 5. Conclusions

We examine the relation between political uncertainty and cash holdings for firms in China. China's highly political environment provides an excellent environment to study the helping hand versus the grabbing hand hypothesis of politician on cash holdings. We document that during a new city government official's first year, a firm holds less cash, which is consistent with the grabbing hand hypothesis of politician. This finding is consistent with the political extraction explanation of Stulz (2005) and Caprio et al. (2013). Our results are robust to alternative measures of cash holdings, sub-samples without firms in four major cities, a matched sample approach, and placebo tests. In addition, we report that if the newly appointed official is from a different (the same) city, firm cash holdings decrease significantly (do not change). We infer that the appointment of a new official from a different (the same) city means greater (less) political uncertainty for a firm and, hence, there is a need (no need) for the firm to decrease its cash holdings. Similarly, if the appointment is expected (unexpected), the cash holdings decrease significantly (do not change) in the first year of the appointment, suggesting firms anticipate changes by lowering their cash levels. The additional results are consistent with the base findings that a firm will decrease its cash holdings when it faces political uncertainty. Political uncertainty matters.

Furthermore, we show that a firm facing a political extraction risk keeps significantly less cash in a period of political uncertainty if (a) it does not have politically connected executives, (b) it is smaller, (c) it has less debt, or (d) it is located in a city with high fiscal deficit. Our findings suggest several moderating factors related to a firm's vulnerability to political extraction in the relation between cash holdings and political uncertainty. In addition, during a period of strong anti-corruption campaign in 2013 and 2014, the relation between political uncertainty and cash holding becomes insignificant. Consistent with Stulz's (2005) prediction, we also report that when a firm has strong twin agency conflicts, it holds less cash during political uncertainty periods than firms with weak agency conflicts, suggesting that firms with bad agency problems are susceptible to political extraction and its executives and/or major shareholders have more resources (especially cash) at their disposal in normal times. When the firm anticipates political uncertainty and believes the newly appointed official may extend a grabbing hand, it reduces its cash holdings as a strategic response. Lastly, our extended results suggest that the market value of cash holdings is significantly negative during periods of political uncertainty, suggesting that the market value of cash to a firm is lower due to the potential loss of cash to political extraction. We document that a firm hides its cash by moving it to related firms via RPTs instead of using it to acquire fixed assets or pay out large dividends. Overall, our findings are consistent with the grabbing hand hypothesis of politician. Firms reduce their cash holdings in cities with new government official appointments.

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## Table 1: Distribution of municipal-level government official turnover by region and year

This table presents the distribution of government official turnover events in China by province and year over the sample period 1998–2012.

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|          |     |              |     | 0          |          |          | ~     | <u> </u> |     | ~    |

| Province     | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Total |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| Anhui        | 10   | 10   | 6    | 16   | 4    | 13   | 3    | 7    | 7    | 5    | 20   | 3    | 6    | 6    | 8    | 15   | 4    | 143   |
| Beijing      |      | 1    |      |      | 1    | 2    |      |      |      | 1    |      |      |      |      | 1    | 1    |      | 7     |
| Chongqing    |      | 2    |      |      | 2    |      |      | 1    |      | 1    |      | 1    |      |      | 2    |      |      | 9     |
| Fujian       | 3    | 4    | 3    | 4    | 8    | 8    |      | 9    | 2    | 5    | 6    | 3    | 3    | 8    | 6    | 11   | 2    | 85    |
| Gansu        | 1    | 2    | 2    | 4    | 4    | 1    | 2    | 6    | 3    | 1    | 9    | 3    | 4    | 9    | 1    | 5    |      | 57    |
| Guangdong    | 10   | 2    | 10   | 10   | 12   | 10   | 9    | 8    | 14   | 5    | 9    | 2    | 13   | 27   | 7    | 4    | 8    | 160   |
| Guangxi      | 10   | 1    | 4    | 4    | 10   | 6    | 1    | 2    | 6    | 6    | 12   | 4    | 2    | 6    |      | 8    | 5    | 87    |
| Guizhou      | 1    |      | 2    | 3    | 3    | 1    | 1    | 1    | 3    | 1    | 7    |      |      | 6    | 1    | 8    |      | 38    |
| Hainan       | 2    |      |      |      | 2    | 2    |      | 3    | 1    | 2    |      | 1    |      | 2    |      | 1    | 2    | 18    |
| Hebei        | 4    | 5    | 3    | 8    | 8    | 7    | 3    | 4    | 15   |      | 15   | 1    | 3    | 8    | 6    | 16   | 4    | 110   |
| Heilongjiang | 3    | 2    | 7    | 2    | 10   | 6    | 5    | 1    | 2    | 4    | 9    | 1    | 5    | 6    | 5    | 1    | 4    | 73    |
| Henan        | 9    | 3    | 2    | 21   | 1    | 11   | 11   | 2    | 19   | 1    | 11   | 2    | 8    | 15   | 7    | 15   | 1    | 139   |
| Hubei        | 12   | 6    | 3    | 2    | 14   | 10   | 4    | 3    | 13   | 5    | 13   | 3    | 5    | 10   | 4    | 12   |      | 119   |
| Hunan        | 7    | 4    | 6    | 4    |      | 7    | 3    | 1    | 8    | 8    | 14   |      | 1    | 10   |      | 17   | 2    | 92    |
| Jiangsu      | 2    | 1    | 9    | 18   | 3    | 12   | 6    | 2    | 6    |      | 5    | 6    | 1    | 10   | 8    | 10   | 5    | 104   |
| Jiangxi      | 3    | 5    | 2    | 11   | 2    | 10   | 1    |      | 10   |      | 8    |      | 5    | 8    |      | 10   | 1    | 76    |
| Jilin        | 5    |      | 1    | 7    | 2    | 2    | 6    | 1    | 2    | 5    | 2    | 1    | 1    | 6    | 1    | 2    | 3    | 47    |
| Liaoning     | 8    | 3    | 14   | 4    | 2    | 6    | 10   | 7    | 8    | 1    | 10   | 4    | 12   | 8    | 4    | 8    | 4    | 113   |
| Neimenggu    | 4    | 1    | 2    | 7    | 1    | 7    | 3    | 3    | 6    | 1    | 7    |      | 3    | 11   |      | 4    | 2    | 62    |
| Ningxia      | 2    |      |      | 1    | 3    | 1    | 1    | 2    |      | 4    | 1    |      |      | 2    | 3    | 1    |      | 21    |
| Qinghai      |      | 2    | 2    | 1    |      |      |      | 2    |      | 2    |      | 1    |      | 4    | 1    | 1    | 1    | 17    |
| Shandong     | 5    |      | 4    | 10   | 17   | 2    | 1    |      | 15   | 9    | 7    |      | 3    | 18   | 4    | 8    |      | 103   |
| Shanghai     |      |      |      | 1    | 1    | 1    |      |      |      | 2    |      |      |      |      | 2    |      |      | 7     |
| Shanxi       | 1    | 2    |      | 2    | 4    | 4    | 3    | 2    | 4    |      | 4    |      |      | 4    | 2    | 5    |      | 37    |
| Shanxi(Jin)  | 5    |      | 11   | 9    |      | 9    | 2    | 5    | 13   | 1    | 12   | 4    | 1    | 6    | 8    | 9    | 2    | 97    |
| Sichuan      | 5    | 5    | 4    | 16   | 4    | 11   | 10   | 9    | 12   | 5    | 12   | 3    |      | 14   | 7    | 8    | 4    | 129   |
| Tianjin      | 1    |      |      |      | 1    |      |      |      |      | 2    |      |      |      |      | 1    |      | 1    | 6     |
| Xinjiang     | 6    | 2    | 3    | 8    | 3    | 5    | 3    | 4    | 6    | 4    | 7    | 7    |      | 8    | 3    | 6    |      | 75    |
| Xizang       | 1    |      | 1    | 1    | 1    | 2    |      |      | 3    |      | 3    |      |      | 2    | 3    | 1    |      | 18    |
| Yunnan       | 1    | 1    | 3    | 6    | 9    | 2    | 2    | 7    | 2    | 7    | 4    | 6    | 3    | 1    | 5    | 4    | 4    | 67    |
| Zhejiang     | 9    | 8    | 1    | 4    | 9    | 8    | 10   | 4    | 3    | 7    | 9    | 3    | 6    | 6    | 6    | 16   | 2    | 111   |
| Total        | 130  | 72   | 105  | 184  | 141  | 166  | 100  | 96   | 183  | 95   | 216  | 59   | 85   | 221  | 106  | 207  | 61   | 2227  |

