

# **Corruption and Corporate Financial Policy: Evidence from Politician Downfalls in China\***

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**JEL Classification:** G32, D73

**Keywords:** Corruption, Politician Downfalls, Cash Policy, Financial Flexibility

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### **Abstract**

We examine the impact of corruption on firms' cash policy using the downfalls of corruptive politicians in China's provinces. We find that affected firms in the event provinces increase their cash holding relative to otherwise unaffected firms in the post-event period. The results concentrate on non-state enterprises and firms having political ties with the government. In addition, the increase of cash is more pronounced in firms with more investment opportunities, with low level of tangible assets, and high level of financial constraint. Lastly, we find that affected firms display a higher cash flow sensitivity of cash and enjoy higher marginal value of cash holding than do the unaffected firms. Overall, our results suggest that corruption has a significant effect on corporate financial policy.

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## 1. Introduction

Corruption is thought to be detrimental to economic growth as it increases business transaction costs, prevents efficient resource allocation, and hampers innovation and productivity growth (Murphy, Shleifer, and Vishny, 1991, 1993; Shleifer and Vishny, 1993; Fisman and Miguel, 2007). Nevertheless, bribery may allow firms to get things done in an economy plagued by bureaucratic hold-up problems (McMillan and Woodruff, 2002; Li, Meng, Wang, and Zhou, 2008). Existing studies on the economic consequence of corruption mainly focus on economic growth, productivity, and firm valuation. However, beyond these aggregated outcomes, we still know little about the impact of corruption on firm-specific decision making. In this study, we attempt to fill the gap by examining the impact of corruption on corporate liquidity management (i.e. cash policy).

Having preferential access to external finance (e.g. priority of getting bank loans and/or going public) is an important motive for firms to bribe the government bureaucrats (Johnson and Mitton, 2003; Khwaja and Mian, 2005; Claessens, Feijen, and Laeven, 2008). This relation-based financing channel is common and especially important for firms in emerging markets (Fisman, 2001; Allen, Qian, and Qian, 2005; Khwaja and Mian, 2005). When firms face frictions in obtaining external funds, they would reserve more cash today as a buffer against exogenous shocks to earnings and to avoid giving up profitable investment opportunities in the future (Opler, Pinkowitz, Stulz, and Williamson, 1999; Almeida, Campello, and Weisbach, 2004; Faulkender and Wang, 2006; Bates, Kahle, and Stulz, 2009)<sup>1</sup>. Because political turnover (i.e. politician downfalls) due to corruption prosecutions could disrupt firms' political connection

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<sup>1</sup> For example, Bates et.al 2009 find that firms with increasing R&D expenditure would accordingly increase their cash holdings as buffer against future shocks because of their costly external financing. Almeida et.al 2004 also finds a positive cash flow sensitivity of cash for financially constrained firms but not for financially unconstrained firms.

with the government and thus impair firm's financing capability through the relation-based channel (see, Piotroski and Zhang, 2014), affected firms would have a heightened incentive to hold more cash. As a consequence, we expect that affected firms would increase their cash holdings following the announcement of corruption prosecution relative to unaffected firms.

China is an ideal venue to investigate this research question because its market socialism system relies critically on virtuous government officials. In addition, dense networks of interpersonal obligations or *guanxi* (关系, lit. "connections") are a historically and culturally deep-rooted part of business in China (Gold and Guthrie, 2002), which makes developing connections a normal and respectable part of doing business. More important, in the past decade, China has launched an intensified campaign to combat corruption. Many high level officials are prosecuted for corruption and removed from their posts, which provides us a unique identification to examine the impact of corruption on the change of firm's financial policy. Furthermore, a well-balanced mixture of state-owned and privately listed firms that differently suffer from the bureaucratic hold-up problems in China also allows us to further examine the relation-based channel behind the effect.

In specific, we use the downfalls of corruptive politicians in China's provinces from 2004 to 2013 as exogenous shocks to firms' financing capability and examine the impact on firm's cash policy. Within our sample period, there are 54 province high-profile politicians (at least vice-ministerial level) that are prosecuted due to corruption. Each year, we identify firms headquartering in the event provinces as treated firms and those headquartering in provinces without corruption cases as control firms. Similar setting is used in several most recent studies, such as Chen, Jiang, Ljungqvist, Lu, and Zhou (2015) and Agarwal, Qian, Seru, and Zhang (2015). We then examine the difference of the change of cash holding between treated and

control firms in the subsequent event year by controlling for factors that are documented to affect firm's cash policy in existing studies.

However, exploiting the corruption events is appropriate only if they came as a surprise and were unlikely to be affected by firms' financial decisions. One can plausibly argue that these conditions are met. In the first place, the announcement of politician prosecution is highly unlikely to be anticipated. The inspection work by the Central Commission for Discipline and Inspection (CCDI), the country's top disciplinary watchdog, is conducted under extreme confidentiality. In China, it's a taboo to discuss and disseminate any sensitive information related to a suspected politician with a high rank before the official announcement by the CCDI. In the second place, the corruption events are unlikely to be affected by the level of cash holding of firms in the province. We show that neither the level of cash holding nor the change of cash holding in years before the downfall announcement explains the likelihood of the occurrence of politician downfalls in a province.

Using the difference-in-difference approach, we find that when a top tier bureaucrat in a province is prosecuted in a specific year, affected firms would experience an increase of cash holding in the subsequent year relative to the unaffected firms. In specific, we find that the change of cash holding in firms locating in the event provinces is 5.8% higher than the change of firms locating in provinces without politician downfalls. For provinces with multiple politician downfalls occurring in a year, we find that, on average, the change of cash holding in affected firms is about 4.2% higher than that in unaffected firm for each additional politician falling down from his post.

We then examine whether our results actually emerge as firms' relation-based financing channel is damaged by the politician downfalls. To test this, we make use of the well-balanced

mixture of state-owned and privately listed firms in China and the fact that many companies have built connections with the government for business reasons. In China, SOEs have preferential treatment from the government and have access to different sources of funds. However, non-SOEs are often denied access to bank loans and are subject to heavy government regulations (McMillan and Woodruff, 2002; Li and Wang, 2008). Non-SOEs might use bribes to get rid of these market and state failures and avoid ideological discrimination. As a result, the crackdown of corruption would negatively affect non-SOEs' financing capability and motivate them to hold more cash. In addition, we expect that the politician downfalls would have larger impact on firms whose CEOs and chairmen have political ties with the corresponding governments than those without such ties, because the firms' political connections with the governments on which they rely to obtain funds could be impaired by the politician downfalls.

As expected, we indeed find that the increase of cash holding concentrates on non-SOEs and firms that have political ties between their top executives and the local government. More interesting, we find that the effect of cash holding is especially pronounced in non-SOEs that also have political connections with the government officials. The results are robust and have a similar pattern when we match affected firms with unaffected control firms using the propensity score matching method. In addition, we find that the effect increases with the expected disruption of political connections, that is, the years that the prosecuted politician have served in the current provinces and posted at the vice-ministerial level or above. Overall, these results appear to suggest that the emerge of our findings is related to the relation-based financing channel.

To provide further evidence on firms' precautionary motive to reserve cash when facing frictions in obtaining external financing, we examine how the change of cash holding varies with firms' investment opportunities, tangibility, and financial constraints. First, firms would have

strong incentive to hold more cash when they face more investment opportunities. Second, firms with more tangible assets may be less influenced by the politician downfalls because they could also choose to get external funds using the collaterals. Third, financially constrained firms could suffer more from the politician downfalls as the damage of relation-based financing channel would intensify the financial constraint that they are facing. Using a triple difference approach, We find that the affected firms' increase of cash holding relative to unaffected firms is more pronounced in the subsamples of firms with high level of investment opportunities, low level of tangibility, and high level of financial constraint.

Our basic findings rely on two underlying assumptions: 1) affected firms consequently save more cash out of cash flow and display higher cash flow sensitivity of cash, and 2) the politician downfalls damage firms' external financing capability and increase the marginal benefit of holding cash. To validate these assumptions, we conduct two tests. First, we follow Almeida, Campello, and Weisbach (2004) and examine the impact of the politician downfalls on cash flow sensitivity of cash. We find that affected firms display higher cash flow sensitivity of cash than do otherwise unaffected firms. In specific, the cash flow sensitivity of cash in firms headquartering in event provinces is about 1.55 times as large as that in firms headquartering in provinces without politician downfalls.

Second, we follow Faulkender and Wang (2006) and test the impact of the politician downfalls on the marginal value of cash holding. Consistent with our expectation, we find that the marginal value of cash holding is higher for affected firms relative to those that are not affected by the corruption prosecutions. In specific, the cash value is \$0.487 for each additional \$1 of cash holding in unaffected firms, while it increases to \$0.727 in affected firms.

Our work contributes to the literature about the economic consequence of corruption.

Prior studies mainly focus on the impact of corruption on aggregated outcomes but little on firms' specific decision making. We fill this gap by showing the impact of corruption on an important corporate financial policy, that is, to what extent the firms should hold the cash and how to manage their assets liquidity.

In addition, we add to the literature considering financial flexibility as the first-order determinant of financial policies. Prior studies in this field focus on firms' financial flexibility in terms of debt capacity in developed market. For example, a most latest study by Chen, Harford, and Lin (2013). They use the change of property price as a shock to firms' collateral value, and study its impact on firms' cash policy. They find that the increases in real estate price discourage firms to hold more cash, which is consistent with the precautionary hypothesis. Different from their work, in this paper, we focus on the relation-based financing channel which is widely used in emerging countries and document that this channel has significant effect on firms' operation.

## **2. Background of Chinese Corruption and Anti-corruption**

Corruption is pervasive in China. According to Transparency International, the average Corruption Perception Index for China over the period of 2004-2013 is only 3.5 and the average rank is 76 out of 175 countries, indicating that China is a highly corruptive country<sup>2</sup>. Some economists estimate that the capital involved with corruptions in China is at least 3 trillion RMB (460 billion USD) every year. An official report from the People's Bank of China (China's central bank) shows that at least 16 thousand officials absconded abroad with total 800 billion RMB (123 billion USD) from mid-1990s to 2008.

