

Corruption Charges Against Executives and Stock Value of Chinese State Owned Enterprises

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Abstract

This paper examines whether the removal of politically connected executives from their positions will have any impacts, positive or negative, on their firms' stock values. It focuses on the prosecution of executives of state owned enterprises in China during the anti-corruption campaign since 2013. Using the event study approach and the Fama-French three factor model, we analyze how announcements of prosecutions, which are expected to eventually result in the removal of the executives in question, affect the market returns of the affiliated firms over a 15-day window surrounding the announcements. A number of robustness tests are conducted. All empirical results suggest that the stock value of firms did not react to the news announcements. A number of possible explanations for this finding are offered.

Keywords: Anti-corruption, Stock Value, Political Connections, Entrenched Executives, China.

JEL Classification Numbers: F35, F13, F6

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1 Introduction

Not long after taking the top political office in China in November 2012, Xi Jinping launched the largest anti-corruption campaign in the history of the People's Republic of China.¹ A large number of government and party officials at various levels have been prosecuted by legal and extra-legal entities such as the Communist Party's discipline inspection committees. A number of high level corporate executives in large state owned enterprises (SOEs) have also been charged with corruption.

Captivated by the drama surrounding the downfall of big "tigers" like former Politburo Standing Committee members Bo Xilai and Zhou Yongkang, public discussion of the campaign has focused mostly on its political undertones. The motivation behind the campaign, in particular, is hotly contested: Is the campaign driven by the urge to safeguard the Party's legitimacy, or by factional fighting within it? A side-effect of the politically oriented narrative is that the prosecution of SOE executives and its implications have received much less attention. This paper tries to fill this gap.

The objective of this paper is to empirically examine how the anti-corruption campaign may affect the stock value of SOEs. This research question is important for a number of reasons.

Firstly, the size of the SOE sector is large. There are currently 110 state owned conglomerates (Xinhua, 2015b) and about 80,000 other SOEs in China (Cendrowski, 2015). Although the share of SOEs in the Chinese economy has been shrinking since the SOE reforms of the late 1990s, in 2013 SOEs still accounted for over 19.4% of the total asset value, 11.4% of total revenue from principal business, and 8.8% of total profit of all industrial enterprises above designated size.² In fact, the SOE sector experienced a boom after the global financial crisis, as it was the predominant beneficiary of the

¹Overholt (2015) provides an insightful explanation of the differences between graft (which could be consistent with growth) and corruption (which is growth harming) in the context of China, Japan, the Philippines and India. He argues that while the main problem faced by China in the past was largely graft, now it edges on evolving into corruption. However, for the sake of simplicity, in this paper we use the term corruption throughout.

²The data is drawn from the China Statistical Yearbook 2014. Designated size is defined as annual revenue from principal business over 20 million yuan, which is roughly equal to 3.2 million USD. The figures for SOEs include those of state owned enterprises, state joint ownership enterprises, joint State-collective enterprises and state sole funded corporations, but exclude collective-owned enterprises.

government's stimulus package during 2008-2009 (Fan, 2014).

Secondly, SOEs play a key role in the economy. As a result of the “grasping the large, letting go of the small” directive of the last SOE reform, the remaining SOEs are now generally large-sized dominating players in strategic sectors such as mining, energy, transportation, telecommunication, banking and public utilities (Fan, 2014). Due to their infrastructural functions, these SOEs exert a much greater influence on the rest of the economy than, say, private companies in the manufacturing sector.

Thirdly, the reforms of the late 1990s did not stop the trend of falling profitability or declining returns to assets amongst SOEs. However, conglomerates like PetroChina and Sinopec still make huge profits, although this is likely the result of their monopolistic power rather than their efficiency (Cai, 2015). In fact, these conglomerates are both a hotbed of corruption and a roadblock to future economic reforms (Overholt, 2015). To arrest the situation, in September 2015 the Community Party's Central Committee and the State Council issued the latest SOE reform guidelines. Although the authorities vowed to promote mixed ownership amongst SOEs, they also ruled out complete privatization for the moment. As a result, SOEs will not subject to the full force of the market, and state supervision remains crucial to their governance. In fact, one of the reform directives is to intensify the state's supervision of SOEs to track corruption and embezzlement (Xinhua, 2015b). By investigating the impact of the current anti-corruption campaign on SOEs, we might be able to envisage the effect of improving SOEs' governance under the new reform guidelines.

The empirical approach used in this paper is the event study, which is commonly used in the finance literature to investigate the impact of specific episodes on company returns. In particular, we examine whether and how announcements of corruption charges against top executives affect the stock value of publicly-traded state owned firms in China. We focus on companies listed on stock markets because their financial data are publicly available and there are well-established market-based measures of their performance.