Panel B: the distribution of government official turnover by origin, type, and tenure

|                     | М       | Mayor      |         | of Municipal ommittee | Total   |            |  |
|---------------------|---------|------------|---------|-----------------------|---------|------------|--|
| Origin              | Numbers | Percentage | Numbers | Percentage            | Numbers | Percentage |  |
| Different City      | 534     | 28.18%     | 493     | 26.02%                | 1027    | 54.20%     |  |
| Same City           | 457     | 24.12%     | 411     | 21.69%                | 868     | 45.80%     |  |
| Total               | 991     | 52.30%     | 904     | 47.70%                | 1895    | 100.00%    |  |
| Turnover Type       | Numbers | Percentage | Numbers | Percentage            | Numbers | Percentage |  |
| Expected Turnover   | 427     | 19.17%     | 389     | 17.47%                | 816     | 36.64%     |  |
| Unexpected Turnover | 738     | 33.14%     | 673     | 30.22%                | 1411    | 63.36%     |  |
| Total               | 979     | 52.31%     | 892     | 47.69%                | 2227    | 100.00%    |  |

# Table 2: Descriptive Statistics

This table presents descriptive statistics for the sample in 1998–2012 periods. All variables are as defined in the Appendix A.

| Variables             | Ν     | Mean   | 5% quantile | Median | 95% quantile | Std. Dev. |
|-----------------------|-------|--------|-------------|--------|--------------|-----------|
| Log(CASH)             | 23955 | -1.933 | -3.803      | -1.865 | -0.326       | 1.109     |
| INDUCTION             | 23955 | 0.373  | 0           | 0      | 1            | 0.484     |
| SOE                   | 23955 | 0.634  | 0           | 1      | 1            | 0.554     |
| MB                    | 23955 | 2.260  | 0.396       | 1.496  | 5.521        | 14.531    |
| NO1                   | 23955 | 0.383  | 0.147       | 0.383  | 0.676        | 0.165     |
| CASHFLOW              | 23955 | 0.161  | -0.102      | 0.052  | 0.244        | 20.08     |
| LEVERAGE              | 23955 | 0.575  | 0.144       | 0.491  | 0.829        | 5.808     |
| CAPEXP                | 23955 | 0.113  | 0.036       | 0.072  | 0.326        | 0.188     |
| SIZE                  | 23955 | 21.549 | 19.805      | 21.414 | 23.823       | 1.263     |
| GROWTH                | 23955 | 7.066  | -0.347      | 0.116  | 0.920        | 875.54    |
| NWC                   | 23955 | 5.102  | -0.320      | 0.153  | 0.821        | 773.183   |
| SIGMA                 | 23955 | 1.086  | 0.0812      | 0.116  | 0.551        | 15.586    |
| DIVIDEND              | 23955 | 0.562  | 0           | 1      | 1            | 0.496     |
| $r_{i,t} - R^B_{i,t}$ | 23562 | 0.003  | -0.603      | -0.030 | 0.706        | 0.464     |
| $\Delta CASH$         | 23562 | 0.017  | -0.092      | 0.002  | 0.130        | 0.752     |
| $\Delta E$            | 23562 | 0.014  | -0.045      | 0.002  | 0.060        | 1.198     |
| $\Delta NA$           | 23562 | 0.151  | -0.103      | 0.060  | 0.367        | 5.360     |
| $\Delta I$            | 23562 | 0.000  | -0.007      | 0.001  | 0.010        | 0.082     |
| ∆DIVIDEND             | 23562 | 0.001  | -0.014      | 0.000  | 0.017        | 0.015     |
| L                     | 23562 | 0.248  | 0.000       | 0.230  | 0.540        | 0.356     |
| NF                    | 23562 | 0.074  | -0.076      | 0.017  | 0.265        | 1.493     |

