

POLITICALLY MOTIVATED CORPORATE DECISIONS:  
EVIDENCE FROM CHINA

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**Abstract.** Every five years Chinese province heads compete for promotions to the national congress by demonstrating superior economic performance. We document pervasive cyclicity in corporate decision-making synchronized with these promotion cycles: taxes firm's pay are 4.1% higher one year before national promotions, investment rates are 6% higher two years before, and Hong Kong dual-listed firms exhibit increased price discrepancy. We contribute to better understanding of the influence of political calendars and incentives on economic activity.

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Key Words: Politically Motivated Corporate Decisions, Corporate Investments, Taxes, Agency, China

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## 1 Introduction

Are times of political tournaments favorable for economic activity? The answer depends on which of two forces dominates in an economy. On the one hand, political uncertainty, arising from possible changes in political leadership, reduces economic activity (Bernanke, 1983).<sup>1</sup> On the other hand, the incentives of politicians to maximize the probability of winning an election by demonstrating performance motivate them to manipulate fiscal and monetary policy instruments to improve macroeconomic fundamentals values prior to an election (Rogoff, 1990). While both forces may be at work in any political economy, it is reasonable to expect that under democratic elections (where outcomes are relatively more uncertain), the former force prevails and under autocratic promotions (where outcomes are relatively less uncertain), the latter force prevails. Firms might increase investment levels before elections to support powerful politicians. Voters tend to react positively regardless of post-election inflation, unemployment rate, and output falling back to natural level.

We investigate the cyclical effect of Chinese political cycles on corporate decisions. China is an interesting laboratory to understand the political business cycle hypothesis. Indeed, it uniquely combines a market economy and a communist system, where political uncertainty is limited by the absence of elections and replaced by tightly-controlled promotions. We find that Chinese National Congress promotion cycles have a broad influence on Chinese economic activity. Using large Chinese datasets, we show that China's national promotions affect corporate decisions on tax, investment, employment, wage, cash holding, debt, stock return, and stock volatility.

We deem the study of Chinese political cycles especially unique and interesting because

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<sup>1</sup> Bernanke (1983) shows that firms behave cautiously and tend to hold back on investment against uncertainty. Tax, revenue, employment, wage, IPO timing, innovation, etc., are also believed to be affected.

of the relatively large “distance” between corporate decisions based on politicians’ nudging and corporate stakeholders’ interests. Under less autocratic elections elsewhere, the question of the extent to which corporate decisions are endogenously optimal or constrained is open. In developed markets, for example, one can see corporate contributions levels to political campaigns, political action committees, and charity as optimally set with respect to stakeholders’ interests and incentives, rather than forced as constraints.<sup>2</sup> While the bigger “distance” between interests of corporate stakeholders and those of politicians in China is apparent, one cannot rule out a distant hard to observe “quid pro quo” exchange.

Every five years, 31 mainland China province heads compete for promotions to the national congress, composed of the National Party Congress (NCPC), the Chinese People’s Political Consultative Conference (PCC), and the National People’s Congress (NPC). In each of these institutions, positions are renewed at the beginning of each tenure and one candidate only is nominated for each position. High-level political promotions in China are typically planned by the central government at least one year in advance to ensure both the smooth transition and the stability of the assets under the politicians’ control (Piotroski and Zhang, 2014). Economic performance is the key determinant of China’s political promotions, both at the city-level and the province-level (see, for example, Li and Zhou (2005) and Chen, Li and Zhou (2005)). In turn, these politicians exert direct control on state-owned enterprises (SOEs) and indirect influence on private companies through regulation, licenses, and networks (Piotroski and Zhang, 2014). Hence, we can expect political incentives to have a strong effect on business decisions in

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<sup>2</sup> Lins, Servaes and Tamayo (2016), for example, show that corporate social responsibility contributions are associated with subsequent better performance in economic crises, benefiting corporate stakeholders. Akey and Lewellen (2016) find that contributions levels to congressional elections are proportional to firms’ sensitivities to government policies. In addition, Pork-Barrel and Earmark programs (e.g., “The Big Dig,” Boston, 1991-2007; “The Bridge to Nowhere,” Alaska 2005-2011; Bell Boeing V-22 Osprey, developed 1981-2007, in service) direct funding to specific districts, benefit specific firms.

dimensions on which politicians are evaluated.<sup>3</sup>

We study jointly taxes, investment, employment, wages, cash holdings, debt, stock returns, and stock volatility using simultaneous equations and find pervasive effects of impending political promotion cycles. For key performance indicators such as taxes, we expect to see fluctuations around the time of the promotion decisions, about one year before the tournament. Accordingly, we find a tendency of firms to increase taxes paid to the government before national promotions. On average, firms pay 13.6% more taxes one year before national promotions. Because promotions are likely to be based on investment outcomes (not investment inputs, which take time to fructify), we expect to see an increase in investments earlier in the cycle. Accordingly, we document a tendency for Chinese firms to increase investment expenditures by an average of 6% two years before national promotions in China, controlling for growth opportunities, cash flows, and economic conditions such as GDP growth, unemployment growth, and inflation growth rates. We find these results robust, even after controlling for potential simultaneity between tax and investment decisions.

Some politicians in China are likely to start investments soon after they take office (An et al., 2016; Cao et al., 2015). We refer to such politicians as “foresighted politicians.” Ru (2015) finds that city secretaries' chances of promotion are associated with more borrowing from the Chinese Development Bank earlier in their terms. Because foresighted politicians are likely to generate better economic outcomes, the probability of promotion for the foresighted politician should be more than that of the procrastinating politician (defined as one who waits until the year prior to the tournament). Accordingly, we find that provinces where politicians are promoted in the upcoming promotion cycle are less likely to display end-of-term cyclicity in investments,

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<sup>3</sup> We note that the purpose of this paper is to study effects of the political tournament on corporate decisions and the economy, not to predict outcomes of these tournaments, or political promotions.

taxes, and other economic variables. We also find weaker effects for the larger and more bureaucratic state-owned enterprises (SOEs), which are less likely to succeed in swiftly achieving short-term goals of the procrastinating politician. Also, SOE leaders tend to be more politically powerful than that of non-SOEs and can therefore better withstand political pressure and avoid making decisions contrary to their own incentives.

We also find an effect of political cycles on equity prices. Using a sample of Chinese companies incorporated in Mainland China and listed in both China's A-share market and Hong Kong Stock Market (H-share), we find price premium increases by 2.9% in the year leading up to national promotions. However, this price premium increase is temporary, dropping back to its normal level in the next year. This evidence is consistent with the conjecture that investors in the Hong Kong Stock Market discount Chinese stocks more heavily before political tournaments, when the information asymmetry regarding wealth transfers due to the political tournament is the highest. The evidence can also be interpreted from a stock price manipulation perspective: that is, the Chinese political process may create incentives for politicians to nudge financial intermediaries to boost stock prices prior to political tournaments. We focus on documenting the pervasive economic effects of Chinese political cycles and leave decomposing the relative contribution of such mechanisms for future research.

To summarize, we investigate the role of China's national promotions on corporate decision-making. We find pervasive evidence of cyclicity in corporate decision-making synchronized with political promotion cycles. We contribute to better understanding of the influence of political calendars and incentives on economic activity.

Section 2 reviews the background, Section 3 presents the evidence, and Section 4 concludes.

## **2 Influence of political forces on corporate decisions**

The Nordhaus (1975) model of political business cycles started a debate over whether politicians aim to maximize chances of winning elections through manipulations of fiscal and monetary policies. Rogoff (1990) claimed that an incumbent national leader is capable of temporarily increasing economic output and employment by raising the money supply in the year before of an election. Voters tend to react positively regardless of post-election inflation, unemployment rate, and output falling back to natural level. In a Chinese study, Piotroski and Zhang (2013) pointed out that those politicized agents have an incentive to “window-dress” the economy in advance of political promotions. Economic outcomes are not only a determinant in China’s political promotions, they also play important roles in other countries such as the U.S. (see, for example, Healy and Lenz (2013), Hopkins (2012), Sanders (1996), Chappel and Keech (1985), and Fiorina (1978)).

Healy and Lenz (2013) listed three explanations for the weight voters place on the election-year economy. First, voters’ memories of the economy in current years may be more accurate compared to their memories of earlier years. Specifically, voters may consciously choose to put more weight on election-years economies as they believe it provides more referable information about incumbent performance and potential growth under the same incumbent. Second, voters may not see the non-election year economic performance as informative about the quality of the candidates’ economic stewardship. Third, psychologists documented a pervasive human tendency to substitute the end for the whole when retrospectively assessing experiences. Particularly, voters may set the election-year economy as a benchmark when evaluating the performance of the incumbent. Using a panel data in the Chilean presidential elections of 1989, 1993, and 1999, Cerda and Vergara (2007) documented that

macroeconomic performance (measured by the unemployment rate and the output gap) had a significant impact on the vote. Specifically, 1.3% and 0.4% additional votes were generated for every percentage increase in the national unemployment rate and output gap, respectively.

One way to address the relation between investment and political election is through political connection. Particularly, CEOs increase investment levels in election years to support those connected politicians in elections. Shleifer and Vishny (1994) claimed that political supporters of the current government are often beneficiaries of excess hiring. They assume politicians cater to interest groups rather than the median voters. These supporters, who are less productive but better paid than their private counterparts (Donahue 1989), display a tendency to vote for the incumbent government to maintain their current benefits. Empirically, they showed that politicians focus on both private and public firms to pursue political benefits. Bertrand et al. (2006) further examined the investment pattern of politically connected CEOs around municipal elections in France and found that firms that display political connections have higher investment levels during election years. Using a sample of close U.S. congressional elections, Akey and Lewellen (2016) find that firms that are highly sensitive to government policy uncertainty have a stronger incentive to contribute to political candidates and indeed contribute more in congressional elections. This, suggests that political connections, rather than being exogenously endowed is an equilibrium choice for firms.

Alok and Ayyagari (2014), (AA), evaluated the impact of political factors on corporate investment decisions. They used a sample of electoral data at the district level over the period 1995-2009 matching it with firm-level investment projects announced in India. Instead of looking at investment values, they concentrated on the number of project announcements. Empirical evidence showed that SOEs announce a greater number of projects during election

years, with greater effects in politically competitive areas. In comparison, they do not observe similar patterns for non-government-owned firms. In addition to the investment announcements around elections, AA studied whether politically motivated investments are costly to the shareholders. They argued that if election-year SOE investment is to pursue political considerations, then such investment is likely to destroy firm value. By showing lower returns for projects announced during election years, they confirmed that politically motivated investments destroy firm values.

Another channel addressing the relation between corporate decision and political election is through political uncertainty. The basic idea is that the uncertainty arising from possible changes in government policy or national leadership has implications for the behavior of both politicians and managers. Such uncertainty arguably induces firms to delay investment until the uncertainty related to future financial regulation and macroeconomic policy is resolved, especially during financial crisis and recession (e.g., Julio and Yook (2012), (JY)). Bernanke (1983) modeled the relation between uncertainty and corporate investment, relying on the assumption that firms are cautious and hold back on investment against uncertainty. He showed that events with uncertain long-run implications can create investment cycles.

JY used a sample of 248 national elections in 48 countries, having either a presidential or a parliamentary system, over the period of 1980-2005. They showed that firms, on average, decrease investment rates by 0.38% in the year leading up to national elections, even after controlling for growth opportunities and economic conditions. Gulen and Ion (2015) provided further empirical evidence using the policy uncertainty index of Baker, Bloom, and Davis to measure the overall level of policy uncertainty in the economy. They showed that the relation between policy uncertainty and capital investment is not uniform between firms, it is



significantly stronger for firms with a higher degree of investment irreversibility and for firms that are more dependent on government spending.