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<sup>2</sup> The Corruption Perception Index ranges from 0 (highly corrupt) to 10 (very clean).



Corruption in China is not the product of modern times. It is deeply rooted in Chinese culture and has existed in Chinese history for thousands of years. Surprisingly, the Confucian concept of renzhi or “rule of man” largely contributes to widespread corruption throughout China. Based on Confucians' view, a true and honest state bureaucrat should be guided by moral principles. Thus, striving for material wealth was considered inappropriate. In addition, in China, Guanxi used to be widely translated as connections and relationships, which reflects the process and maintaining of interpersonal relationship. Guanxi is a method of exerting power to gain more benefits and it is being used successfully in all networks of society, such as jobs and business.

The constitution of the People’s Republic of China enshrines a Leading Role for the Communist Party of China (CCP). This gives Party policies constitutional precedence over all laws and regulations, and empowers Party officials to intervene in any judicial and regulatory decisions (Chen, 2003; Jones, 2003). After decades of economic reforms, China has developed a new modern-socialist market economy—a mixture of open-market economy and state-owned enterprise. It is different from the original ideology of communism but still depends critically on virtuous government officials. In China, most influential senior officials and high level business and government positions are held by the elite who have propelled their family members and caused inheritance of their power for next generations. They are the ones who are mostly believed to be involved in the political corruption in China. An example of this is the downfall of the former provincial party chief Bo Xilai and his families who made billions of U.S. dollars by privileged upbringing and political influence.

However, corruption poses a serious hindrance to China's economy and political systems. Corruption could cause social uncertainty, which threatens to bring down the ruling Communists. In addition, it is detrimental to the development of economy, for example, it increases the costs

and risks of doing business, and accelerates the running off of national assets. To sustain the government's legitimacy and economic growth, the Chinese government has strived to fight against corruption in recent years. During Hu Jintao's era (2002-2012), many high level officials are convicted of bribery, including members of the Central Politburo of Communist Party of China (CPC), generals of the People's Liberation Army, governors of provinces, CEOs of the Big Four commercial banks, etc. Xi Jinping took over as the party chief in the end of 2012. He has launched an unprecedented anti-corruption campaign, and vowed to "*fight corruption at every level, punish every corrupt official, and eradicate the soil that breeds corruption*". Xi is strongly supported by Wang Qishan, the head of Central Commission for Discipline Inspection (CCDI), who has been widely regarded as leading warrior in fighting against corruption. According to the CCDI, about 182,000 officials were punished for corruption and abuse of power nationwide in 2013 alone.

The top anti-corruption body in China is the Central Commission for Discipline Inspection (CCDI) of the CPC, which is designed solely for investigating and penalizing Communist Party members who violated party discipline. Its secretary is usually the member of the Standing Committee of the Political Bureau of the Central Committee. The investigations conducted by CCDI usually involve two stages. The first stage is a phase of collecting evidence on suspected officials, which is generally conducted under extreme confidentiality. Except the CCDI staffs, few people would know about the investigation and it is a taboo to discuss and disseminate any sensitive information related to the investigation. After collecting solid evidence, the CCDI would officially announce to the public about the officials that are under investigation. Due to the confidentiality of the first stage investigations, the announcements of the investigations are always surprises to both the public and the suspected officials themselves. For

example, some officials are taken away by officers of CCDI when they are making keynote speeches in important government conferences. The CCDI then detains the suspected party officials to conduct the second stage investigations which are more comprehensive and time-consuming. If the officials are found to have broken the law, which is usually the case, CCDI would transfer the corruption cases to prosecutors for final trials.

### **3. Data and Variables**

We first search for the top politicians that are prosecuted due to corruption in each province over the period from 2004 to 2013 in China. We focus on politicians that have posts with vice-ministerial level (e.g. vice-governor of a province) or higher level in provincial governments. These high-ranking politicians are most likely to have significant business ties with local companies and their removals are most likely to create tense political atmosphere and have material impact on the political network.

We use two sources to identify the corruption events: the official website of the CCDI and the website of Xinhua. The latest corruption events would be reported on these two websites at the first time. From these reports, we could obtain the announcement dates and the personal information of the investigated/arrested politicians, such as, their names, positions, bureaucratic levels, and the provinces they serve in. Eventually, we identify 54 cases from 2004 to 2013 where 48 politicians are vice-provincial level cadres, 5 are ministerial level cadres, and 1 is vice-national level cadre.

The distribution information of the 54 cases by province and year is presented in Table 1. We find that 26 out of 31 mainland China provinces have at least one corruption event during the

sample period. From the last column, we can see that Anhui (4 cases), Guangdong (4 cases), Heilongjiang (4 cases) and Sichuan (4 cases) have the largest number of politicians that are prosecuted over the 10 years period. Beijing, Gansu, Hainan, Hunan, Liaoning, Ningxia, Shanxi, Shan Xi, and Shanghai have only 1 corruption case. Five provinces have none corruption events, including Hebei, Qinghai, Xinjiang, Yunnan and Tibet. From the bottom of the table, we can see that 2005, 2009 and 2013 are years having the most intensive politician downfalls, with total number of cases being 8, 7 and 11, respectively.

[Insert Table 1 here]

Corruption might play out differently in state-owned enterprises (SOEs) and non-SOEs as they are subject to different bureaucratic constraints. State control over Chinese firms is sometimes exercised through control chains of intermediate firms. To classify firms as SOEs or not, we use the China Listed Firm's Shareholders Research Database (GTA\_HLD), which provides details about the large shareholders of all firms listed on Shanghai Stock Exchange and Shenzhen Stock Exchange from 2003 on. The database includes information about each firm's large direct shareholders, their ultimate controlling shareholders, and the equity control chains that connect them to the firm. Following CSMAR (China Stock Market and Accounting Research) and guidelines from the CSRC (China Securities Regulatory Commission) issued on Dec 16 1997, we adopt a 30% threshold to trace control chains. We make an indicator variable that flags state-owned enterprises (SOEs), by which we mean firms controlled by the state or state organs at or above the 30% threshold, either directly or indirectly via equity control chains. We designate all other firms as non-SOEs. In most cases, the state organ is a State-owned Assets Supervision and Administration Commissions (SASACs), the Ministry of Finance and its

provincial branches, or an analogous body.

In addition, the impact of corruption events could be different to firms with political ties or not. We obtain firms' political connection status from CSMAR. Specifically, CSMAR provides information on CEOs' and directors' professional relations with the government. It reports whether the CEOs and directors have connections to the local governments or the central government. As we focus on the downfalls of politicians in the local governments, we define those firms whose CEOs or chairmen of board of directors have connections to the local governments to be the ones with political connections. For firms that do not have political connection information in CSMAR, we manually check their annual reports in the years with missing information on political connection status and see whether the firms' CEOs or chairmen have/had government officer positions or are/were members of Nation People's Congress (NPC) or Chinese People's Political Consultative Conference (CPPCC). To be classified as politically connected firms, their CEOs' or chairmen's political positions should be above county level. In this way, we are able to identify the political connection status of all our sample firms from 2004 to 2013.

We use the change of cash holding scaled by total assets ( $\Delta(Cash/Total\ Assets)$ ), and the change of cash holding scaled by net assets ( $\Delta(Cash/Net\ Assets)$ ) to measure the change of firm cash policy in the post-event period. We collect the financial information and other firm characteristics from CSMAR. All variables used in this study are defined in Appendix A. As we attempt to study the impact of politician downfalls on the change of cash holding in the subsequent one year, the measures of cash holding change and firm characteristics are constructed based on the sample period from 2005 to 2014.

[Insert Table 2 here]

#### 4. Change of Cash Holding and Politician Downfalls

##### *The Baseline Results*

The corruption prosecution could impair the firms' relation with the government and make it more difficult for them to obtain funds, which motivates them to hold more cash to avoid giving up investment opportunities in the future. In this section, we test this hypothesis using a difference-in-difference approach. The model is specified as follows:

$$\Delta Cash_{i,t} = \alpha_i + \omega_t + \beta \times Case_{i,t-1} + \gamma X_{i,t} + \xi_{i,t} \quad (1)$$

The dependent variable  $\Delta Cash_{i,t}$  is the change in cash holding scaled by net assets ( $\Delta(Cash/Net\ assets)$ ) or scaled by total assets ( $\Delta(Cash/Total\ assets)$ ) of firm  $i$  from year  $t-1$  to year  $t$ . We define firms headquartering in the provinces with top-tier politician downfalls as treated firms and those headquartering in provinces without politician downfalls as control firms. Thus, our key explanatory variable is  $Case_{i,t-1}$ , a dummy variable which is equal to 1 if there is at least one politician at vice-ministerial level or above prosecuted in the province where firm  $i$  locates in year  $t-1$  and 0 otherwise. If the corruption prosecution damages firms' relation-based financing capability and makes them financially constrained, affected firms would increase their cash holding relative to other unaffected firms. We thus expect  $\beta$  to be positive and significant. For robustness reason, we create another variable,  $Case\ Numbers_{i,t-1}$  which is the number of politicians falling down from their post in the province where firm  $i$  locates in year  $t-1$ . Following Bates et al. (2009), we control for a set of variables  $X_{i,t}$  that are documented to be related with the change of cash holding, including, cash flow, firm size, leverage, Tobin's  $q$ , capital expenditures, acquisition intensity, change in net working capital, and change in short

term debt. The summary statistics for the variables used in this model are reported in Panel A of Table 2. We also include year fixed effect and firm fixed effect in the regression. As the treatment is defined at province level, we thus estimate the model by clustering standard errors at province.