### Table 3: Political uncertainty and cash holdings

This table presents the ordinary least squares regression results of the impact of political uncertainty on cash holdings. The t-statistics are reported in parentheses and year and industry fixed effects are included in different specifications. The t-statistics reported in parentheses are based on standard errors clustered by city. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All variables are as defined in the Appendix A.

| Log(CASH)      | (1)       | (2)           | (3)           | (4)           | (5)           | (6)           |
|----------------|-----------|---------------|---------------|---------------|---------------|---------------|
| INDUCTION      | -0.026*   | -0.027**      | -0.035***     | -0.027**      | -0.035***     | -0.035***     |
|                | (-1.84)   | (-2.46)       | (-3.08)       | (-2.57)       | (-3.22)       | (-2.80)       |
| SOE            |           | $0.057^{***}$ | $0.083^{***}$ | $0.055^{***}$ | $0.078^{***}$ | $0.078^{***}$ |
|                |           | (5.78)        | (8.40)        | (5.68)        | (7.92)        | (2.93)        |
| MB             |           | -0.010***     | -0.016***     | -0.010***     | -0.014***     | -0.014        |
|                |           | (-2.97)       | (-4.28)       | (-2.89)       | (-3.70)       | (-1.30)       |
| SIZE           |           | -0.000        | -0.021***     | $0.013^{***}$ | -0.002        | -0.002        |
|                |           | (-0.07)       | (-3.62)       | (2.63)        | (-0.25)       | (-0.08)       |
| CASHFLOW       |           | $2.012^{***}$ | $1.977^{***}$ | $1.912^{***}$ | $1.873^{***}$ | $1.873^{***}$ |
|                |           | (39.24)       | (38.40)       | (37.61)       | (36.67)       | (18.58)       |
| NWC            |           | $1.741^{***}$ | $1.720^{***}$ | $1.790^{***}$ | $1.768^{***}$ | $1.768^{***}$ |
|                |           | (94.26)       | (93.22)       | (93.00)       | (91.73)       | (46.30)       |
| GROWTH         |           | $0.035^{***}$ | 0.031***      | $0.047^{***}$ | $0.042^{***}$ | $0.042^{***}$ |
|                |           | (3.74)        | (3.33)        | (5.10)        | (4.53)        | (3.40)        |
| CAPEXP         |           | $0.578^{***}$ | $0.624^{***}$ | $0.535^{***}$ | $0.587^{***}$ | $0.587^{***}$ |
|                |           | (12.79)       | (13.80)       | (12.05)       | (13.22)       | (8.86)        |
| NO1            |           | -0.192***     | -0.160***     | -0.156***     | -0.136***     | -0.136        |
|                |           | (-5.76)       | (-4.71)       | (-4.74)       | (-4.07)       | (-1.43)       |
| LEVERAGE       |           | $0.535^{***}$ | 0.483***      | $0.572^{***}$ | $0.512^{***}$ | $0.512^{***}$ |
|                |           | (16.32)       | (14.82)       | (17.06)       | (15.34)       | (5.89)        |
| SIGMA          |           | $0.001^{***}$ | $0.001^{**}$  | 0.000         | 0.000         | 0.000         |
|                |           | (2.61)        | (2.18)        | (1.00)        | (0.59)        | (0.65)        |
| DIVIDEND       |           | $0.185^{***}$ | 0.169***      | $0.161^{***}$ | $0.147^{***}$ | $0.147^{***}$ |
|                |           | (15.41)       | (14.17)       | (13.64)       | (12.47)       | (7.91)        |
| Intercept      | -1.917*** | -2.738***     | -2.721***     | -2.591***     | -2.723***     | -2.723***     |
|                | (-223.39) | (-24.38)      | (-21.64)      | (-11.63)      | (-11.92)      | (-7.75)       |
| Year           | No        | No            | Yes           | No            | Yes           | Yes           |
| Industry       | No        | No            | No            | Yes           | Yes           | Yes           |
| Cluster        | No        | No            | No            | No            | No            | Yes           |
| N              | 23955     | 23955         | 23955         | 23955         | 23955         | 23955         |
| $\mathbf{R}^2$ | 0.0001    | 0.4182        | 0.4307        | 0.4431        | 0.4548        | 0.4548        |

Panel A: Estimation results

Panel B: Marginal economic impact of political uncertainty

|            | Estimated<br>coefficient<br>(β) | Effect on cash<br>ratio =<br>$(e^{\beta} - 1)*100\%$ | Mean net<br>assets (RMB<br>million) | Mean cash<br>holding ratio<br>(100%) | Change in<br>cash (RMB<br>million) | Change in cash<br>(US\$ million) |
|------------|---------------------------------|--|-------------------------------------|--------------------------------------|------------------------------------|----------------------------------|
| Column (6) | -0.035                          | -3.44%   | 6810                                | 23.20%                               | -39.97                             | -6.15                            |

#### **Table 4: Robust examinations**

This table presents robustness check on the impact of political uncertainty on cash holdings. In Panel A, the dependent variable CASH is measured as ratio of cash assets and cash equivalent assets to net assets, where net assets are total assets minus cash and cash equivalents while CASH2 is measured as ratio of cash assets to net assets, where net assets are total assets minus cash. EXCESSCASH is defined as the difference between actual cash and predicted, normal cash. Appendix B outlines the detailed method of calculating EXCESSCASH. The "major 4" cities are Beijing, Shanghai, Tianjin, and Chongqing. In column (4), we further control three city level economic factors in which a firm located, including the GDP growth for the city (GDP\_Growth), lag one-period of the city GDP growth (LagGDP\_Growth), and the ratio of city level investment to GDP (InvGDP). In Panel B, The variable MATCH is an indicator variable equals to one if firm *i* is a treatment firm (faces political uncertainty) firm, and zero for a control firm. In Panel (B), the control firm is matched by similar market value, return on assets (ROA), and total book assets, respectively. In Panel C, for each political uncertainty event, we assume that the event happens again in the next three years and set up a simulated dummy variable for each year (the same procedure as INDUCTION variable). The three dummy variables are denoted as INDUCTION1, INDUCTION2 and INDUCTION3, respectively. Then, we use these simulated variables to replace INDUCTION and conduct the regression for the main results in Table 4 respectively for each of the three simulated variables. In Panel D, we examine specific political uncertainty in terms of appointing new mayor, new communist party secretary for the city, or both mayor and community party secretary. We do not report the coefficients of the control variables for brevity. Year and industry fixed effects are included in different specifications. The t-statistics reported in parentheses are based on standard errors clustered by city. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All variables are as defined in the Appendix A.