Apart from investment, economists also studied the effect of political elections on other corporate decisions (e.g., Bertrand et al. (2007), Durnev (2013), Liu and Ngo (2014), Piotroski and Zhang (2013)). Piotroski and Zhang (2013) showed that incentives created by the impending turnover of provincial politicians can accelerate the pace of initial public offering (IPO) activity in certain politicized environments. They investigated data on provincial-level political promotion<sup>4</sup> between 2001 and 2008 in China. By utilizing a Cox proportional hazard model, they found a temporary increase in the number of IPOs in advance of impending political promotions. They also found that this effect holds for both SOEs and non-SOEs. While it is strongest for SOEs in provinces in which politicians are more rewarded for market development events, it is strongest for non-SOEs around events more likely to influence the firms' political connections.

In addition to corporate IPO decisions, Durnev (2013) further tested the sensitivity of investment to stock prices during election years. With a sample of 466 national elections across 79 countries over the period 1980-2006, he showed a 40% lower investment-to-price sensitivity surrounding elections. He also found firms that experience a drop in investment-to-price sensitivity around elections display worse subsequent performances, evidenced by a 6% drop in sales growth over the next two years. Bertrand et al. (2007) showed that publicly traded firms managed by politically connected CEOs showed higher rates of job and plant creations in election years, with a sample of publicly listed firms in France over the 1987 to 2002 period. The effect is larger for companies operating in politically contested districts. In addition to job and

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<sup>4</sup> Data on these political promotions are hand-collected by searching information published in the "Chinese Personnel Database" and "China VIPs" from the China Information Bank and supplemented by Google web searches.

plant creations, Liu and Ngo (2014) studied the impact of national elections or political control over bank failure in the US. Employing hazard analysis on a sample over the period 1934-2012 covering 3,995 documented failed banks by the FDIC, they found a significant 45% decline in the likelihood of bank failure in the year leading up to an election. Bhattacharya et al. (2014) study the effect of policy uncertainty on corporate innovation. They claim that firms postpone the decision to increase funding in R&D until an election outcome is released. Using a sample of national elections in 43 countries between 1976 and 2005, they showed that the growth in innovation (as measured by patent counts, patent citations, and patent originality) drops significantly during elections years.

## **2.1 Political promotions in China**

Our study examines the influence of political forces on corporate decisions before Chinese political promotions. Economic performance is arguably the key indicator in these national promotions (e.g., Zhou (2005)). Chen, Li and Zhou (2005), Li and Zhou (2004), and Bo (2007) provided evidence that the turnover of provincial leaders (i.e., provincial party secretaries) hinges on their economic performance. Using the turnover of provincial leaders in China between 1979 and 1995, Li and Zhou (2004) found that promotion probability increases in local economic performance. Consistent with these findings, Bo (2007) found that the political mobility of provincial leaders is determined not only by political movements of the communist party but also by local economic conditions. Using unique data from the China Development Bank, Ru (2015) finds that city secretaries who borrow more from the bank have a higher probability of getting promoted.

It is reasonable to expect that, given the power, politicians would choose to temporarily improve the economic condition to maximize the likelihood of promotion. In fact, provincial

politicians in China influence firms through numerous regulatory, administrative, and soft channels (Piotroski and Zhang, 2014). Weak institutions and market imperfections create opportunities for political forces to affect the operating, investment, and capital structure decisions of firms under their control and supervision (Shleifer and Vishny, 1994, 1997; Rajan and Zingales, 2003). Therefore, it is reasonable to expect that Chinese politicians choose to exert power on local firms on various dimensions before national promotions. We examine whether such political incentives significantly influence corporate decision-making in the following empirical analysis.

### **3 Empirical Analysis**

We examine the impact of impending provincial-level political tournaments on various corporate decisions, such as investments, tax accounting, hiring, wages, and debt decisions. We also examine the impact of impending tournament events on capital market reactions of these decisions using variables such as volatility, return, and pricing of dual-listed firms.

Tax revenues provide a direct indication of economic performance of the province. Paying less tax leaves more cash flow to non-governmental shareholders. However, if the government is the main shareholder in a company, the opposite is true and tax payments can be conceptually equated to dividend payments to the main shareholders of the firm. Consistent with this, Bo (2007) shows evidence that the revenue contribution of a province during the provincial leader's tenure also plays an important role in political promotions. Lei (2016) finds evidence that firms favored by governments otherwise, increased tax revenues in a year governments benefitted from it. Stanfield et al. (2016) find sensitivity of firms' effective tax rates to their being investigated for corruption. In this section, we examine whether firms are paying more taxes before national tournaments. We hypothesize that political incentives will incline these

companies to pay more taxes before national tournaments with the aim of showcasing an improvement in economic performance of the province along the dimension of tax collection.

To maximize the likelihood of promotion, politicians would target a temporary increase in firms' tax payments. Because taxes are an economic outcome for the government, we expect to see fluctuations around the time of the promotion decisions, about one year before the tournament.

*We hypothesize that corporate taxes increase in the year before national promotions.*

There are two channels addressing the relation between investment and political election. The first is the political business cycles hypothesis. The incumbents manipulate fiscal and monetary policy instruments to improve macroeconomic fundamentals prior to an election to maximize the probability of winning. That is, corporate investment is reacting to changing economic environment. The second is the political uncertainty hypothesis. Uncertainty arising from possible changes in policy or national leadership affects the behaviors of both politicians and firms. Firms are holding back on potential investments until the resolution of (political) uncertainty (e.g., JY).

In China, we expect to see an increase in investments more than one year before tournament years because promotions are likely to be based on investment outcomes (not investments inputs, which take time to generate economic growth).

*We hypothesize that corporate investment increases more than one year before national promotions.*

Besides investment and tax payment, there should be other firm decisions that are affected by national promotions. Unemployment rate is a direct indicator of economic performance. In order to gain promotion opportunities, politicians are likely to boost the short-

term employment rates prior to national promotions. Wage is another important indicator. While higher wages indicate greater tax revenues to government, it also enhances economic performance as wage is positively affecting national consumption. We suggest that corporations will adjust both employment and wage decisions in accordance with national promotions. AA argue that if investments are politically motivated, firm values are likely to suffer from depletion. When investments are to serve politicians by exploiting shareholders, it hinders a firm's performance. The market will also react negatively to the poor investment through lower stock returns. Finally, in previous sections, we claimed that political uncertainty does not affect corporate investment during China's national promotions. We would observe greater stock volatility in the financial market if uncertainty matters.

*We hypothesize that employment and wages increase, and stock returns decrease before national promotions.*

We test these and related hypotheses in the following section.

### **3.1 Data**

#### **3.1.1 The Tournament of Provincial Party Secretary Promotions**

To create a sample of political tournament events capturing politically motivated decision-making of firms in a province, we consider national tournaments in (mainland) China held between 2000 and 2013. Specifically, we benchmark the five-year political cycle in China to the sessions of the National People's Congress (NPC), which were held during our sample period in three years: 2003, 2008, and 2013. We note that this particular choice of benchmark is only a matter of convenience and does not economically influence the results of this paper. Our variables could also be defined based on the National Party Congress that also meets every five years, but one year prior to the National People's Congress.

The NPC meets every five years, and promotions of provincial party secretaries are announced in these years. We note, however, that these promotion decisions are made at least a year before the NPC meetings and reflect economic results up to that point in time. Our analysis focuses on systematic distortions in economic incentives around the time of these promotions. For example, we conjecture that the incentives of a provincial party secretary are to increase tax collections in the province one year before NPC meetings, to provide an enhanced perception of the economic activity in the secretary's province around the time of the promotion decisions, which is about one year prior to NPC meetings. We call the years of NPC meetings *tournament years*.

Table I presents the distribution of 35 promotion events of provincial party secretaries. This data is hand collected from the Politics website,<sup>5</sup> a website founded by the *Nanfang Magazine*, which, in turn, is owned by the Guangdong people's government. The Politics website contains curriculum vitae (CV) of all previous and present provincial party secretaries dating back to 1949. Each CV provides detailed information (starting and termination dates, position, etc.) of the provincial party secretary. We are, thus, able to identify the beginning date and termination date of party secretaries.

The overall promotion rate is 38%. In both 2003 and 2008, the promotion rates are 32%. It means that 10, out of 31 provincial party secretaries succeeded in the national promotion in both years. In comparison, the promotion rate increased by 48% in 2013, meaning 15 provincial party secretaries were promoted in that year's national congresses. This suggests substantial time variation in promotions across tournament years.

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<sup>5</sup> <http://www.zt360.cn/Index.html>

### **3.1.2 Macroeconomic Data**

To identify the influence of political motivations that induces cyclicity in corporate decision-making, we control for the influence of the macroeconomic environment in various provinces and years. We obtain macroeconomic data from the National Bureau of Statistics of China (NBSC), which contains monthly, quarterly and annual macroeconomic data for the country and for each province. We have obtained the annual unemployment rate, Gross Domestic Product (GDP) Index (national-level and province-level), and Consumer Price (CPI) Index from 2000 to 2013.<sup>6</sup>

### **3.1.3 Firm-Level Data**

We analyze cyclicity in firm-level investments, taxes, and other variables representing corporate decisions. Our data source for these variables is the China Stock Market & Accounting Research (CSMAR)<sup>7</sup> database and the RESSET<sup>8</sup> database. Appendix A describes the calculation of various variables used in the analysis, and Table II presents summary statistics of various variables for our sample.

## **3.2 Corporate Tax and Political Tournaments**

Table III, Panel A reports the mean tax rate one year prior to China's national

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<sup>6</sup> All three figures are located under the Indicator section in the Annual National Database. Specifically, the annual unemployment rate is generated from the Employment and Wages section. Annual unemployment rate is defined as the registered number of unemployed persons scaled by the sum of registered number of employed and unemployed persons, off-duty workers, private business owners, private business workers, individual owners, and individual workers. The unemployment growth variable is computed as the difference in unemployment rate from the previous year. We also obtain historical GDP index for each province from the National Economic Accounting section. GDP index is defined as growth in the sum of provincial consumption, investment, government spending and net exports, adjusted for inflation. It measures changes in provincial real GDP relative to the previous year. For example, a GDP index of 106.5 indicates that real GDP has increased by 6.5%. We also obtain provincial CPI from the Price Indices section. CPI measures changes in price level of a market basket of consumer goods and services consumed by households.

<sup>7</sup> Company stock return and financial data are collected from the CSMAR database in Fan, Wong and Zhang (2007).

<sup>8</sup> The RESSET database is designed by numerous experts in Tsinghua University, Peking University, and the London School of Economics. The database is in line with the world's leading standards, referring to the research concepts of internationally renowned database, combined with China's national conditions carefully.

tournaments compared to other years. The most direct statistic that demonstrates the impact of an impending tournament year on taxes is that tax rate increases from 21.47% in non-tournament years to 24.39% in tournament years. This difference of 2.92% is statistically significant and represents a percentage change of 13.6% in the tax rate between tournament and non-tournament years. This univariate analysis provides preliminary evidence consistent with the view that political incentives induce a cyclic pattern in corporate taxes, which tend to rise one year before each tournament cycle.