[Insert Table 3 here]

The estimated results are reported in Table 3. In column 1 and column 2, the dependent variable is the change of cash holding scaled by net assets. The coefficient on  $Case_{i,t-1}$  is positive 0.011 and significant at 1% level. The result suggests that firms in provinces with politician downfalls have experienced an increase of cash/net assets ratio relative to the firms in provinces with no politician downfalls. The magnitude is economically significant as it means a normalized difference in change of cash/net assets about 5.8% ( $0.011/0.19$ , 0.19 is the standard deviation of  $\Delta(Cash/Net\ assets)$ ). In column 2, the coefficient on  $Case\ Numbers_{i,t-1}$  is 0.008, significant at 1% level. It means that, on average, the normalized relative increase of cash holding is 4.2% for each politician falling down from his post in a province.

In column 3 and column 4, the dependent variable is change in cash holding scaled by total assets ( $\Delta(Cash/Total\ assets)$ ). We find similar results, indicating that firms in event provinces have experienced significant increase in  $Cash/Total\ assets$  relative to the firms in non-event provinces. The coefficients on other control variables are generally consistent with the prior literature. For instance, Tobin'q is positively correlated with cash holding, which is consistent with the evidence in prior literature that firms with higher growth opportunities would have incentive to hold more cash. Net working capital is negatively related to cash holding because firms can use working capital as substitution for cash holding. Capital expenditures and acquisition intensity are negatively related to cash holding, which is reasonable, because higher

level of investments would drive down the level of cash holding.

### *Validity of the Corruption Events*

Our empirical analysis rests on the assumption that the corruption events came as a surprise and the cross-province timing of the corruption events is unrelated with firms' financial policy decisions. Anecdotal evidence shows that it is unlikely that these corruption investigations are anticipated by the public. We often see cases that some high-level officials are reported by media to join ordinary meetings in one day but then unexpectedly announced to be arrested and investigated in the following day. Some officials are arrested by CCDI when they are giving speeches during important provincial government meetings. Despite the anecdotal evidence, we directly test whether firms can anticipate these corruption investigations and correspondingly change cash holdings before the corruption investigations.

Specifically, we run a province level probit model to assess whether the change in cash holding can predict the probability of the downfalls of high level officials. The dependent variable is  $Case_{i,t}$ , which takes the value of 1 if there are politicians at or above vice-ministerial level prosecuted in province  $i$  in year  $t$  and 0 otherwise. Our key independent variables are the level of cash holding in year  $t$ , and the level in year  $t-1$  and the level in  $t-2$ . Similarly, we also use the change of cash holding in year  $t$ , year  $t-1$  and year  $t-2$ . We average the level and change of cash holding of all firms in a province to get the province level variables. If, on average, firms can anticipate the corruption events and adjust their cash policy years before the event date, we would find a significant relation between the level/change of cash holding and occurrence of politician downfalls. We also control provincial macro characteristics that may be related to the occurrence of corruption events in a province: GDP per capita, GDP growth, unemployment rate



and inflation rate. We report the results in Table 4. As shown in all of the four columns, both the level and the change of cash holding in year  $t$ , year  $t-1$ , and year  $t-2$  cannot predict the occurrence of the corruption events.

[Insert Table 4 here]

## **5. Change of Cash Holding and the Relation-Based Financing Channel**

We have documented that firms in provinces having top-tier officials falling from the posts would increase their cash holding relative to firms in other provinces with no officials downfalls. In this section, we examine whether the results emerge as firm's relation-based financing channel is damaged by the corruption prosecution. In specific, we divide firms into two groups: one group that relies heavily on relation-based financing channel to obtain external financing and the other group that relies less on relation-based channel to get access to external financing. We then test whether the impact of corruption prosecution on cash holding differs between these two groups. If our results are driven by the disruption of relation-based financing channel, they should be more pronounced in firms that rely heavily on political relations to get external financing as these firms are more vulnerable to the connection disruption. Otherwise, we would not expect to find significantly different results between the two groups.

Specifically, we divide sample into SOEs and non-SOEs, firms with political connections and firms with no political connections.

### *SOEs and Non-SOEs*

SOEs have access to cheap external capital through their strong relations with governments regardless of the downfalls of high-level officials. The corruption prosecutions

would have less impact on their financing capability. While for non-SOEs which do not have official support from governments, their capability to obtain external funds is relatively vulnerable. They are more likely to rely on bribes to gain access to external finance. Therefore, when there comes a shock to relation-based financing channel, SOEs having broader sources of fund could maintain a low level of cost of capital, while non-SOEs may face increased cost of capital due to limited sources. In this situation, non-SOEs could have incentive to hoard more cash for unexpected financing needs in the future. We expect that the impact of politician downfalls on the change of cash holding should be more pronounced in non-SOEs. Specifically, we create a dummy variable,  $Non-SOEs_{i,t}$  which is equal to 1 if firm  $i$  is not state owned enterprise and 0 otherwise. We augment our baseline regression  $eq(1)$  by introducing the interaction term between  $Non-SOEs_{i,t}$  and  $Case_{i,t-1}$  ( $Case\ Numbers_{i,t-1}$ ). A positive and significant coefficient on the interaction term would suggest that the impact of politician downfalls on treated firms is more pronounced in Non-SOEs.

The estimate results are reported in Panel A of Table 5. In column 1, the dependent variable is the  $\Delta(Cash/NetAssets)$ . We find that the coefficient on  $Non-SOEs_{i,t}*Case_{i,t-1}$  is 0.024 and highly significant (t-value=3.81). For SOEs, the impact of politician downfalls on the change of cash holding is small (-0.004) and insignificant (t=-0.79), while for non-SOEs, the change of cash holding measured by  $Cash/NetAssets$  in affected firms is 0.024 (the standardized difference is 12.6%) higher than the change of cash holding in unaffected firms. The result thus suggests that the effect of politician downfalls concentrate on non-SOEs. In column 2, we replace  $Case_{i,t-1}$  with  $Case\ Numbers_{i,t-1}$ , and find the coefficient on the interaction term is 0.02, significant at 1% level. In column 3 and 4, we replace  $\Delta(Cash/NetAssets)$  with  $\Delta(Cash/Total\ Assets)$ . We find that the results show a similar pattern. Overall, the results are consistent with our prediction that the

impact of politician downfalls on the change of cash holding is more pronounced in Non-SOEs.

[Insert Table 5 here]

#### *Firms with PC vs Firms with no PC*

We next assess whether the impact of politician downfalls would differ between firms with political connections and firms with no political connections. We conjecture that the crackdowns of high-level officials would severely damage CEOs' and chairmen's political ties with the government, thus increasing the cost of capital for firms that used to rely on these political ties to raise external funds. While for firms that do not have political connections, their financing channel would not be affected much by the corruption events. People may have the concern that the political connection measure might not capture the de facto political connection between the company and the officials prosecuted, for example, a firm would be defined as one with political connections even if it is only connected to officials that are not under investigation. However, in China, corruption is pervasive and notorious. The impelling anti-corruption campaign makes every bureaucratic people feel insecure and conceive of being the target of CCDI. As a result, even for firms that are connected to officials that are not under investigation, their ability to obtain external capital through their CEOs' or chairmen's political ties would also be impeded.

We create a dummy variable,  $PC_{i,t}$ , which is equal to 1 if the CEO or chairman of firm  $i$  also serve a position in the government at/before time  $t$  and 0 otherwise. We include  $PC_{i,t}$  and its interaction term with  $Case_{i,t}$  ( $Case\ Number_{i,t-1}$ ) in our baseline model. The estimated results are reported in Panel B of Table 5. We find that the coefficients on the interaction terms,  $Case_{i,t-1} * PC_{i,t-1}$  and  $Case\ Number_{i,t-1} * PC_{i,t-1}$ , are positive and significant no matter which measures of

the change of cash holding we are using. However, the coefficients on the standalone  $Case_{i,t}$  ( $Case\ Number_{i,t-1}$ ) become less significant and their magnitude also decline relative to baseline results in Table 4. The results suggest that the impact of politician downfalls on the change of cash holding concentrates on politically connected firms, which confirms our argument that the disruption of firms' political ties is a crucial channel through which politician downfalls affect firms' cash policy.

#### *Non-SOEs with Political Connections*

The results in Panel A and Panel B of Table 5 suggest that non-SOEs and firms with political connections increase cash holdings significantly relative to their counter parties in the event provinces. To better understand the mechanism about the impact of politician downfalls on firms' cash policy, we further examine whether the effect is more pronounced in non-SOEs with political connections. Non-SOEs are generally plagued by more regulatory constraints and market failure. They could gain competitive advantage by building political connections with the government. However, an intensive relying on the political connections would make them vulnerable to the corruption investigation. Therefore, we expect that non-SOEs with political connections are likely to be affected by the corruption investigations and would increase their cash holding to a greater extent. To test on this, we interact  $Case_{i,t-1}$  ( $Case\ numbers_{i,t-1}$ ) with  $Non-SOEs_{i,t}$  and  $PC_{i,t-1}$  and re-estimate the model. The results are presented in Panel C. As expected, we find that the coefficients on  $Case_{i,t-1} * Non-SOEs_{i,t} * PC_{i,t-1}$  and  $Case\ numbers_{i,t-1} * Non-SOEs_{i,t} * PC_{i,t-1}$  are positive and significant, which suggests that cash holding of non-SOEs with political connections are most sensitive to politician downfalls.

To ease the concern that affected firms (firms in provinces with politician downfalls)

might have characteristics that are essentially different from the unaffected firms (firms in provinces with no politician downfalls), we match each firm in the event provinces with a firm that is not in the event provinces but has the same characteristics using the propensity score matching method. We then use the matched sample to conduct a difference-in-difference (DID) test.