Upon learning that a firm's top executive has been charged with corruption, theoretic-

cally the stock market may react in two different directions, depending on how politically connected the executive is and whether the prosecution is politically motivated. On the one hand, if the political connections of the executive bring the firm economic rents, the prosecution means lower expected profits in the future. Such a negative effect may manifest itself in at least two channels. First, the prosecution comes with the likely departure of the executive from the firm, which severs the political connections of the firm. Second, since China does not have an independent judicial system, the prosecution signals a weakening position or support of the political patrons behind the executive and, by extension, the firm. On the other hand, if the political connections enabled an incompetent and corrupt executive to become entrenched within corporate management, the prosecution provides the firm with an opportunity to improve corporate governance, which will protect its (state) assets and enhance its future profitability. For example, Bliss and Gul (2012) find that politically connected firms have a higher cost of debt which can be partially explained by the perception among lenders and auditors of their higher risk. Also, Fan et al. (2007) find that post-IPO earnings growth and stock returns are lower for firms whose CEOs are former or current government bureaucrats. The poorer performance of these politically connected firms is partially driven by the practice of appointing more bureaucrats to the board of directors than firms without politically connected CEOs.

This paper belongs to the literature that documents how political connections of firms might affect their performance. For example, Fisman (2001) finds that the stock value of firms connected to Suharto, the former dictator of Indonesia, reacted negatively to rumors about his health. By analyzing the likelihood of government bailouts of 450 politically connected firms from 35 countries during 1997-2002, Faccio et al. (2006) find that politically connected firms are more likely to be bailed out by government than similar non-connected firms. In China, Li et al., 2008 find that the Party membership of entrepreneurs is positively correlated with firm performance and credits from banks or other state institutions and Chan et al., 2012 find that politically-connected firms display no financing constraints whereas non-connected firms do. This paper adds to

this literature by examining how the stock value of firms reacts to the announcement of corruption charges against their executives. The charged executives in our sample are either members of the Communist Party or bureaucratic managers in state-owned enterprises. Therefore they all are politically connected, albeit not necessarily to the same degree. The anti-corruption campaign since 2013 provides an opportunity to shed light on how the market evaluates the economic impacts on companies of negative shocks against their politically-connected executives. To the best of our knowledge, this paper represents the first piece of empirical evidence on the financial impact of the current anti-corruption campaign on SOEs.

Our key findings can be summarized as follows. Around announcements of the prosecution of allegedly corrupt executives, the average stock value of affiliated firms did not change significantly. Moreover, we do not find that the reaction of stock value of affected firms had a bipolar distribution, eliminating the possibility that some stocks react positively while some others negatively. Further tests show that the findings are robust to allowing for firm heterogeneity in terms of leverage level and profitability. A number of explanations for this finding are offered later in the paper.

The rest of the paper is organized as follows. Section 2 describes the background and data. Section 3 describes the methodology. Section 4 presents the results and Section 5 concludes.

2 Background and Data

In China, the government divisions responsible for administrative audits and prosecutions of corruptions are departments of supervision. Under the one-party regime, the departments of supervisions are also charged with enforcing party discipline and regulation on the members of the Communist Party. Indeed, at central, province and prefecture levels, each department of supervision is also the committee of (party) discipline inspection at that level. For example, a provincial department of supervision and committee of discipline inspection would have the same personnel, offices and websites.

In the absence of judicial independence, the departments of supervision or committees of discipline inspection function as extra-legal organizations and have authority over government officials, executives of state-owned firms, and party members within their jurisdictions.

We collected announcements of investigation and prosecution against corporate executives from the websites of provincial departments of supervision. The news announcements span from January 1st, 2013 to August 31, 2015 and cover all provincial administrative units in the mainland. Given the extra-legal status of the departments of supervision, announcements of investigation and prosecution are the first official actions revealed to the public and typically lead to a conviction for corruption or some other punitive administrative sanction.

Our data of stock prices and financial data were obtained from the China Stock Market & Accounting Research Database. The daily stock prices and quarterly financial data include all publicly traded firms in the Shanghai Stock Exchange and the Shenzhen Stock Exchange from 2012 to 2015.

We collected 318 news announcement related to 231 firms. Amongst these, 75 prosecutions were identified as being related to 45 publicly traded SOEs. Furthermore, we focused on the initial news announcements because they were likely to be most informative. We also performed robustness checks using all news events and found similar price responses to news of corruption charges.³ Some of the firms do not have complete financial data for the analysis. After removing multiple news stories about the same firm as well as firms with missing financial data, 34 news announcements were used in the event study.

The firms with executives charged with corruption tend to be larger firms in terms of assets and operating revenue compared to the other firms in our sample. These firms also had higher debt to asset ratios and returns to equity. Table 1 summarizes the financial characteristics of these firms and other firms in our sample.

³The results of these robustness checks are not reported here to save space.

Table 1: Summary Statistics of Firms Financial Characteristics

	Firms with Executives Charged with Corruption			All Firms		
	Median	Mean	S.D.	Median	Mean	S.D.
Total Asset (RMB, billion)	49.1	728	2890	5.15	131	1160
Revenue (RMB, billion)	5.45	44.1	106	0.583	4.84	25.1
Return on Equity (%)	1.728	-4.454	32.146	1.350	-10.854	294.306
Debt to Asset Ratio	0.579	0.598	0.221	0.512	0.559	1.375

Notes: The number of publicly traded firms with executives corruption charges is 34. The total number of firms in the data sample is 1108.