To formally test our prediction, we use the following regression specification:

$$\begin{aligned}
 Tax_{ijt} = & \alpha_0 + \beta_1 Tournament_{t+1} + \beta_2 Tournament_{t+1} * SOE_{ij} + \beta_3 SOE_{ij} + \beta_4 Q_{ij,t-1} \\
 & + \beta_5 CF_{ijt} + \beta_6 \Delta GDP_t + \beta_7 \Delta Unemployment_t + \beta_8 \Delta Inflation_t \\
 & + \beta_7 Promoted_{j,t+1} + \varepsilon_{ijt}, \quad (1)
 \end{aligned}$$

where  $i$  indexes firms,  $j$  indexes provinces, and  $t$  indexes years.  $Tax_{ijt}$  is the corporate tax rate, computed as the sum of tax expenses and deferred tax liabilities scaled by earnings before taxes. The explanatory variable of interest is the  $Tournament_{t+1}$  dummy set to 1 if a national congress is one year away. The coefficient on the tournament dummy,  $\beta_1$ , captures changes in the conditional tax rate one year before national tournaments, controlling for both company characteristics and economic conditions. To best capture the effect of national tournaments on tax rates, the dummy variable  $Tournament$  is given a value of 1 for any firm-year in which the tournaments are held no earlier than October in year  $t-1$  and no later than September in year  $t$ .<sup>9</sup> In principle, this identification strategy will provide consistent estimates as the  $Tournament_{t+1}$  dummy is a deterministic variable, which is unrelated to economic activity or any other such variable. However, we recognize a potential for small sample bias in our estimates due to the

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<sup>9</sup> We follow the definition of year from JY.



limited time-series available for this study. In the last part of this section, we analyze cross-sectional differences in investment history (cumulative investment) of provincial leaders to provide further support for our hypotheses.

To control for the effect that the change in tax rate is attributed to those politicians who were promoted, we construct a dummy variable, which sets to 1 if the politician (i.e., provincial party secretary) is promoted in the upcoming national tournaments. We include a dummy variable that identifies winners of the promotion cycle to distinguish between provinces in which the party secretaries are actually promoted in the year of national congress (denoted by  $Promoted_{j,t+1} = 1$ ). For example, the previous Sichuan party secretary Liu Qibao was elected as the Member of the Secretariat of the Central Committee (state-level deputy) during the NCPC in November 2012. We thus assign 1 to the Promoted dummy for firms in Sichuan in 2013.<sup>10</sup> Table I displays the number of secretaries promoted in 2003, 2008, and 2013.

We include Tobin's Q and cash flow to control for firm characteristics. Tobin's Q is the market value of assets scaled by the book value of assets, which controls for differences in investment opportunities. Cash flow is EBIT (earnings before interest and taxes) less taxes and interest expense plus depreciation and amortization then scaled by beginning-of-year total assets. To best capture the effect of general economic conditions on firms' tax decisions, we employ provincial GDP growth, inflation growth, and unemployment growth. GDP (inflation, unemployment) growth is measured as the percentage change in a province real GDP (real inflation, unemployment rate).

Province-fixed effects are included in the model. We do not include year-fixed effects in

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<sup>10</sup> Note that, at the beginning of the section, national congresses held after September in year t are treated as held in year t+1.

our specification because doing so will induce multicollinearity.<sup>11</sup> Standard errors are robust to heteroskedasticity and clustered by province. Tobin's Q and cash flow are both winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles to control for potential outlier effects.

Table III, Panel B displays results for our regression specification. In Column 2, the result for  $Tournament_{t+1}$  shows interesting evidence: its coefficient (0.041) is positive and statistically significant. Economically, it translates into a 4.1% higher tax rate. Evidence is consistent with our prediction that firms have incentives to pay more taxes in the year leading up to national tournaments.

The coefficient for SOE is positive and significant, indicating that state-owned companies generally have higher tax rates. Specifically, the coefficient (0.031) translates into a 3.1% higher tax rate paid by SOEs. However, the interaction of the  $Tournament_{t+1}$  dummy with SOE is negative but insignificant. The conjecture that SOEs pay more taxes if national tournaments are coming up in the next year is rejected. This is consistent with our hypothesis that leaders of SOEs are relatively powerful, and are therefore less likely to be influenced to act according to pre-tournament requests of procrastinating politicians (Zhang and Scase (2013)).

To test the robustness of our results, we estimate the following model (see also Bradshaw, Liao and Ma, 2013):

$$\begin{aligned}
 Tax_{ijt} = & \alpha_0 + \beta_1 Tournament_{t+2} + \beta_2 Tournament_{t+1} + \beta_3 Tournament_{t+2} * SOE_{ij} + \\
 & \beta_4 Tournament_{t+1} * SOE_{ij} + \beta_5 SOE_{ij} + \beta_5 Tax_{ij,t-1} + \beta_6 Promoted_{t+2} + \beta_7 Promoted_{t+1} + \\
 & \beta_8 ROA_{ijt} + \beta_9 Size_{ijt} + \beta_{10} Leverage_{ijt} + \beta_{11} Loss_{ijt} + \beta_{12} GDP_t + \varepsilon_{ijt}, \quad (2)
 \end{aligned}$$

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<sup>11</sup> Since any national promotion held after October in year t and before September in year t+1 will be treated as being held in year t+1, the promotion dummy is set to 1 for year 2001, 2006, and 2011 and 0 for other years.

where the dependent variable is effective tax rate, computed as the sum of tax expenses and deferred tax liabilities divided by earnings before taxes. The main explanatory variables of interest are  $Tournament_{t+2}$ ,  $Tournament_{t+1}$  and their interactions with the SOE dummy. Control variables include lagged tax rate, win dummies, ROA, firm size, leverage, the Loss dummy,<sup>12</sup> and GDP.

Columns 3 and 4 in Table III, Panel B reports results for our analysis. The coefficient for  $Tournament_{t+1}$  is positive and significant at less than the 1% level, whereas it is insignificant for  $Tournament_{t+2}$ . Consistent with our hypothesis, results indicate a temporary increase in taxes paid to the government one year before national tournaments (the time period when the tax numbers are likely to influence promotion decisions).

The result is also economically meaningful; the coefficient for  $Tournament_{t+1}$  translates into a 5.3% growth in tax rate if tournaments are held in the next year. In comparison, SOEs tend to engage in fewer tax-avoiding activities in general, evidenced by a positively and statistically significant coefficient (0.010), meaning SOEs on average pay a 1% higher tax rate. However, the coefficients for both interaction terms are insignificant, which means that SOEs are not sensitive to national tournaments in terms of tax avoidance. Overall, our results are robust to the change of specifications. In summary, we find that firms pay more taxes if there are national tournaments one year later. This action results in more tax revenues for provincial governments.

### **3.3 The Reaction of Corporate Investment to Impending Political Tournament Events**

One-year is a relatively short time-frame for corporate investments to produce economic returns that improve promotion chances of Provincial leaders. Here we use a two year time-

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<sup>12</sup> The Loss dummy is set to 1 if the firm reports a loss in the fiscal year.

period to evaluate whether procrastinating politicians attempt to influence corporate investment decisions. Table IV, Panel A reports the mean investment rate two years prior to China's national tournaments. The most direct statistic that demonstrates the impact of an impending tournament year on investments is that investment rates as a percentage of assets increase to 7.58% two years before the political tournament compared to 7.14% in other years. This difference of 0.45% is statistically significant and represents a percentage change of 6% in the investment rate between tournament and non-tournament years. This univariate analysis provides preliminary evidence is consistent with the view that political incentives induce a cyclic pattern in corporate investments, which tend to rise two years before each tournament cycle.

To formally analyze the effect of political cycles on corporate investments, we replace the dependent variable in Equation (1) with investments ( $I_{ijt}$ ), which is defined as the ratio of capital expenditures to beginning-of-year book value of total assets.

We report the results in Table IV, Panel B. Column 1 reports the regression of investment rate on the  $Tournament_{t+2}$  dummy alone. The following columns add SOE and an interaction term along with clustered errors and controls such as province-fixed effects, Tobin's Q, cash flow, unemployment growth, GDP growth, and inflation growth. Column 8 displays results for equation (1). Consistent with our conjecture that political incentives induce corporate investment before national tournaments, we find that the increase in investments two years before the tournament-year is economically meaningful and statistically significant at the 1% level after controlling for various other determinants of corporate investments.

With all controls (specification 9), we find that two years before tournament years, investment rates decline by 0.5% per year. That is, tournament year investment rates are higher than that in non-tournaments years by about 6%.

We find that the *Promoted<sub>j</sub>* variable is not significant. This is consistent with the hypothesis that the tournament is competitive and end-of-term measures do not influence the promotion outcome as these measures are adopted by most candidates. We also find that SOEs tend to reduce their investments significantly around the time the promotions are finalized (one year before). This suggests that political incentives are strongest for SOEs, which get relaxed nearer the time when the tournament winner is announced.

In summary, we find evidence consistent with our hypothesis that firms have greater investment rates two years before national tournaments.

### **3.3.1. Cross-sectional effects**

We have shown that the investment rate of firms is systematically higher two years before national tournaments. We now further our analysis to see if there are cross-sectional effects.

#### *State-Owned Enterprises and Privately Owned Firms*

According to survey evidence in Zhang and Scase (2013), state-owned enterprises are inclined to conform with institution arrangements and are inclined to hire staff members who have personal relations with someone either in senior management or in the upper authorities of government. They have a preference for a “no mistakes” style of management in contrast to a “reward-risk trade-off” style of management. Because leaders of SOEs are relatively powerful, they are less likely to be influenced to act according to pre-tournament requests of procrastinating politicians.

In contrast, privately owned firms (POFs) are often run by entrepreneurs who are relatively more adaptable, flexible, nimble, and inclined to exploit opportunities to further their own monetary and political interests. According to the survey, private entrepreneurs elected to

the NPC have gained legitimacy to participate in government circles. This new identity and status grants them many benefits, such as access to loans, political capital, credibility, and networks for negotiating favorable policies from local and provincial party officials.

This mechanism suggests that the economic return on investment that can be produced by SOEs is less than that by POFs. This further suggests that Provincial leaders who seek to maximize the economic return on investment in their provinces the two years before their promotion decisions should use their soft power on entrepreneurs and offer them political incentives to increase firm investments when they feel that it will increase their promotion chances in the upcoming tournament cycle.

To test this conjecture, we interact an SOE dummy (set to 1 if national tournaments are held in the next year) with the tournament year dummy. In column 9, we find results in support of our conjecture: the coefficient for the interaction term is negatively significant.

Next, we would like to see how SOEs, owned by the central and provincial governments, are affected by national tournaments, respectively. We create two dummy variables, Central SOE and Provincial SOE. Central SOE is set to 1 if the central government is the ultimate controller, and Provincial SOE is assigned a value of 1 if the provincial government has the ultimate control. Second, we would like to see how firms in different industries make investment decisions. Firms in our sample are classified into four industries: Property, Commerce, Industrials, and Conglomerates.<sup>13</sup> We generate three industry dummies for Property, Commerce and Conglomerates, and the interactions with tournament.

Table V, Panel A reports the results for our analyses. We also add the Central SOE dummy, Provincial SOE dummy, and their interactions with the tournament dummy in Column

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<sup>13</sup> Firms in the finance and utilities industries are excluded in our sample to avoid potential government regulations.

1. Both coefficients for the interactions are statistically insignificant, indicating that neither Central nor Provincial SOEs are sensitive to national tournaments. In Column 2, we add the three industry dummies and their interactions with the tournament dummy. Again, while we find that firms in other industries have lower investment activities compared to industrial firms, the difference is not statistically significant for the interaction terms. This suggests that the promotion cycle is an economy-wide effect and is not concentrated on certain industries or types of SOEs. We also find that the *Promoted<sub>j</sub>* variable is not significant. Reinforcing the finding in Table IV, this finding is consistent with the hypothesis that the tournament is competitive and end-of-term measures do not influence promotion outcomes as these measures are adopted by most candidates.

#### *Heterogeneity Across Provinces*

Among the 31 provinces in mainland China, there are 5 autonomous regions and 4 directly controlled municipalities. An autonomous region is a minority entity that has greater population of a specific minority ethnic group. For example, the Xinjiang Uyghur Autonomous Region is the primary residence of most Uyghurs. The constitution empowers autonomous regions with more legislative rights than other provinces, and they tend to have greater control over the local economy, SOEs, and firms in general. We create a Minority dummy, which is given a value of 1 for firms in autonomous regions. We also create an additional municipality dummy as control variable.