|                   | (1)            | (2)        | (3)                  | (4)           |
|-------------------|----------------|------------|----------------------|---------------|
|                   |                |            | Log(CASH)            | Control for   |
|                   | Log (CASH2)    | EXCESSCASH | (without the major 4 | City economic |
|                   |                |            | cities)              | factors       |
| INDUCTION         | -0.034***      | -0.034***  | -0.033**             | -0.027**      |
|                   | (-2.73)        | (-2.71)    | (-2.45)              | (-2.00)       |
| Intercept         | $-2.798^{***}$ | -6.341***  | -3.164               | -2.171***     |
|                   | (-8.05)        | (-19.23)   | (-9.09)              | (-4.57)       |
| CDP Crowth        |                |            |                      | $0.043^{*}$   |
| GDP_Growin        |                |            |                      | (1.75)        |
| LacODD Crowth     |                |            |                      | 0.007         |
| LagGDP_Growin     |                |            |                      | (0.57)        |
|                   |                |            |                      | -0.013        |
| INVGDP            |                |            |                      | (-0.18)       |
| Control variables | Yes            | Yes        | Yes                  | Yes           |
| Year              | Yes            | Yes        | Yes                  | Yes           |
| Industry          | Yes            | Yes        | Yes                  | Yes           |
| Cluster           | Yes            | Yes        | Yes                  | Yes           |
| N                 | 23955          | 23955      | 19060                | 20968         |
| $\mathbb{R}^2$    | 0.4534         | 0.4761     | 0.4546               | 0.4604        |

Panel A: Alternative measures of cash holdings

| Panel | B: | Using | a | matched | sam | ple | approacl | h |
|-------|----|-------|---|---------|-----|-----|----------|---|
|-------|----|-------|---|---------|-----|-----|----------|---|

|                   | Matched by market value | Matched by ROA | Matched by total asset |
|-------------------|-------------------------|----------------|------------------------|
| Log(CASH)         | (1)                     | (2)            | (3)                    |
| MATCH             | -0.050**                | -0.0577***     | -0.052**               |
| MAICH             | (-2.17)                 | (-2.74)        | (-2.51)                |
| τ., .             | -2.627***               | -2.540***      | -2.293****             |
| Intercept         | (-7.68)                 | (-7.55)        | (-4.74)                |
| Control variables | Yes                     | Yes            | Yes                    |
| Year              | Yes                     | Yes            | Yes                    |
| Industry          | Yes                     | Yes            | Yes                    |
| Cluster           | Yes                     | Yes            | Yes                    |
| Ν                 | 19104                   | 19053          | 19111                  |
| $R^2$             | 0.4536                  | 0.4504         | 0.4585                 |

Panel C: Using placebo tests of the political uncertainty events

| Log(CASH)         | (1)                              | (2)                              | (3)                  |
|-------------------|----------------------------------|----------------------------------|----------------------|
| INDUCTION1        | 0.007<br>(0.53)                  |                                  |                      |
| INDUCTION2        |                                  | -0.011<br>(-0.49)                |                      |
| INDUCTION3        |                                  |                                  | 0.003<br>(0.19)      |
| Intercept         | -2.743 <sup>***</sup><br>(-7.78) | -2.743 <sup>***</sup><br>(-7.78) | -2.743***<br>(-7.78) |
| Control variables | Yes                              | Yes                              | Yes                  |
| Year              | Yes                              | Yes                              | Yes                  |
| Industry          | Yes                              | Yes                              | Yes                  |
| Cluster           | Yes                              | Yes                              | Yes                  |
| N                 | 23955                            | 23955                            | 23955                |
| $\mathbb{R}^2$    | 0.4545                           | 0.4545                           | 0.4545               |

Panel D: Different measures of *INDUCTION* 

| Log(CASH)           | (1)       | (2)       | (3)       |
|---------------------|-----------|-----------|-----------|
| NUDUCTION Manage    | -0.047*** |           |           |
| INDUCTION_Mayor     | (-3.68)   |           |           |
| INDUCTION Secondamy |           | -0.030*** |           |
| INDUCTION_Secretary |           | (-2.12)   |           |
| INDUCTION Poth      |           |           | -0.047*** |
| INDUCTION_Boin      |           |           | (-2.62)   |
| Interes and         | -2.457*** | -2.372*** | -1.941*** |
| Intercept           | (-7.76)   | (-4.83)   | (-3.85)   |
| Control variables   | Yes       | Yes       | Yes       |
| Year                | Yes       | Yes       | Yes       |
| Industry            | Yes       | Yes       | Yes       |
| Cluster             | Yes       | Yes       | Yes       |
| N                   | 20981     | 20940     | 17966     |
| $\mathbf{R}^2$      | 0.4561    | 0.4540    | 0.4555    |

#### Table 5: Political uncertainty and cash holdings: related results

We present two related results from political uncertainty and cash holdings in Table 5. Panel A reports the regression results by partitioning the samples using the origins of new city officials. The whole sample is separated into subsamples according to the origins of the new city officials. Panel B presents the impact of the unexpected and expected government official turnover on cash holdings. We do not report the coefficients of the control variables for brevity. Year and industry fixed effects are included. The t-statistics reported in parentheses are based on standard errors clustered by city. The sum of sample size in both sub-samples in Panel A does not equal to 34,168 because there are missing information on the origins for some officials. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All variables are as defined in the Appendix A.