In specific, we first run a probit model where the dependent variable is *Case* and the independent variables are the same set of firm level characteristics in equation 1. We then match each treated firm with one control firm using the propensity score obtained from the probit model. We calculate and test the difference of the change of cash holding between the treatment group and the control group. The results are reported in Panel A of Table 6. We find that the change of *Cash/Net assets* (*Cash/Total assets*) in treated firms is 0.013 (0.007) higher than the change in the control firms. The differences are highly significantly at 1% level. We repeat the same exercise in subsamples of SOEs, non-SOEs, firms without political connections (no PC), firms with political connections (PC), SOEs without political connections, SOEs with political connections, non-SOEs without political connections, and non-SOEs with political connections. We find that the differences are significantly positive in non-SOEs and firms with political connections. Interesting, we find the differences are small and lack of significance in SOEs no matter whether they have political connections with the government or not. However, the differences are positively significant in non-SOEs without political connections and non-SOEs with political connections, nevertheless, the differences in the latter subsample are more significant.

In Panel B, we further add four provincial level macro variables to the probit model: GDP per capita, GDP growth, unemployment rate and inflation rate. We find the results have a very

similar pattern. Overall, the results are highly consistent with our previous analysis.

[Insert Table 6 here]

### *Expected Disruption of Political Connections*

The impact of the politician downfalls on the change of cash holding should vary with the expected degree to which valuable political connections are disrupted. Greater disruption should generate stronger incentives to reserve cash to avoid future cash-flow shocks at the event announcement. We exploit two characteristics of the prosecuted politicians that are correlated with the level of disruption arising from the politician downfalls: whether the prosecuted politicians have served in the current province for more than ten years and the number of years that the prosecuted politicians have posted at a vice-ministerial level or above in the current province.

The downfall of a long-servicing politician is likely to have a more significant impact on existing political relations. To test for this effect, we create a dummy variable  $SameProv_{i,t-1}$  that equals 1 if the corruptive politician has served in the current province for more than ten years and 0 otherwise. We also measure the tenure of the corruptive politician ( $YearofVice_{i,t-1}$ ) using the log of the number of years that he has posted at a vice-ministerial level or above in the current province.

We create interaction terms between these two variables and  $Case_{i,t-1}$  (*Case numbers* $_{i,t-1}$ ) and add them in the baseline model. The estimated results are reported in Table 7. No matter which variables are used to measure the change of cash holding, we find the coefficients on  $Case_{i,t-1} * SameProv_{i,t-1}$  and  $Case_{i,t-1} * YearofVice_{i,t-1}$  are significantly positive. This suggests that the relative increase of cash holding in affected firms is strengthened with the increase of politicians'

service years in the event provinces. We find the results are robust when we use  $Case\ number_{i,t-1}$ . Overall, the results suggest that affected firms have incentive to hold more cash when the expected disruption of political connections is more significant.

[Insert Table 7 here]

## 6. Change of Cash Holding and Precautionary Saving Motive

Our argument is in line with precautionary saving hypothesis. That is, when facing frictions in obtaining funds, firms have incentive to reserve cash to avoid giving up investment opportunities in the future. To provide evidence on this, we divide our sample by the level of investment opportunities, the level of tangible assets, and the degree of financial constraint. In this section, we examine how our results differ in these subsamples.

### *High investment opportunity vs low investment opportunity*

Firms with more investment opportunities have incentive to hold more cash when they face frictions in external financing. If firms' relation-based financing channel is impeded by the corruption investigations, firms with high investment opportunities would have stronger incentive to hoard cash to avoid giving up potential investment opportunities in the future. We use Tobin's Q to measure firms' investment opportunities and create a dummy variable, *High Tobin's Q*, which is equal to 1 if firm i's Q is above the sample median and zero otherwise. We then add the interaction term between our event dummy,  $Case_{i,t-1}$ , and *High Tobin's Q* to the baseline regression. The regression results are presented in Panel A of Table 8.

[Insert Table 8 here]

We find that the coefficients on  $Case * High\ Tobin's\ Q$  ( $Case\ numbers * High\ Tobin's\ Q$ ) in

all specifications are significantly positive, which suggests that the change of cash holding in firms with high investment opportunities are more sensitive to politician downfalls. For example, as shown in column 1, the impact of politician downfalls on the change of *Cash/Net assets* in firms with high Q is about 2.33 times  $((0.02-0.006)/0.006)$  larger than the change in firms with low Q. The results support our argument that the politician downfalls introduce negative shocks to firms' financial capability and motivate them to hold more cash, especially for those with valuable investment opportunities.

#### *High tangibility vs low tangibility*

We next examine whether firms' tangible assets can act as a cushion to the financing capacity shocks. Firms could more easily obtain funds from the state-owned banks either when they could pledge more collateral to the banks or when they have an intimate relationship with the government. Firms with more tangible assets could still maintain reasonable access to the funds even in the case that their relation-based financing channel is damaged by the corruption shocks. We thus expect that the impact of politician downfalls should be more pronounced in firms with lower level of tangible assets.

We create a dummy variable, *High Tangibility<sub>i,t</sub>* which is equal to 1 if the level of firm i's tangible assets is above the sample median and 0 otherwise. We include the interaction term between *High Tangibility<sub>i,t</sub>* and *Case<sub>i,t</sub>* (*Case numbers<sub>i,t</sub>*) in our model. The estimated results are in Panel B of Table 8. As expected we find that the coefficients on the interaction terms are negative and significant, indicating that the impact of politician downfalls on the change of cash holding is alleviated by the level of tangible assets that the firms have. This magnitude is economically significant. For example, in column 1, the coefficients on *Case<sub>i,t</sub>* and *Case\*High*



$Tangibility_{i,t}$  are 0.018 and -0.013, respectively. This means that the increase of cash holding in low tangible firms is 3.6 times ( $3.6=0.018/(0.018-0.013)$ ) higher than the increase in high tangible firms.

#### *Financially Constrained vs Financially Unconstrained*

Based on existing studies, such as Almeida and Campello (2007), financial flexibility is relevant only when firms are financially constrained. Accordingly, affected firms (firms locating in provinces with politician downfalls) would have incentive to hold more cash when they are plagued by financial constraints. We use two variables to measure the level of firms' financial constraints. The first variable is the Hadlock and Pierce (2010)'s HP index. A firm is defined as financially constrained (financially unconstrained) if the firm's HP index is below (above) the sample median. The second variable is the dividend yield. Firms having the ability to pay dividend are believed to be less financially constrained. Firms whose dividend yield is above the sample median are defined as high dividend yield firms (*High dividend yield*=1, financially unconstrained) and those below the median are defined as low dividend yield firms (*High dividend yield*=0). We add interaction term between  $Case_{i,t}$  (*Case numbers* $_{i,t}$ ) and the financial constraint variables to our model. The estimated results are reported in Panel C and Panel D of Table 8. We find that the coefficients on  $Case_{i,t}$  are insignificantly different from zero, while the coefficients on  $Case*Financially\ constrained_{i,t}$  are positive and highly significant. This finding is consistent with Almeida and Campello (2007) that the precautionary saving motivation is relevant only when firms are financially constrained. In addition, we find the coefficients on  $Case*High\ dividend\ yield_{i,t}$  are significantly negative, which confirms our finding that the impact of politician downfalls on cash holding concentrates on financially constrained firms. Overall,

the results show that when firms are financially constrained, politician downfalls would lead to a more pronounced increase in firms' cash holding.

## 7. Cash Flow Sensitivity of Cash

Our finding in previous sections suggests that firms in provinces with politician downfalls would experience a significant increase in cash holding relative to the firms in provinces without politician downfalls. This finding relies on two assumptions: 1) firms influenced by politician downfalls save more cash out of cash flow, and 2) the disruption of relation-based channel increases the marginal value of cash. In this and the following sections, we directly test the validity of these two assumptions.

We first test whether firms' cash flow sensitivity of cash would increase after their relation-based financing channels are disrupted by the politician downfalls. Prior literature has documented that firms would save cash out of cash flow (positive cash flow sensitivity of cash) when they are financially constrained (Almeida, Campello, and Weisbach, 2004). We thus expect that a firm would accordingly save more cash out of cash flow to hedge potential risk if the firm's financing capacity is damaged due to the disruption of relation-based financing channel. Specifically, we follow Almeida, Campello, and Weisbach (2004) to conduct our baseline regression analysis. The model is specified as following:

$$\Delta Cash_{i,t} = \alpha_i + \omega_t + \beta Case_{i,t-1} + \gamma Cashflow_{i,t} + \lambda Case_{i,t-1} \times Cashflow_{i,t} + \phi X_{i,t} + \xi_{i,t} \quad (2)$$

Where *Cashflow* is defined as (Earnings before extraordinary items and depreciation - interest expenses - tax expenses - dividends)/total assets. We interact *Cashflow* with *Case* to capture the impact of politician downfalls on firms' cash flow sensitivity of cash.  $\alpha_i$  is firm fixed effect and  $\omega_t$  is year fixed effect. Our focus is  $\lambda$ . A significant and positive  $\lambda$  would suggest that

firms in provinces with politician downfalls would save more cash out of cash flow relative to firms in other provinces without downfalls in the subsequent year.  $X_{i,t}$  is the same set of control variables as used in equation 1.

[Insert Table 9 here]

Table 9 presents the regression results. In columns 1 and 2, the dependent variable is  $\Delta(\text{Cash}/\text{Net assets})$ . The coefficients on the interaction terms (both  $\text{Case} \times \text{Cash flow}$  and  $\text{Case Numbers} \times \text{Cash flow}$ ) are positive and highly significant, suggesting that the affected firms whose financing capacity is damaged by politicians downfalls have more incentive to save cash out of cash flow relative to otherwise unaffected firms. This increase in cash flow sensitivity of cash is also economically significant. For instance, in column 1, unaffected firms would save 0.140 dollar out of each dollar of cash flow generated, while for the affected firms, they would save 0.217 dollar from every dollar of cash flow, or a 55% increase. In columns 3 and 4, the dependent variable is  $\Delta(\text{Cash}/\text{Total assets})$ , and we find a similar result. Overall, the results in Table 8 provide us support for the first assumption that firms affected by the politician downfall actually save more cash out of cash flow.