There are 11 coastal provinces (e.g., Guangdong and Shanghai) in mainland China. Globalization of the world economy has empowered coastal cities in these provinces in national development. In China, coastal cities act as “engines” of economic growth. One important reason is that coastal cities provide greater interactions and interrelations between local and foreign

investors than landlocked cities. Data from the National Bureau of Statistics of China show, as of 2012, that there were 333,102 foreign firms within the 11 coastal provinces, 3 times more than those within non-coastal provinces (107,281). We predict that provincial governments have relatively smaller control over coastal firms because of the larger presence of foreign players in these provinces. In other words, we expect coastal firms to have relatively lower investment growth during tournament years. We introduce a coastal dummy, which sets to 1 for coastal firms.

Firms are major contributors to the economy. Politicians from the smallest provinces (in terms of the number of firms) are likely to have a disadvantage in national tournaments compared to those from other provinces and those from the largest provinces are likely to have an advantage. To analyze heterogeneity along this dimension, we create two dummy variables: Large and Medium. We assign a value of 1 to the Large dummy for the ten provinces having the greatest number of firms in our sample. The Medium dummy is set to 1 for the next ten largest provinces.

Table V, Panel B displays cross-sectional results for provincial characteristics. In Column 1, we add the Minority dummy, Municipality dummy, and their interactions with the tournament dummy to equation (1). While we find that firms in autonomous regions tend to have greater investment levels than other firms, there is statistically no difference when it comes to national tournaments. In Column 2, we add the Coastal dummy and its interaction with the tournament dummy to equation (1). Inconsistent with our hypothesis that coastal firms are less sensitive to political events, we do not document any statistical difference in the investment patterns between coastal and landlocked firms. In Column 3, we add the Large dummy, Medium dummy, and their interactions with the tournament dummy to equation (1). We observe some interesting results in



this analysis. While the coefficient for the tournament dummy is statistically insignificant, the coefficient for the interaction term with the Medium dummy is statistically significant at about 5% level. This could be because the tournaments in the Medium provinces are more likely the ones that still have a chance for success in political tournaments compared to the smaller ones.

We also find that larger provinces are more likely to have foresighted politicians who start soon after the previous round of promotions and are unlikely to benefit from such “last-year investment” measures. In Columns 2 and 3, we also find politicians who are promoted in the upcoming round of promotions are less likely to resort to such “end-of-term investment” measures. At least for larger provinces, it seems that it is more likely that foresighted politicians are promoted (we explore this further in Table VIII).

### **3.4 Political Tournaments and the Pricing of Dual-Listed Firms**

We examine whether political tournaments in China influence the pricing of firms in China’s financial markets. While the null hypothesis of financial market efficiency would predict that investors anticipate any cyclicity induced by political tournaments and offer no opportunity to profit from patterns in financial variables, the alternative hypothesis of patterns in financial variables is not unreasonable. Inefficiencies in Chinese financial markets is not a new topic. For example, Ma, Swan and Song (2010) show that the financial institutions of Mainland China have a significant influence on prices, through the price discovery process. In other words, Chinese institutions provide informational advantages to domestic investors. To test whether similar advantages exist during national tournaments, we use a sample of Chinese companies incorporated in Mainland China and dual-listed in both China’s A-share market and the Hong Kong Stock Market (H-share). Our sample uses monthly data from the AH-Premium database in Datastream. There are 51 cross-listed firms between October 2010 and August 2013 in our

sample, which contains 4,155 observations. Our analysis is based on the empirical model from Sun and Tong (2000).

$$\begin{aligned}
Premium_{ijt} = & \alpha_0 + \beta_1 Tournament + \beta_2 Win + \beta_3 Premium_{ij,t-1} + \beta_4 Shares_{ijt} + \beta_5 MV_{ijt} \\
& + \beta_6 Volume_{ijt} + \beta_7 Volatility_{ijt} + \beta_8 Red\ Chip_t + \beta_9 \Delta Inflation_t \\
& + \beta_{10} \Delta Reserve_t + \varepsilon_{ijt}.
\end{aligned} \tag{3}$$

Table VI shows results for model (3). The dependent variable is the price premium, computed as stock price in the A-share market minus stock price in the H-share market, then scaled by stock price in the H-share market. Control variables include lagged price premium, the ratio of outstanding shares of A and H shares, market capitalization, the ratio of trading volume (Volume A-share/Volume H-share), the relative volatility (Volatility A-share/Volatility H-share), the trading volume of Red Chip shares, change in China's inflation, and change in China's foreign reserve. The coefficient for  $Tournament_{t+1}$  is positive and significant, indicating that the gap between A-share price and H-share price increases if there are national tournaments in the next year. The result is also economically significant, meaning that stock prices of A-share on average increase by 10% against H-share one year before national tournaments. The coefficient for  $Tournament_{t+1}$  translates to a 2.9% growth in the price premium one year prior to national tournaments. In general, the evidence in Table VI supports our hypothesis about the existence of political tournament induced cyclicalities in the price premium between China A-shares and Hong Kong H-shares. One simple explanation of this cyclicalities, consistent with the information story of Ma, Swan and Song (2010), is that the information asymmetry in times when the winners and losers from political tournaments are being decided is higher than the information asymmetry in other times. Consequently, foreign investors place a higher premium on Chinese stocks during these times. This evidence can also be interpreted from a stock price manipulation perspective. That is, the Chinese political process may create incentives for politicians to nudge financial

intermediaries to boost stock prices prior to political tournaments. We note that these two explanations are not mutually exclusive and might simultaneously contribute to the observed price gap. We leave the disentanglement of these mechanisms for future research.

### **3.5 A simultaneous analysis of corporate decisions prior to political tournament years**

In this section, we further our analysis by simultaneously analyzing the effect of impending political tournaments on firms' investment, tax, employment, wage, cash holding, debt, stock return, and volatility.

There are ex-ante reasons to expect such pervasive effects of political tournaments on Chinese firm's decisions. Li and Zhou (2005) and Chen, Li and Zhou (2005) document the deterministic role of economic performance on China's political tournament. Opler et al. (1999) show evidence that U.S. firms have a very strong precautionary motive for holding cash. JY further claim that the transactions motive plays an equally important role. They empirically test the joint decisions on corporate investments and cash holdings near the time of elections in parliamentary and presidential countries. Empirical evidence shows that while firms tend to reduce investments during election years, there is a temporary growth in cash holdings until the election uncertainty is resolved. Also, because unemployment rate is a key indicator of economic performance, we expect firms to boost the short-term employment rates prior to national tournaments. AA argue that if investments are politically motivated, firm values are likely to suffer from depletion. When investments are to serve politicians by exploiting shareholders, it hinders firm performance through lower stock returns. Boutchkova et al. (2011) claim political uncertainty leads to greater volatility. If political uncertainty exists prior to national tournaments, we should observe greater stock volatility.

We begin our analysis by examining the univariate effect of impending political

tournaments on various firm decisions using the following preliminary regression:

$$Y_{ijt} = \alpha_0 + \beta_1 \text{Tournament}_{t+2} + \beta_2 \text{Tournament}_{t+1} + \beta_3 Y_{ij,t-1} + \varepsilon_{ijt}, \quad (4)$$

where  $Y_{ijt}$  includes investment, employee growth, wage growth, cash, debt, tax, stock returns, and volatility. The results in Table VII show that while investments tend to respond two years prior to tournament years, other variables such as employees, wages, taxes, returns, and volatility tend to respond one year prior.

We, then, estimate these effects jointly. The joint estimation helps address potential endogeneity and omitted-variable-related concerns because these eight variables are likely to be cotermined. For example, although firms' investment activities are constrained by the availability of cash, increasing investment is likely to reversely hinder the level of cash holdings. In this case, both investment and cash are endogenous and cotermined at the same time. We employ the 2-stage least squares (2SLS) methodology to deal with these econometric issues. For 2SLS, it is important to identify instrumental variables for each endogenous variable. We choose the lagged variables, following the idea from Hansen and Singleton (1982) that lagged values are valid instruments.

In the first stage, we regress each endogenous variable on the eight instruments, along with the exogenous variables.

$$Y_{ijt} = \alpha_0 + \gamma \text{Instrument} + \beta_1 \text{Tournament}_{t+2} + \beta_2 \text{Tournament}_{t+2} * \text{SOE}_{ij} + \beta_3 \text{Tournament}_{t+1} + \beta_4 \text{Tournament}_{t+1} * \text{SOE}_{ij} + \delta \text{Exogenous} + \varepsilon_{ijt}, \quad (5)$$

where  $Y_{ijt}$  includes investment, tax, employee growth, wage growth, cash, debt, stock returns, and volatility. *Instrument* includes the lagged variables of all endogenous variables. *Exogenous* variables include GDP growth, unemployment growth, inflation growth, annual market return, annual market volatility, Tobin's Q, cash flow, win dummy, cumulative investment, and the

interactions between tournament dummies and aggregate cumulative investment (which measures the cumulative sum of average investment rates of a province throughout the tenure of a party secretary). We then generate the predicted values of  $Y_{ijt}$ , denoted as  $\hat{Y}_{ijt}$ .

In the second stage, we replace all instruments with predicted values computed in the first stage. That is, we perform the following regression:

$$Y_{ijt} = \alpha_0 + \gamma \hat{Y}_{ijt} + \beta_1 \text{Tournament}_{t+2} + \beta_2 \text{Tournament}_{t+2} * \text{SOE}_{ij} + \beta_3 \text{Tournament}_{t+1} + \beta_4 \text{Tournament}_{t+1} * \text{SOE}_{ij} + \delta \text{Exogenous} + \varepsilon_{ijt}. \quad (6)$$

Table VIII shows results for our 2SLS estimation. Columns 1 to 8 display results for investment, employee growth, wage growth, cash, debt, tax, volatility, and returns, respectively. We find support for our conjecture that political tournaments induce broad cyclicity in Chinese firm behavior.

The multidimensional evidence is consistent with the single-dimensional evidence reported in earlier sections. We find that investments tend to increase two years prior to tournament years and decrease around the time promotions are decided, i.e., one year prior to tournament years. Specifically, our estimates suggest that if national tournaments are coming up in two years, firms on average will increase their investment rates by 0.020, a 28% change in the investment rate. The change is statistically significant at less than the 1% level. In comparison, we find that the growth in employment and wages tends to be lower during this period. At the same time, while there is no significant change in cash holdings, debt increases by 1.6%, which almost offsets the increase in investments. These finding increment indicates that debt is the major source of financing the increased value in investment. In comparison, there is no statistical difference between SOEs and non-SOEs, except that SOEs have fewer debts.

The more pervasive influence of upcoming political tournaments are seen one year prior

to national congress. A significant effect is present for all eight variables we study. While employee growth, cash, and tax, tend to increase in these years, the effect on investment, wage growth, debt, volatility, and stock returns is negative. One year prior to tournament years, there are also significant differences between SOEs and non-SOEs in regards to investments, wage growth, debt, volatility, returns, employee growth, cash, and taxes. While employee growth and taxes probably reflect a “window-dressing” by firms on behest of provincial candidates, a drop in investments probably reflects a lower utility of spending on investments at this late stage in the promotion process.

We also find lower stock returns during this period. The negative relation could reflect the negative influence of political tournaments on firm value. These tournaments also decrease volatility, suggesting an effect that is contrary to the uncertainty effect observed before democratic elections.

We use the cumulative investment of a politician to capture heterogeneity between politicians who are more foresighted (and experienced) in comparison to those who have lesser investment track record. If the cyclicalities are driven by procrastinating (or less experienced) politicians, we expect to find opposing effects when cumulative investment is interacted with various cyclicalities related variables. In Table VIII, we find that one year before political tournaments, provinces with leaders who have a higher cumulative investment track record have opposite signs for employment growth, wages, cash, debt, tax, volatility, and return compared to the first row. While the sign for the interaction term of investments and two years before tournament is positive (0.265, the same sign as the overall effect), the net effect for higher cumulative investment on investments two years before tournaments is still negative as the coefficient on cumulative investments (-0.871) is larger and negative. This suggests that our

results are primarily driven by less experienced and/or less foresighted politicians.