3 Empirical Approach

To investigate whether and how the stock value of affected firms reacts to news about corruption charges against their executives, we estimate a well-established Fama-French (1992; 1993) three-factor model for each firm:

$$r_{it} - r_t^f = \alpha_i + \beta_i(r_t^m - r_t^f) + \delta_i\text{SMB}_t + \lambda_i\text{HML}_t + \epsilon_{it} \quad (1)$$

where r_{it} is the buy-and-hold stock return for firm i on day t ; r_t^f is the risk-free return; r_t^m is the market return; SMB_t is the small-minus-big factor return; and HML_t is the high-minus-low factor returns.

The intuition of the model is as follows. The traditional capital asset pricing model (CAPM) suggests that the return of stock i over a risk-free asset ($r_{it} - r_t^f$) is equal to the market return ($r_t^m - r_t^f$) adjusted for risk (β_i), which is commonly known as the “beta”. As $\beta_i > 0$, a stock that generates a higher than market return must also carry a higher risk. However, it has been observed that, even after adjusting for risk, firms with a small market capitalization and a low price-to-book ratio still tend to outperform the market. Thereby, the Fama-French model augments the CAPM with the small-minus-big (SMB_t) and high-minus-low (HML_t) factor returns to account for these market abnormalities. In particular, the small-minus-big factor return is the difference of the daily returns of two portfolios, one of which is a value-weighted portfolio consisting of the bottom third of firms by market capitalization, and the other is a value-weighted

portfolio consisting of the top third of firms by market capitalization. The high-minus-low factor return is the difference of the daily returns of two other portfolios, one of which is a value-weighted portfolio consisting of top third of firms by book-to-market-asset ratio (value firms), and the other one is a value-weighted portfolio consisting of bottom third of firms by book-to-market-asset ratio (growth firms). Since Fama-French factors are known to be country-specific (Griffin, 2002; Fama and French, 2012), we use mainland-China-specific risk-free returns, market returns, small-minus-big returns, and high-minus-low returns in our estimations. Furthermore, these returns are calculated based on all publicly traded firms on the Shanghai Stock Exchange and the Shenzhen Stock Exchange, not just SOEs, in accordance to the theoretical underpinning of the CAPM and Fama-French model.

Firm i 's normal return on the event day t , denoted by \hat{r}_{it} , is the return predicted by the model based on the firm's stock returns from the year preceding a 15-day window centered on the event day:

$$\hat{r}_{it} = r_t^f + \left[\hat{\alpha}_i + \hat{\beta}_i(r_t^m - r_t^f) + \hat{\delta}_i\text{SMB}_t + \hat{\lambda}_i\text{HML}_t \right]$$

where $\hat{\alpha}_i$, $\hat{\beta}_i$, $\hat{\delta}_i$ and $\hat{\lambda}_i$ are estimated using data of the most recent year for firm i before day t . The abnormal return AR_{it} is the actual return minus the predicted normal return:

$$\text{AR}_{it} = r_{it} - \hat{r}_{it}$$

In our analysis, the event day for an SOE is the day upon which the first announcement about its executive being charged for corruption was made. A negative abnormal return means that the market expects the executive's eventual departure will damage the firm's future. This could be the case if the firm is deemed to lose its political connections along with the charged executive, or that the political power of the patrons behind the executive and hence the firm is deemed to have diminished. On the contrary, a positive abnormal return means that the market expects the executive's removal will benefit the firm. This could be the case if the prosecuted executive was considered by

the market to be incompetent but was difficult to remove previously for political reasons, but now the corruption charge provides an opportunity for the firm to get rid of this ‘bad apple’.

4 Results

Figure 1 plots the mean abnormal returns on the event days, averaged across all firms with at least one executive charged with corruption, as well as the mean abnormal returns over a 15-day window centered on the event days. The dashed lines indicate the 95% confidence interval calculated from the standard errors from the Fama-French models for individual firms. Throughout the 15-day windows centered on the event days, we do not detect any day with a mean abnormal significantly different from zero. The stock market did not seem to react to the news about corruption charges against top corporate executives. We are able to reject the hypothesis that, on event days, the mean absolute abnormal return was different from zero at the 5% level of significance. Moreover, there is little evidence that the information regarding the news was leaked within seven days before the announcements, or that the market took time within the next seven days to absorb the value impact of the news.

To more formally test whether leaked news contributed to the observed market inaction, Figure 2 plots the mean cumulative abnormal returns starting from 7 days before the announcement of corruption charges. Once again, the mean cumulative abnormal returns since one week prior to the event were never significantly different from zero on any days within the 15-day window at the conventional level of statistical significance.