## **8. Marginal Value of Cash Holding**

Another important assumption on which our basic findings rely is that firms' marginal value of cash holdings should increase when their financing capacity is damaged by the politician downfalls. In this section, we examine whether firms in provinces with politician downfalls have higher marginal value of cash holdings than firms in provinces without downfalls. Faulkender and Wang (2006) suggest that shareholders would place less value on the

cash that firms hold when firms have better access to capital markets. We follow their method and specify our model as follows:

$$r_{i,t} - R_{i,t}^B = \beta_0 + \beta_1 Case_{i,t-1} + \beta_2 Case_{i,t-1} \times \frac{\Delta C_{i,t}}{ME_{i,t-1}} + \beta_3 \frac{\Delta C_{i,t}}{ME_{i,t-1}} + \beta_4 \frac{\Delta E_{i,t}}{ME_{i,t-1}} + \beta_5 \frac{\Delta NA_{i,t}}{ME_{i,t-1}} + \beta_6 \frac{\Delta RD_{i,t}}{ME_{i,t-1}} + \beta_7 \frac{\Delta Int_{i,t}}{ME_{i,t-1}} \quad (3)$$

$$+ \beta_8 \frac{\Delta Div_{i,t}}{ME_{i,t-1}} + \beta_9 \frac{C_{i,t-1}}{ME_{i,t-1}} + \beta_{10} L_{i,t} + \beta_{11} \frac{NF_{i,t}}{ME_{i,t-1}} + \beta_{12} \frac{C_{i,t-1}}{ME_{i,t-1}} \times \frac{\Delta C_{i,t}}{ME_{i,t-1}} + \beta_{13} L_{i,t} \times \frac{\Delta C_{i,t}}{ME_{i,t-1}} + \alpha_i + \omega_t + \xi_{i,t}$$

Where  $r_{i,t}$  is firm  $i$ 's stock returns in fiscal year  $t$  and  $R_{i,t}^B$  is stock  $i$ 's benchmark returns. We use the value-weighted return of the 25 Fama-French portfolios based on size and book-to-market ratio as the benchmark returns. We add our variable of interest  $Case_{i,t-1}$  to the model and we focus on the coefficient on the interaction term  $Case_{i,t-1} * \Delta C_{i,t} / ME_{i,t-1}$ ,  $\beta_2$ , which captures the impact of politician downfalls on the changes of cash value. We use the exactly same set of control variables used in Faulkender and Wang (2006), including, cash holding ( $C_{i,t}$ ), change in earnings ( $\Delta E_{i,t}$ ), change in net assets ( $\Delta NA_{i,t}$ ), change in R&D expenditure ( $\Delta RD_{i,t}$ ), change in interest expense ( $\Delta Int_{i,t}$ ), change in dividends ( $\Delta Div_{i,t}$ ) and leverage ( $L_{i,t}$ ). The summary statistics for the sample used in this analysis is reported in Panel B of Table 2.

Table 10 reports the estimate results. In column 1, we report the coefficients estimated using the standard cash value model. We find the coefficient on  $\Delta C_{i,t} / ME_{i,t-1}$  is 0.529, meaning one additional dollar of cash holding is worth 0.529 from the perspective of shareholders. The coefficients on the control variables are basically consistent with those in Faulkender and Wang (2006). In column 2, we add the interaction term,  $Case_{i,t-1} * \Delta C_{i,t} / ME_{i,t-1}$ . We find the coefficient on the interaction term is 0.240 and significant at 1% level. The coefficient on the standalone  $\Delta C_{i,t} / ME_{i,t-1}$  decreases to 0.487. The results suggest that one additional dollar of cash holding is worth 0.727 (0.487+0.240) in firms locating in provinces having politician downfalls, while it is only worth 0.487 in firms locating in provinces having no politician downfalls. In column 3, we alternatively use  $CaseNumbers_{i,t-1}$ . The coefficient on  $CaseNumbers_{i,t-1} * \Delta C_{i,t} / ME_{i,t-1}$  is 0.147 and

significant at 1% level, confirming our finding that the marginal value of cash holding is higher in affected firms than that in unaffected firms. Overall, the results suggest that the market places more value on firms' cash holding when they locate in provinces with politician downfalls.

[Insert Table 10 here]

## **9. Conclusion**

We examine the impact of corruption on corporate cash policy using the downfalls of senior corruptive politicians in China. We find that firms whose relation-based financing channel is damaged by the corruption prosecutions would increase their cash holding relative to firms that are not affected by the prosecutions. In addition, we find that the results are more pronounced in non-state enterprises and in firms whose CEOs or chairmen also serve position in the local government. The effect is also more pronounced when the prosecuted politicians have a long tenure on their positions in the event provinces. These results support our argument that the disruption of relation-based financing channel is caused by the corruption prosecutions. Furthermore, we find that our results are more pronounced in firms with low level of tangible assets, in financially constrained firms, and in firms with more investment opportunities. Lastly, we find that affected firms display a higher cash flow sensitivity of cash and enjoy higher value for each additional dollar of cash holding than do firms unaffected by the politician downfalls. Overall, our findings suggest that corruption has an important impact on firms' financial policy.

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**Table 1**  
**Corruption Cases by Year and Provinces**

This table reports the number of corruption cases in each province from 2004 to 2013. The rank of corrupted politicians is above or equivalent to that of the deputy provincial or deputy ministerial level (e.g. vice-governor of a province). The last column reports the total number of corruption cases for each province over the sample period. The last row reports the total number of corruption cases for each year in the country.

Provinces	2004	2005	2006	2007	2008	2009	2011	2012	2010	2013	Total
Anhui	0	2	1	0	0	0	0	0	0	1	4
Beijing	0	0	1	0	0	0	0	0	0	0	1
Fujian	0	1	0	0	1	0	0	0	0	0	2
Gansu	0	1	0	0	0	0	0	0	0	0	1
Guangdong	0	1	0	0	0	2	0	0	1	0	4
Guangxi	0	0	0	1	0	0	0	0	0	1	2
Guizhou	0	0	0	0	0	1	0	0	0	1	2
Hainan	0	1	0	0	0	0	0	0	0	0	1
Hebei	0	0	0	0	0	0	0	0	0	0	0
Henan	0	2	0	0	0	0	0	0	0	0	2
Heilongjiang	4	0	0	0	0	0	0	0	0	0	4
Hubei	0	0	0	0	0	0	0	0	0	2	2
Hunan	0	0	0	0	0	0	0	0	0	1	1
Jilin	0	0	0	0	1	0	0	1	0	0	2
Jiangsu	1	0	1	0	0	0	0	0	0	1	3
Jiangxi	0	0	0	0	0	0	1	0	0	1	2
Liaoning	0	0	0	0	0	1	0	0	0	0	1
Neimenggu	0	0	0	0	0	0	1	0	0	1	2
Ningxia	0	0	0	0	0	1	0	0	0	0	1
Qinghai	0	0	0	0	0	0	0	0	0	0	0
Shandong	0	0	1	1	0	1	0	1	0	0	4
Shanxi	1	0	0	0	0	0	0	0	0	0	1
Shan Xi	0	0	1	0	0	0	0	0	0	0	1
Shanghai	0	0	1	0	0	0	0	0	0	0	1
Sichuan	0	0	0	0	0	0	0	1	1	2	4
Tianjin	0	0	0	1	1	0	0	0	0	0	2
Xinjiang	0	0	0	0	0	0	0	0	0	0	0
Yunnan	0	0	0	0	0	0	0	0	0	0	0
Zhejiang	0	0	0	0	0	1	1	0	0	0	2
Chongqing	1	0	0	0	0	0	0	0	1	0	2
Tibet	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>7</b>	<b>8</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>11</b>	<b>54</b>



**Table 2: The Summary Statistics of Variables**

This Table presents summary statistics of the variables used in the paper. The sample period is from 2005 to 2014. Panel A presents the summary statistics of variables used in analysis of cash holdings. Panel B presents the summary statistics of variables used in analysis of marginal value of cash holdings. All variables are defined in Appendix A.

<i>Panel A: Analysis of cash holdings</i>						
Variables	N	Mean	Std.	Q1	Q2	Q3
$\Delta(\text{Cash}/\text{Net assets})$	18095	-0.042	0.19	-0.09	-0.01	0.04
$\Delta(\text{Cash}/\text{Total assets})$	18095	-0.015	0.08	-0.05	-0.01	0.03
Case	18095	0.199	0.40	0.00	0.00	0.00
Case numbers	18095	0.259	0.59	0.00	0.00	0.00
Cash flow	18095	0.067	0.30	0.03	0.06	0.09
Firm size	18095	21.68	1.24	20.8	21.5	22.4
Firm leverage	18095	0.464	0.21	0.30	0.47	0.63
Tobin's Q	18095	3.303	2.81	1.57	2.47	4.08
Capital expenditures	18095	0.059	0.06	0.02	0.04	0.08
Acquisition intensity	18095	0.013	0.08	0.00	0.00	0.00
$\Delta\text{net working capital}$	18095	-0.003	0.08	-0.04	0.00	0.04
$\Delta\text{short debt}$	18095	0.002	0.08	-0.04	0.01	0.05

  

<i>Panel B: Analysis of marginal value of cash holdings</i>						
Variables	N	Mean	Std.	Q1	Q2	Q3
Size, BM/ME adjusted returns	15931	-0.004	0.48	-0.25	-0.08	0.15
Case	15931	0.209	0.41	0.00	0.00	0.00
Case numbers	15931	0.273	0.60	0.00	0.00	0.00
$\Delta\text{Cash}/\text{ME}$	15931	0.019	0.12	-0.03	0.00	0.04
$\Delta\text{Earnings}/\text{ME}$	15931	0.013	0.08	-0.01	0.00	0.02
$\Delta\text{Net Assets}/\text{ME}$	15931	0.065	0.18	0.00	0.02	0.06
$\Delta\text{R\&D}/\text{ME}$	15931	0.000	0.00	0.00	0.00	0.00
$\Delta\text{Interest}/\text{ME}$	15931	0.002	0.01	0.00	0.00	0.00
$\Delta\text{Dividends}/\text{ME}$	15931	0.001	0.01	0.00	0.00	0.00
Lagged Cash/ME	15931	0.672	2.59	0.06	0.13	0.25
Leverage	15931	0.484	0.23	0.31	0.49	0.64
Net Financing/ME	15931	0.027	0.21	-0.03	0.00	0.06

**Table 3**  
**Politicians' Downfalls and Firm's Cash Holding Change**

This table reports the change of firm's cash holding in provinces with politician downfalls.  $Case_{i,t-1}$  equals 1 if there is at least one corruption investigation on high-level politicians in firm  $i$ 's province in year  $t-1$  and 0 otherwise.  $CaseNumber_{i,t-1}$  is the total number of corruption investigations in firm  $i$ 's province in year  $t-1$ . All variables are defined in the Appendix A. The  $t$  statistics are reported in parentheses. Significance at the 10%, 5%, and 1% level is indicated by \*, \*\*, and \*\*\*, respectively.

