

China's national promotions and firms' decision making

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Publication Date: 2016

DOI: https://doi.org/10.26190/unsworks/18946

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CHINA'S NATIONAL PROMOTIONS AND FIRMS' DECISION MAKING

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A thesis in fulfilment of the requirements for the degree of Master of Philosophy

Acknowledgements

I would like to express my grateful thanks to my supervisor Professor David Feldman and co-supervisor Dr Konark Saxena from School of Banking and Finance, UNSW Business School, University of New South Wales for encouraging my research. You provide me with great support and guidance. I would also like to thank Vic Edwards for suggesting the use of the RESSET database and enabling access to it. Furthermore, a warm thanks to Professor Zhu Zhiwu from Tsinghua University and Jim Wang from Beijing RESSET Data Tech Co. Ltd for providing the data and the guidance of how to use the database.

It is my great honor to conduct my research at UNSW. I have learned and improved so much from the discussions with other research students. Finally, a special thanks to my family. Words cannot express how thankful I am to my family for your supports.

Jiaming Li

March 2016

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Abstract

Employing a sample of 17,534 firm year observations across 31 provinces over 2000-2013 in mainland China, this thesis examines the role of China's political tournaments in corporate decision making. We first document that investment rate is systematically higher before national tournaments, controlling for investment opportunities and economic conditions. Specifically, we show an average increase of 7.0% investment rates two years before national tournaments. We further examine the tournament effects on tax decisions and show that firms on average pay 4.1% more taxes in the year leading up to national tournaments. Using a sample of firms dual-listed in both mainland and Hong Kong exchange, we show that the Chinese government is likely to intervene into the market around national tournaments. Finally, we introduce additional firm aspects including employment, wage, cash holding, debt, stock return, and stock volatility in order to investigate how these variables are influenced simultaneously. We show that the results for investment and tax are consistent with our findings. In addition, we also find that firms tend to raise debts to fund the extra investments. The market reacts negatively as these investments serve politicians at the costs of shareholders. We also discover a temporary growth in employment and wage before national tournaments. Further, evidence shows that China's national tournaments are not likely to raise political concerns. Our finding is consistent with political leaders influencing firms' decisions to win political tournaments.

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1. Introduction

Politics affect firms' decision making, in which one important way is through the channel of elections. Investment is one major aspect that attracts extensive investigations. There are three channels addressing the relation between elections and investment. The first is the political business cycle hypothesis. The incumbents manipulate fiscal and monetary policy instruments to improve macroeconomic fundamentals prior to an election to maximize the probability of Promotion. Besides, politicians can also influence corporate decisions to improve economic performance. That is, corporate investment is reacting to changing economic performance. The second is the political uncertainty hypothesis. Uncertainty arising from possible changes in policy or national leadership affects behaviours of both politicians and firms. Firms are holding back on potential investments until the resolution of political uncertainty (Julio and Yook, 2012). Beside investment, many other corporate aspects are believed to be politically affected. Existing literature extensively examines political impacts on corporate decisions. While most studies focus on politically motivated corporate decisions in presidential and parliamentary countries, only few studies investigate socialist countries (e.g., China). This thesis attempts to fill this gap by providing empirical evidence of existence of politically motivated corporate decisions in China. Specifically, we examine how corporate managers make decisions in relation to China's national elections. National elections in which national leadership is determined provide a predetermined and predictable natural event. With national elections being held in 5-year interval, we can test whether Chines corporate decisions are synchronized with elections cycles.

In this paper, we investigate the role of China's national promotions on corporate decisions. There are three houses of national congresses in China: the National Party Congress (NCPC), the Chinese People's Political Consultative Conference (PCC), and the National People's Congress (NPC).

The tenure of each congress lasts five years, with one plenary session on a yearly basis. Promotions for federal positions (e.g., President, Vice President, Premier, Vice Premier, State Councilor, President of the Supreme People's Court, Minister of Defense,...) are held at the beginning of each tenure during the first plenary session. We term such elections "national tournaments". First, we test how firms adjust investment levels regarding to national tournaments. Second, we show if firms display greater tendency to tax avoidance before national tournaments. Third, we account for potential endogeneity problems to investigate various firm decisions and market reactions affected by national tournaments simultaneously. Fourth, we show cross-sectional effects (i.e. provincial and firm characteristics) on corporate investment. Finally, we examine whether the Chinese government intervene into the market around national tournaments.

The political business cycle hypothesis states that politicians can influence corporate decisions to improve economic performance. Firms increase investment levels before elections to support connected politicians. Rogoff (1990) refines the Keynesian political business cycle model by allowing rational voters and politicians, and utility-maximizing agents. He shows an incumbent national leader is capable of temporarily increasing economic output and employment by raising money supply in the year ahead of an election. Voters tend to react positively regardless of post-election inflation, unemployment rate, and output falling back to natural level. The political uncertainty hypothesis states uncertainty arising from possible changes in government policy or national leadership is arguably inducing firms to delay investment until the uncertainty related to future financial regulation and macroeconomic policy is resolved. Bernanke (1983) models the relation between uncertainty and corporate investment, relying on the assumption firms are cautious and hold back on investment against uncertainty.

Apart from investment, economists also study the effect of political elections on other corporate decisions (e.g. Betrand et al 2007, Durnev 2013, Liu and Ngo 2014, Piotroski and Zhang 2013). Piotroski and Zhang (2013) show incentives created by the impending turnover of provincial politicians can accelerate the pace of initial public offering (IPO) activity in certain politicized environments. Durnev (2013) finds a 40% lower investment-to-price sensitivity surrounding elections. Bertrand et al (2007) document that publicly-connected firms display higher rates of job and plant creations in election years. In addition to job and plant creations, Liu and Ngo (2014) study the impact of national elections or political control over bank failure in the US.

China's national tournaments provide an interesting setting to study for several reasons. First, while most literature (e.g., Julio and Yook 2012, Bertrand et al. 2006) focus on elections in countries with presidential and parliamentary systems, there are limited studies on China with a socialistic system which differs in various ways. While most political positions are determined through electoral voting in presidential and parliamentary countries such as Brazil and Australia respectively, high-level political tournaments (i.e. provincial and state-level tournaments) 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). Second, economic performance is the key determinant of China's political promotion (e.g., Li and Zhou 2005, Chen, Li and Zhou 2005). In China, politicians have direct controls over the activity of state-owned enterprises (SOEs) and strong influence on the behaviour of private firms through soft channels (e.g. regulation, licenses, and social and political networks). In addition, political forces have significant impacts on capital market activity; politicians and bureaucrats have considerable influence over the regulatory and capital allocation process, and firms' debt raising and equity capital benefit from political connections (Piotroski and Zhang, 2014). In order to temporarily strengthen economic performance, politicians (i.e. provincial

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party secretaries) are likely to influence the behaviour of local firms, both SOEs and non-SOEs. Third, China's national tournaments provide a natural experiment for understanding the political influences on corporate investment. Unlike countries (e.g., Japan and Australia) where election timings are rather flexible, the timing of China's national tournaments is predetermined and runs with a five-year interval.

Using national tournaments between 2000 and 2013, we compare corporate investments two years leading up to the national tournaments with that in other years. We choose this timing for several reasons. First, unlike elections in presidential or parliamentary countries, China's national tournaments are typically determined at least one year in advance by the central government (Piotroski and Zhang, 2014). Second, increasing investment affects other corporate aspects (e.g., revenue, tax, employment, and wage,...) which in turn contribute to the economy in the following year. We thus hypothesize a temporary increase in corporate investment levels two years before national tournaments.

Our empirical study provides results consistent with our primary prediction that firms increase investments two years prior to national tournaments. During these periods, investment expenditures increase by an average of 7.0%, controlling for growth opportunities, cash flows, and economic conditions (i.e., GDP, unemployment, inflation).

After showing that investment levels are systematically higher before national tournaments, we further examine the cross-sectional effects. We document that firms in medium provinces (in terms of firm numbers) are main contributors to the growths in investments. Specifically, investment rate is on average 0.01 higher compared to firms in other provinces. We also study cross-sectional effects on other provincial characteristics (autonomous regions, and coastal provinces) and firm characteristics (central and provincial SOEs, and industry).

However, no statistical correlation is captured in relation to national tournaments.

Taxes are revenues to the government, however, at the expenses of shareholders. We further examine corporate tax levels before national tournaments. We show that firms are less tax avoiding if there are national tournaments in the next year. We show that firms on average pay 4.1% more taxes one year before national tournaments, while tax rates two years in advance is not sensitive to tournaments. In addition, the findings are more meaningful along with evidence of the increasing investment rate. Our study finds that firms tend to increase investments levels two years before national tournaments. Investments levels drop back to the normal level in the following year (i.e., one year before national tournaments). At the same time, corporate taxes increase, providing greater tax revenues (a potential indicator about economic performance) to the government. As the government "promotes." higher tax transfers to the government might be seen as positive indicator to the relevant officials."

We further examine whether the government intervene into the stock market around national tournaments. Government intervention in China is not a new topic. Ma, Swan and Song (2010) show that the financial development of Mainland China's emerging market has a significant influence on the price discovery process. In other words, government intervention in China's stock market leads to informational advantages of domestic investors. Using a sample of Chinese companies incorporated in Mainland China and dual-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 tournaments. However, the growth is temporary-dropping back to its normal level in the next year. Evidence confirms our prediction that the Chinese government intervenes into the market before national tournaments. There are potential endogenous concerns about simultaneity that investment and tax decisions are codetermined. More specifically, firms pay fewer taxes when investment levels are higher. On the other hand, if firms pay more taxes, there will be fewer cash flows for further investment. We employ the 2-stage least square (2SLS) technique to minimize such simultaneous effects. We also account for other firm characteristics (i.e. employee, wage, cash holding, debt, stock return, and stock volatility) that could be potentially affected by national tournaments and codetermined along with investment and tax. Results show that firms temporarily increase (reduce) investments (employee and wage growths) two years in advance. The changes only last for one year. There is also a temporary increase in taxes one year leading up to tournaments. While firms tend to raise debts to cover the funding, it decreases at the same time when investment decreases. In addition, the market tends to hold pessimistic views about firm performances as these changes in decisions serve politicians rather than shareholders. Finally, we show China's national tournaments are not likely to raise political uncertainty.