|                           | Origins of newl | y appointed Mayors | Origins of newly | appointed Secretary |
|---------------------------|-----------------|--------------------|------------------|---------------------|
| Log(CASH)                 | Same City       | Different City     | Same City        | Different City      |
|                           | (1)             | (2)                | (3)              | (4)                 |
| INDUCTION                 | -0.002          | -0.053***          | -0.008           | -0.057**            |
|                           | (-0.06)         | (-3.00)            | (-0.31)          | (-2.30)             |
| Intercept                 | -3.90***        | -1.346***          | -2.513***        | -2.843***           |
|                           | (-7.65)         | (-2.47)            | (-4.51)          | (-7.85)             |
| Control Variables         | Yes             | Yes                | Yes              | Yes                 |
| Year                      | Yes             | Yes                | Yes              | Yes                 |
| Industry                  | Yes             | Yes                | Yes              | Yes                 |
| Cluster                   | Yes             | Yes                | Yes              | Yes                 |
| N                         | 12970           | 10985              | 14520            | 9435                |
| $\mathbf{R}^2$            | 0.4531          | 0.4624             | 0.4451           | 0.4754              |
| Marginal Economic Effects | 2 22            | 50.00              | 0.26             | 64 20               |
| (RMB Million)             | -2.32           | -37.99             | -9.20            | -04.39              |
| Marginal Economic Effects | -0.36           | -9.23              | -1.42            | _0 01               |
| (US\$ Million)            | -0.50           | -7.23              | -1.42            | -7.91               |

Panel A: The origins of the newly appointed officials

Panel B: Expected and unexpected government official turnover

|   | Mayor     |            | Sec       | retary     |
|---|-----------|------------|-----------|------------|
|   | Expected  | Unexpected | Expected  | Unexpected |
| Log(CASH)                                   | (1)       | (2)        | (3)       | (4)        |
| INDUCTION                                   | -0.059*** | -0.027     | -0.029*   | -0.007     |
| INDUCTION                                   | (-4.00)   | (-1.55)    | (-1.83)   | (-0.31)    |
| Intercept                                   | -2.812*** | -2.272***  | -2.157*** | -2.277***  |
|   | (-7.49)   | (-4.83)    | (-3.90)   | (-4.08)    |
| Control Variables                           | Yes       | Yes        | Yes       | Yes        |
| Year  | Yes       | Yes        | Yes       | Yes        |
| Industry                                    | Yes       | Yes        | Yes       | Yes        |
| Cluster                                     | Yes       | Yes        | Yes       | Yes        |
| N   | 12450     | 11505      | 12700     | 11255      |
| $\mathbf{R}^2$                              | 0.4397    | 0.4748     | 0.4834    | 0.3689     |
| Marginal Economic Effects                   | -66.59    | -30.96     | -28.70    | -8.11      |
| (RMB Million)                               | 20107     | 2 317 0    | _3170     |            |
| Marginal Economic Effects<br>(US\$ Million) | -10.24    | -4.76      | -4.41     | -1.25      |

#### Table 6: Political extraction risk, political uncertainty, and cash holdings

This table presents the ordinary least squares regression results of the impact of political uncertainty on cash holding under different sub-sample selections. In Panel A, we separate the full sample into two subsamples according to some characteristics that influence the extraction risk that the firm faces. Executives are politically-connected (*PC*=1) if the CEO or chairman is a former government official, a former military officer, a member of the Committee of the Chinese People's Political Consultative Conference, or a member of the National Congress of Communist Party of China. *SCALE* takes a value of 1 if the firm's total assets that year are greater than the median value of all the firms in the same year. *DD* takes a value of 1 when the change in corporate debt scale of the year is larger than the median of all firms. *DEFICIT* has a value of 1 if the city's fiscal deficit situation where listed firms located is better than the average level. In Panel B, we use the 2012 and before and 2013 and after to single out the impact of the 18<sup>th</sup> National Congress of the Communist Party of China, President Xi Jinping put on a strong emphasis on anti-corruption campaign with new requirements and mandatory rules on government officials' behavior. Hence, the period in 2013 and after presumes having less corruption. We do not report the coefficients of the control variables for brevity. Year and industry fixed effects are included. The t-statistics reported in parentheses are based on standard errors clustered by city. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All variables are defined in Appendix A.

|  | Politically connected executives |           | Firm scale |           | Change in corporate debt |           | Regional Fiscal<br>Deficit |            |
|--|----------------------------------|-----------|------------|-----------|--------------------------|-----------|----------------------------|------------|
| Log(CASH)                                  | PC=1                             | PC=0      | Scale=1    | Scale=0   | DD=1                     | DD=0      | DEFICIT =1                 | DEFICIT =0 |
|  | (1)                              | (2)       | (3)        | (4)       | (5)                      | (6)       | (7)                        | (8)        |
| INDUCTION                                  | -0.014                           | -0.054*** | -0.026     | -0.046*** | -0.011                   | -0.044**  | -0.005                     | -0.134***  |
|  | (-0.65)                          | (-2.86)   | (-1.64)    | (-2.78)   | (-0.66)                  | (-2.23)   | (-0.48)                    | (-2.74)    |
| Intercept                                  | -2.237***                        | -2.638*** | -1.365***  | -4.610*** | -2.033***                | -3.166*** | -2.27***                   | -1.527**   |
|  | (-4.46)                          | (-5.04)   | (-3.05)    | (-4.36)   | (-6.57)                  | (-5.95)   | (-4.51)                    | (-3.19)    |
| Control Variables                          | Yes                              | Yes       | Yes        | Yes       | Yes                      | Yes       | Yes                        | Yes        |
| Year                                       | Yes                              | Yes       | Yes        | Yes       | Yes                      | Yes       | Yes                        | Yes        |
| Industry                                   | Yes                              | Yes       | Yes        | Yes       | Yes                      | Yes       | Yes                        | Yes        |
| Cluster                                    | Yes                              | Yes       | Yes        | Yes       | Yes                      | Yes       | Yes                        | Yes        |
| N  | 5074                             | 12030     | 13061      | 10894     | 11132                    | 16279     | 18293                      | 2238       |
| $\mathbb{R}^2$                             | 0.4363                           | 0.4584    | 0.4308     | 0.4889    | 0.3812                   | 0.4112    | 0.4745                     | 0.4131     |
| Marginal Economic Effects<br>(RMB Million) | -16.16                           | -61.10    | -29.83     | -52.25    | -12.71                   | -50.03    | -5.80                      | -145.75    |
| Marginal Economic Effects (US\$ Million)   | -2.49                            | -9.40     | -4.59      | -8.04     | -1.96                    | -7.70     | -0.89                      | -22.42     |