In conclusion, our results show that the influence of political forces on corporate decision-making under state-led capitalism are dramatically different from those in capitalistic and democratic countries such as the United States.

#### **4 Conclusion**

This paper investigates how China's national promotions influence corporate decisions. We consider this study unique and interesting because it captures corporate decisions mostly induced by political motivation and not directly related to corporate stakeholders. In contrast, while studying the questions in democratic regimes, it is hard to separate the extent to which corporate decisions, including political and charity contributions, are equilibrium optimal ones rather than constrained ones.

Using a sample of Chinese listed firms across 31 provinces in mainland China over the period 2000-2013, we first document that firms increase tax payments by an average of 4.1% in the year leading up to national promotions. We also find that the investment rate is systematically higher two years before national promotions. More specifically, we show an average increase of 6% investment rate two years in advance of national promotions relative to investment rate in other years, even after controlling for firms' investment opportunities and economic conditions. We link such phenomenon to the promotional incentives of politicians for national promotions.

Together, the evidence indicates that politicians are likely to manipulate firms' investment levels two years before national promotions. In the next year, investment levels decrease, but, at the same time, firms start paying more taxes to the government. Such changes in firms' decisions help improve economic performance temporarily, which in turn assists

politicians competing for promotions.

To address potential concerns that tax payment and investment level decisions, as well as other firm decisions are codetermined, we use the 2-stage least squares methodology (2SLS). Simultaneously determined variables include investment, tax, cash holdings, debt, employment, wages, stock returns, and stock volatility. We find consistent results using the 2SLS methodology: there is a temporary increase in corporate tax rates one year before promotions and a temporary increase in corporate investments two years before national promotions. Our evidence also shows that stock volatility, a proxy for political uncertainty, is lower before promotion years in China, in contrast to other countries where it tends to be higher prior to national elections.

Overall, our evidence is consistent with Chinese political leaders influencing economic outcomes in their provinces in order to favorably compete in upcoming “promotion tournaments.” This evidence has implications for studies that examine impending political events in other countries. While the positive effect of political incentives on economic activity is likely to be lower in democratic countries, it is unlikely to be negligible. This further suggests that estimates of the effect of political events such as democratic elections on economic activity are likely to be understated in studies that focus on the negative effects of economic uncertainty. The reason is that positive effects of political incentives on economic activity, as we identify here, mitigate these studies’ findings. This is an interesting topic for future research.



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## Appendix A: Variable Descriptions

<b>Firm Variables</b>	<b>Description</b>
Investment	Capital expenditures divided by beginning-of-year book value of total assets
Tobin's Q	Book value of total assets minus the book value of equity plus market value of equity scaled by book value of total assets
Cash flow	EBIT plus depreciation and amortization minus interest expense and taxes scaled by beginning-of-year book value of total assets
SOE	Dummy variable set to one if the firm is a state-owned enterprise
Central SOE	Dummy variable set to one if the SOE is owned by the central government
Provincial SOE	Dummy variable set to one if the SOE is owned by the provincial government
Cash	Cash holdings divided by beginning-of-year book value of total assets
Employee growth	Change in number of employees divided by beginning-of-year employee numbers
Wages growth	Change of wage expenses divided by beginning-of-year wage expenses
Debt	Total debt divided by beginning-of-year book value of total assets
Tax	The sum of tax expenses and deferred tax liabilities divided by earnings before tax
Stock return	Annual stock return
Stock return volatility	Realized volatility computed using daily stock returns
Firm size	Natural logarithm of the book value of total assets
Outstanding shares	Monthly stock outstanding shares
Market value	Monthly stock market value
PPE	The net book value of total fixed assets
Loss	Dummy variable set to one if the firm reports a loss in the fiscal year
Leverage	Total liabilities divided by total assets at the end of the year

<b>Province Variables</b>	<b>Description</b>
Tournament	Dummy variable set to one for any firm-year in which national Tournaments are held no earlier than October in year t-1 and no later than September in year t
Win	Dummy variable set to one if the party secretary of a province is promoted in the upcoming national Tournaments
GDP growth	The growth in national GDP
Unemployment growth	The growth in unemployment rate
Inflation growth	The growth in inflation rate
Minority	Dummy variable set to one for autonomous regions
Municipality	Dummy variable set to one for municipalities
Costal	Dummy variable set to one for coastal provinces
GDP per capita	The per capita GDP
Foreign reserve growth	The growth in foreign reserves
Cumulative investment	The cumulative sum of weighted average investment rates of a province throughout the tenure of a party secretary, computed using firm level investment rates within the same province

<b>Market Variables</b>	<b>Description</b>
Trading volume (Red Chip)	Monthly trading volume of Red Chip market in Hong Kong
Market return	Annual A-share market return
Market Volatility	Realized volatility computed using daily A-share market return

### **Information related to variable computation and sample selection**

The capital expenditure ratio, Tobin's Q<sup>14</sup>, depreciation of assets<sup>15</sup>, amortization<sup>16</sup>, total assets, total operating revenue, total operating expenses, non-operating income, interest expenses, income tax expenses, and employee benefits payable<sup>17</sup> are collected from the China Stock Market Financial Statements database. The number of employees is collected from the China Listed Enterprises database. The province<sup>18</sup> and industry codes are collected from the China Listed Firm's Shareholders Research database.

The dependent variable investment rate is computed as the product of capital expenditure ratio and the sum of depreciation of assets and amortization scaled by the beginning-year book value of total assets. The controlling variable cash flow is computed as the sum of total operating revenue, non-operating income, depreciation of assets, and amortization minus interest expenses and income tax expenses scaled by the beginning-year book value of total assets. The China Securities Regulatory Commission (CRSC) classifies all firms in China into six industries: Finance, Utility, Commerce, Property, Industry, and Conglomerate. Firms in the Finance and Utilities industries are excluded from our sample.<sup>19</sup> We also create four dummy variables, Commerce, Property, Industry, and Conglomerate, for the remaining four industries. SOE is a dummy variable that indicates if a firm is state-owned.

To classify whether a firm is owned by the government, we first obtain the Actual Controller Economic Nature data from the RESSET database. This dataset classifies the nature of controlling shareholders into central, provincial state-owned enterprise, private enterprise, collective enterprise, university, foreign investment, trade union, and other. We, thus, assign SOE a value of 1 if the ultimate controller is either a central enterprise or provincial state-owned enterprise. Investment rate, Tobin's Q and cash flow are winsorized at the 1st and 99th percentiles throughout the analysis.

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<sup>14</sup> The sum of net debt and market value of equity scaled by total assets.

<sup>15</sup> More specifically, it is the depreciation of fixed assets; oil and gas assets; and bearer biological assets.

<sup>16</sup> Amortization includes both the amortization of intangible assets and amortization of long-term prepaid expenses.

<sup>17</sup> Employee benefits payable includes employee wages and salaries, bonuses, staff welfare, various social security contributions, housing funds, union running costs, employee education costs, non-monetary benefits, compensation to employees for termination of employment relationship, share-based payments, etc.

<sup>18</sup> It is the province where a firm is located.

<sup>19</sup> Denis and Sibilkov 2009

To prevent the possibility that results are driven by small firms, we require firms to have at least CNY150 million (around \$25 million) total assets at the beginning of the sample or when first entering the sample. We also exclude firms in the Finance and Utility industries to eliminate the possible effect of regulation. We also require firms to have non-negative values for total assets and capital expenditure, and Tobin  $q$ .<sup>20</sup> Firms with less than three consecutive years of data are also excluded.<sup>21</sup> The final dataset contains 17,534 observations.

## **Appendix B: Presentation of China's main institutions**

### **National Congress**

The People's Republic of China (PRC) has a single-party system in which the Communist Party of China (CPC) is the ruling party. There are three houses of national congresses, the National People's Congress (NPC), the Chinese People's Political Consultative Conference (PCC), and the National Party Congress (NCPC). While each congress has a term of five years, a plenary session is held on a yearly basis. Elections for federal positions (for example, president, vice president, premier, vice premier, state counselor, president of the Supreme People's Court, and minister of defense) are held at the beginning of each tenure during the first plenary session. There is always one candidate in each election, and the candidate is nominated by the central government. We, thus, call such election process a national promotion process.

The National People's Congress (NPC), composed of deputies from the provincial people's congresses, and People's Liberation Army, and others, is the supreme organ of state power in China. The latest promotion to the NPC was held on the 5th of March 2013. The NPC has the power to amend the constitution, to amend basic laws (criminal offenses, civil affairs, state organs, and other matters), to elect and appoint members to central state organs, and to determine major state issues. The NPC Standing Committee is the highest body of the NPC, composed of a chairman, vice chairman, secretary-general, and other members. The chairman and vice-chairman serve no more than two consecutive terms. There are also elections and appointments for many federal positions, such as the President of the Supreme People's Court and the Central Military Committee members.

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<sup>20</sup> Denis and Sibilkov 2009

<sup>21</sup> Almeida and Campello 2007

The Chinese People's Political Consultative Conference (PCC) is an institution of multiparty co-operation and political consultation led by the CPC. The latest promotion to the PCC was held on the 3rd of March 2013. It includes the CPC, eight democratic parties, individuals without party affiliation, eight major mass organizations, representative figures from 56 ethnic groups and five major religious groups in China. The major functions of the PCC are political consultation, and democratic supervision and participation in the deliberation and administration of state affairs. The Standing Committee, which is in charge of daily affairs, is the main body of the PCC. It is composed of a chairperson, vice-chairpersons and secretary-general.

NCPC is the highest body within the Communist Party of China (CPC). The latest promotion to the NCPC was held on the 8th November 2012. The Constitution has given NCPC the functions and powers to hear and examine the report of the Central Commission for Discipline Inspection, to revise the Party Constitution, and to elect federal party positions. The leadership of the Communist Party changes during the congress through elections. The reshuffle involves not only the top leadership and the general secretary, but also many significant state-level positions (such as the Politburo, Standing Committee, and Central Military Commission).

## **Provinces**

(Mainland) China has four levels of formal administration under the state government. The top-level officially consists of 31 provinces, which include 23 provinces (Beijing, Shanghai, Guangdong, Sichuan, Hunan etc.); 5 autonomous regions (Guangxi, Inner Mongolia, Tibet, Ningxia, and Xinjiang) that have large ethnic minority populations; and 4 municipalities (Beijing, Shanghai, Tianjin and Chongqing) that report directly to the central government. The term "province" below refers to these 23 provinces, 5 autonomous regions, and 5 municipalities. Each province is led by the provincial communist party and people's government in conjunction.

The provincial people's government conducts administrative work related to various aspects of the province, including economy, education, science, culture, public health, physical culture, urban and rural development, finance, civil affairs, public security, ethnic affairs, judicial administrations, supervision, and family planning in their respective administrative areas. The government issues decisions and orders; appoints or removes administrative functionaries, trains and evaluates their performance, and rewards or punishes them.

The provincial party secretary, leader of each provincial communist party, is the most powerful position in the province. Although the people's government in a province is



accountable for the administrative work related to various aspects (economy, education, science, culture, public health, etc.), provincial party secretaries have the power to scrutinize governors and other lower level officers and report directly to the central government.

**Table I: Descriptive Statistics on Chinese Provinces**

This table presents province-level summary statistics. The first three columns report the number of provincial party secretaries promoted in national tournament years (in 2003, 2008, and 2013). Because there is only one party secretary in each province, the value is either 0 or 1. Coastal indicates whether the province is considered a coastal province. We also report the total SOEs and average GDP, Unemployment Rate, and Inflation Rate of each province across the sample period. See Appendix A for details of variable construction.