The findings in this paper have several contributions. First, we document a tendency for corporate to increase investments two years leading up to national tournaments in China. While literature largely focuses on elections in presidential and parliamentary countries, China has a socialistic political system. The major difference between elections in China and other presidential and parliamentary countries is that there is one candidate in each election. The candidate is normally nominated by the central government at least one year in advance. Potential nominees would have to outperform others to compete for the nomination. Second, we also show a tendency for firms to increase taxes paid to the government before national tournaments. To our knowledge, there is limited literature discussing the effect of political elections or promotions on firms' tax decisions. Finally, we utilise the 2-stage least squares (2SLS) methodology to deal with potential endogeneity problem about that decisions are made simultaneously. We show how China's national tournaments affect

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corporate decisions on investment, tax avoidance, employment, wage, cash holding, debt, stock return, and stock volatility. In conclusion, despite the unique political environment in China, our study documents similar findings cyclical electoral impacts on firm decisions compared to other studies (e.g., Alok and Ayyagari 2015).

Our findings are similar to those of Alok and Ayyagari (2015) that support the hypothesis of politically motivated corporate decisions in India. However, while Alok and Ayyagari (2015) show that only SOEs act correspondingly to national elections through increased investments rate, we document higher investments rate from both SOEs and non-SOEs. Another difference is that while most literature (Alok and Ayyagari 2015, Julio and Yook 2012, etc.) shows investments rate changes one year before national elections, we find that the increased investments rate occurs one year earlier. We further show that while investments rate drops back to normal level in the year before national tournaments, there are increased employments and taxes paid to local government which further boost provincial economic performance right before national tournaments.

The remainder of the paper proceeds as follows. Section II provides information about the political systems of China. Section III discusses relative literature. Section IV develops the empirical predictions. Section V discusses the collection of data. Section VI presents our main empirical evidence about the impact of national tournaments on corporate decisions, multiple robustness checks, and various subsample analyses. Section VII summarizes the paper.

2. China's Political System

2.1 National Congress

The People's Republic 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 in a yearly basis. Elections for federal positions (e.g., President, Vice President, Premier, Vice Premier, State Councilor, President of the Supreme People's Court, 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. Every candidate is nominated by the central government at least one year before national tournaments.

Article 16 of The Civil Servant Law of the People's Republic of China states that

"The levels of leading posts are classified into chiefs at the state level, deputies at the state level, chiefs at the provincial and ministerial level, deputies at the provincial and ministerial level, chiefs at the department and bureau level, deputies at the department and bureau level, chiefs at the county and section level, deputies at the county and section level, chiefs at the township and subdivision level and deputies at the township and subdivision level."

There are only less than fifty state level chiefs (e.g., President, Vice President, Premier,...) and state level deputies (e.g., Vice Premiers, State Councilor,...). In comparison, there are more than three hundreds chiefs at the provincial and ministerial level (e.g. **Provincial Party Secretaries**, Ministers of Education, Minister of Defence,...). Although there is only one candidate for each tournament, becoming this one candidate is highly competitive. The potential candidates (e.g., provincial party secretaries) compete fiercely. Therefore, unlike the case in democratic elections with multiple candidates, becoming the only candidate generally means winning the election. We, thus, call such election process a national tournament process.

The National People's Congress (NPC), composed of deputies from the provincial people's congresses, and People's Liberation Army etc., is the supreme organ of state power in China. The latest election to the NPC was held on the 5th March 2013. The NPC has the power to amend the Constitution, to amend basic laws (criminal offences, 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 Chairman, Vice Chairmen, Secretary-General and other members. The Chairman and Vice-Chairman serve no more than two consecutive terms. There are also elections and appointments of many federal positions, such as the President of the Supreme People's Court and the Central Military Committee members.

The Chinese People's Political Consultative Conference (PCC) is an important institution of multiparty co-operation and political consultation led by the CPC. The latest election to the PCC was held on 3rd March 2013. It consists of the CPC, eight democratic parties, personages without party affiliation, eight major mass organizations, representative figures from 56 ethnic groups and five major religious groups in China etc. The major functions of the PCC are political consultation, 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 PCC. It is composed of Chairperson, Vice-Chairpersons and Secretary-general.

NCPC is the highest body within the Communist Party of China (CPC). The latest election to the NCPC was held on 08th 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, the general secretary, but many significant state-level

positions (e.g., the Politburo, Standing Committee, and Central Military Commission,...).

2.2 Provinces

(Mainland) China has four levels of formal administration under the state government, with the top level officially consists of 31 provinces. This includes 23 provinces (Beijing, Shanghai, Guangdong, Sichuan, Hunan etc.), five autonomous regions (Guangxi, Inner Mongolia, Tibet, Ningxia and Xinjiang) which have large ethnic minority populations, four municipalities (Beijing, Shanghai, Tianjin and Chongqing) that directly report 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. Appendix B shows the map of China's 31 mainland provinces¹.

The provincial people's government conduct 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; issue decisions and orders; appoint or remove administrative functionaries, train and make evaluations of their performance and reward or punish them.

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 scrutinise governors and other lower level officers and reports directly to the central government.

¹ <u>http://www.chinadiscovery.com/china-maps/china-provincial-map.html</u>

3. Literature

Political scientists and economists have been studying the conjunction of political elections and economic policy cycles. Voters make their decisions based on economic condition at the time of elections and that the incumbent introduces policies that affect the short-run unemployment, inflation and output. Starting with the Nordhaus (1975) model of political business cycles, there has been debates over whether politicians aim to maximize the probability of winning the election through manipulation of fiscal and monetary policy. Rogoff (1990) refines the Keynesian political business cycle model by allowing rational voters and politicians, and utility-maximizing agents. He claims an incumbent national leader is capable of temporarily increasing economic output and employment by raising money supply in the year ahead of an election. Voters tend to react positively regardless of post-election inflation, unemployment rate, and output falling back to natural level. Piotroski and Zhang (2013) point out that those politicized agents have an incentive to window-dress the economy in advance of political tournaments. Chen, Li and Zhou (2005), Li and Zhou (2004), and Bo (2007) provide evidence that the turnover of provincial leaders (i.e., provincial party secretaries) hinges on their economic performances. Employing the turnover of provincial leaders in China between 1979 and 1995, Li and Zhou (2004) find the probability of promotion is positively related to local economy. Consistent with these findings, Bo (2007) finds that the political mobility of provincial leaders is determined not only by the political movements of the communist party but also by local economic conditions.

Economic condition is not only a determinant in China's political tournament, it also plays an important role in other countries such as the U.S. (e.g., Healy and Lenz 2013; Hopkins 2012; Sanders 1996; Chappell and Keech 1985; Fiorina 1978). Healy and Lenz (2013) list 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 in earlier years. Specifically, voters may consciously choose to put more weight on the election-year economy 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 document a pervasive human tendency to substitute the end for the whole when retrospectively assessing experiences. Particularly, voters may set the election-year economy as 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) document the impact of macroeconomic performance (measured by the unemployment rate and the output gap) has a significant impact on the vote of the governing coalition. Specifically, 1.3% and 0.4% additional votes are generated for every percentage increase in the national unemployment rate and output gap, respectively.

One channel addresses 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) claim that political supporters of the current government are often beneficiaries of excess hiring rate. 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 show that politicians focus on both private and public firms to pursue political benefits. Bertrand et al. (2006) further examine the investment pattern of politically connected CEOs around municipal elections in France and find firms that display political connections have higher investment levels during election years. Alok and Ayyagari (2015) evaluate the impact of political factors on corporate investment decisions. They

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use a sample of electoral data at the district level over the period 1995-2009 matching with firm-level investment projects announced in India. Instead of looking at investment values, they concentrate on the number of project announcements. Empirical evidence shows that SOEs announce 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, Alok and Ayyagari (2015) also study if politically motivated investments are costly to the shareholders. They argue that if election-year SOE investment is to pursue political considerations, then such investment is likely to destroy firm value. By showing lower announcement returns for projects announced during election years, they confirm that politically motivated investment destroys 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 behaviour of both politicians and managers. Such uncertainty is arguably inducing firms to delay investment until the uncertainty related to future financial regulation and macroeconomic policy is resolved, especially during financial crisis and recession (Julio and Yook, 2012). Bernanke (1983) models the relation between uncertainty and corporate investment, relying on the assumption firms are cautious and hold back on investment against uncertainty. He shows that events with uncertain long-run implications lead to increasing returns to waiting for new information. Julio and Yook (2012) use a sample of 248 national elections in 48 countries, with either a presidential or parliamentary system, over the period of 1980-2005. They show 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) further provide empirical evidence to support this channel. They use the policy uncertainty index of Baker, Bloom, and Davis to measure the overall level of policy uncertainty in the economy. While showing 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 which are more dependent on government spending.

Apart from investment, economists also study the effect of political elections on other corporate decisions (e.g. Betrand et al 2007, Durnev 2013, Liu and Ngo 2014, Piotroski and Zhang 2013). Piotroski and Zhang (2013) show incentives created by the impending turnover of provincial politicians can accelerate the pace of initial public offering (IPO) activity in certain politicized environments. They test on provincial-level political tournament² between 2001 and 2008 in China. By utilising a Cox proportional hazard model, they find a temporary increase in the number of IPOs in advance of impending politicaltournaments. In addition, such effect holds for both SOEs and non-SOEs. While it is strongest for SOEs in provinces where the 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 test 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 shows a 40% lower investment-to-price sensitivity surrounding elections. He also finds 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. Betrand et al (2007) show that publicly-traded firms managed by politically connected CEOs show higher rates of job and plant creations in election years, with a sample of publicly listed firms in

² Data on these political tournaments are hand-collected by searching information published in the "Chinese Personnel Database" and "China VIPs" from China Information Bank and supplemented by Google web searches.

France over the 1987 to 2002 period. The effect is larger for companies operating in politically contested districts. In addition to job and plant creations, Liu and Ngo (2014) study 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 find 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 election outcome is released. Using a sample of national elections in 43 countries between 1976 and 2005, they show that the growth in innovation (as measured by patent counts, patent citations, and patent originality) drops significantly during elections years.

4. Hypothesis Development

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 performance. The second is the political uncertainty hypothesis. Uncertainty arising from possible changes in policy or national leadership affects behaviours of both politicians and firms. Firms are holding back on potential investments until the resolution of political uncertainty (Julio and Yook, 2012).

Economic performance is arguably the key indicator in China's national tournaments (e.g., Chen, Li and Zhou 2005). Politicians would choose to temporarily improve the economic condition to maximize the likelihood of promotion. Chinese politicians have direct control over the activity of SOEs and strong influence on the behaviour of private firms through soft channels (Piotroski and Zhang, 2014). Therefore, politicians would choose to exploit local firms' investment levels in advance to national tournaments. Piotroski and

Zhang also point out that China's high-level political tournaments 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. Therefore, we choose to examine firms' investment levels two years before national tournaments.