Panel A: The impact of different extraction risk

|   | 2012 or Before                   | 2013 and After       |
|---|----------------------------------|----------------------|
| Log(CASH)                                   | (1)                              | (2)                  |
| INDUCTION                                   | -0.033 <sup>**</sup><br>(-2.25)  | -0.030<br>(-1.11)    |
| Intercept                                   | -2.674 <sup>***</sup><br>(-7.03) | -2.025***<br>(-5.05) |
| Control variables                           | Yes                              | Yes                  |
| Year  | Yes                              | Yes                  |
| Industry                                    | Yes                              | Yes                  |
| Cluster                                     | Yes                              | Yes                  |
| N   | 19905                            | 4050                 |
| $R^2$                                       | 0.4689                           | 0.4172               |
| Marginal Economic Effects<br>(RMB Million)  | -51.29                           | -46.69               |
| Marginal Economic Effects<br>(US\$ Million) | -7.89                            | -7.18                |

Panel B: The impact of the 18<sup>th</sup> National Congress of the Communist Party of China

### Table 7: Twin agency problem, political uncertainty and cash holdings

This table reports the regression results regarding the impact of the twin agency problem and political uncertainty on cash holdings under different sample selections. We separate the full sample into two subsamples according to different measurements of twin agency conflicts. We do not report the coefficients of the control variables for brevity. Year and industry fixed effects are included. The t-statistics reported in parentheses are based on standard errors clustered by city. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All variables are as defined in the Appendix A.

|   | Ownersh  | Ownership wedge |          | t Coverage | Auditors         |                  |
|---|----------|-----------------|----------|------------|------------------|------------------|
| $L_{\alpha\alpha}(CASH)$                    | Small    | Large           | Analyst  | No Analyst | Top4             | Non-Top4         |
| Log(CASH)                                   | wedge    | wedge           | Coverage | Coverage   | Accounting Firms | Accounting Firms |
|   | (1)      | (2)             | (3)      | (4)        | (5)              | (6)              |
| INDUCTION                                   | -0.006   | -0.066***       | -0.017   | -0.052**   | -0.009           | -0.028**         |
|   | (-0.44)  | (-2.88)         | (-1.22)  | (-2.18)    | (-0.17)          | (-2.16)          |
| Intercept                                   | -1.776** | -2.944***       | -1.338** | -4.496***  | -1.250***        | $-2.185^{***}$   |
|   | (-2.98)  | (-4.34)         | (-2.78)  | (-5.86)    | (-3.04)          | (-4.17)          |
| Control Variables                           | Yes      | Yes             | Yes      | Yes        | Yes              | Yes              |
| Year  | Yes      | Yes             | Yes      | Yes        | Yes              | Yes              |
| Industry                                    | Yes      | Yes             | Yes      | Yes        | Yes              | Yes              |
| Cluster                                     | Yes      | Yes             | Yes      | Yes        | Yes              | Yes              |
| Ν   | 9886     | 8745            | 12649    | 11306      | 4461             | 17514            |
| $\mathbf{R}^2$                              | 0.5007   | 0.4426          | 0.5297   | 0.3936     | 0.4787           | 0.4630           |
| Marginal Economic Effects (RMB Million)     | -6.95    | -74.23          | -19.59   | -58.89     | -10.41           | -32.09           |
| Marginal Economic Effects<br>(US\$ Million) | -1.07    | -11.42          | -3.01    | -9.06      | -1.60            | -4.94            |

#### Table 8: Political uncertainty and the value of cash holding

This table presents the results of the regression of the excess stock return,  $r_{i,t} - R_{i,t}^B$ , on political uncertainty event dummy and changes in firm characteristics over the fiscal year.  $\Delta CASH_t$  is the change of firm *i*'s cash holdings during year *t*. All variables except  $L_t$  and excess stock return are deflated by the lagged market value of equity  $(M_{t-1})$ . \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively. All variables are as defined in the Appendix A.

| Panel A                    |               |               |               |               |
|----------------------------|---------------|---------------|---------------|---------------|
| $r_{i,t} - R^B_{i,t}$      | (1)           | (2)           | (3)           | (4)           |
| $\Delta CASH_t$            | $0.662^{***}$ | 0.636***      | $0.650^{***}$ | 0.625***      |
|                            | (6.64)        | (6.38)        | (6.52)        | (6.26)        |
| INDUCTION                  | 0.009         | 0.006         | 0.008         | 0.006         |
|                            | (1.59)        | (1.01)        | (1.47)        | (1.01)        |
| $INDUCTION*\Delta CASH_t$  | -0.138*       | -0.143*       | -0.134        | $-0.140^{*}$  |
|                            | (-1.67)       | (-1.73)       | (-1.62)       | (-1.69)       |
| $\Delta E_t$               | $1.394^{***}$ | $1.373^{***}$ | $1.400^{***}$ | $1.378^{***}$ |
|                            | (16.45)       | (16.17)       | (16.51)       | (16.23)       |
| $\Delta NA_t$              | $0.177^{***}$ | $0.172^{***}$ | $0.171^{***}$ | $0.166^{***}$ |
|                            | (6.43)        | (6.27)        | (6.20)        | (6.04)        |
| $\Delta I_t$               | 0.726         | $0.935^{*}$   | 0.803         | $1.010^{*}$   |
|                            | (1.38)        | (1.77)        | (1.53)        | (1.91)        |
| $\Delta DIVIDEND_t$        | $0.478^{*}$   | $0.488^{*}$   | $0.484^{*}$   | $0.496^{*}$   |
|                            | (1.71)        | (1.75)        | (1.73)        | (1.78)        |
| $CASH_{t-1}$               | $0.141^{***}$ | 0.139***      | 0.153***      | $0.150^{***}$ |
|                            | (4.51)        | (4.37)        | (4.85)        | (4.66)        |
| $L_t$                      | 0.165***      | $0.165^{***}$ | 0.158***      | 0.159***      |
|                            | (9.58)        | (9.43)        | (9.05)        | (8.96)        |
| $NF_t$                     | -0.320****    | -0.326***     | -0.315***     | -0.321***     |
|                            | (-7.71)       | (-7.83)       | (-7.56)       | (-7.67)       |
| $CASH_{t-1}*\Delta CASH_t$ | -0.346        | -0.313        | -0.304        | -0.274        |
|                            | (-1.01)       | (-0.91)       | (-0.88)       | (-0.80)       |
| $L_t^* \Delta CASH_t$      | -0.221        | -0.204        | -0.232        | -0.219        |
|                            | (-0.94)       | (-0.87)       | (-0.99)       | (-0.94)       |
| Intercept                  | -0.0723***    | -0.0281       | -0.0693       | -0.0276       |
|                            | (-10.32)      | (-1.57)       | (-0.77)       | (-0.30)       |
| Year                       | No            | Yes           | No            | Yes           |
| Industry                   | No            | No            | Yes           | Yes           |
| Cluster                    | Yes           | Yes           | Yes           | Yes           |
| N                          | 23562         | 23562         | 23562         | 23562         |
| $\mathbf{R}^2$             | 0.0288        | 0.0375        | 0.0303        | 0.0390        |