Province	2003	2008	2013	Total	Coastal	SOE	GDP	Unemployment	Inflation	Investment
Anhui	0	0	0	0	0	36	9.1	4.0	3.0	9.3
Beijing	1	0	1	2	0	40	10.7	1.6	2.2	7.1
Chongqing	1	1	1	3	0	11	5.9	3.9	2.7	7.1
Fujian	0	0	1	1	1	27	10.9	3.9	2.7	5.8
Gansu	0	0	0	0	0	13	3.1	3.3	3.4	6.2
Guangdong	1	1	0	2	1	67	34.8	2.6	2.6	7.0
Guangxi	0	0	0	0	1	15	7.0	3.8	3.2	8.6
Guizhou	0	0	1	1	0	12	3.5	3.9	3.1	6.9
Hainan	0	0	0	0	1	6	1.5	3.1	3.2	4.6
Hebei	0	0	1	1	1	21	15.5	3.9	3.1	7.3
Heilongjiang	0	1	1	2	0	18	8.1	4.3	3.1	5.1
Henan	1	0	1	2	0	22	17.1	3.4	3.3	9.1
Hubei	1	0	0	1	0	20	11.6	4.2	3.3	7.5
Hunan	0	0	1	1	0	32	11.7	4.2	3.2	7.5
Inner Mongolia	0	0	1	1	0	8	8.1	4.1	3.1	7.3
Jiangsu	1	1	0	2	1	46	30.4	3.4	2.9	7.5
Jiangxi	0	1	1	2	0	15	7.0	3.4	2.8	7.4
Jilin	0	0	1	1	0	14	6.4	4.0	3.0	6.9
Liaoning	0	1	0	1	1	27	13.6	4.7	2.8	6.7
Ningxia	0	0	0	0	0	8	1.2	4.4	3.6	8.5
Qinghai	0	0	0	0	0	7	1.0	3.8	4.1	7.4
Shaanxi	0	0	1	1	0	20	7.3	3.8	3.2	7.0
Shandong	1	1	0	2	1	54	29.3	3.4	2.7	8.9
Shanghai	1	1	1	3	1	82	13.3	4.2	2.4	5.0
Shanxi	0	0	0	0	0	15	6.9	3.3	3.2	7.6
Sichuan	1	1	1	3	0	30	12.7	4.3	3.3	6.8
Tianjin	0	1	1	2	1	17	6.7	3.7	2.6	5.8
Tibet	0	0	0	0	0	39	0.4	3.7	2.9	6.1
Xinjiang	0	0	0	0	0	23	4.1	3.6	3.4	10.2
Yunnan	0	0	0	0	0	19	5.6	4.2	3.4	9.0
Zhejiang	1	0	0	1	1	33	20.8	3.5	2.7	8.5
Total	10	10	15	35	11					
Mean	0.32	0.32	0.48	0.38	0.35	24	10.5	3.7	3.0	7.3

**Table II: Descriptive statistics on Chinese firms**

Panel A reports summary statistics for national Tournaments held between 2000 and 2013. Panel B reports their correlation matrix. See Appendix A for variable descriptions.

*Panel A*

<b>Firm Level Characteristics</b>				
<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Standard Deviation</b>
Investment	16380	0.0725	0.0454	0.0817
Tax	16965	0.2257	0.1703	0.2351
Employment Growth	16162	0.1264	0.0181	0.5605
Wages Growth	16156	0.4268	0.1085	1.5668
Cash	16305	0.0208	0.0202	0.0643
Debt	16305	0.2494	0.2260	0.2022
SOE	17527	0.4314	0.0000	0.4953
Tobin's Q	17360	1.6891	1.3484	1.0569
Cash Flow	16378	0.0629	0.0567	0.0792
Market Return	16965	0.2649	-0.1209	0.7440
Market Volatility	16965	0.0058	0.0044	0.0042

Panel B

	Correlation Matrix																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.Tournament	1.00																
2.Promotion	0.64	1.00															
3.Investment	0.02	-0.01	1.00														
4.Tax	-0.02	0.00	-0.03	1.00													
5.Employment Growth	-0.01	-0.01	0.15	0.04	1.00												
6.Wages Growth	-0.01	0.01	0.08	0.00	0.17	1.00											
7.Cash	-0.04	-0.02	0.20	0.00	0.03	0.04	1.00										
8.Debt	-0.03	-0.02	0.24	0.01	0.09	0.10	-0.11	1.00									
9.SOE	-0.02	0.00	0.00	0.07	-0.02	0.00	0.08	0.04	1.00								
10.Tobin's Q	0.10	0.07	0.02	-0.10	0.06	0.04	0.01	-0.10	-0.11	1.00							
11.Cash Flow	0.01	0.00	0.35	0.06	0.19	0.11	0.38	-0.07	-0.01	0.20	1.00						
12.Unemployment Growth	0.07	0.09	0.01	-0.05	-0.05	-0.03	0.05	0.03	0.04	0.03	-0.08	1.00					
13.GDP Growth	0.03	0.01	-0.02	0.04	-0.02	0.06	0.01	0.09	0.05	-0.21	0.01	-0.44	1.00				
14.Inflation Growth	0.13	0.04	0.04	0.03	0.04	0.02	-0.11	-0.04	-0.04	0.23	0.07	-0.42	0.20	1.00			
15.Market Return	-0.11	-0.07	-0.03	0.06	0.01	0.08	0.07	0.04	0.01	-0.24	0.05	-0.34	0.59	-0.23	1.00		
16.Market Volatility	-0.29	-0.18	-0.01	0.01	-0.01	0.01	0.02	0.02	0.01	0.08	0.02	0.08	0.20	0.41	0.13	1.00	
17.Cumulative Investment	-0.04	-0.08	0.09	-0.01	-0.01	-0.01	0.04	0.06	0.08	-0.08	0.01	-0.06	0.19	0.03	0.03	0.09	1.00

**Table III: Impact of political tournament cycles on corporate tax payments**

Panel A presents mean tax rates during and outside tournament years, and for SOEs and non-SOEs. It also shows mean tax rates around tournament years. Panel B presents estimates from tax regressions of the type:

$$Tax_{ijt} = \alpha_0 + \beta_1 Tournament_{t+2} + \beta_2 Tournament_{t+1} + \beta_3 Tournament_{t+2} * SOE_{ij} + \beta_4 Tournament_{t+1} * SOE_{ij} + \beta_4 SOE_{ij} + \beta_5 Tax_{ij,t-1} + \beta_6 Promoted_{t+2} + \beta_7 Promoted_{t+1} + \beta_8 ROA_t + \beta_9 Size_t + \beta_{10} Leverage_t + \beta_{11} Loss_{ijt} + \beta_{12} GDP_t + \varepsilon_{ijt},$$

where  $i$  indexes the firm,  $j$  indexes the province, and  $t$  indexes the year. The dependent variable is tax rate, defined as the sum of tax expenses and deferred tax liabilities divided by earnings before taxes.  $Tournament_{t+2}$  is a dummy variable set to 1 if there are national Tournaments in two years.  $SOE_{ij}$  is a dummy variable set to 1 if the firm is owned by the government.  $Tax_{ij,t-1}$  is the tax rate of the previous year.  $ROA_t$  is return on assets.  $Size_t$  is the natural logarithm of the book value of total assets.  $Leverage_t$  is leverage of the firm.  $Loss_{ijt}$  is a dummy variable set to 1 if the firm reports a loss in fiscal year. GDP is the real gross domestic products.  $Promoted_{j,t+2}$  is a dummy variable set to 1 if the provincial party secretary of the province is promoted in two years. See Appendix A for variable descriptions. Standard errors are clustered by province. The brackets report t-statistics. \*, \*\*, \*\*\* represent statistical significance at the 10%, 5%, and 1% level, respectively.

*Panel A: Mean Tax Rates*

<b>Mean Tax Rates in Tournament Years vs. Non-Tournament Years</b>					
	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Std.</b>	
Tournament	5138	0.2439	0.0034	0.2467	
Non-Tournament	16057	0.2147	0.0018	0.2236	
Difference		0.0292			
Difference (t-stat)		(7.9555)			
<b>Mean Tax Rates around Tournament Years</b>					
Year	2yr before Tournament		Tournament Year		2yr after Tournament
	-2	-1	0	1	2
Tax	0.2157	0.2439	0.2136	0.2247	0.2187
<b>Mean Tax Rates: SOE vs. non-SOE</b>					
	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Std.</b>	
Non-SOE	11952	0.2059	0.1552	0.2194	
SOE	9243	0.2422	0.1917	0.2409	
Difference		-0.0363			
Difference (t-stat)		(-11.4387)			

Panel B: Impact of impending political tournament on tax rates

Tax	1	2	3	4
1yr before Tournament		0.041***		0.052***
		(5.84)		(4.97)
1yr before Tournament*SOE		-0.003		-0.004
		(-0.37)		(-0.49)
2yr before Tournament	-0.011	-0.004	-0.011*	-0.003
	(-1.40)	(-0.60)	(-1.91)	(-0.59)
2yr before Tournament*SOE	0.004	0.006	0.002	0.003
	(0.69)	(0.85)	(0.36)	(0.42)
SOE	0.031***	0.032***	0.012***	0.013***
	(4.45)	(4.45)	(3.06)	(3.34)
Promoted in 1yr		0.012		-0.013
		(1.26)		(-0.91)
Promoted in 2yr	0.008	0.01	0.009	0.009
	(0.67)	(0.91)	(1.13)	(1.17)
GDP Growth	0.375*	-0.281		
	(1.81)	(-1.10)		
Unemployment Growth	-0.75	-4.769***		
	(-0.48)	(-2.99)		
Inflation Growth	0.431**	0.422**		
	(2.62)	(2.54)		
Cash Flow	0.242***	0.237***		
	(4.23)	(4.15)		
Tobin's Q	-0.023***	-0.024***	-0.009***	-0.010***
	(-8.81)	(-9.35)	(-3.62)	(-4.19)
ROA			0.648***	0.639***
			(11.97)	(11.76)
Firm Size			0.018***	0.017***
			(6.68)	(6.53)
Leverage			0.002***	0.002***
			(7.53)	(7.40)
Tax(t-1)			0.364***	0.364***
			(18.80)	(19.04)
Constant	0.188***	0.253***	-0.316***	-0.342***
	(8.66)	(9.79)	(-5.47)	(-5.91)
adj. R <sup>2</sup>	0.037	0.039	0.179	0.183
Observations	13662	13662	16133	16133
Fixed Effects	Province	Province	Province	Province

**Table IV: Impact of impending political tournament on firm investments**

This table presents estimates for regressions of the following type:

$$I_{ijt} = \alpha_0 + \beta_1 \text{Tournament}_{t+2} + \beta_2 \text{Tournament}_{t+2} * \text{SOE}_{ij} + \beta_3 \text{SOE}_{ij} + \beta_4 \text{Tournament}_{t+2} * X + \beta_5 X + \beta_6 Q_{ij,t-1} + \beta_7 CF_{ijt} + \beta_8 \Delta GDP_t + \beta_9 \Delta \text{Unemployment}_t + \beta_{10} \Delta \text{Inflation}_t + \beta_{11} \text{Promoted}_{j,t+2} + \varepsilon_{ijt},$$

where  $i$  indexes the firm,  $j$  indexes the province, and  $t$  indexes the year. The dependent variable is investment rate, defined as capital expenditure scaled by beginning-of-year total assets.  $\text{Tournament}_{t+2}$  is a dummy variable set to 1 if there are national Tournaments in two years.  $X$  is a dummy variable set of firm-specific characteristics. In Column 1,  $X$  includes the Central SOE, and Provincial SOE dummies. In Column 2,  $X$  includes the Conglomerate, Property, and Commerce dummies.  $\text{SOE}_{ij}$  is a dummy variable set to 1 if the firm is owned by the government.  $Q_{ij,t-1}$  is the proxy for Tobin's Q.  $CF_{ijt}$  is cash flow.  $\Delta GDP_t$  is the change in real gross domestic product over the previous year.  $\Delta \text{Unemployment}_t$  is the change in the unemployment rate over the previous year.  $\Delta \text{Inflation}_t$  is the change in inflation over the previous year.  $\text{Promoted}_{j,t+2}$  is a dummy variable set to 1 if the provincial party secretary is promoted in two years. See Appendix A for variable descriptions. Standard errors are clustered by province. The brackets report t-statistics. \*, \*\*, \*\*\* represent statistical significance at the 10%, 5%, and 1% level, respectively.