It is possible that the mean abnormal return did not significantly deviate from zero because a subset of firms experienced significant drops in their stock value, while another subset of firms experienced significant increases in their stock value. To examine this possibility, in Figure 3, we plot the distribution of abnormal returns on the event days across firms. A visual examination reveals no clear bimodal distribution in the abnormal

Figure 1: Mean Abnormal Returns around Corruption Charges

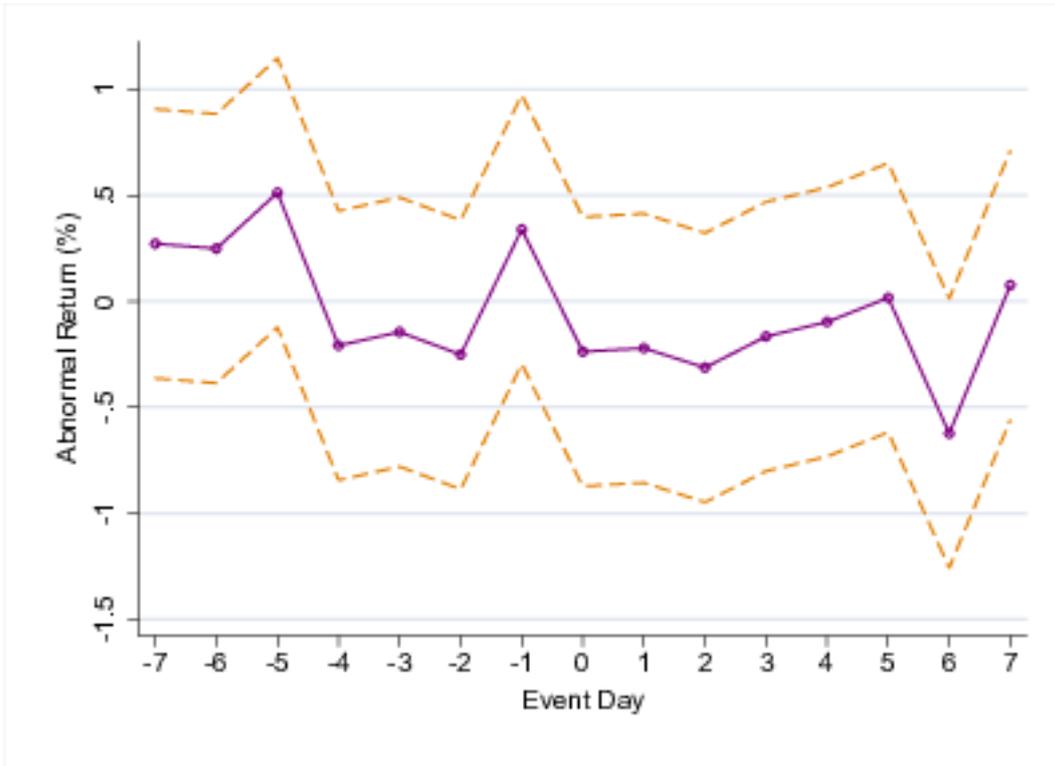
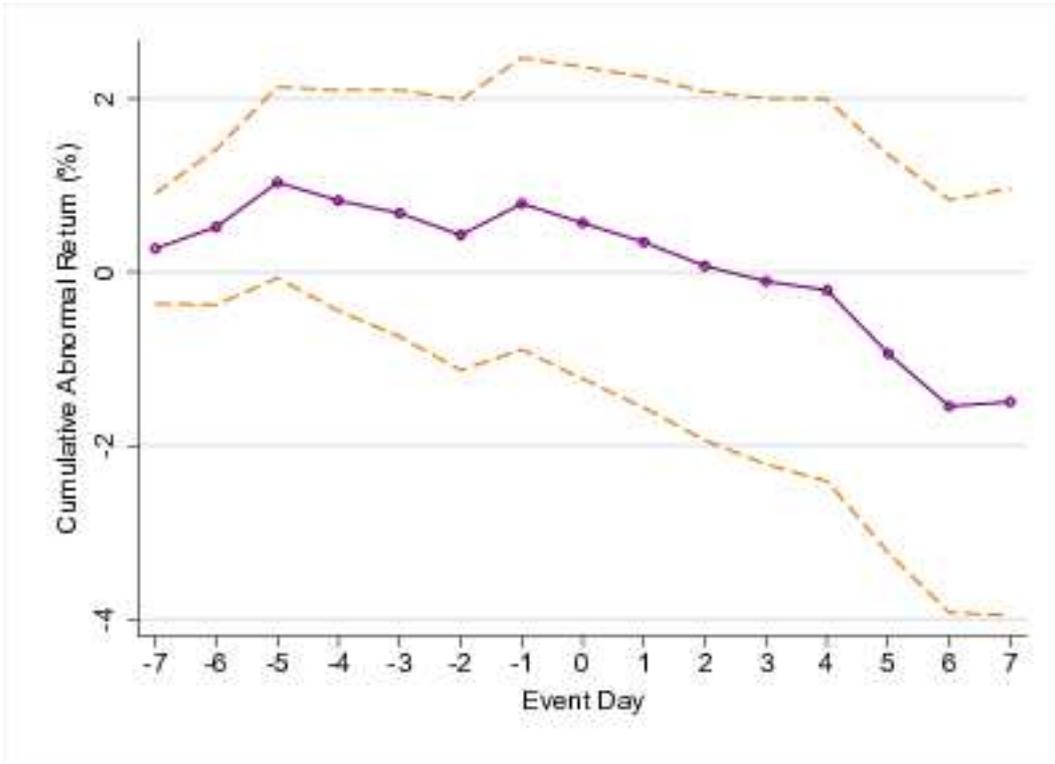
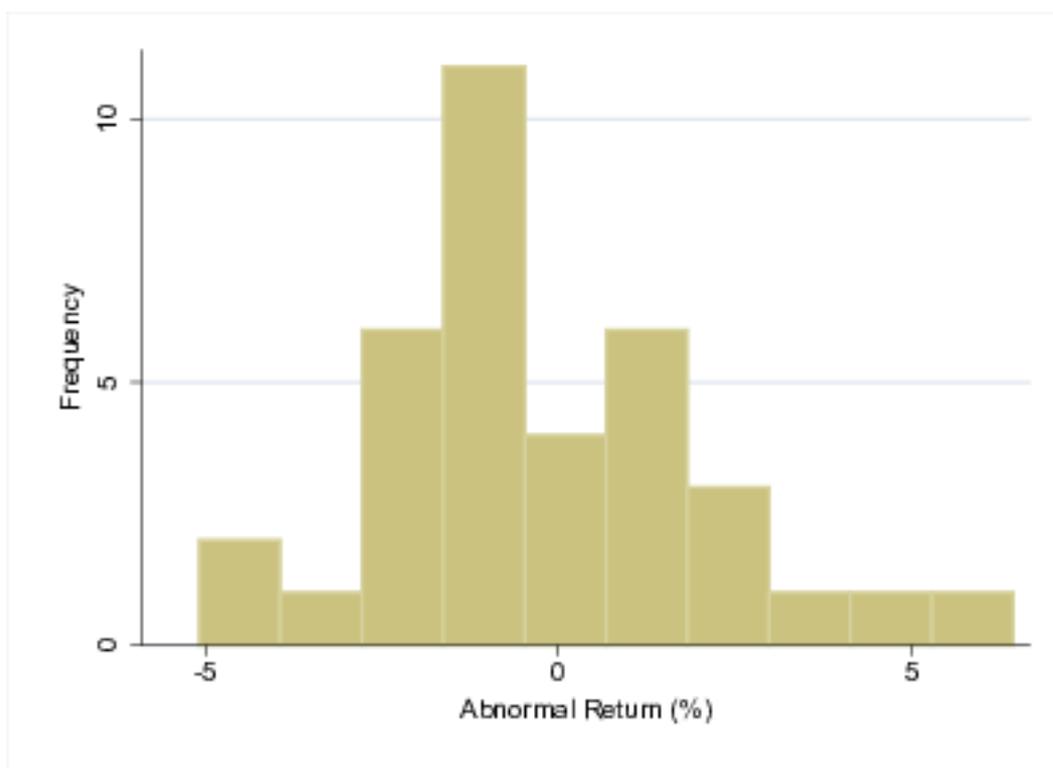