Dependent variable	$\Delta(\text{Cash/Net assets})_t$		$\Delta(\text{Cash/Total assets})_t$	
	(1)	(2)	(3)	(4)
$Case_{t-1}$	0.011*** ( 3.24)		0.006*** ( 3.71)	
$Case\ numbers_{t-1}$		0.008*** ( 3.17)		0.005*** ( 3.94)
$Cash\ flow_t$	0.155*** ( 5.18)	0.155*** ( 5.17)	0.077*** ( 4.63)	0.077*** ( 4.62)
$Firm\ size_t$	0.009* ( 1.83)	0.009* ( 1.83)	0.006** ( 2.64)	0.006** ( 2.63)
$Firm\ leverage_t$	0.095*** ( 4.10)	0.095*** ( 4.10)	0.019** ( 2.19)	0.019** ( 2.21)
$Tobin's\ Q_t$	0.004*** ( 3.41)	0.004*** ( 3.38)	0.002*** ( 6.54)	0.002*** ( 6.47)
$Capital\ expenditures_t$	-0.934*** ( -4.90)	-0.934*** ( -4.88)	-0.448*** ( -5.93)	-0.448*** ( -5.90)
$Acquisition\ intensity_t$	-0.086*** ( -3.47)	-0.086*** ( -3.47)	-0.045*** ( -4.49)	-0.045*** ( -4.50)
$\Delta net\ working\ capital_t$	-0.771*** ( -5.49)	-0.771*** ( -5.52)	-0.388*** ( -6.33)	-0.388*** ( -6.39)
$\Delta short\ debt_t$	-0.386*** ( -5.08)	-0.387*** ( -5.10)	-0.184*** ( -4.69)	-0.184*** ( -4.71)
Intercept	-0.184* ( -1.88)	-0.184* ( -1.88)	-0.137*** ( -2.84)	-0.137*** ( -2.83)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province
N	18095	18095	18097	18097
Adj. R-squared	45.11%	45.11%	38.48%	38.49%

**Table 4****The Timing of Corruption Cases and Firm's Cash Holding**

This table reports the results of probit regressions of probability of corruption investigations on firm's average cash holding/change of cash holding in prior years. The dependent variable is a dummy variable,  $Case_{i,t-1}$ .  $Case_{i,t-1}$  equals 1 if there is at least one corruption investigation on high-level politicians in firm  $i$ 's province in year  $t-1$  and 0 otherwise. The key independent variables are the mean of the level and the change of cash holdings of all firms headquartering in the provinces with corruption investigations. We also control for the province macro conditions, including GDP per capital, GDP growth, Unemployment rate, and Inflation rate. The chi-square statistics are reported in parentheses. Significance at the 10%, 5%, and 1% level is indicated by \*, \*\*, and \*\*\*, respectively.

Dependent variable	Case <sub>t</sub>			
	(1)	(2)	(3)	(4)
Cash/Net assets in t	-1.753 (0.58)			
Cash/Net assets in t-1	0.117 (0.00)			
Cash/Net assets in t-2	1.632 (0.52)			
Cash/Total assets in t		0.396 (0.00)		
Cash/Total assets in t-1		-2.951 (0.23)		
Cash/Total assets in t-2		3.602 (0.42)		
Δ(Cash/Net assets) in t			2.260 (0.49)	
Δ(Cash/Net assets) in t-1			-1.126 (0.13)	
Δ(Cash/Net assets) in t-2			-2.280 (0.51)	
Δ(Cash/Total assets) in t				4.854 (0.49)
Δ(Cash/Total assets) in t-1				-3.835 (0.33)
Δ(Cash/Total assets) in t-2				-4.162 (0.43)
Unemployment rate <sub>t</sub>	-9.009 (0.23)	-5.668 (0.10)	-5.951 (0.12)	-6.242 (0.14)
GDP per capital <sub>t</sub>	0.265 (1.34)	0.250 (1.20)	0.264 (1.35)	0.270 (1.42)
GDP growth <sub>t</sub>	1.368 (0.25)	1.489 (0.29)	1.374 (0.25)	1.444 (0.27)
Inflation rate <sub>t</sub>	-34.679** (4.32)	-33.119** (3.99)	-33.059** (4.04)	-33.051** (4.00)
Intercept	-7.651 (0.00)	-7.513 (0.00)	-7.428 (0.00)	-7.495 (0.00)
Year FE	Yes	Yes	Yes	Yes
N	310	310	310	310
Adj. R-squared	10.21%	10.02%	10.23%	10.31%

**Table 5**  
**Politicians' Downfalls and Change of Cash Holdings in Non-SOEs and in Politically Connected Firms**

This table reports the impact of corruption investigations on the change of firm's cash holding in non-SOEs and in firms with political connections.  $Case_{i,t-1}$  equals 1 if there is at least one corruption investigation on high-level politicians in firm  $i$ 's province in year  $t-1$  and 0 otherwise.  $CaseNumber_{i,t-1}$  is the total number of corruption investigations on high-level politicians in firm  $i$ 's province in year  $t-1$ .  $Non-SOEs_{i,t-1}$  equals 1 if the state or state organs have less than 30% shares of firm  $i$  in year  $t-1$  and 0 otherwise.  $PC_{i,t-1}$  equals 1 if the CEO or chairman of firm  $i$  has professional connection with the local government in year  $t-1$  and 0 otherwise.  $Control_{i,t}$  include all the control variables used in Table 3. All other variables are defined in Appendix A. In Panel A, we examine the impact of corruption investigations on the change of cash holding in non-SOEs. In Panel B, we examine the impact of corruption investigations on the change of cash holding in firms that are politically connected with local governments. In Panel C, we examine the impact of corruption investigations on the change of cash holding in non-SOEs that are politically connected with local government. All variables are defined in the Appendix A. The  $t$  statistics are reported in parentheses. Significance at the 10%, 5%, and 1% level is indicated by \*, \*\*, and \*\*\*, respectively.

Panel A: Non-SOEs				
Dependent variable	$\Delta(\text{Cash/Net assets})_t$		$\Delta(\text{Cash/Total assets})_t$	
	(1)	(2)	(3)	(4)
$Case_{t-1}$	-0.004 (-0.79)		-0.001 (-0.47)	
$Case_{t-1} * Non-SOEs_{t-1}$	0.024*** (3.81)		0.011*** (3.79)	
$Case\ numbers_{t-1}$		-0.004 (-1.01)		-0.001 (-0.36)
$Case\ numbers_{t-1} * Non-SOEs_{t-1}$		0.020*** (3.92)		0.008*** (3.71)
$Non-SOEs_{t-1}$	0.002 (0.31)	0.002 (0.28)	-0.001 (-0.39)	-0.001 (-0.39)
Control	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province
N	18095	18095	18095	18095
Adj. R-squared	45.51%	45.51%	38.90%	38.90%
Panel B: Political connection				
Dependent variable	$\Delta(\text{Cash/Net assets})_t$		$\Delta(\text{Cash/Total assets})_t$	
	(1)	(2)	(3)	(4)
$Case_{t-1}$	0.005 (1.28)		0.003* (1.93)	
$Case_{t-1} * PC_{t-1}$	0.026*** (3.48)		0.010*** (2.98)	
$Case\ numbers_{t-1}$		0.005 (1.59)		0.003** (2.32)
$Case\ numbers_{t-1} * PC_{t-1}$		0.016*** (2.66)		0.007** (2.54)

PC <sub>t-1</sub>	-0.003 (-0.59)	-0.002 (-0.38)	-0.003 (-1.10)	-0.003 (-0.98)
Control	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province
N	18095	18095	18095	18095
Adj. R-squared	45.50%	45.48%	38.87%	38.87%

Panel C: Non-SOEs with political connection

Dependent variable	$\Delta(\text{Cash/Net assets})_t$		$\Delta(\text{Cash/Total assets})_t$	
	(1)	(2)	(3)	(4)
Case <sub>t-1</sub>	-0.006 (-1.11)		-0.002 (-0.62)	
Case <sub>t-1</sub> *Non-SOEs <sub>t-1</sub>	0.019*** (2.62)		0.008** (2.54)	
Case <sub>t-1</sub> *PC <sub>t-1</sub>	0.012 (0.91)		0.002 (0.43)	
Case <sub>t-1</sub> *Non-SOEs <sub>t-1</sub> *PC <sub>t-1</sub>	0.025* (1.79)		0.011** (2.05)	
Case numbers <sub>t-1</sub>		-0.006 (-1.28)		-0.001 (-0.46)
Case numbers <sub>t-1</sub> *Non-SOEs <sub>t-1</sub>		0.017*** (3.00)		0.007** (2.56)
Case numbers <sub>t-1</sub> *PC <sub>t-1</sub>		0.008 (0.85)		0.001 (0.33)
Case numbers <sub>t-1</sub> *Non-SOEs <sub>t-1</sub> *PC <sub>t-1</sub>		0.021* (1.83)		0.008* (1.89)
Non-SOEs <sub>t-1</sub>	0.001 (0.19)	0.001 (0.10)	-0.001 (-0.42)	-0.001 (-0.43)
PC <sub>t-1</sub>	-0.004 (-0.59)	-0.004 (-0.55)	-0.003 (-0.85)	-0.003 (-0.82)
Non-SOEs <sub>t-1</sub> *PC <sub>t-1</sub>	0.005 (0.44)	0.006 (0.55)	0.001 (0.24)	0.001 (0.28)
Control	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province
N	18095	18095	18095	18095
Adj. R-squared	45.55%	45.54%	38.94%	38.93%