*Panel A: Mean Investment Rates*

Tournament years and non-tournament years						
		Mean	Median	Std.		
Tournament (t-2)		0.0758	0.0482	0.0839		
Non-Tournament		0.0714	0.0444	0.0809		
Difference		-0.0045				
Difference (t-stat)		(-2.993)				
Investment rates tournament years						
Year	2yr before Tournament	-1	Tournament Year	1	2yr after Tournament	
Investment	-2	0.0758	0.0712	0.0746	0.0700	0.0713
SOE vs. non-SOE						
Non-SOE		0.0730	0.0453	0.0825		
SOE		0.0718	0.0454	0.0807		
Difference		0.0011				
Difference (t-stat)		(0.8772)				

Panel B: Sensitivity of firm investments to political tournament cycles

Investment	1	2	3	4	5	6	7	8	9
2yrs before Tournament	0.004*** (2.99)	0.004*** (3.95)	0.007*** (4.77)	0.006*** (3.65)	0.007** (2.66)	0.007** (2.65)	0.007*** (2.91)	0.005** (2.44)	0.005** (2.14)
2yrs before Tournament *SOE			-0.007*** (-2.99)	-0.003 (-1.47)	-0.003 (-1.45)	-0.003 (-1.55)	-0.003 (-1.54)	-0.003 (-1.18)	-0.004 (-1.53)
1yr before Tournament									0.000 (-0.26)
1yr before Tournament *SOE									-0.004** (-2.03)
SOE			-0.000 (-0.01)	0.000 (0.14)	0.000 (0.14)	0.000 (0.05)	0.000 (0.11)	0.000 (0.03)	0.001 (0.49)
Tobin's Q				-0.004*** (-4.36)	-0.004*** (-4.37)	-0.004*** (-4.49)	-0.004*** (-4.80)	-0.005*** (-5.63)	-0.005*** (-5.53)
Cash flow				0.357*** (21.69)	0.357*** (21.72)	0.360*** (21.38)	0.361*** (21.40)	0.362*** (21.13)	0.362*** (21.17)
Promoted in 1yr									-0.001 (-0.52)
Promoted in 2yrs					-0.002 (-0.61)	-0.003 (-0.80)	-0.003 (-0.82)	-0.002 (-0.77)	-0.002 (-0.78)
Unemployment growth						1.587*** (3.45)	1.160** (2.20)	1.955*** (3.70)	-0.117*** (-2.58)
GDP growth							-0.106** (-2.40)	-0.121** (-2.70)	2.011*** (3.83)
Inflation growth								0.176*** (5.70)	0.177*** (5.70)
Constant	0.071*** (97.41)	0.071*** (267.59)	0.071*** (52.02)	0.055*** (29.82)	0.055*** (30.04)	0.054*** (28.77)	0.065*** (14.07)	0.064*** (13.95)	0.063*** (13.35)
adj. R <sup>2</sup>	0.000	0.023	0.023	0.138	0.138	0.139	0.139	0.141	0.141
Observations	16380	16380	16373	15534	15534	15534	15534	15534	15534
Fixed effects	No	Province	Province	Province	Province	Province	Province	Province	Province



**Table V: Heterogeneity in investment sensitivity to impending political tournament**

This table presents estimates for the regression evaluating the effect of province heterogeneity of the type:

$$I_{ijt} = \alpha_0 + \beta_1 \text{Tournament}_{t+2} + \beta_2 \text{Tournament}_{t+2} * \text{SOE}_{ij} + \beta_3 \text{SOE}_{ij} + \beta_4 \text{Tournament}_{t+2} * X + \beta_5 X + \beta_6 Q_{ij,t-1} + \beta_7 CF_{ijt} + \beta_8 \Delta GDP_t + \beta_9 \Delta \text{Unemployment}_t + \beta_{10} \Delta \text{Inflation}_t + \beta_{11} \text{Promoted}_{j,t+2} + \varepsilon_{ijt}$$

where *i* indexes the firm, *j* indexes the province, and *t* indexes the year. The dependent variable is investment rate, defined as capital expenditure scaled by beginning-of-year total assets. *Tournament*<sub>*t*+2</sub> is a dummy variable set to 1 if there are national promotions in two years. *X* is a dummy variable set of firm-specific characteristics. In Column 1, *X* includes the Central SOE, and Provincial SOE dummies. In Column 2, *X* includes the Conglomerate, Property, and Commerce dummies. *SOE*<sub>*ij*</sub> is a dummy variable set to 1 if the firm is owned by the government. *Q*<sub>*ij,t-1*</sub> is the proxy for Tobin's Q. *CF*<sub>*ijt*</sub> is cash flow.  $\Delta GDP_t$  is the change in real gross domestic product over the previous year.  $\Delta \text{Unemployment}_t$  is the change in unemployment rate over the previous year.  $\Delta \text{Inflation}_t$  is the change in inflation over the previous year. *Promoted*<sub>*j,t+2*</sub> is a dummy variable set to 1 if the provincial party secretary of the province is promoted in two years. See the Appendix for variable descriptions. Standard errors are clustered by province. The brackets report t-statistics. \*, \*\*, \*\*\* represent statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A: Province heterogeneity based on private firms, provincial SOEs and central SOEs, and across industries

	1 SOE	2 Industry
2yrs before Tournament	0.005** (2.45)	0.005** (2.36)
2yrs before Tournament*SOE		-0.002 (-1.12)
SOE		0.000 (-0.07)
2yrs before Tournament*Provincial SOE	-0.003 (-1.43)	
2yrs before Tournament*Central SOE	0.002 (0.43)	
Provincial SOE	0.000 (0.02)	
Central SOE	0.000 (0.05)	
2yrs before Tournament*Conglomerates		-0.001 (-0.26)
2yrs before Tournament*Property		0.001 (0.16)
2yrs before Tournament*Commerce		0.001 (0.21)
Conglomerates		-0.015*** (-6.76)
Property		-0.045*** (-14.68)
Commerce		-0.012** (-2.50)
Promoted in 2yrs	-0.002 (-0.78)	-0.002 (-0.62)
Unemployment growth	-0.121** (-2.70)	-0.087* (-1.89)
GDP growth	1.954*** (3.69)	2.178*** (4.28)
Inflation growth	0.177*** (5.69)	0.166*** (5.44)
Tobin's Q	-0.005*** (-5.61)	-0.005*** (-5.32)
Cash flow	0.362*** (20.95)	0.344*** (20.42)
Constant	0.064*** (13.86)	0.069*** (15.59)
adj. R <sup>2</sup>	0.141	0.166
Observations	15534	15534
Fixed effects	Province	Province

Panel B: Province heterogeneity based on minority, municipalities, coastal location, and firm count

	<b>1</b>	<b>2</b>	<b>3</b>
	<b>Minority</b>	<b>Coastal</b>	<b>Firm Count</b>
2yrs before Tournament	0.007*** (3.35)	0.007*** (2.79)	0.002 (0.35)
2yrs before Tournament*SOE	-0.002 (-0.99)	-0.002 (-1.06)	-0.002 (-1.08)
2yrs before Tournament*Minority	-0.01 (-1.62)		
2yrs before Tournament*Municipality	-0.003 (-1.08)		
Minority	0.015** (2.62)		
Municipality	-0.005 (-1.06)		
2yrs before Tournament*Coastal		0.000 (-0.02)	
Coastal		-0.004 (-1.14)	
2yrs before Tournament*Large			0.006 (1.44)
2yrs before Tournament*Medium			0.010* (1.95)
Large			0.000 (-0.12)
Medium			0.005 (0.85)
SOE	0.000 (-0.03)	0.000 (-0.09)	0.000 (-0.12)
Promoted in 2yrs	-0.005 (-1.28)	-0.007** (-2.11)	-0.008** (-2.36)
Unemployment growth	-0.099** (-2.11)	-0.098** (-2.12)	-0.095** (-2.06)
GDP growth	2.112*** (4.16)	2.137*** (4.20)	2.143*** (4.17)
Inflation growth	0.170*** (5.88)	0.172*** (6.02)	0.170*** (6.02)
Tobin's Q	-0.005*** (-5.60)	-0.005*** (-6.04)	-0.005*** (-5.90)
Cash glow	0.350*** (21.17)	0.350*** (21.50)	0.350*** (22.18)
Constant	0.062*** (12.82)	0.064*** (13.68)	0.061*** (12.22)
adj. R <sup>2</sup>	0.16	0.158	0.158
Observations	15534	15534	15534
Fixed effects	Province	Province	Province

**Table VI: Impact of political tournament cycles on pricing of dual-listed firms**

This table presents estimates for the following regression:

$$\text{Premium}_{ijt} = \alpha_0 + \beta_1 \text{Tournament} + \beta_2 \text{Win} + \beta_3 \text{Premium}_{ij,t-1} + \beta_4 \text{Shares}_{ijt} + \beta_5 \text{MV}_{ijt} + \beta_6 \text{Volume}_{ijt} + \beta_7 \text{Volatility}_{ijt} + \beta_8 \text{Red Chip}_t + \beta_9 \Delta \text{Inflation}_t + \beta_{10} \Delta \text{Reserve}_t + \varepsilon_{ijt}$$

where  $i$  indexes the firm,  $j$  indexes the province, and  $t$  indexes the year. The dependent variable is the price premium of firms dual-listed in both A-share and Hong Kong markets. *Promotion* is a dummy variable set containing  $\text{Tournament}_{t+1}$ ,  $\text{Tournament}_t$ ,  $\text{Tournament}_{t-1}$ , which is set to 1 if national Tournaments are held in the previous year, in year  $t$ , and in the next year, respectively. *Win* is a dummy variable set containing  $\text{Win}_{j,t+1}$ ,  $\text{Win}_{j,t}$ ,  $\text{Win}_{j,t-1}$ .  $\text{Shares}_{ijt}$  is the ratio of outstanding shares of A and H shares.  $\text{MV}_{ijt}$  is the monthly stock market value.  $\text{Volume}_{ijt}$  is the ratio of trading volume (Volume A-share/Volume H-share).  $\text{Volatility}_{ijt}$  is the relative volatility (Volatility A-share/Volatility H-share).  $\text{Red Chip}_t$  is the monthly trading volume of the Red Chip market.  $\Delta \text{Inflation}_t$  is the monthly inflation growth.  $\Delta \text{Reserve}_t$  is the monthly national foreign reserve growth. See Appendix A for variable descriptions. Standard errors are clustered by province. The brackets report  $t$ -statistics. \*, \*\*, \*\*\* represent statistical significance at the 10%, 5%, and 1% level, respectively.