We hypothesize that corporate investment increases two years before national tournaments.

Among the 31 provinces in mainland China, there are 5 autonomous regions and 4 direct-controlled municipalities. An Autonomous Region is a minority entity which has higher population of a specific minority ethnic group. For example, the Xinjiang Uyghur Autonomous Region is the primary residence of most Uyghur. The constitution empowers autonomous regions with more legislative rights than other provinces. In other words, provincial governments in autonomous regions have greater controls over local firms.

We hypothesize that firms in autonomous districts have greater investment growth over other firms two years before national tournaments.

There are 11 coastal provinces (e.g., Guangdong, Shanghai,...), in mainland China. Han and Yan (1999) argue that globalization of the world economy has empowered the role of coastal cities in national development. In China, coastal cities act as "engines" in economic growth. One important reason is that coastal cities provide greater connection between local and foreign investors than landlocked cities. Data from the National Bureau of Statistics of China show, as of 2012, there were 333,102 foreign firms within the 11 coastal provinces, 3 times more than those within non-coastal provinces (107281). Provincial governments should have relatively smaller control over local firms when the proportion of foreign firms is higher.

We hypothesize that coastal firms have smaller investment growth over landlocked firms two years before national tournaments.

Local firms are major contributors to the economy. Politicians from larger provinces (in terms of the number of firms) are arguably to be more advantageous in national tournaments compared to other provinces, especially small provinces. However, for politicians from provinces at the middle of the hierarchy, they still have the chance to compete in national tournaments. Therefore, medium provinces should have greater willingness for better economic performance before national tournaments.

We hypothesize that firms in medium provinces have greater investment growth over other firms two years before national tournaments.

Tax revenues provide direct indication about the economy condition. Bo (2007) shows evidence that the revenue contribution of a province during the provincial leader's tenure also plays an important role in political tournaments. In order to maximize the likelihood of promotion, politicians shall also target a temporary increase in firms' tax payments.

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

China's government intervention is not a new topic. Ma, Swan and Song (2010) show that the financial development of Mainland China's emerging market has a significant influence on the price discovery process. In other words, government intervention in China's stock market leads to informational advantages of domestic investors. If China's government intervene into the market around national tournaments, we would be able to observe greater price premium between stocks in mainland China and the Hong Kong Exchange.

We hypothesize that the Chinese government intervene into the market around national tournaments.

Besides investment and tax payment, there should be other firm decisions that are affected by national tournaments. Julio and Yook (2012) empirically test the joint decisions on corporate investment and cash holdings around national 18

elections. 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. They explain that since firms hold back on investment, the value of free cash increases. On the other hand, if firms decide to increase investments prior to national tournaments, we would expect a drop in cash holdings. 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 tournaments. 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 consumptions. We suggest that corporates will adjust both employment and wage decisions in accordance to national tournaments. Alok and Ayyagari (2015) 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. 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 tournaments. We would observe greater stock volatility in the financial market if uncertainty matters.

We hypothesize that investment, tax, cash holding, debt, employee, wage, and stock return are all be affected by national tournaments.

5. Data

5.1 National Tournament Data

This study considers national tournaments in China (mainland) held between 2000 and 2013. The three houses of national congresses we study are the National Party Congress (NCPC), the Chinese People's Political Consultative Conference (PCC), and the National People's Congress (NPC), in which

tournaments are all held every five years³. To best capture the effect of national tournaments on investment, the dummy variable *Tournament* is given a value of one for any firm-year in which the three tournaments are held no earlier than October in year t-1 and no later than September in year t^4 .

To control for the effect that the growth in investment 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 also obtain provincial party secretary data from the Politics website⁵, founded by Nanfang Magazine owned by Guangdong people's government. The Politics website contains Curriculum Vitae of all previous and present provincial party secretaries dating back from 1949. Each Curriculum Vita provides detail information (the starting and termination date, position etc.) of the provincial party secretary. We are, thus, able to identify the beginning date and termination date of party secretaries. We assign the dummy variable Promotion value of one for provinces in which the provincial party secretaries were promoted in upcoming national tournaments. 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 Promotion dummy for firms in Sichuan in 2013⁶.

5.2 Province-Level Data

We obtain macroeconomic data from the Annual National Database, which contains monthly, quarterly and annual macroeconomic data for the country, of National Bureau of Statistics of China (NBSC). NBSC also provides

³ First plenary sessions of NCPC was held at the end of 2002, 2007 and 2012. First plenary sessions of PCC were held two days earlier than CPC in 2003, 2008 and 2013.

⁴ We follow the definition of year from Julio and Yook 2012.

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

⁶ Note that, at the beginning of the section, national congresses held after September in year t are treated as held in year t+1

international macroeconomic data for major countries (e.g., Japan, UK and America). We obtain annual unemployment rate, Gross Domestic Products (GDP) Index and Consumer Price (CPI) Index from 2000 to 2013. 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 registered number of unemployed persons scaled by 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.

Table I shows descriptive statistics on Chinese provinces. Column 2-4 in Panel A displays the number of secretaries promoted in 2003, 2008, and 2013. The overall promotion rate is 38%. Horizontally, the promotion rates are both 32% in 2003 and 2008. It means that 10, out of 31, provincial party secretaries succeeded in the national tournaments in both years. In comparison, the promotion rate increases by 50% in 2013, meaning 15 provincial party secretaries were promoted in this year's national tournaments. Value in Column 6 is set to 1 if the province is a coastal province. It shows there are in 11 coastal provinces in Mainland China. Column 7 shows the average number of SOEs in each province across our sample period 2003-2013. The top three provinces with most SOEs are Shanghai, Guangdong, and Shandong. Column

8-10 shows the average GDP (in 100billion CNY), unemployment rate, and inflation rate for each province between 2003 and 2013. Overall, Guangdong has the highest average GDP, whereas Beijing has the lowest unemployment rate and inflation rate during this period. Column 11 shows the average investment rates for each province across 2003-2013. Provinces with highest average investment rates are Xinjiang, Anhui, Henan respectively. Panel B shows summary statistics for province level variables used in this paper. The mean for national tournaments is 0.2345, indicating around 23.5% (4112) of the sample are in tournament years. In addition, a 0.1121 mean for the Promotion dummy indicates that 1966 observations of the sample are within those province-years in which party secretaries are promoted. Note that Panel A shows that the province mean promotion ration is 38%. The mean promotion ratio in our sample is 47.8%, implying 25.8% more firms on average in the promoted provinces⁷. A zero mean for unemployment growth indicates that the unemployment rate is relatively stable throughout the sample period. In comparison, the average GDP and inflation growth are around 10% and 2.6%, respectively. We also find that the median values for these three variables are very close to their mean values, indicating the distributions are relatively bellshaped or with close to zero skewness. Cumulative Investment is 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. The mean cumulative investment rate is 6.4%.

5.3 Firm-Level Data

We obtain firm characteristics data from the China Stock Market & Accounting Research (CSMAR)⁸ database and RESSET⁹ database.

⁷ Promotion/Tournament=0.1121/0.2345=0.478

^{(0.478/0.38)-1=0.258}

⁸ Company stock return and financial data are collected from the CSMAR database in Fan, Wong and Zhang (2007).

We start from collecting information from CSMAR. The capital expenditure ratio, Tobin's Q¹⁰, depreciation of assets¹¹, amortization¹², total assets, total operating revenue, total operating expenses, non-operating income, interest expenses, income tax expenses, and employee benefits payable ¹³ are collected from the China Stock Market Financial Statements database. The number of employees is collected from the China Listed Enterprises database. The province ¹⁴ and industry code are collected from the China Listed Firm's Shareholders Research database.

After collecting all necessary firm-level data, we start constructing the variables used in this study. 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 less 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.¹⁵ We also create four dummy variables, Commerce, Property, Industry, and Conglomerate, for the

⁹ 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.

¹⁰ The sum of net debt and market value of equity scaled by total assets.

¹¹ More specifically, it is the depreciation of fixed assets; oil and gas assets; and bearer biological assets.

¹² Amortization includes both the amortization of intangible assets and amortization of long-term prepaid expenses.

¹³ 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 payment, etc.

¹⁴ It is the province where a firm locates in.

¹⁵ Denis and Sibilkov 2009

remaining four industries respectively. 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 centrally enterprise, provincial state-owned enterprise, private enterprise, collective enterprise, university, foreign investment, trade union, and other. We, thus, assign SOE a value of one if the ultimate controller is either a centrally 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. 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 effects of regulation. We also require firms to have non-negative values for total assets and capital expenditure, and Tobin q.¹⁶ Firms with less than 3 consecutive years are also excluded.¹⁷ The final dataset contains 17534 observations.

Table II shows descriptive statistics for all variables. Panel A reports the number of observations, mean, median and standard deviation firm characteristics.¹⁸ The dependent variable investment rate, measured by the ratio of capital expenditures scaled by beginning-of-year book value of total assets, has an average value of 0.073 and the median is around 0.045. This indicates that firms on average spend 7.3% assets values on capital expenditure per year while 50% firms have only 4.5% or less investment rate. SOE is set to 1 if the firm is state-owned and 0 otherwise. The mean of SOE is 0.4314, meaning that around 43% observations are state-owned enterprises. In addition, the mean

¹⁶ Denis and Sibilkov 2009

¹⁷ Almeida and Campello 2007

¹⁸ Note that the number of observations for each variable is not identical in the table. This is because that missing values are counted. Observations with missing values will be automatically excluded when running regressions.

values for Tobin's Q and cash flow, both are scaled by beginning-year book value of total assets, are 1.69 and 0.06 respectively. Employee growth and wage growth are calculated as the changes of numbers of employees or wages divided by beginning-of-year values. The average growth of employees and wages are 12.64% and 42.68% respectively. Cash is the cash holdings divided by beginning-of-year book value of total assets. Debt is total debt divided by beginning-of-year book value of total assets. Tax is the sum of tax expenses and deferred tax liabilities divided by earnings before tax. Volatility is firm's realised volatility computed using daily stock return. Return is the firm's annual stock return. Market return is the annual A-share market return. Market volatility is the realised volatility computed using daily A-share market return. The average cash holding, debt, and tax rate is 2.08%, 24.94%, and 22.57% respectively. In addition, while firms' mean stock returns are close to market return (both at around 26.50%), firms' return (1.74%) are generally more volatile than the market (0.58%). Panel B reports correlations between variables used in this paper. The largest correlation is between the Promotion dummy and Tournament dummy (0.6364) which shows that there is no evidence of colinearity.