**Table 6****The Change of Firm's Cash Holdings between Treated and Matched Control Firms**

This table reports the difference in change of firm's cash holdings between treated firms and matched control firms. First, we run a probit model where the dependent variable is  $Case_{i,t}$  and the independent variables are a set of firm and regional characteristics. With the propensity score obtained from the probit model, we match each treated firm with a firm having the closest score to it. Finally, we calculate the difference of cash holding change between these two groups of firms. In Panel A, the independent variables used in the probit model are the same as those in our baseline mode in Table 3. In Panel B, the independent variables used in the probit model are the independent variables in our baseline model plus four variables measuring regional development. The four variables are: GDP per capita, GDP growth, Unemployment rate, and Inflation rate. We conduct the difference-in-difference tests using 9 samples, including all firms, SOEs, non-SOEs, firms having no political connections, firms having political connections, SOEs having no political connections, SOEs having political connections, Non-SOEs having no political connections, and Non-SOEs having political connections. Significance at the 10%, 5%, and 1% level is indicated by \*, \*\*, and \*\*\*, respectively.

Panel A: Matching based on the independent variables in the baseline model.						
	$\Delta(\text{Cash/Net assets})$			$\Delta(\text{Cash/Total assets})$		
	Control (i)	Treated (ii)	Dif (ii-i)	Control (i)	Treated (ii)	Dif (ii-i)
All firms	-0.047	-0.035	0.013***	-0.019	-0.012	0.007***
SOEs	-0.010	-0.010	0.000	-0.004	-0.005	-0.001
Non-SOEs	-0.064	-0.045	0.019***	-0.024	-0.017	0.007**
No PC	-0.044	-0.037	0.007	-0.014	-0.013	0.001
PC	-0.055	-0.026	0.029***	-0.023	-0.010	0.013***
SOEs without PC	-0.011	-0.013	-0.002	-0.004	-0.005	-0.001
SOEs with PC	-0.025	-0.001	0.024*	-0.011	-0.003	0.008
Non-SOEs without PC	-0.069	-0.052	0.017**	-0.024	-0.018	0.006*
Non-SOEs with PC	-0.070	-0.036	0.034***	-0.027	-0.012	0.015**
Panel B: Further control for regional macro-economic conditions						
	$\Delta(\text{Cash/Net assets})$			$\Delta(\text{Cash/Total assets})$		
	Control (i)	Treated (ii)	Dif (ii-i)	Control (i)	Treated (ii)	Dif (ii-i)
All firms	-0.045	-0.033	0.012***	-0.018	-0.013	0.005**
SOEs	-0.008	-0.010	-0.002	-0.003	-0.005	-0.002
Non-SOEs	-0.070	-0.050	0.021***	-0.028	-0.019	0.009***
No PC	-0.040	-0.035	0.005	-0.015	-0.015	0.001
PC	-0.055	-0.025	0.030***	-0.023	-0.012	0.011**
SOEs without PC	-0.011	-0.011	-0.000	-0.005	-0.005	-0.001
SOEs with PC	-0.025	-0.003	0.022*	-0.012	-0.004	0.008
Non-SOEs without PC	-0.075	-0.051	0.024***	-0.027	-0.019	0.008**
Non-SOEs with PC	-0.078	-0.033	0.045***	-0.032	-0.015	0.017***

**Table 7**  
**The Impact of Expected Disruption of Political Connections**

This table reports the impact of expected disruption of political connections on firm's cash holding change.  $Case_{i,t-1}$  equals 1 if there is at least one corruption investigation on high-level politicians in firm  $i$ 's province in year  $t-1$  and 0 otherwise.  $CaseNumber_{i,t-1}$  is the total number of corruption investigations on high-level politicians in firm  $i$ 's province in year  $t-1$ .  $SameProv$  is equal to 1 if the corruptive politician has served in the current province for more than ten years and 0 otherwise.  $YearofVice$  is the number of years since the corruptive politician got a vice-ministerial level in the event province. All variables are defined in the Appendix A. The  $t$  statistics are reported in parentheses. Significance at the 10%, 5%, and 1% level is indicated by \*, \*\*, and \*\*\*, respectively.

Dependent variable	$\Delta(\text{Cash/Net assets})_t$				$\Delta(\text{Cash/Total assets})_t$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$Case_{t-1}$	-0.003 (-0.24)	0.002 (0.92)			-0.002 (-0.41)	0.001 (0.73)		
$Case_{t-1} * SameProv_{t-1}$	0.014*** (4.24)				0.008*** (4.56)			
$Case_{t-1} * YearofVice_{t-1}$		0.002** (2.24)				0.001*** (2.91)		
$Case\ numbers_{t-1}$			-0.002 (-0.23)	0.001 (0.52)			-0.002 (-0.37)	0.000 (0.49)
$Case\ numbers_{t-1} * SameProv_{t-1}$			0.011*** (3.99)				0.007*** (4.32)	
$Case\ numbers_{t-1} * YearofVice_{t-1}$				0.002** (2.12)				0.001** (2.51)
Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province	Province	Province	Province	Province
N	18095	18095	18095	18095	18095	18095	18095	18095
Adj. R-squared	45.46%	45.46%	45.46%	45.45%	38.85%	38.84%	38.85%	38.85%

**Table 8****The Impact of Investment Opportunity and Financial Constraint**

This table reports the impact of investment opportunity and financial constraint on firm's cash holding change following the downfalls of politicians.  $Case_{i,t-1}$  equals 1 if there is at least one corruption investigation on high-level politicians in firm  $i$ 's province in year  $t-1$  and 0 otherwise.  $CaseNumber_{i,t-1}$  is the total number of corruption investigations on high-level politicians in firm  $i$ 's province in year  $t-1$ .  $HighTobin'sQ_{i,t-1}$  equals 1 if firm  $i$ 's Tobin's  $Q$  is above the sample median in year  $t-1$  and 0 otherwise.  $HighTangibility_{i,t-1}$  equals 1 if firm  $i$ 's tangible asset is above the sample median in year  $t-1$  and 0 otherwise.  $FinancialConstraint_{i,t-1}$  equals 1 if firm  $i$ 's financial constraint index is below the sample median in year  $t-1$  and 0 otherwise. We follow Hadlock and Pierce (2010) to create the financial constraint index.  $HighDividendYield_{i,t-1}$  equals 1 if firm  $i$ 's dividend yield is above the sample median in year  $t-1$  and 0 otherwise. All other variables are defined in the Appendix A. In Panel A, we examine the impact of investment opportunity on firm's cash holding. In Panel B, we examine the impact of tangibility on firm's cash holding. In Panel C, we examine the impact of financial constraint on firm's cash holding. In Panel D, we examine dividend yield on firm's cash holding. All variables are defined in the Appendix A. The  $t$  statistics are reported in parentheses. Significance at the 10%, 5%, and 1% level is indicated by \*, \*\*, and \*\*\*, respectively.

Panel A: Investment opportunity				
Dependent variable	$\Delta(\text{Cash/Net assets})_t$		$\Delta(\text{Cash/Total assets})_t$	
	(1)	(2)	(3)	(4)
Case <sub>t-1</sub>	0.006*		0.003*	
	( 1.87)		( 1.88)	
Case <sub>t-1</sub> *High Tobin's Q <sub>t-1</sub>	0.020**		0.011**	
	( 1.99)		( 2.18)	
Case numbers <sub>t-1</sub>		0.004*		0.002*
		( 1.76)		( 1.84)
Case numbers <sub>t-1</sub> *High Tobin's Q <sub>t-1</sub>		0.015**		0.010*
		( 2.20)		( 1.86)
High Tobin's Q <sub>t-1</sub>	0.015***	0.015***	0.007***	0.007***
	( 2.86)	( 2.99)	( 3.02)	( 3.09)
Control	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province
N	18095	18095	18095	18095
Adj. R-squared	44.48%	44.47%	38.13%	38.13%
Panel B: Tangibility				
Dependent variable	$\Delta(\text{Cash/Net assets})_t$		$\Delta(\text{Cash/Total assets})_t$	
	(1)	(2)	(3)	(4)
Case <sub>t-1</sub>	0.018***		0.009***	
	( 3.93)		( 3.60)	
Case <sub>t-1</sub> *High Tangibility <sub>t-1</sub>	-0.013**		-0.004*	
	( -2.28)		( -1.77)	
Case numbers <sub>t-1</sub>		0.014***		0.007***
		( 3.36)		( 3.73)
Case numbers <sub>t-1</sub> *High Tangibility <sub>t-1</sub>		-0.008**		-0.003*
		( -2.18)		( -1.71)



High Tangibility <sub>t-1</sub>	-0.02*** (-3.95)	-0.02*** (-4.00)	-0.02*** (-6.71)	-0.02*** (-6.80)
Control	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province
N	18095	18095	18095	18095
Adj. R-squared	45.53%	45.53%	39.05%	39.05%