Panel B: Marginal economic impact of political impact based on Column (4)

|             | <i>Mean of</i> $C_{t-1}$ | <i>Mean of</i> $L_t$ | Marginal value of RMB 1.00* |
|-------------|--------------------------|----------------------|-----------------------------|
| INDUCTION=1 | 0.1198                   | 0.2581               | 0.504                       |
| INDUCTION=0 | 0.1198                   | 0.2581               | 0.646                       |

## Table 9: Where does the cash go?

This table presents the regression results of additional tests for the question "Where dose the cash go during the years when the officials take the position?" The dependent variables vary in different regressions and all the independent variables are defined in the Appendix A. Year and industry fixed effects are included in different specifications. The t-statistics reported in parentheses are based on standard errors clustered by city. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

| Independent<br>Variable  | Related party transactions<br>amount as a buyer minus the<br>amount as a seller scaled by<br>total assets( <i>NETRPT</i> ) |         | Related party transactions<br>amount as a buyer scaled<br>by total assets( <i>BUYRPT</i> ) |         | Capital<br>expenditure<br>(INVESTMENT) | Dividend<br>Payout<br>Dummy<br>(DIVIDEND) |
|--------------------------|--|---------|--|---------|--|---|
| -                        | All RP I   |         | All RP I   |         | (5)                                    | (())                                      |
| NIDUCTION                | (1)  | (2)     | (3)  | (4)     | (5)                                    | (6)                                       |
| INDUCTION                | 0.811  | 0.261   | 0.254  | 0.263   | 0.001                                  | 0.021                                     |
|                          | (1.01)   | (2.65)  | (0.24)   | (2.66)  | (0.21)                                 | (0.70)                                    |
| SOE                      | 0.168  | 0.061   | 0.358  | 0.060   | -0.018                                 | -0.163                                    |
|                          | (0.65)   | (1.00)  | (0.45)   | (0.97)  | (-4.32)                                | (-2.77)                                   |
| CASHFLOW                 | -0.115   | -0.077  | 0.569  | -0.079  | 0.087***                               | 2.791                                     |
|                          | (-0.13)  | (-0.28) | (0.55)   | (-0.29) | (2.66)                                 | (9.07)                                    |
| CASH                     | -0.159   | 0.0549  | -0.382   | 0.0676  | $0.120^{***}$                          | $2.861^{***}$                             |
|                          | (-0.11)  | (0.22)  | (-0.10)  | (0.27)  | (8.27)                                 | (10.53)                                   |
| SIZE                     | 0.215  | -0.0203 | -0.378   | -0.022  | 0.001                                  | $0.808^{***}$                             |
|                          | (1.09)   | (-0.70) | (-1.46)  | (-0.76) | (0.46)                                 | (22.17)                                   |
| LEV                      | 0.047  | -0.002  | 0.021  | -0.004  | -0.004                                 | $-4.020^{***}$                            |
|                          | (0.91)   | (-0.07) | (0.20)   | (-0.13) | (-1.42)                                | (-21.00)                                  |
| ROE                      | 0.020  | -0.000  | 0.073  | -0.000  | 0.000                                  | $0.005^{*}$                               |
|                          | (0.81)   | (-0.03) | (0.80)   | (-0.03) | (0.74)                                 | (1.75)                                    |
| TOBIN'S O                | -0.000   | 0.000   | -0.000   | 0.000   | 0.000                                  | -0.047 ***                                |
| z z                      | (-0.36)  | (0.02)  | (-0.34)  | (0.05)  | (1.12)                                 | (-2.93)                                   |
| Intercept                | -4.677   | 0.314   | 6.248  | 0.348   | 0.0179                                 | -16.03***                                 |
|                          | (-1.25)  | (0.20)  | (1.30)   | (0.22)  | (0.62)                                 | (-17.12)                                  |
| Year                     | Yes  | Yes     | Yes  | Yes     | Yes                                    | Yes                                       |
| Industry                 | Yes  | Yes     | Yes  | Yes     | Yes                                    | Yes                                       |
| Cluster                  | Yes  | Yes     | Yes  | Yes     | Yes                                    | Yes                                       |
| N                        | 22563  | 22563   | 22563  | 22563   | 22563                                  | 22563                                     |
| R-squared<br>(Pseudo R2) | 0.0011   | 0.0011  | 0.0008   | 0.0011  | 0.0442                                 | 0.2118                                    |