Figure 2: Mean Cumulative Abnormal Returns around Corruption Charges



returns across firms. To allow for information leak and absorption lag, we also plot the distribution of 3-day cumulative abnormal returns in Figure 4 and 5-days cumulative abnormal returns in Figure 5. Both figures show no evidence that there are two subsets of firms displaying opposite reactions to the corruption charges news.

Figure 3: Distribution of Abnormal Returns on Event Days



It is well documented that SOEs in China are on average less productive than domestic private enterprises (see for example, Hsieh and Klenow, 2009). However, the competitive disadvantages of SOEs are compensated by their greater access to bank credit (Song et al., 2011). Poncet et al. (2010) and Chan et al. (2012) find that, while privately owned firms in China are financially constrained, SOEs are not. Moreover, Li et al. (2008) show that among private firm owners, membership of the Communist Party is associated with more credit from banks or other state institutions. These findings suggest that political connections are likely to play a crucial role in the allocation of credit in China. Given the close relationship of political connections and bank credit in China, it is likely that changes to a firm's political connections may affect the stock value of highly leveraged firms more than less leveraged firms. In Figure 6, we examine

Figure 4: Distribution of 3-Day Cumulative Abnormal Returns around Corruption Charges

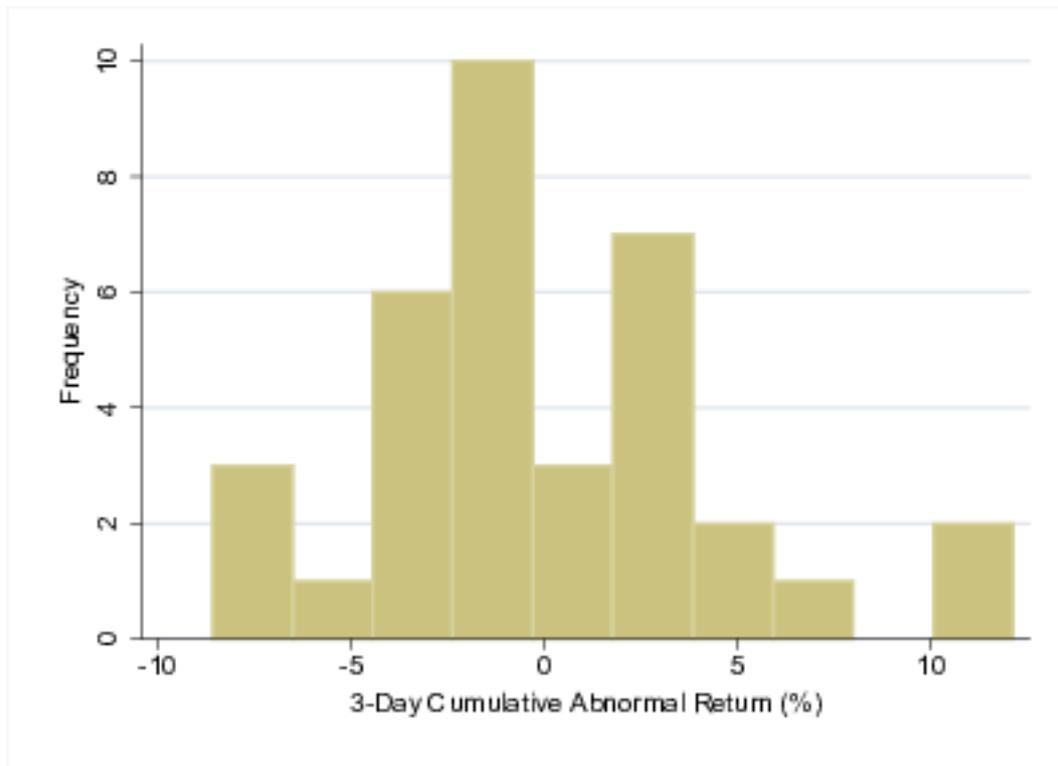
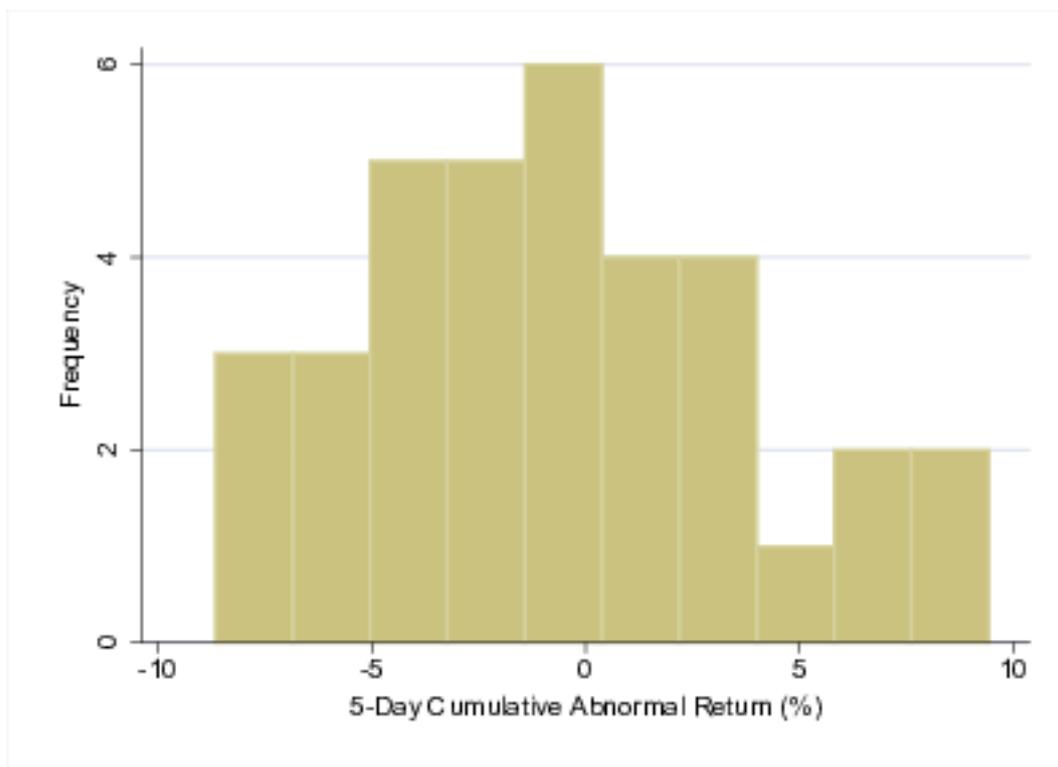


Figure 5: Distribution of 5-Day Cumulative Abnormal Returns around Corruption Charges



this by plotting abnormal returns and cumulative abnormal returns of firms around the event days against their debt-to-asset ratio. On the top left sub-plot, the vertical axis is the abnormal returns on the event day. Turning clockwise from the top right sub-plot, the vertical axis represents 3-day, 5-day and 7-day cumulative abnormal returns. As can be seen from Figure 6, none of the subplots exhibits a negative correlation between (cumulative) abnormal returns and leverage. Some sub-plots show a weak positive correlation. However, univariate regression results indicate that the positive correlation is not statistical significant at any conventional level.