Panel C: Financial constraints

Dependent variable	$\Delta(\text{Cash/Net assets})_t$		$\Delta(\text{Cash/Total assets})_t$	
	(1)	(2)	(3)	(4)
Case <sub>t-1</sub>	0.002 (0.40)		0.003 (1.35)	
Case <sub>t-1</sub> *Financially constrained <sub>t-1</sub>	0.019*** (3.03)		0.008** (2.15)	
Case numbers <sub>t-1</sub>		0.002 (0.59)		0.003* (1.76)
Case numbers <sub>t-1</sub> *Financially constrained <sub>t-1</sub>		0.015*** (2.64)		0.007* (1.73)
Financially constrained <sub>t-1</sub>	-0.008 (-1.40)	-0.007 (-1.28)	-0.004 (-1.61)	-0.004 (-1.50)
Control	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province
N	18095	18095	18095	18095
Adj. R-squared	45.49%	45.48%	38.86%	38.86%

Panel D: Dividend yield

Dependent variable	$\Delta(\text{Cash/Net assets})_t$		$\Delta(\text{Cash/Total assets})_t$	
	(1)	(2)	(3)	(4)
Case <sub>t-1</sub>	0.016*** (3.44)		0.008*** (3.12)	
Case <sub>t-1</sub> *High dividend yield <sub>t-1</sub>	-0.008* (-1.76)		-0.004* (-1.73)	
Case numbers <sub>t-1</sub>		0.013*** (3.37)		0.007*** (3.51)
Case numbers <sub>t-1</sub> *High dividend yield <sub>t-1</sub>		-0.007** (-2.11)		-0.004* (-1.79)
High dividend yield <sub>t-1</sub>	0.002 (0.51)	0.002 (0.54)	-0.003** (-2.04)	-0.003* (-1.94)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province
N	18095	18095	18095	18095
Adj. R-squared	45.46%	45.45%	38.86%	38.87%

**Table 9**  
**Politicians' Downfalls and Firm's Cash Flow Sensitivity**

This table reports firm's cash flow sensitivity in provinces with politician downfalls.  $Case_{i,t-1}$  equals 1 if there is at least one corruption investigation on high-level politicians in firm  $i$ 's province in year  $t-1$  and 0 otherwise.  $CaseNumber_{i,t-1}$  is the total number of corruption investigations on high-level politicians in firm  $i$ 's province in year  $t-1$ . All variables are defined in the Appendix A. The  $t$  statistics are reported in parentheses. Significance at the 10%, 5%, and 1% level is indicated by \*, \*\*, and \*\*\*, respectively.

Dependent variable	$\Delta(\text{Cash/Net assets})_t$		$\Delta(\text{Cash/Total assets})_t$	
	(1)	(2)	(3)	(4)
$Case_{t-1}$	0.006 ( 1.47)		0.003 ( 1.10)	
$Case_{t-1} \times \text{Cash flow}_t$	0.077*** ( 2.64)		0.031** ( 2.39)	
$Case\ numbers_{t-1}$		0.004 ( 1.14)		0.003 ( 1.06)
$Case\ numbers_{t-1} \times \text{Cash flow}_t$		0.053** ( 2.51)		0.029* ( 1.93)
$\text{Cash flow}_t$	0.140*** ( 4.00)	0.141*** ( 4.11)	0.061*** ( 3.41)	0.065*** ( 3.40)
$\text{Firm size}_t$	0.009* ( 1.85)	0.009* ( 1.83)	0.006** ( 2.65)	0.006** ( 2.63)
$\text{Firm leverage}_t$	0.095*** ( 4.19)	0.095*** ( 4.15)	0.019** ( 2.26)	0.019** ( 2.25)
$\text{Tobin's } Q_t$	0.004*** ( 3.37)	0.004*** ( 3.31)	0.002*** ( 6.48)	0.002*** ( 6.40)
$\text{Capital expenditures}_t$	-0.933*** ( -4.82)	-0.934*** ( -4.80)	-0.448*** ( -5.85)	-0.448*** ( -5.81)
$\text{Acquisition intensity}_t$	-0.085*** ( -3.46)	-0.086*** ( -3.47)	-0.045*** ( -4.50)	-0.045*** ( -4.50)
$\Delta\text{net working capital}_t$	-0.770*** ( -5.46)	-0.771*** ( -5.45)	-0.388*** ( -6.30)	-0.388*** ( -6.27)
$\Delta\text{short debt}_t$	-0.386*** ( -5.07)	-0.387*** ( -5.10)	-0.184*** ( -4.69)	-0.184*** ( -4.71)
Intercept	-0.185* ( -1.90)	-0.184* ( -1.88)	-0.137*** ( -2.85)	-0.137*** ( -2.83)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Cluster	Province	Province	Province	Province
N	18095	18095	18095	18095
Adj. R-squared	45.46%	45.45%	38.85%	38.85%

**Table 10**  
**Corruption and Marginal Value of Cash Holdings**

This table reports firm's marginal value of cash holdings in provinces with politicians arrested/investigated.  $Case_{i,t-1}$  equals 1 if there is at least one corruption investigation on high-level politicians in firm  $i$ 's province in year  $t-1$  and 0 otherwise.  $CaseNumber_{i,t-1}$  is the total number of corruption investigations on high-level politicians in firm  $i$ 's province in year  $t-1$ . All variables are defined in the Appendix A. The  $t$  statistics are reported in parentheses. Significance at the 10%, 5%, and 1% level is indicated by \*, \*\*, and \*\*\*, respectively.

Dependent variable	(Size, BM/ME adjusted returns) <sub>t</sub>		
	(1)	(2)	(3)
Case <sub>t-1</sub>		-0.005 (-0.61)	
Case <sub>t-1</sub> × ΔCash <sub>t</sub> /ME <sub>t-1</sub>		0.240*** (4.31)	
Case numbers <sub>t-1</sub>			-0.008 (-1.20)
Case numbers <sub>t-1</sub> × ΔCash <sub>t</sub> /ME <sub>t-1</sub>			0.147*** (3.61)
ΔCash <sub>t</sub> /ME <sub>t-1</sub>	0.529*** (3.91)	0.487*** (3.65)	0.431*** (3.65)
ΔEarnings <sub>t</sub> /ME <sub>t-1</sub>	0.113*** (6.51)	0.114*** (6.62)	0.110*** (6.44)
ΔNet Assets <sub>t</sub> /ME <sub>t-1</sub>	0.023** (2.01)	0.024** (2.10)	0.025** (2.16)
ΔR&D <sub>t</sub> /ME <sub>t-1</sub>	3.177*** (3.31)	3.117*** (3.32)	3.098*** (3.34)
ΔInterest <sub>t</sub> /ME <sub>t-1</sub>	-0.103 (-0.66)	-0.039 (-0.20)	-0.047 (-0.23)
ΔDividends <sub>t</sub> /ME <sub>t-1</sub>	0.880*** (4.24)	0.885*** (4.30)	0.900*** (4.27)
Cash <sub>t-1</sub> /ME <sub>t-1</sub>	0.150*** (9.13)	0.158*** (9.29)	0.154*** (9.20)
Leverage <sub>t</sub>	-0.067* (-1.92)	-0.068** (-1.98)	-0.068** (-1.96)
Net Financing <sub>t</sub> /ME <sub>t-1</sub>	0.009 (0.75)	0.005 (0.37)	0.001 (0.08)
Cash <sub>t-1</sub> /ME <sub>t-1</sub> × ΔCash <sub>t</sub> /ME <sub>t-1</sub>	-0.016* (-1.80)	-0.021* (-1.95)	-0.020* (-1.86)
Leverage <sub>t</sub> × ΔCash <sub>t</sub> /ME <sub>t-1</sub>	-0.242* (-1.72)	-0.253* (-1.79)	-0.237* (-1.66)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cluster	Province	Province	Province
N	15931	15931	15931
Adj. R-squared	21.44%	21.60%	21.59%

## Appendix A

### Variable Definitions and Descriptions

Variables	Definitions/Descriptions
<i>Key independent variables</i>	
Case	1 if the government officer(s) that is (are) at least vice-ministerial level (e.g. vice-governor of a province) in a province is (are) arrested/investigated, and 0 otherwise.
Case numbers	The number of government officer(s) that is (are) at least vice-ministerial level (e.g. vice-governor of a province) in a province is (are) arrested/investigated.
<i>Analysis of cash holdings</i>	
$\Delta(\text{Cash}/\text{Net assets})$	The change of (Cash + short-term investments)/total assets from year t-1 to t.
$\Delta(\text{Cash}/\text{Total assets})$	The change of (Cash + short-term investments)/(total assets - cash - short-term investments) from year t-1 to t.
Cash flow	(Earnings before extraordinary items and depreciation - interest expenses - tax expenses - dividends)/total assets.
Firm size	The logarithm of total assets.
Firm leverage	Total liability to total assets.
Tobin's Q	Market value equity to book value of total equity
Capital expenditures	Capital expenditures to total assets.
Acquisition intensity	The total amount of acquisitions engaged to total assets.
$\Delta\text{net working capital}$	The change of non-cash net working capital to total assets from year t-1 to t.
$\Delta\text{short debt}$	The change in debt in current liabilities to total assets from year t-1 to t.
<i>Analysis of marginal value of cash holdings</i>	
Size, BM/ME adjusted returns	Fama-French (1993) 25 size and book-to-market portfolios adjusted returns.
$\Delta\text{Cash}/\text{ME}$	Change in cash scaled by market value.
$\Delta\text{Earnings}/\text{ME}$	Change in earnings before extraordinary items scaled by market value.
$\Delta\text{Net Assets}/\text{ME}$	Changes in net assets scaled by market value.
$\Delta\text{R\&D}/\text{ME}$	Change in R&D scaled by market value.
$\Delta\text{Interest}/\text{ME}$	Change in interest scaled by market value.
$\Delta\text{Dividends}/\text{ME}$	Change in common dividends scaled by market value.
Lagged Cash/ME	Lagged cash scaled by market value.
Leverage	All debt/market value of total assets.
Net Financing/ME	New equity issues + net new debt issues scaled by market value.