6 Empirical Results

This section presents our empirical findings in relation to changes in firms' decisions prior to China's national tournaments. We begin with the univariate analysis in investment, followed by a multiple regression framework controlling for economic performance and firm characteristics. We also test variation in the sensitivity of investment to national tournaments across provinces, and firms. We further test if there is political impact on corporate tax decisions. We then examine if the Chinese government intervene into the market around national tournaments. Finally, we address potential endogeneity problem about the simultaneity of investment, tax, cash, debt, employment, wage, stock return, and volatility using the 2-stage least squares methodology.

6.1 Corporate Investment and National tournaments

Panel A in Table III shows the mean investment rates two years prior to China's national tournaments (tournament years). In non-tournament years, the unconditional mean investment rate, measured by the ratio of capital expenditures to beginning-of-year book value of assets, is 0.0714. In comparison, the rate increases by 0.0044 to 0.0758 in tournament years. This growth is statistically significant at 1% level, representing a 6% increment in the unconditional mean investment rate relative to non-tournament years throughout the sample. Panel A also provides a more detailed examination of firm investment patterns across the cycle. We report average investment rates before and after the tournament years. Average investment rates in tournament years are significantly higher than that in non-tournament years. The univariate analysis provides preliminary evidence consistent with the view that the willingness of politicians to be promoted leads to temporary growth in corporate investments. Panel A also reports the mean investment rates between SOEs and non-SOEs. SOEs have a mean investment rate of 0.0718. For non-SOEs, the rate is higher by 0.0012.

We next examine firms' investment decisions in a multivariate setting, controlling for firm characteristics and provincial economic. We acquire the following augmented version of specification from Julio and Yook (2012) to evaluate corporate investment behaviours two years before national tournaments:

$$\begin{split} I_{ijt} &= \alpha_0 + \beta_1 Tournament_{t+2} + \beta_2 Tournament_{t+2} * SOE_{ij} + \\ \beta_3 SOE_{ij} + \beta_4 Q_{ij,t-1} + \beta_5 CF_{ijt} + \beta_6 \Delta GDP_t + \beta_7 \Delta Unemployment_t + \\ \beta_8 \Delta Inflation_t + \beta_7 Promotion_{j,t+2} + \varepsilon_{ijt} \end{split}$$
(1)

Where i indexes firms, j indexes provinces, and t indexes years. The dependent variable, investment, is defined as the ratio of capital expenditures to beginning-of-year book value of total assets. The explanatory variable of interest is the *Tournament*_{t+2}dummy set to 1 if national tournaments are held

in two years. The coefficient on the tournament dummy, β_1 , captures changes in the conditional investment rate two years ahead of national tournaments, controlling for both company characteristics and economic conditions.

We include Tobin's Q and cash flow to control for firm characteristics. Tobin's Q is defined as the market value of assets scaled by the book value of assets, as our proxy for investment incentives. Cash flow is defined as 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 effects of general economic conditions on firm investment decisions, we employ provincial GDP growth, inflation growth, and unemployment growth. GDP (inflation, unemployment) growth is measured as the percentage change in a province's real GDP (real inflation, unemployment rate) in the year prior to the investment decision. Finally, we include a *Promotion*_{*j*,*t*+2} dummy to control for provinces where the party secretaries are promoted in the next national tournaments and 0 otherwise.

Province-fixed effects are included in the model. We do not include year-fixed effects in our specification because it will cause multicollinearity problem¹⁹. Standard errors are robust to heteroskedasticity and clustered by province. Tobin's Q and cash flow are both winsorized at the 1st and 99th percentiles, to control for potential outlier effects.

Panel B in Table III shows the results for our specification. Column 1 reports the regression of investment rate on the $Tournament_{t+2}$ dummy alone. The following columns add province-fixed effects and clustered errors, SOE and interaction term, Tobin's Q, cash flow, unemployment growth, GDP growth,

¹⁹ Since any national tournament held after October in year t and before September in year t+1 will be treated as being held in year t+1, the tournament dummy is hence set to 1 for year 2001, 2006, and 2011 and 0 for other years.

and inflation growth. Column 8 displays results for equation (1). Consistent with our prediction that firms increase investment levels two years prior to national tournaments, the tournament-year increment in the conditional mean investment rate is economically meaningful and statistically significant at 1% level. Investment rates decline by 0.005 during this period. In terms of magnitudes, the coefficient translates into an economically significant 7% growth in investment rate relative to the average non-tournament year investment rates, 0.0714. We also find that investment rate is positively affected by cash flow, unemployment growth, and inflation growth while negatively influenced by Tobin's Q, and GDP growth. More specifically, firms tend to invest more with greater level of liquidity, but less with more investment incentives. The findings are both economically and statistically significant, at less than 1% level. In addition, greater economic growth results in lower levels of investment activities, indicating firms tend to raise investment levels when the economy is not performing well. On the other hand, when the economy is performing well, there will be, politically, fewer demands for higher investment levels. The result is also economically meaningful, indicating that the 12% reduction in investment rates as a result of a 1% GDP growth. In comparison, the changes in unemployment rate and inflation both play positive roles in corporate investment.

In particular, firms increase investment levels by 2 times and 17.6% for 1% growth in unemployment rate and inflation rate, respectively. The findings are both economically and statistically significant. In comparison, while SOEs in general do not have greater investment rate, the relation between corporate investment and SOEs is also not statistically significant.

In column 9, we add another dummy which sets to 1 if national tournaments are held in the next year, along with the interaction with SOE. Our results are robust to the inclusion of these two variables. While the coefficient for $Tournament_{t+2}$ is still positively significant, the coefficient for $Tournament_{t+1}$ is neither statistically nor economically significant. In comparison, the coefficient for the interaction term is negatively significant. We also find that SOEs tend to reduce their investments significantly around the time of tournaments 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 addition, the insignificant coefficient for *Promotion*_{*j*,*t*+2} is consistent with our hypothesis that all candidates play hard to become the tournament winner.

In conclusion, we show evidence consistent with our hypothesis that firms have greater investment rates two years before national tournaments. Firms would have greater levels of investment if there are national tournaments in two years. More specifically, the increment is 0.005. In terms of magnitudes, it translates into an economically significant 7.0% growth in investment rates relative to investment rates in non-tournament years, after controlling for firm characteristics and economic performance.

6.2 Subsample Analysis

In Section 6.1, we have shown that investment rate is systematically higher when there are upcoming national tournaments in two years. We now further our analysis to see if there are cross-sectional effects.

6.2.1 Variation across Firms and Industries

In this section, we further our analysis into firm-level characteristics. First, 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, whereas Provincial SOE is assigned a value of one if the provincial government have 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 Conglomerates²⁰. We generate three industry dummies for Property, Commerce and Conglomerates, and the interactions with tournament. Panel A in Table IV shows results for our analyses. We add the Central SOE dummy, Provincial SOE dummy, and their interactions with the tournament dummy in Column 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.

6.2.2 Variation across Provinces

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

There are 11 coastal provinces (e.g., Guangdong, Shanghai,...), in mainland China. Han and Yan (1999) claim that globalization of the world economy has empowered the role of coastal cities in national development. In China, coastal cities act as "engines" in economic growth. One important reason is that coastal cities provide greater connection between local and foreign investors than landlocked cities. Data from the National Bureau of Statistics of China show,

²⁰ Firms in the Finance and Utilities industries are excluded in our sample to avoid potential government regulations.

as of 2012, there were 333,102 foreign firms within the 11 coastal provinces, 3 times more than those within non-coastal provinces (107281). We predict that provincial governments have relatively smaller control over costal firms. In other words, we expect coastal firms to have relatively lower investment growths during promotion years. We introduce a coastal dummy which sets to one for coastal firms.

Local firms are major contributors to the economy. Politicians from larger provinces (in terms of the number of firms) are likely to be more advantageous in national promotions compared to other provinces, especially those from small provinces. However, for those from the middle of the hierarchy, they still stand a chance to compete in national tournaments. We suggest that medium provinces have greater willingness to better economic performance before national tournaments. We create two dummy variables: Large and Medium. We assign a value of one to the Large dummy for the ten provinces having the most numbers of firms in our sample. The Medium dummy is set to 1 for the next ten largest provinces.

Panel B in Table IV 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 promotion 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 while the smaller provinces are not competitive enough and the largest ones are more likely to win the tournament, middle provinces have to play hard to compete for promotions.

6.3 Corporate Tax and Political Tournaments

Tax avoidance is beneficial to shareholders. At the same time, it results in lower tax revenues to the government. Bo (2007) shows evidence that the revenue contribution of a province during the provincial leader's tenure plays an important role in China's political tournaments. In this section, we aim to examine if firms are less tax aggressive before national tournaments. We hypothesize that politicians demand more taxes from local companies before national tournaments with the aim to temporarily improve his economic performance. To test our prediction, we replace the dependent variable in equation (1) with a corporate tax rate, computed as the sum of tax expenses and deferred tax liabilities scaled by earnings before tax.

Panel A in Table V shows the mean tax rates one year prior to China's national tournaments. The unconditional mean tax rate one year before tournament is 0.2439 whereas it reduces by 0.0292 in other years. The difference is also statistically significant at less than 1% level. Panel A also provides a more detailed examination of firm tax payment patterns across the cycle. The average tax rate one year before national tournament is significantly higher than that in non-tournament years. The table also shows the mean tax rates between SOEs and non-SOEs. SOEs have a mean tax rate of 0.2422. In comparison, the rate decreases by 0.0363 for non-SOEs.

Column 1 in Table V, Panel B, displays results for our specification. The coefficient for SOE is positive and significant, indicating state-owned companies generally have higher tax rates. Specifically, the coefficient (0.031) translates into a 3.1% higher tax rate paid by SOEs. This is consistent with the literature that the major function of SOEs is to pursue political goals in China

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(e.g., Bradshaw, Liao and Ma 2013). In comparison, we do not document any significant patterns for the period two years before national tournaments, evidenced by insignificant coefficients for both tournament dummy and the interaction term. We relate such result to the change in investment levels during this period. If managers decided to increase investments, there would be limited cash flows for other corporate decisions (i.e. taxes).