# Appendix A. Variable definitions

## **Dependent Variables**

| CASH                  | The ratio of cash and cash equivalents to net assets, where net assets is total assets minus cash and cash equivalents   |
|-----------------------|--|
| CASH2                 | The ratio of cash to net assets, where net assets is total assets minus cash   |
| Log(CASH)             | The natural logarithm of variable CASH   |
| Log(CASH2)            | The natural logarithm of variable CASH2  |
| $r_{i,t} - R^B_{i,t}$ | Excess stock return equals the stock returns of firm $i$ in the year $t$ minus its benchmark return at year $t$ . We use the 25 Fama and French portfolios formed on size and book-to-market (B/M) as our benchmark portfolios. The portfolio return is a value-weighted return based on market capitalization within each of the 25 portfolios. For each year, we group every firm into one of 25 size and B/M portfolios based on the intersection between the size and B/M independent sorts. |
| Political uncert      | ainty event variables  |
| INDUCTION             | For each firm-year, it takes a value of one when the local official in the firm's location is newly appointed and zero otherwise. If officials took office from January 1 to June 30, then the current year represents the year he took office; if officials took office from July 1 to December 31, the following year represents the year he took office.  |
| Variables that p      | proxy for appropriation risk   |
| PC                    | Political connection of the executives, <i>PC</i> takes one if the CEO or President is a former government official, a former military officer, a member of the Committee of the Chinese People's Political Consultative Conference, or a member of the National Congress of Communist Party of China; zero otherwise.   |
| SCALE                 | Enterprise Scaled dummy, <i>SCALE</i> takes one when the company's asset that year is greater than the median of all corporate assets and zero otherwise.  |
| DD                    | Change in corporate debt scale dummy; it takes a value of one when the change in corporate debt of the year is larger than the median of all firms and zero otherwise.   |
| DEFICIT               | Regional fiscal deficit dummy, <i>DEFICIT</i> takes one if the regional fiscal deficit situation of the city where listed firms register is better than the average level, and zero otherwise  |
| Variables that p      | proxy for agency conflicts   |
| Wedge                 | Wedge is the ultimate owners' control rights divided by its cash flow rights   |
| AC                    | AC is an indicator variable takes one if the company has analyst coverage and zero otherwise   |
| BIG4                  | <i>BIG4</i> is an indicator variable takes one if the company is audited by the Top 4 auditor firms in China and zero otherwise  |
| Independent va        | riables in the additional tests  |
| NETRPT                | The total related-party transactions amount of listed company as a buyer minus the total related-party transactions amount of listed company as a seller scaled by total assets  |
| BUYRPT                | The total related-party transactions amount of listed company as a buyer scaled by total assets  |
| INVESTMENT            | The capital expenditure divided by total asset   |

| PAYOUT                  | The amount of dividend divided by net profit  |
|-------------------------|---|
| <b>Control variable</b> | S   |
| SOE                     | SOE takes one if the ultimate controller is the state and zero otherwise.   |
| MB                      | market to book ratio of the firm, equals the book value of total assets minus book value of equity<br>plus the market value of equity divided by the book value of total assets |
| NO1                     | The shareholding of the largest shareholder   |
| CASHFLOW                | Operating cash flow divided by total assets   |
| LEVERAGE                | Total liabilities divided by total assets   |
| CAPEXP                  | Capital expenditures divided by total assets  |
| SIZE                    | The natural logarithm of total assets   |
| GROWTH                  | Growth rate equals operating income minus lagged operating income scaled by lagged operating income   |
| NWC                     | Net working capital, calculated as current assets exclusive of <i>CASH</i> (defined above)minus current liabilities divided by total assets                                     |
| SIGMA                   | The standard deviation of the operating cash flow ratio(defined above) in the industry of the year  |
| E                       | Earnings before extraordinary items plus interest, deferred tax credits, and investment tax credits   |
| NA                      | Total assets minus cash holdings  |
| I                       | Interest expense  |
| DIVIDEND                | The total common dividend paid by the company   |
| L                       | Market leverage, measured as the ratio of interest-bearing liabilities in a firm to lagged market value.  |
| NF                      | The company's net financing, measured as the total equity issuance minus repurchases plus debt issuance minus debt redemption   |
| M                       | Market value, which takes the market value of the company's stock in the closing days   |
| ΔΧ                      | $X_t$ is compact notation for the 1-year change, $X_t - X_{t-1}$  |
| GDP_Growth              | City-level GDP growth for the city in which the firm is located   |
| LagGDP_Growth           | The lagged value of city-level GDP growth   |
| InvGDP                  | The ratio of city-level investment to GDP   |

#### Appendix B. Measuring EXCESSCASH

This appendix describes the methodology for estimating excess cash holdings. We first estimate a regression to establish the normal cash holdings for a firm. This step is based on the work of Opler et al. (1999) and Fresard and Salva (2010). Excess cash is then defined as the difference between actual cash and predicted, normal cash. In other words, it is the residual of a cash levels regression.

We use several specifications to estimate normal cash, and none of our eventual conclusions about the effect of corporate governance on the value and the use of excess cash are affected materially by the choice. The following regression equation represents our main specification; its residuals (including firm fixed effects) are used to calculate excess cash:

 $Log(CASH) = \alpha + \beta_1 SIZE + \beta_2 FCF + \beta_3 NWC + \beta_4 SIGMA + \beta_5 MB + \beta_6 LEVERAGE + YearDummies + FirmFixedEffects + \varepsilon$ 

Where FCF is Operating Income minus Interest minus Taxes over year t divided by net assets. All the other variables are defined in Appendix A.

## Appendix C. Definitions of expected and unexpected government official turnover

The tenures of mayor and secretary of the Communist Party Committee (CPC) are generally five years and it needs to be in sync with the city's National People's Congress of the People's Republic of China (NPC). There are four types of government official turnover as depicted in the Figure 1 below.



Figure 1: Types of government official turnover

Type 1 appointee covered the full five-year appointment and the appointment is in sync with the NPC. Type 2 appointee began in the same year as the NPC but the appointee left early. Type 3 appointee did not begin in the same year as the NPC but the appointee finished the remaining term. Type 4 appointee did not begin in the same year as the NPC and left early. The follow Table provides a frequency count of the different types of government official turnover.

| go | vernment official turnover types                       | Mayor | Secretary of CPC | total |
|----|--|-------|------------------|-------|
| 1  | Finished the whole five year                           | 99    | 108              | 207   |
| 2  | Began in the same year as the NPC but left early       | 356   | 302              | 658   |
| 3  | Did not begin in the same year as the NPC but finished | 211   | 174              | 385   |
| 4  | Did not begin in the same year and left early          | 313   | 308              | 621   |
| To | otal   | 979   | 892              | 1871  |

For expected turnover in our paper, we consider only the beginning of the appointment. It is because firms consider only how the newly appointed government officials may affect them. Hence, we count Types 1 and 2 as the expected turnovers. Then, Types 3 and 4 appointments are unexpected turnovers.