For the same reason, we also examine whether firm profitability correlates with abnormal returns around the announcements. Figure 7 is similar to Figure 6 except that the horizontal axes in Figure 7 represent firm profitability as measured by return to equity. Again, visual examination and regression results do no suggest that abnormal returns around the corruption news are linked to firm profitability.

Figure 6: Abnormal Returns and Leverage

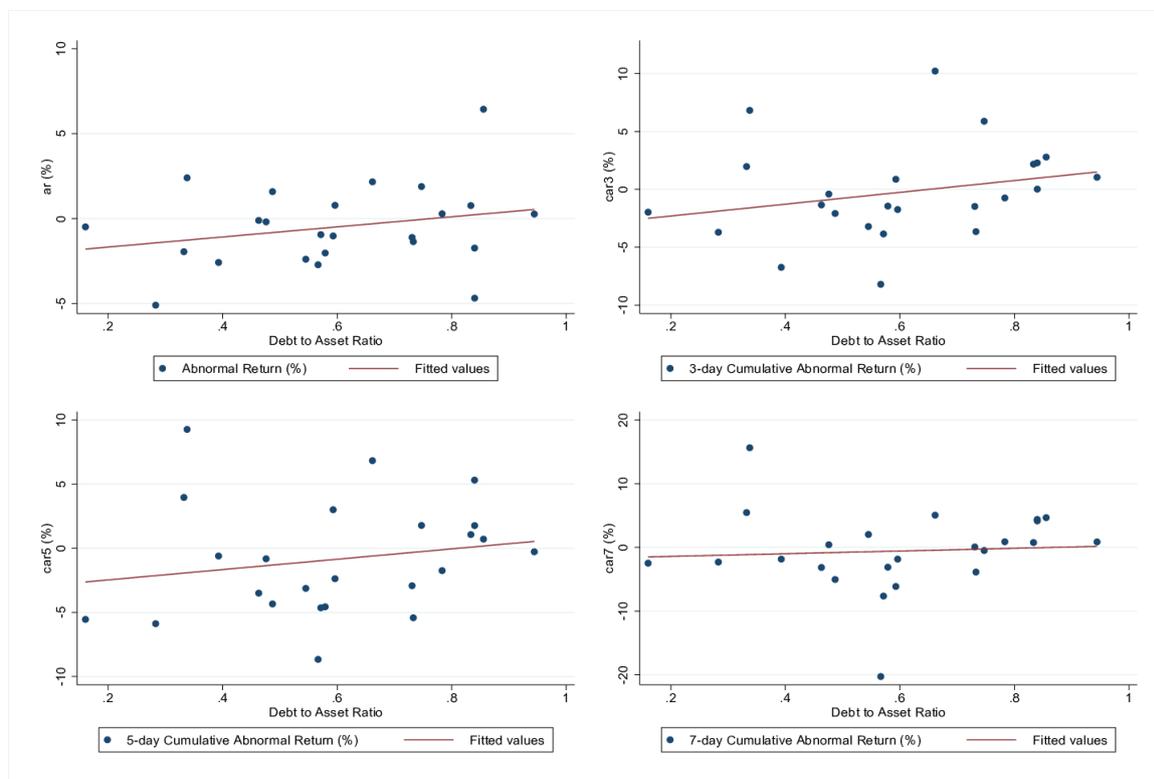
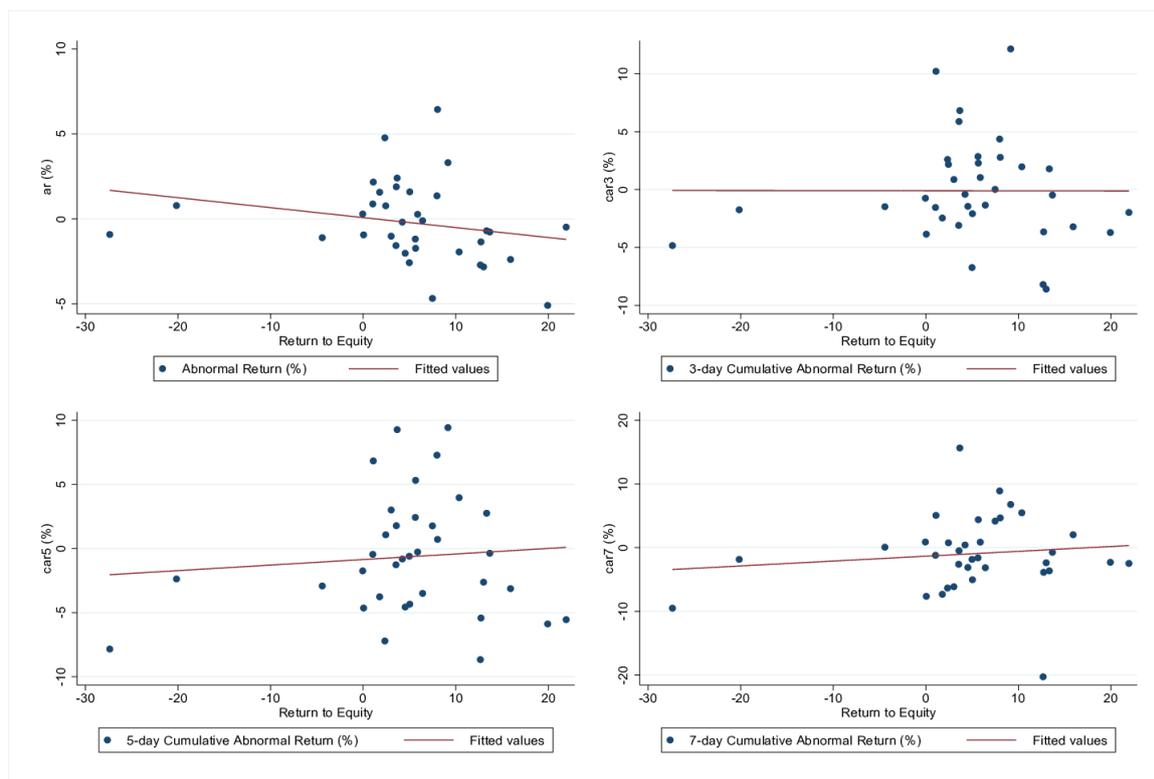


Figure 7: Abnormal Returns and Profitability



5 Concluding Remarks

China launched the anti-corruption campaign in late 2012, and it is still ongoing at the time of writing. By the end of 2014, according to the Central Commission for Discipline Inspection (CCDI), over 414,000 party officials have been disciplined for corruption, and 21,600 have been prosecuted in court.⁴ Although these make up a negligible share of the total 90 million Community Party members, they signify the biggest party cleansing movement since the end of the Mao Zedong era.⁵ Furthermore, even though there is always speculation that some prosecutions could be politically motivated, the campaign has received widespread public support.

Although so far, government officials seem to be the main target of the campaign, there are recent signals that the CCDI is focusing more of its attention upon SOEs executives (Xinhua, 2015a). According to the People's Daily, in 2014 more than 70

⁴Source: http://www.ccdi.gov.cn/yw/201502/t20150212_51324.html (in Chinese).

⁵On the other hand, it is difficult to verify what the official figures actually represent because CCDI does not provide details of these cases.

SOE top executives were placed under investigation. Of these, nearly 20 of them are from the energy and resource sectors alone, followed by executives in the finance media and telecommunication sectors (Daily, 2015). This supports the argument that state owned conglomerates are most prone to corruption due to the huge state assets that they control as well as the large monopolistic rents they collect. Given this, it is not surprising that the latest SOE reform guidelines emphasize combating corruption in the sector.

In this paper we examined the potential impact of the prosecution of executives on the share prices of SOEs. Although our empirical analysis circles around corruption charges against SOE executives, the underlying research question is more general: whether politically connected executives – given their vices and virtues – add any net value to a firm. Previous studies attempting to answer this question, such as Fan et al. (2007), mostly focus on the effect of installing politically connected executives. The current paper tackles the same question but from the opposite side: it looks at the effect of removing the executives.

All our analyses yield the same conclusion: there is no discernible impact of the prosecution announcements on the affiliated firms' share prices. There are a number of possible explanations for this finding:

1. Because the removal of a politically connected executive from an SOE could simultaneously have both positive and negative effects on the firm's future prospect, these two effects could cancel each other out;
2. News leaks or market rumors could have been spread much earlier than seven days prior to the official announcement – the left hand side window allowed in our analysis;
3. Related to the previous explanation though less likely, the market fails to comprehend the implication of the prosecution within seven days after the announcement;
4. The market has long priced in the possibility of SOE executives stepping down at any time for political reasons, and therefore does not need to reassess their firms'

values for a specific official reason of their dismissal;

5. Large SOEs' monopolistic power and profitability have a much deeper root than just one (though top) politically connected executive;
6. Related to the previous explanation, the market expects the new executives to be equally well-connected in the political circle; and
7. The monitoring function performed by China's stock market is weak for numerous reasons. In particular, it is famously dominated by retail investors betting on capital gains, not actively engaged in the monitoring of management.

It should be stressed that these possible explanations are not mutually exclusive.

Last but not least, the anti-corruption campaign has implications for the reform of not only the SOE sector but also the wider economy. At least prior to the current campaign, higher positions in the Party had been keenly sought after because higher positions typically mean more rent seeking opportunities. Because promotion of party officials was based on, amongst other criteria, the growth performance of their respective jurisdictions, even the corrupt ones have their self-interest aligned with the Party's economic objective (Overholt, 2015). However, as certain interest groups, like Zhou Yongkang's Petroleum Faction, have become so powerful – like an empire within a nation – they begin to view further reforms as a threat to their monopolistic power and have increasingly defied them. From this perspective, bringing down corrupt government officials or SOE executives have a common purpose: allowing Xi's administration to regain the ownership of the reform agenda.

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