In Column 2, we further our analysis, by adding the $Tournament_{t+1}$ dummy and its interaction with SOE, to see if corporates take any action on tax avoidance if national tournaments are coming up in the next year. While the coefficients for $Tournament_{t+2}$ and its interaction term are still insignificant, the result for $Tournament_{t+1}$ shows interesting evidence. The coefficient (0.041) for $Tournament_{t+1}$ is positively and statistically significant at less than 1% level, indicating a positive correlation between corporate tax rates and national tournaments. Economically, it translates into a 4.1% higher tax rate. Evidence is consistent with our prediction that firms become less tax aggressive in the year leading up to national tournaments. The results are more meaningful when compared with results in column 9 in Table III, Panel B. Column 9 in Table III, Panel B, shows that the level of investment drops one year prior to national tournaments. At the same time, corporates start to increase taxes paid to government, which further enhance the economic performance.

To test the robustness of our results, we apply the model from Bradshaw, Liao and Ma (2013)

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

Where the dependant variable is effective tax rate, computed as the sum of tax expenses and deferred tax liabilities divided by earnings before tax. 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, Promotion dummies, ROA, firm size, leverage, the Loss dummy²¹, and GDP.

Column 4 in Table V, Panel B, reports results for our analysis. The coefficient for $Tournament_{t+1}$ is positive and significant at less than 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 result is also economically meaningful, the coefficient for $Tournament_{t+1}$ translates into a 5.2% 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 (0.013), meaning SOEs on average pay 1% higher tax rate. However, the coefficients for both interaction terms are insignificant, meaning SOEs are not sensitive to national tournaments in terms of tax avoidance. Overall, our results are robust to the change of specifications.

In conclusion, we find firms pay more taxes if there are national tournaments in one year. At the same time, provincial governments receive more tax revenues. Results are of greater significance along with the results in Table III, Panel B. While firms temporarily increase investment level two years ahead of national tournaments, the investment level drops back to the normal level in the next year. At the same time, firms start paying more taxes to the government.

6.4 Government Intervention

China's government intervention is not a new topic. Ma, Swan and Song (2010) show that the financial development of Mainland China's emerging market has

²¹ The Loss dummy is set to 1 if the firm reports a loss in the fiscal year.

a significant influence on the price discovery process. In other words, government intervention in China's stock market leads to informational advantages of domestic investors. To test whether government intervention exists during national tournaments, we use a sample of Chinese companies incorporated in Mainland China and are dual-listed in both China's A-share market and Hong Kong Stock Market (H-share). Our sample use monthly data from the AH-Premium database in Datastream. There are 51 cross-listing firms in our sample between October 2010 and August 2013 which contains 4155 observations. Our model is based on the model from Sun and Tong (2000).

 $\begin{aligned} & \text{Premium}_{ijt} = \\ & \alpha_0 + \beta_1 \text{Tournament} + \beta_2 \text{Promotion} + \beta_3 \text{Premium}_{ij,t-1} + \\ & \beta_4 \text{Shares}_{ijt} + \beta_5 \text{MV}_{ijt} + \beta_6 \text{Volume}_{ijt} + \beta_7 \text{Volatility}_{ijt} + \\ & \beta_8 \text{Red Chip}_t + \beta_9 \Delta \text{Inflation}_t + \beta_{10} \Delta \text{Reserve}_t + \varepsilon_{ijt} \end{aligned}$ (3)

Table VI shows results for model (3). The dependent variable is the price premium, computed as stock price in A-share market less stock price in Hshare market then scaled by stock price in H-share market. Promotion is a dummy variable set contains $Tournament_{t+1}$, $Tournament_t$, and $Tournament_{t-1}$ which set to 1 if national tournaments are held in the previous year, in year t, and in the next year, respectively. Promotion is a dummy variable set contains $Promotion_{t+1}$, $Promotion_t$, and $Promotion_{t-1}$. 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 Hshare 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 2.9% against H-share one year before national tournaments. Although the coefficient for $Tournament_t$ is statistically insignificant, it is

economically meaningful. The coefficient translates into a 2.9% decrease in price premium in the year of national tournaments. In general, evidence supports our hypothesis about the existence of government intervention which leads to higher price premium between China A-shares and Hong Kong H-shares.

6.5 Testings for Simultaneity

In previous sections, we document firms have systematically greater investment two years prior to national tournaments. In addition, we show that firms start to pay more taxes in the year before national tournaments. In this section, we further our analysis by looking at the simultaneous effects of national tournaments on firms' investment, tax, employment, wage, cash holding, debt, stock return, and volatility.

Li and Zhou (2005) and Chen, Li and Zhou (2005) document the deterministic role of economic performance on China's political tournaments. Opler et al. (1999) show evidence that U.S. firms have very strong precautionary motive for holding cash. Julio and Yook (2012) further claim that the transactions motive plays an equally important role. They empirically test the joint decisions on corporate investments and cash holdings around elections in parliamentary and presidential countries. Empirical evidence shows that while firms tend to reduce investment during election years, there is a temporary growth in cash holdings until the election uncertainty is resolved. Although Chinese firms have greater investments prior to national tournaments, it is uncertain how they finance these extra investments (e.g., cash, debt).

Unemployment rate is a key indicator of economic performance. In order to gain promotion opportunities, politicians shall boost up the short term employment rates prior to national tournaments. We suggest that corporates will adjust employment decisions in accordance to national tournaments. Wage is another indicator to be focused on. While higher wages indicate greater tax revenues to government, it also enhances economic performance as wage is positively affecting national consumptions.

Alok and Ayyagari (2015) 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 return. Boutchkova et al (2011) claim political uncertainty leads to greater volatility. If political uncertainty exists around national tournaments, we should observe greater stock volatility.

Table VII shows preliminary regressions for the following regressions²²:

$$Y_{iit} = \alpha_0 + \beta_1 Tournament_{t+2} + \beta_2 Tournament_{t+1} + \beta_3 Y_{ii,t-1} + \varepsilon_{iit}$$
(4)

Where Y_{ijt} includes investment, employee growth, wage growth, cash, debt, tax, stock return, and volatility. In general, the preliminary results show that while firms tend to have more investment two years prior to national tournaments, while cash is decreasing at the same time. The changes are temporary and will return to normal level. In comparison, tax, stock return, and volatility increase in both periods. Finally, there are higher growths in both employees and wages if national tournament is coming up in one year.

Our next step is to test our hypotheses with multivariate regressions. However, there are potential endogeneity concerns about simultaneity that these eight variables are codetermined. For example, although firms' investment activities are constraint 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 codetermined at the same time. We employ the 2-stage least squares (2SLS) methodology to deal with such simultaneity

²² Specifically, the explanatory variables are $Tournament_{t+2}$ and $Tournament_{t+1}$; and $Promotion_{t+2}$, $Promotion_{t+1}$ and lagged dependent variable, respectively.

concerns. 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.

The first stage is to examine each endogenous variable on the eight instruments along with exogenous variables.

$$\begin{split} Y_{ijt} &= \\ \alpha_0 + \gamma Instrument + \beta_1 Tournament_{t+2} + \beta_2 Tournament_{t+2} * \\ SOE_{ij} + \beta_3 Tournament_{t+1} + \beta_4 Tournament_{t+1} * SOE_{ij} + \\ \delta Exogenous + \varepsilon_{ijt} \end{split}$$
(5)

Where Y_{ijt} includes investment, tax, employee growth, wage growth, cash, debt, stock return, and volatility. *Instrument* includes the lagged variables of all endogenous variables. *Exogenous* includes GDP growth, unemployment growth, inflation growth, annual market return, annual market volatility, Tobin's Q, cash flow, Promotion dummy, cumulative investment, the interactions between tournament dummies and aggregate cumulative investment. We then generate the predicted values of Y_{ijt} , \hat{Y}_{ijt} .

The second stage is to replace all instruments with predicted values to compute the model.

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

Table VIII shows results for our 2SLS estimation. Unlike results from Table III in which each column represents results from one single specification²³, all results under Columns 1 to 8 in Table VIII are from the same simultaneous equation. Each column in Table VIII has a specific dependent variable:

²³ For example, there is only one independent variable in Column 1 (2yr before Tournament) whereas there are eight independent variables in Column 8 (2yr before Tournament, SOE, Tobin's Q,...).

investment rate, employment growth, wage growth, cash, debt, tax rate, volatility, stock returns, respectively. For example, the coefficients for *Tournament*_{t+1} from column 1 to column 8 are -0.095 (investment), 1.024 (employment), -1.778 (wages), 0.022 (cash), -0.709 (debt), 0.422 (tax), -0.005 (volatility), -0.330 (return) respectively. Regardless of statistical significance, these coefficients show that one year before national tournaments, firms tend to have lower investments rate, wage growth, debt, stock volatility, and stock returns, as indicated by corresponding negative coefficients. On the other hand, firms tend to have higher employment growth, cash, and tax rate, as indicated by corresponding positive coefficients.

The coefficients for *Tournament*_{t+2} are positive for investment and debt but</sub> negative for employee growth and wage growth. The coefficients for $Tournament_{t+1}$ are positive for employee growth, cash, and tax, but negative for investment, wage growth, debt, volatility, and return. The coefficients for the interaction terms between $Tournament_{t+1}$ and SOE are positive for investment, wage growth, debt, volatility, and return, but negative for employee growth, cash, and tax. Specifically, evidence shows that if national tournaments are coming up in two years, firms on average will increase investment rates by 0.020 or 28%. The change is statistically significant at less than 1% level. In comparison, we find that the growths in employment and wages tend to be lower during this period. At the same time, while there is no significant change in cash holding, debt is increasing by 0.016 which almost offsets the increase in investments. Such increment indicates that debt is the major source to finance the increased value in investment. In comparison, there is no statistically difference between SOEs and non-SOEs, except that SOEs have fewer debts.

Investment rates decline in the next year, or one year before national tournaments. While wage growth is still decreasing, firms have higher growth in employment as well as taxes. If investment decreases, demands for cash or/and debts should decrease at the same time. Results show a temporary increase in firms' cash holdings and decrease in debts. We also find lower stock returns during this period. The negative relation shows evidence that such growth in investments hinders firm performance. These investments are to help politicians in national tournaments rather than shareholders' interests. The market shows negative expectation about such investment growth. Beside negative stock returns, we also document lower stock volatility. If political uncertainty exists around national tournaments, we would observe greater volatility. However, the decreasing stock volatility provides challenging evidence. We relate this finding to the relatively China's stable political environment compared to presidential and parliamentary countries. Finally, we find that SOEs are less sensitive to national tournaments as the coefficients for the interaction term are all in different signs or smaller in values. For example, while stock returns are, on average, -0.330 for non-SOEs, it is only -0.253²⁴ for SOEs.

In conclusion, our results show that political influence on corporate decisionmaking in China is significantly different from those in parliamentary and democratic countries.

7. Conclusion

This paper investigates how China's national tournaments influence corporate decisions. Using a sample of Chinese listed firms across 31 provinces in mainland China over the period 2000-2013, we first document that investment rate is systematically higher two years before national tournaments. More specifically, we show an average increase of 7.0% investment rate two years in advance of national tournaments relative to investment rate in other years, even

²⁴ Computed as the difference between the coefficients for Tournament(t+1) and Tournament(t+1)*SOE, which are -0.330 and 0.077 respectively.

after controlling for firms' investment opportunities and economic conditions. We link such phenomenon to the promotional incentives of politicians to national tournaments.

We further examine the cross-sectional effects on investment. We show that firms in medium provinces (in terms of firm numbers) are major contributors to investment growth. In comparison, we do not document significant relation between national tournaments and other provincial characteristics (autonomous regions, and coastal provinces) and firm characteristics (central and provincial SOEs, and industry).

We further examine the promotional effects on corporate tax decisions. We show that firms increase tax payments by an average of 4.1% in the year leading up to national tournaments. The finding is more meaningful along with investment decision. Evidence from both investment and tax decisions indicate that politicians are likely to manipulate firms' investment levels two years before national tournaments. The investment level decreases in the next year, but at the same time, corporate start to pay more taxes to the government. Such changes in firms' decisions helps improve economic performance temporarily which in turn assists the politician in national tournaments.

Using a sample of Chinese companies incorporated in Mainland China and dual-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 tournaments. We suggest that the Chinese government is likely to intervene into the market so that stocks in China's market are priced higher, against those in Hong Kong market, around national tournaments.

Despite the empirical findings on corporate investment and tax, there are potential concerns that both decisions as well as other firm decisions are codetermined (problem of endogeneity). We utilise the 2-stage least squares methodology (2SLS) to minimise such concerns about simultaneity. Those potentially endogenous variables include: investment, tax, cash holding, debt, employee, wage, stock return, and stock volatility. We show that consistent with findings from previous results, we find a temporarily increase in corporate investments two years before national tournaments. We also document lower growth rates in both employment and wages. However, these changes only last for one year. There is also a temporary increase in corporate tax rates one year before tournaments. While firms tend to raise debts to cover the growth in investments, it decreases at the same time as investment decreases. In addition, the change in investment decision displays negative signal to the market that it merely serves politicians at the expenses of shareholders. Finally, evidence also shows political uncertainty, which is claimed to be higher around national elections in other countries (e.g., America), does not raise concerns in China.

In conclusion, despite the unique political environment in China, our study documents similar findings cyclical electoral impacts on firm decisions compared to other studies (e.g., Alok and Ayyagari 2015). In comparison, our findings do not support the political uncertainty theory regarding national elections (e.g. Julio and Yook 2012).

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Appendix A

Variable Descriptions

Firm	
Variables	Description
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 of numbers of employees divided by beginning-of-year employee numbers
Wage 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	Realised volatility computed using daily stock return
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

Province	
Variables	Description
Tournament	Dummy variable set to one for any firm-year in which national tournament are held no earlier than October in year t-1 and no later than September in year t
Promotion	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 for municipalities
Coastal	Dummy variable set to one for coastal provinces
GDP per capita	The per capita GDP
Foreign reserve growth	The growth in foreign reserve
Cumulative	The cumulative sum of weighted average investment rates of a province throughout the tenure of a party secretary.
investment	computed using firm level investment rates within the same province
Market	
Variables	Description

Variables	Description
Trading volume	Monthly trading volume of Red Chip market in Hong Kong
Market return	Annual A-share market return
Market Volatility	Realised volatility computed using daily A-share market return

Appendix B: Map of China



Table I: Descriptive Statistics on Chinese Provinces

Panel A presents the number of provincial party secretaries promoted in national tournament years (in 2003, 2008, and 2013). Column 1 lists the name of each province. Column 2-4 list the number of promoted party secretaries in each province in 2003, 2008, and 2013, respectively. Since there is only one party secretary in each province, the value should be either 0 or 1. Column 5 shows the total number of provincial party secretaries who won national promotions. Column 6 indicates whether the province is a coastal province. 1 indicates coastal province and 0 otherwise. Column 7-9 report the average GDP, Unemployment Rate, and Inflation Rate of each province across the sample period. Column 10 shows the average number of SOEs in each province across the sample period. Column 11 shows the average investment rates of each province across the sample period. Panel B presents descriptive statistics of province level variables used in our models. See Appendix A for variable description.

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

Panel B

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Province Level Characteristics										
Variable	Ν	Mean	Median	Standard Deviation						
Tournament	17534	0.2345	0.0000	0.4237						
Promotion	17534	0.1121	0.0000	0.3155						
GDP Growth	17534	0.1000	0.0960	0.0174						
Unemployment Growth	17534	0.0005	0.0000	0.0019						
Inflation Growth	17534	0.0257	0.0260	0.0214						
Cumulative Investment	17534	0.0640	0.0608	0.0195						

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 description.

Panel A

Firm Level Characteristics										
Variable	Ν	Mean	Median	Standard Deviation						
Investment	16380	0.0725	0.0454	0.0817						
SOE	17527	0.4314	0	0.4953						
Tobin's Q	17360	1.6891	1.3484	1.0569						
Cash Flow	16378	0.0629	0.0567	0.0792						
Employment Growth	16162	0.1264	0.0181	0.5605						
Wage Growth	16156	0.4268	0.1085	1.5668						
Cash	16305	0.0208	0.0202	0.0643						
Debt	16305	0.2494	0.2260	0.2022						
Tax	16965	0.2257	0.1703	0.2351						
Volatility	16965	0.0174	0.0113	0.0263						
Return	16138	0.2656	-0.0674	0.9443						
Market Return	16965	0.2649	-0.1209	0.7440						
Market Volatility	16965	0.0058	0.0044	0.0042						

Correlation Matrix																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.Tournament	1.0000																
2.Promotion	0.6364	1.0000															
3.Investment	0.0199	-0.0129	1.0000														
4.Tax	-0.0215	-0.0002	-0.0280	1.0000													
5.Employment Growth	-0.0057	-0.0093	0.1509	0.0358	1.0000												
6.Wage Growth	-0.0064	0.0120	0.0786	-0.0043	0.1705	1.0000											
7.Cash	-0.0427	-0.0178	0.2021	-0.0017	0.0286	0.0359	1.0000										
8.Debt	-0.0313	-0.0239	0.2365	0.0100	0.0893	0.0963	-0.1126	1.0000									
9.SOE	-0.0193	0.0040	0.0007	0.0741	-0.0244	0.0012	0.0822	0.0405	1.0000								
10.Tobin's Q	0.1019	0.0684	0.0241	-0.0962	0.0561	0.0432	0.0100	-0.0956	-0.1090	1.0000							
11.Cash Flow	0.0065	-0.0042	0.3501	0.0572	0.1903	0.1111	0.3750	-0.0691	-0.0098	0.2029	1.0000						
12.Unemployment Growth	0.0691	0.0945	0.0058	-0.0464	-0.0518	-0.0281	0.0481	0.0290	0.0445	0.0311	-0.0791	1.0000					
13.GDP Growth	0.0277	0.0068	-0.0195	0.0393	-0.0184	0.0635	0.0137	0.0873	0.0477	-0.2118	0.0099	-0.4388	1.0000				
14.Inflation Growth	0.1314	0.0408	0.0366	0.0269	0.0359	0.0156	-0.1083	-0.0429	-0.0442	0.2331	0.0665	-0.4230	0.1997	1.0000			
15.Market Return	-0.1147	-0.0710	-0.0331	0.0593	0.0068	0.0788	0.0692	0.0420	0.0143	-0.2405	0.0511	-0.3379	0.5895	-0.2265	1.0000		
16.Market Volatility	-0.2863	-0.1833	-0.0117	0.0085	-0.0063	0.0121	0.0167	0.0157	0.0139	0.0828	0.0161	0.0792	0.2043	0.4052	0.1280	1.0000	
17.Cumulative Investment	-0.0350	-0.0785	0.0931	-0.0050	-0.0100	-0.0077	0.0431	0.0568	0.0775	-0.0794	0.0140	-0.0565	0.1936	0.0294	0.0345	0.0934	1.0000

Table III: Impact of Impending Political Tournament on Firm Investments

Panel A presents mean investment rates during and outside tournament years, and for SOEs and non-SOEs. It also shows mean investment rates around tournament years.

Panel B presents estimates for the following regression:

 $I_{ijt} = \alpha_0 + \beta_1 Tournament_{t+2} + \beta_2 Tournament_{t+2} * SOE_{ij} + \beta_3 SOE_{ij} + \beta_4 Q_{ij,t-1} + \beta_5 CF_{ijt} + \beta_6 \Delta GDP_t + \beta_7 \Delta Unemployment_t + \beta_8 \Delta Inflation_t + \beta_7 Promotion_{j,t+2} + \varepsilon_{ijt}$

Where i indexes the firm, j indexes the province, and t indexes the year. The dependant variable is investment rate, defined as capital expenditure scaled by beginning-of-year total assets. $Tournament_{t+2}$ is a dummy variable set to 1 if there is National Tournament in two years. 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. ΔGDP_t is the change in real gross domestic product over the previous year. $\Delta Unemployment_t$ is the change in unemployment rate over the previous year. $\Delta Inflation_t$ is the change in inflation over the previous year. 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: Mean Investment Rates

Tournament Years vs. non-Tournament Years											
Tournament	N 3962	Mean 0.0758	Median 0.0482	Std. 0.0839							
Non-Tournament	12418	0.0714	0.0444	0.0809							
Difference Difference (t-stat)		-0.0045 -2.993									
Mean Investment Rates around Tournament Years											
	2yr before Tournament		Tournament Year		2yr after Tournament						
Year	-2	-1	0	1	2						
Investment	0.0758	0.0712	0.0746	0.07	0.0713						
		SOE vs. n	on-SOE								
	Ν	Mean	Median	Std.							
Non-SOE	9098	0.0730	0.0453	0.0825							
SOE	7282	0.0718	0.0454	0.0807							
Difference		0.0012									
Difference (t-stat)		0.8772									

Investment	1	2	3	4	5	6	7	8	9
2yr before Promotion	0.004***	0.004***	0.007***	0.006***	0.007**	0.007**	0.007***	0.005**	0.005**
	(2.99)	(3.95)	(4.77)	(3.65)	(2.66)	(2.65)	(2.91)	(2.44)	(2.14)
2yr before Promotion *SOE			-0.007***	-0.003	-0.003	-0.003	-0.003	-0.003	-0.004
1vr before Promotion			(-2.99)	(-1.47)	(-1.45)	(-1.55)	(-1.54)	(-1.18)	(-1.53)
ryr before i foniotion									(-0.26)
1yr before Promotion *SOE									-0.004**
-									(-2.03)
SOE			0	0	0	0	0	0	0.001
			(-0.01)	(0.14)	(0.14)	(0.05)	(0.11)	(0.03)	(0.49)
Tobin's Q				-0.004***	-0.004***	-0.004***	-0.004***	-0.005***	-0.005***
Cash Flow				(-4.30)	(-4.37)	(-4.49)	(-4.80)	(-3.03)	(-3.33)
Cash Flow				(21.69)	(21.72)	(21.38)	(21.40)	(21.13)	(21.17)
Promoted in 1yr				(2110))	(21112)	(21100)	(21110)	(21110)	-0.001
5									(-0.52)
Promoted in 2yr					-0.002	-0.003	-0.003	-0.002	-0.002
					(-0.61)	(-0.80)	(-0.82)	(-0.77)	(-0.78)
Unemployment Growth						1.587***	1.160**	1.955***	-0.117***
CDP Growth						(3.45)	(2.20)	(3.70)	(-2.38)
							(-2.40)	(-2,70)	(3.83)
Inflation Growth							(2:10)	0.176***	0.177***
								(5.70)	(5.70)
Constant	0.071***	0.071***	0.071***	0.055***	0.055***	0.054***	0.065***	0.064***	0.063***
	(97.41)	(267.59)	(52.02)	(29.82)	(30.04)	(28.77)	(14.07)	(13.95)	(13.35)
adj. \mathbb{R}^2	0	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

Panel B: Sensitivity of Firm Investments to Political Tournament Cycles

Table IV: Heterogeneity in Investment Sensitivity to Impending Political Tournament

Panel A: Province Heterogeneity Based on Private Firms, Provincial SOEs and Central SOEs, and across industries

This table presents estimates for the following regression:

$$\begin{split} I_{ijt} = \ \alpha_0 + \beta_1 Promotion_{t+2} + \beta_2 Promotion_{t+2} * SOE_{ij} + \beta_3 SOE_{ij} + \beta_4 Promotion_{t+2} * X + \beta_5 X + \beta_6 Q_{ij,t-1} \\ + \beta_7 CF_{ijt} + \beta_8 \Delta GDP_t + \beta_9 \Delta Unemployment_t + \beta_{10} \Delta Inflation_t + \beta_{11} Win_{j,t+2} + \varepsilon_{ijt} \end{split}$$

Where i indexes the firm, j indexes the province, and t indexes the year. The dependant variable is investment rate, defined as capital expenditure scaled by beginning-of-year total assets. $Promotion_{t+2}$ 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. 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. ΔGDP_t is the change in real gross domestic product over the previous year. $\Delta Unemployment_t$ is the change in unemployment rate over the previous year. $\Delta Inflation_t$ is the change in inflation over the previous year. See the Appendix for 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.

	1	2
	SOE	Industry
2yr before Tournament	0.005**	0.005**
	(2.45)	(2.36)
2yr before Tournament*SOE		-0.002
205		(-1.12)
SUE		$\begin{pmatrix} 0 & 07 \end{pmatrix}$
2vr before Tournament*Provincial SOF	0.003	(-0.07)
2yr before Tournament Trovincial SOL	(-1.43)	
2vr before Tournament*Central SOE	0.002	
,	(0.43)	
Provincial SOE	0	
	(0.02)	
Central SOE	0	
	(0.05)	0.001
2yr before Tournament*Conglomerates		-0.001
2vr before Tournament*Property		(-0.26)
2yr before roumanient rioperty		(0.16)
2vr before Tournament*Commerce		0.001
y		(0.21)
Conglomerates		-0.015***
		(-6.76)
Property		-0.045***
		(-14.68)
Commerce		-0.012**
Promoted in 2vr	0.002	(-2.30)
Tomoted in 291	(-0.78)	(-0.62)
Unemployment Growth	-0.121**	-0.087*
	(-2.70)	(-1.89)
GDP Growth	1.954***	2.178***
	(3.69)	(4.28)
Inflation Growth	0.177***	0.166***
T1:10	(5.69)	(5.44)
Tobin's Q	-0.005^{***}	-0.005^{***}
Cash Flow	0.362***	0 344***
Cash Tłów	(20.95)	(20.42)
Constant	0.064***	0.069***
	(13.86)	(15.59)
adj. R ²	0.141	0.166
Observations	15534	15534
Fixed Effects	Province	Province

This table presents estimates for the following regression:

$$I_{iit} = \alpha_0 + \beta_1 Tournament_{t+2}$$

 $+ \beta_2 Tournament_{t+2} * SOE_{ij} + \beta_3 SOE_{ij} + \beta_4 Tournament_{t+2} * X + \beta_5 X + \beta_6 Q_{ij,t-1} + \beta_7 CF_{ijt} + \beta_8 \Delta GDP_t + \beta_9 \Delta Unemployment_t + \beta_{10} \Delta Inflation_t + \beta_{11} Promotion_{j,t+2} + \varepsilon_{ijt} + \varepsilon_{ijt}$

Where i indexes the firm, j indexes the province, and t indexes the year. The dependant variable is investment rate, defined as capital expenditure scaled by beginning-of-year total assets. *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 province-specific characteristics. In Column 1, X includes the Minority, and Municipality dummies. In Column 2, X includes the Coastal dummy. In Column 3, X includes the Large, and Medium dummies. 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. ΔGDP_t is the change in real gross domestic product over the previous year. $\Delta Unemployment_t$ is the change in unemployment rate over the previous year. $\Delta Inflation_t$ is the change in inflation over the previous year. See the Appendix for variable set to 1 if the provincial party secretary of the province. The brackets report t-statistics. *, **, *** represent statistical significance at the 10%, 5%, and 1% level, respectively.

	1	2	3
	Minority	Coastal	Firm Count
2yr before Promotion	0.007***	0.007***	0.002
	(3.35)	(2.79)	(0.35)
2yr before Promotion*SOE	-0.002	-0.002	-0.002
	(-0.99)	(-1.06)	(-1.08)
2yr before Promotion*Minority	-0.01		
	(-1.62)		
2yr before			
Promotion*Municipality	-0.003		
	(-1.08)		
Minority	0.015**		
	(2.62)		
Municipality	-0.005		
	(-1.06)		
2yr before Promotion*Coastal		0.000	
		(-0.02)	
Coastal		-0.004	
		(-1.14)	
2yr before Promotion*Large			0.006
			(1.44)
2yr before Promotion*Medium			0.010*
.			(1.95)
Large			0.000
Madiana			(-0.12)
Medium			0.005
SOF	0.000	0.000	(0.85)
SOE	(0.000)	(0.000)	(0.12)
Dromotod in Orm	(-0.05)	(-0.09)	(-0.12)
Promoted in 2yr	(1.28)	-0.007^{++}	-0.008
Unemployment Growth	0.000**	(-2.11)	(-2.50)
Chemployment Growth	(-2, 11)	(-2, 12)	(-2.06)
GDP growth	2 112***	2 137***	2 1/3***
GDI glowill	(4.16)	(4.20)	(4.17)
Inflation Growth	0.170***	0 172***	0.170***
liniation Growin	(5.88)	(6.02)	(6.02)
Tobin's O	-0.005***	-0.005***	-0.005***
room's Q	(-5.60)	(-6.04)	(-5.90)
Cash Flow	0.350***	0.350***	0.350***
	(21.17)	(21.50)	(22.18)
Constant	0.062***	0.064***	0.061***
	(12.82)	(13.68)	(12.22)
adi \mathbf{R}^2	0.16	0.158	0.158
Observations	15534	15534	15534
Fixed Effects	Province	Province	Province
TIAGE Effects	11011100	Tiovinee	Trovince

Table V: 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 Column 1-2 present estimates for the following regression:

$$Tax_{ijt} = \alpha_0 + \beta_1 Tournament_{t+2} + \beta_2 Tournament_{t+2} * SOE_{ij} + \beta_3 SOE_{ij} + \beta_4 Q_{ij,t-1} + \beta_5 CF_{ijt} + \beta_6 \Delta GDP_t + \beta_7 \Delta Unemployment_t + \beta_8 \Delta Inflation_t + \beta_7 Promotion_{i,t+2} + \varepsilon_{ijt}$$

Panel B Column 3-4 present estimates for the following regression:

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

Where i indexes the firm, j indexes the province, and t indexes the year. The dependant variable is tax rate, defined as the sum of tax expenses and deferred tax liabilities divided by earnings before tax. *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. $Q_{ij,t-1}$ is the proxy for Tobin's Q. CF_{ijt} is cash flow. $Tax_{ij,t-1}$ 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. ΔGDP_t is the change in real gross domestic product over the previous year. $\Delta Unemployment_t$ is the change in unemployment rate over the previous year. $\Delta Inflation_t$ is the change in inflation over the previous year. *Promotion*_{j,t+2} 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 tstatistics. *, **, *** represent statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A: Mean Tax Rates

Mean Tax Rates in Tournament Years vs. Non-Tournament Years									
	Ν	Mean	Median	Std.					
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							
Mean Tax Rates around Tournament Years									
	2yr before Tournament		Tournament Year		2yr after Tournament				
Year	-2	-1	0	1	2				
Tax	0.2157	0.2439	0.2136	0.2247	0.2187				
	Mean Ta	x Rates: SO	OE vs. non-SOE						
	Ν	Mean	Median	Std.					
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							

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. \mathbb{R}^2	0.037	0.039	0.179	0.183
Observations	13662	13662	16133	16133
Fixed Effects	Province	Province	Province	Province

Panel B: Sensitivity of Firm Investments to Political Tournament Cycles

Table VI: Impact of Political Tournament Cycles on Pricing of Dual-listed Firms

This table presents estimates for the following regression:

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

Where i indexes the firm, j indexes the province, and t indexes the year. The dependant variable is the price premium of firms dual-listed in both A-share and Hong Kong markets. *Tournament* is a dummy variable set contains $Tournament_{t+1}$, $Tournament_t$, $Tournament_{t-1}$ which set to 1 if national tournaments are held in the previous year, in year t, and in the next year, respectively. *Promotion* is a dummy variable set contains $Promotion_{j,t+1}$, $Promotion_{j,t}$, $Promotion_{j,t-1}$. *Shares*_{ijt} is the ratio of outstanding shares of A and H shares. MV_{ijt} is the monthly stock market value. $Volume_{ijt}$ is the ratio of trading volume (Volume A-share/Volume H-share). $Volatility_{ijt}$ is the relative volatility (Volatility A-share/Volatility H-share). $Red Chip_t$ is the monthly trading volume of Red Chip market. $\Delta Inflation_t$ is the monthly inflation growth. $\Delta Reserve_t$ is the monthly national foreign reserve growth. 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.

Price Premium	1
	0.000
lyr before Tournament	0.029**
	(2.03)
Year of Tournament	-0.029*
1 û T	(-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 ²	0.909
Observations	2736
Fixed Effects	Firm

Table VII: Broad economic impact of political tournament cycles

This table presents estimates from the joint estimation of the following equations:

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

where i indexes the firm, j indexes the province, and t indexes the year. The dependant variables are the changes of investment, employee, wage, cash, debt, tax, volatility, and stock return, respectively. *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 dependant variables. 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.

	1	2	3	4	5	6	7	8
	Δ Investment	∆Employee Growth	∆Wage Growth	∆Cash	∆Debt	ΔTax	∆Volatility	∆Return
2yr before Tournament	0.004**	-0.01	0.080*	0.000	0.002	0.018***	0.001*	0.298***
-	(2.51)	(-0.56)	(1.71)	(-0.19)	(0.64)	(3.32)	(1.88)	(10.09)
1yr before Tournament	-0.002	0.037**	0.216***	0.011***	0.003	0.040***	0.007***	0.789***
	(-1.62)	(2.38)	(4.77)	(7.40)	(1.05)	(7.83)	(12.86)	(27.91)
Constant	-0.005***	-0.003	-0.109***	-0.002***	-0.003*	-0.007**	-0.007***	-0.313***
	(-5.56)	(-0.31)	(-4.03)	(-2.81)	(-1.91)	(-2.44)	(-20.94)	(-18.54)
adj. R ²	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

								0
	1	2	3	4	5	6	7	8
		∆Employee	∆Wage					
	∆Investment	Growth	Growth	∆Cash	Δ Debt	∆Tax	∆Volatility	∆Return
2yr before Tournament	0.003**	0.009	0.067	-0.004***	-0.005	0.016***	0.002***	0.113***
	(2.02)	(0.54)	(1.48)	(-2.97)	(-1.55)	(2.90)	(7.63)	(3.91)
1yr before Tournament	-0.002	0.046***	0.234***	0.008***	0.001	0.043***	0.006***	0.763***
	(-1.14)	(3.04)	(5.81)	(6.07)	(0.17)	(8.50)	(27.10)	(30.06)
Y(t-1)	-0.300***	-0.523***	-0.503***	-0.434***	-0.324***	-0.427***	-0.045***	-0.535***
	(-36.32)	(-63.92)	(-66.54)	(-55.73)	(-38.14)	(-52.21)	(-13.22)	(-74.46)
Constant	-0.005***	0.000	-0.112***	-0.003***	-0.003	-0.005*	-0.002***	-0.266***
	(-5.52)	(-0.05)	(-4.76)	(-3.31)	(-1.56)	(-1.75)	(-17.04)	(-17.94)
adj. R ²	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 presents estimates from regressions of the type

$$\begin{split} Y_{ijt} &= \alpha_0 + \gamma \hat{Y}_{ijt} + \beta_1 Tournament_{t+1} + \beta_2 Tournament_{t+1} * SOE_{ij} + \beta_3 Tournament_{t+2} + \beta_4 Tournament_{t+2} \\ &* SOE_{ij} + \delta Exogenous + \varepsilon_{ijt} \end{split}$$

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. *Tournament*_{t+2} is a dummy variable set to 1 if there are national tournaments in two years. \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, the interactions between tournament dummies and cumulative investment. 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. 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
lyr before Tournament	-0.095***	1.024***	-1.778**	0.022***	-0.709***	0.422***	-0.005***	-0.330***
5	(-4.84)	(6.20)	(-2.66)	(5.75)	(-16.28)	(7.29)	(-3.44)	(-3.75)
1yr before Tournament *SOE	0.022***	-0.213***	0.516***	-0.005**	0.165***	-0.097***	0.001**	0.077**
5	(4.06)	(-5.41)	(3.47)	(-2.17)	(13.45)	(-7.04)	(2.65)	(2.42)
2vr before Tournament	0.020***	-0.088*	-0.287**	-0.001	0.016	0.005	0.001	0.015
,	(3.04)	(-1.90)	(-2.26)	(-0.17)	(1.48)	(0.25)	(0.54)	(0.25)
2vr before Tournament *SOE	-0.002	0.029	-0.083	0.001	-0.022***	0.01	0	-0.009
,	(-0.89)	(0.80)	(-1.52)	(0.26)	(-3.84)	(0.91)	(-0.71)	(-0.39)
Investment	(0.07)	2.469***	0.185	0.015	-0.510***	0.033	-0.007	-0.378
		(5.06)	(0.15)	(0.32)	(-3.03)	(0.17)	(-0.96)	(-0.60)
Employee	0.079***	(2100)	-0.041	-0.006	0.211***	-0.063**	0.002***	0.098
	(8.15)		(-0.13)	(-0.72)	(11.05)	(-2.16)	(2.98)	(1.33)
Wage	0.001	-0.005	(0.12)	0.001	-0.039***	0.013	0	-0.019
	(0.22)	(-0.14)		(0.34)	(-4.48)	(1.11)	(-0.38)	(-0.49)
Cash	3 385***	-40 455***	88 718***	(0.51)	32 373***	-19 675***	0 240***	14 872***
Cush	(3.97)	(-5.86)	(3.22)		(15.78)	(-6.36)	(2.93)	(6.02)
Debt	-0.081***	1 047***	-1 622**	0.022*	(15.70)	0.400***	-0.005	-0 339**
Debt	(2.82)	(4.34)	(237)	(1.70)		(4.91)	(1.58)	(2.41)
Tax	0.006	0 372*	0.649	0.016	0.470***	(4.91)	0.003	0.210
Tux	(0.24)	(1.02)	(1.06)	(0.77)	(11.40)		(1.15)	(1.30)
Volatility	(0.24) 23 273***	183 218***	140 387	3 248**	103 338***	55 080***	(1.15)	50 800***
Volatility	-23.273	(7.50)	-149.387	(2.20)	-105.558	(6.25)		-50.899
Poturn	(-7.08)	2 008***	(-1.49)	(2.39)	(-14.29)	(0.23)	0.016***	(-3.10)
Ketuili	-0.309	2.998	(2.70)	(2.85)	-2.078	(5.02)	-0.010	
Decemented in 1ym	(-0.33)	0.104***	(-2.70)	(3.65)	(-14.91)	(3.92)	(-3.47)	0.06
Promoted in Tyr	(4.80)	-0.194***	(1.66)	-0.004***	(11.02)	-0.077****	(2.50)	(1.50)
Desensed in 2xm	(4.69)	(-3.73)	(1.00)	(-2.00)	(11.05)	(-0.09)	(2.39)	(1.39)
Promoted in 2yr	-0.020****	(5.70)	-0.104	(1.52)	-0.119	(4.80)	-0.001	-0.030*
CDB Crossth	(-4.84)	(5.70)	(-1.57)	(1.55)	(-12.90)	(4.80)	(-1.54)	(-1.91)
GDP Growth	-0.89/***	8.409***	-7.398	0.175*	-3.403***	2.564***	-0.050***	-2.730**
Un and large and Granth	(-4.50)	(3.71)	(-1.23)	(1.72)	(-12.52)	(4.09)	(-3.70)	(-2.39)
Unemployment Growth	-4.413***	40.825***	-10.055	0.93	-27.487***	15.494***	-0.294***	-14.545
	(-3.49)	(4.08)	(-0.29)	(1.41)	(-8.71)	(4.59)	(-4.73)	(-1.01)
Inflation Growth	1.651***	-18.238***	41.3/8***	-0.433***	14.098***	-/./06***	0.105**	6.4/6***
MICE	(4.30)	(-0.10)	(3.33)	(-6.90)	(15.51)	(-5.39)	(2.73)	(5.51)
Market Return	0.438***	-3.550***	5.435**	-0.0/3***	2.382***	-1.268***	0.019***	1.149***
	(6.68)	(-6.50)	(2.62)	(-3.90)	(14.89)	(-5.88)	(4.22)	(29.32)
Market Volatility	29.762***	-226.681***	129.841	-3.816*	120.528***	-64.82/***	1.226***	60.513***
T 1:1 0	(7.23)	(-7.51)	(1.05)	(-1.99)	(13.45)	(-6.17)	(20.96)	(4.59)
Tobin's Q	-0.050***	0.425***	-0.500*	0.008**	-0.2/0***	0.134***	-0.002***	-0.131***
~	(-6.68)	(6.46)	(-1.94)	(2.61)	(-14.52)	(5.50)	(-3.73)	(-8.75)
Cash Flow	0.092	4.208***	-8.631***	0.110***	-3.508***	2.675***	-0.024*	-1.492**
	(0.93)	(5.81)	(-2.78)	(2.76)	(-14.97)	(7.63)	(-1.84)	(-2.10)
2yr before Tournament *Cum								
Investment	0.265**	-3.471***	8.805***	-0.085	2.860***	-1.753***	0.018	1.304
	(2.24)	(-3.93)	(3.06)	(-1.37)	(11.65)	(-4.76)	(1.00)	(1.38)
lyr before Tournament *Cum		< - 0						
Investment	0.532***	-6.796***	14.728***	-0.154***	5.061***	-2.883***	0.037*	2.352**
~ -	(3.64)	(-4.83)	(2.77)	(-2.90)	(14.96)	(-6.15)	(2.04)	(2.31)
Cum Investment	-0.871***	11.275***	-23.797***	0.268***	-8.612***	5.001***	-0.066**	-4.055***
_	(-3.55)	(5.68)	(-3.19)	(4.02)	(-14.97)	(6.41)	(-2.39)	(-4.10)
Constant	0.320***	-2.530***	2.536	-0.046**	1.550***	-0.591***	0.014***	0.738***
	(6.94)	(-6.65)	(1.69)	(-2.08)	(15.34)	(-4.09)	(6.49)	(5.10)
adj. R ²	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