Price Premium	1
1yr before Tournament	0.029** (2.03)
Year of Tournament	-0.029* (-1.86)
1yr after Tournament	-0.148*** (-8.32)
Premium(t-1)	0.774*** (70.44)
Outstanding shares	-0.030** (-2.49)
Market value	0.000*** (4.50)
Trading volume	0.010*** (3.93)
Volatility	-0.003* (-1.95)
Trading volume (Red Chip)	-0.182*** (-4.65)
Inflation growth	4.751*** (5.84)
Foreign reserve growth	-0.733*** (-2.70)
Promoted in 1yr	-0.01 (-0.71)
Promoted this year	0.132*** (6.62)
Promoted last year	0.096*** (5.45)
Constant	0.188*** (4.44)
adj. R <sup>2</sup>	0.909
Observations	2736
Fixed effects	Firm

**Table VII: Broad economic impact of political tournament cycles**

This table analyzes how various firm-level variables respond to impending political promotions. It presents single-variable estimates from the estimation of the following equation:

$$Y_{ijt} = \alpha_0 + \beta_1 \text{Tournament}_{t+2} + \beta_2 \text{Tournament}_{t+1} + \beta_3 Y_{ij,t-1} + \varepsilon_{ijt},$$

where  $i$  indexes the firm,  $j$  indexes the province, and  $t$  indexes the year. The dependent variables are the changes of investment, employee growth, wage growth, cash, debt, tax, volatility, and stock return, respectively.  $\text{Tournament}_{t+2}$  is a dummy variable set to 1 if there are national Tournaments in two years.  $Y_{ij,t-1}$  is the lagged values of the dependent variables. See Appendix A for variable descriptions. Standard errors are clustered by province. The brackets report t-statistics. \*, \*\*, \*\*\* represent statistical significance at the 10%, 5%, and 1% level, respectively.

	1	2	3	4	5	6	7	8
	$\Delta$ Investment	$\Delta$ Employee Growth	$\Delta$ Wage Growth	$\Delta$ Cash	$\Delta$ Debt	$\Delta$ Tax	$\Delta$ Volatility	$\Delta$ Return
2yrs before Tournament	0.004** (2.51)	-0.01 (-0.56)	0.080* (1.71)	0.000 (-0.19)	0.002 (0.64)	0.018*** (3.32)	0.001* (1.88)	0.298*** (10.09)
1yr before Tournament	-0.002 (-1.62)	0.037** (2.38)	0.216*** (4.77)	0.011*** (7.40)	0.003 (1.05)	0.040*** (7.83)	0.007*** (12.86)	0.789*** (27.91)
Constant	-0.005*** (-5.56)	-0.003 (-0.31)	-0.109*** (-4.03)	-0.002*** (-2.81)	-0.003* (-1.91)	-0.007** (-2.44)	-0.007*** (-20.94)	-0.313*** (-18.54)
adj. R <sup>2</sup>	0.001	0.000	0.001	0.004	0.000	0.004	0.011	0.052
Observations	14285	14189	14161	14331	14323	14969	14988	14164
Fixed effects	No	No	No	No	No	No	No	No

	1	2	3	4	5	6	7	8
	$\Delta$ Investment	$\Delta$ Employee Growth	$\Delta$ Wage Growth	$\Delta$ Cash	$\Delta$ Debt	$\Delta$ Tax	$\Delta$ Volatility	$\Delta$ Return
2yrs before Tournament	0.003** (2.02)	0.009 (0.54)	0.067 (1.48)	-0.004*** (-2.97)	-0.005 (-1.55)	0.016*** (2.90)	0.002*** (7.63)	0.113*** (3.91)
1yr before Tournament	-0.002 (-1.14)	0.046*** (3.04)	0.234*** (5.81)	0.008*** (6.07)	0.001 (0.17)	0.043*** (8.50)	0.006*** (27.10)	0.763*** (30.06)
Y(t-1)	-0.300*** (-36.32)	-0.523*** (-63.92)	-0.503*** (-66.54)	-0.434*** (-55.73)	-0.324*** (-38.14)	-0.427*** (-52.21)	-0.045*** (-13.22)	-0.535*** (-74.46)
Constant	-0.005*** (-5.52)	0.000 (-0.05)	-0.112*** (-4.76)	-0.003*** (-3.31)	-0.003 (-1.56)	-0.005* (-1.75)	-0.002*** (-17.04)	-0.266*** (-17.94)
adj. R <sup>2</sup>	0.097	0.251	0.268	0.204	0.105	0.177	0.066	0.356
Observations	12310	12221	12187	12357	12346	12992	13011	12248
Fixed effects	No	No	No	No	No	No	No	No

**Table VIII: Broad economic impact analysis using a simultaneous equation model**

This table jointly analyzes how various firm-level variables respond to impending political promotions. This table presents joint estimates from regressions of the type:

$$Y_{ijt} = \alpha_0 + \gamma \hat{Y}_{ijt} + \beta_1 \text{Tournament}_{t+1} + \beta_2 \text{Tournament}_{t+1} * \text{SOE}_{ij} + \beta_3 \text{Tournament}_{t+2} + \beta_4 \text{Tournament}_{t+2} * \text{SOE}_{ij} + \delta \text{Exogenous} + \varepsilon_{ijt},$$

where  $i$  indexes the firm,  $j$  indexes the province, and  $t$  indexes the year. The dependent variables are investment, employee, wage, cash, debt, tax, volatility, and stock return, respectively.  $\hat{Y}_{ijt}$  includes the predicted values of dependent variables in equation (7). *Exogenous* is a variable set that includes GDP growth, unemployment growth, inflation growth, annual market return, annual market volatility, Tobin's Q, cash flow, promote dummy, cumulative investment, and the interactions between congress dummies and cumulative investment. See Appendix A for variable descriptions. Standard errors are clustered by province. The brackets report t-statistics. \*, \*\*, \*\*\* represent statistical significance at the 10%, 5%, and 1% level, respectively. The estimation procedure is performed by two-stage least-squares estimation.

	1	2	3	4	5	6	7	8
	Investment	Employee	Wage	Cash	Debt	Tax	Volatility	Return
1yr before Tournament	-0.095*** (-4.84)	1.024*** (6.20)	-1.778** (-2.66)	0.022*** (5.75)	-0.709*** (-16.28)	0.422*** (7.29)	-0.005*** (-3.44)	-0.330*** (-3.75)
1yr before Tournament*SOE	0.022*** (4.06)	-0.213*** (-5.41)	0.516*** (3.47)	-0.005** (-2.17)	0.165*** (13.45)	-0.097*** (-7.04)	0.001** (2.65)	0.077** (2.42)
2yrs before Tournament	0.020*** (3.04)	-0.088* (-1.90)	-0.287** (-2.26)	-0.001 (-0.17)	0.016 (1.48)	0.005 (0.25)	0.001 (0.54)	0.015 (0.25)
2yrs before Tournament*SOE	-0.002 (-0.89)	0.029 (0.80)	-0.083 (-1.52)	0.001 (0.26)	-0.022*** (-3.84)	0.01 (0.91)	0 (-0.71)	-0.009 (-0.39)
Investment		2.469*** (5.06)	0.185 (0.15)	0.015 (0.32)	-0.510*** (-3.03)	0.033 (0.17)	-0.007 (-0.96)	-0.378 (-0.60)
Employee	0.079*** (8.15)		-0.041 (-0.13)	-0.006 (-0.72)	0.211*** (11.05)	-0.063** (-2.16)	0.002*** (2.98)	0.098 (1.33)
Wage	0.001 (0.22)	-0.005 (-0.14)		0.001 (0.34)	-0.039*** (-4.48)	0.013 (1.11)	0 (-0.38)	-0.019 (-0.49)
Cash	3.385*** (3.97)	-40.455*** (-5.86)	88.718*** (3.22)		32.373*** (15.78)	-19.675*** (-6.36)	0.240*** (2.93)	14.872*** (6.02)
Debt	-0.081*** (-2.82)	1.047*** (4.34)	-1.622** (-2.37)	0.022* (1.70)		0.400*** (4.91)	-0.005 (-1.58)	-0.339** (-2.41)
Tax	0.006 (0.24)	-0.372* (-1.92)	0.649 (1.06)	-0.016 (-0.77)	0.479*** (11.49)		0.003 (1.15)	0.219 (1.30)
Volatility	-23.273*** (-7.08)	183.218*** (7.50)	-149.387 (-1.49)	3.248** (2.39)	-103.338*** (-14.29)	55.989*** (6.25)		-50.899*** (-5.10)
Return	-0.369*** (-6.55)	2.998*** (6.16)	-4.865** (-2.70)	0.063*** (3.85)	-2.078*** (-14.91)	1.122*** (5.92)	-0.016*** (-3.47)	
Promoted in 1yr	0.023*** (4.89)	-0.194*** (-5.73)	0.259 (1.66)	-0.004** (-2.06)	0.124*** (11.03)	-0.077*** (-6.09)	0.001** (2.59)	0.06 (1.59)
Promoted in 2yrs	-0.020*** (-4.84)	0.171*** (5.70)	-0.164 (-1.57)	0.004 (1.53)	-0.119*** (-12.90)	0.066*** (4.80)	-0.001 (-1.54)	-0.056* (-1.91)
GDP Growth	-0.897*** (-4.30)	8.409*** (5.71)	-7.398 (-1.25)	0.175* (1.72)	-5.465*** (-12.32)	2.564*** (4.09)	-0.050*** (-5.76)	-2.730** (-2.59)
Unemployment growth	-4.413*** (-3.49)	40.823*** (4.08)	-10.633 (-0.29)	0.93 (1.41)	-27.487*** (-8.71)	15.494*** (4.59)	-0.2946*** (-4.73)	-14.545 (-1.61)
Inflation growth	1.651*** (4.36)	-18.238*** (-6.16)	41.378*** (3.35)	-0.433*** (-6.90)	14.098*** (15.51)	-7.706*** (-5.39)	0.105** (2.73)	6.476*** (5.51)
Market return	0.438*** (6.68)	-3.550*** (-6.50)	5.435** (2.62)	-0.073*** (-3.90)	2.382*** (14.89)	-1.268*** (-5.88)	0.019*** (4.22)	1.149*** (29.32)
Market volatility	29.762*** (7.23)	-226.681*** (-7.51)	129.841 (1.05)	-3.816* (-1.99)	120.528*** (13.45)	-64.827*** (-6.17)	1.226*** (20.96)	60.513*** (4.59)
Tobin's Q	-0.050*** (-6.68)	0.425*** (6.46)	-0.500* (-1.94)	0.008** (2.61)	-0.270*** (-14.52)	0.134*** (5.50)	-0.002*** (-3.73)	-0.131*** (-8.75)
Cash flow	0.092 (0.93)	4.208*** (5.81)	-8.631*** (-2.78)	0.110*** (2.76)	-3.508*** (-14.97)	2.675*** (7.63)	-0.024* (-1.84)	-1.492** (-2.10)
2yrs before Tournament*Cum								
Investment	0.265** (2.24)	-3.471*** (-3.93)	8.805*** (3.06)	-0.085 (-1.37)	2.860*** (11.65)	-1.753*** (-4.76)	0.018 (1.00)	1.304 (1.38)
1yr before Tournament*Cum								
Investment	0.532*** (3.64)	-6.796*** (-4.83)	14.728*** (2.77)	-0.154*** (-2.90)	5.061*** (14.96)	-2.883*** (-6.15)	0.037* (2.04)	2.352** (2.31)
Cum Investment	-0.871*** (-3.55)	11.275*** (5.68)	-23.797*** (-3.19)	0.268*** (4.02)	-8.612*** (-14.97)	5.001*** (6.41)	-0.066** (-2.39)	-4.055*** (-4.10)
Constant	0.320*** (6.94)	-2.530*** (-6.65)	2.536 (1.69)	-0.046** (-2.08)	1.550*** (15.34)	-0.591*** (-4.09)	0.014*** (6.49)	0.738*** (5.10)
adj. R <sup>2</sup>	0.41	0.015	0.024	0.34	0.56	0.234	0.434	0.643
Observations	13335	13337	13287	13337	13337	13337	13337	13337
Fixed effects	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm