Firms and Local Governments: Relationship Building during Political Turnovers*

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Abstract

We study how firms build relations with local governments in emerging markets without established rules of political lobbying. We document that following a turnover of the Party Secretary or mayor of a city in China, firms (especially privately owned enterprises, POEs hereafter) headquartered in that city significantly increase their “perk spending,” for example, expenses for travel and entertainment among others. Both the instrumental-variable-based results and heterogeneity analysis are consistent with the interpretation that the perk spending is used to build relations with local governments. In addition, we find that local political turnover in a city tends to be followed by changes of the Chairmen or the CEOs of state-owned enterprises that are controlled by the local government. We also discuss and rule out several alternative explanations for the above findings.

Keywords: Government, Relationship, Political turnovers, Perk, Personnel changes

JEL classification: G30, G38

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1. Introduction

Government plays an important role in any modern economic system. In western-style democracy, it is well understood that firms try to influence policymaking via lobbying and other activities that can result in what is known as “regulatory capture” (Stigler, 1971; Peltzman, 1976; Laffont and Tirole, 1991). Lobbying is regulated, and thus firms are required to report their lobbying activities to the regulatory agencies (e.g., in the USA, Federal Election Commission). As a result, researchers have used lobbying and legislative data to study the extent and the impact of lobbying.

It is well recognized that the relationship with government plays an even more critical role for firms in emerging markets where the government casts a bigger impact on the firms' operations. Politically connected firms may enjoy benefits such as preferential access to external financing, lower financing costs, receiving government contracts and bailouts, tax benefits, subsidies, favorable policies, and legislative conditions, all of which can enhance their operations and increase their values (Fisman, 2001; Faccio, 2006; Faccio, McConnell, and Masulis, 2006; Bunkanwanicha and Wiwattanakantang, 2009). However, much less is known about how firms “invest” in their relations with governments in emerging markets where the rules of political lobbying are either non-existing or less well-established. This may be partly due to the difficulty in measuring relationship building, because such activities are not clearly regulated in emerging economies. In this article, we attempt to fill this gap by examining how firms invest in their relationships with local governments in China following the turnovers of key local politicians using a large, partially hand-collected, panel dataset.

As the largest emerging economy, China is a particularly important country to study how firms interact with the government outside of western-style democracies. As forcefully argued in Xu (2011), the institutional foundation for Chinese economic reform can be characterized as a Regionally Decentralized Authoritarian (RDA) regime. RDA is a combination of political centralization and economic regional decentralization. National government maintains strict control over the political and personnel governance structure in that the appointment and promotion of sub-national government officials are controlled by the central government; yet regional governments, namely, provinces, cities/municipalities, and counties, have the overall responsibility for initiating and coordinating reforms, providing public services, and enforcing laws within their jurisdictions.

This fundamental institutional feature of China suggests that firms are likely to build relationships with local government officials who have the jurisdiction over them. We thus conjecture that after political turnovers of key local government officials, firms might use “perk spending,” such as business entertainment expenses, to invest in the connections with their local governments.

After political turnovers, firms may face the risk of losing existing connections and being adversely affected by new government policies introduced by the new local government officials.
officials. This gives them an extra incentive to build relations. Moreover, it is relatively easy for firms to disguise relation-building expenses as productivity-related perk spending. For example, Cai, Fang, and Xu (2011) argue that Chinese executives commonly use perks, such as entertainment, and travel (ETC), to network with government officials, suppliers, clients, and creditors. Therefore, our first hypothesis is that firms would increase their perk spending after political turnovers in their local governments.

Moreover, the connection with local governments can also be established through personnel changes at the firms, for example, replacing senior management by people with connections to the new local government officials. Relative to a private firm, a state-owned enterprise (SOE) might focus less on the firm’s profitability and be less concerned about the inefficiency of hiring a “friend” of the local official instead of the most productive candidate. In addition, the cost for SOEs to use perk spending to build relationship with local politicians is higher than that for the private firms because SOEs are subject to additional layers of auditing from the State-owned Assets Supervision and Administration Commission. Consequently, after a political turnover, local private firms focus relatively more on perk spending and hence their perk spending is more sensitive to political turnovers, while local SOEs focus relatively more on the hiring-a-friend strategy and hence their managerial changes are more sensitive to political changes. Therefore, our second hypothesis is that state-owned firms, particularly those controlled by their local governments, tend to change their key personnel following local political turnovers.

We note that some of the top personnel changes may be initiated by the newly appointed city officials. Regardless of whether the changes are initiated by firms or by local politicians, however, they lead to the same consequence of strengthening the connection to local governments. In that sense, we refer to those actions as “relationship building,” even when firms only play a passive role and the replaced managers may or may not directly benefit from the personnel changes.

China’s capital market provides an ideal setup for testing these hypotheses. First, the Chinese economy is known as a relational economy. Guanxi is crucial for firms to do business when their contracts and property rights are not well protected by formal institutions (Xin and Pearce, 1996; Tsang, 1998; Allen, Qian, and Qian, 2005). Among the different kinds of guanxi, political connections are among the most important (Shih, Adolph, and Liu, 2012; Piotroski and Zhang, 2014). Second, perk expenses and senior management changes are more likely to be disclosed by public firms, making the measurement possible. Third, there are frequent political turnovers in local Chinese governments because the central government has a policy of appointing new political leaders in each city every several years to incentivize the career politicians and prevent local officials from building up too much power. In our sample period of 2007–18, there are 1,802 city-level political turnovers, with significant variations across regions and over time.

We document that, when a new Party Secretary, or a mayor, takes office in a city, the firms in that city increase their “perk spending,” after controlling for firm characteristics and local economic conditions such as local GDP and population growth. The increase in perk spending does not appear to be driven by the changes in local economic environment, firms’ business investment, main customers and suppliers, or government officials’ corporate site visits. This effect is economically significant. In the year after a new Party Secretary or mayor is appointed, on average, a local firm in the city increases its perk spending by about 3.62 million RMB, which is over 20% of the average annual perk spending.
Although this result is consistent with our hypothesis, it could also be driven by omitted variables that affect both political turnovers and perk spending. To address this concern, we adopt the instrumental variable in Ru (2018), who shows that, due to the 5-year political cycles in China, the fifth year after an official starts at a position is a strong predictor of political turnovers. That is, we use the indicator for whether the year is the fifth year after an official takes the office as an instrument for political turnover. Our estimates based on this instrument further support the interpretation that political turnovers cause an increase in perk spending by local firms.

We are fully aware that our evidence is circumstantial. We find that firms increase their perk spending after political turnovers, but do not have direct evidence that the increased perk spending is used for building up relations with local governments. Hence, to further bolster our interpretation, we analyze the cross-sectional variations in the effect of local political turnover on perk spending. First, we find that the perk spending appears to respond less to political turnovers when it is costlier for officials to accept perks from local firms, for example, after a recent arrest of a local politician in a city, or when the Central Disciplinary Inspection Team is conducting an investigation in the region. Second, we exploit the geographic variations in the transparency and corruption level of city governments, measured by the Government-Business-Relation Index, and we find that, consistent with our interpretation, the effect of local political turnover on perk spending is stronger in areas with more corruption. Third, if the incoming official is from the same city, presumably, the turnover causes fewer interruptions in the existing connections, leading to less need to invest in relationship. Consistent with this intuition, we find that the effect of local political turnover on perk spending is indeed weaker for those cases. Finally, we find that the effect is weaker for SOEs or firms with more politically connected CEOs or Chairmen. This is consistent with the intuition that if a firm is more politically connected, local political turnovers should result in fewer interruptions on its connections, leading to a smaller effect on its perk spending. These cross-sectional and time-series variations in the effect on perk spending lend further support to our interpretation that the increase in perk spending after political turnovers is to build up relations with local governments.

To test our second hypothesis, we examine firms’ personnel changes after political turnovers. We find that local political turnovers tend to be followed by more changes of CEOs and Chairmen of firms in that city; moreover, this result is driven by the changes at firms that local politicians can influence, such as SOEs controlled by the city government. The effect disappears when we conduct the tests on private firms or on SOEs controlled by the central government.

Our paper contributes to several strands of the literature. First, it adds to the literature on how firms build relations with their governments. Prior literature finds that firms can build political connections through a wide range of means including hiring executives with prior political experiences and/or government affiliations (Fan et al., 2007; Akey, 2015), contributing to electoral campaigns (Claessens, Feijen, and Laeven, 2008; Cooper, Gullen, and Ovtchinnikov, 2010; Ovtchinnikov and Pantaleoni, 2012; Akey, 2015; Hassan et al., 2019), lobbying (Borisov, Goldman, and Gupta, 2016), and corporate investment (Aggarwal, Meschke, and Wang, 2012; Bertrand et al., 2018). Our paper differs from those studies in that we focus on an important emerging economy—China, and that we examine how firm perk spending is used to build political networks with governments. Furthermore, we find that another important aspect of relationship building is perhaps through personnel changes: local political turnovers tend to be followed by more changes of Chairmen or
CEOs for local SOEs in that city. We believe that our evidence on top managers’ turnover due to local government officials’ turnover is new to the literature. In addition, our finding that the SOEs and the POEs use different strategies to build relationship with the new leaders of the local government, with the former focusing more on a personnel-change strategy and the latter a perk-spending strategy, enriches our understanding of firms’ relationship building with local governments in China.

Second, our paper is also related to the recent literature on the effects of the anti-corruption campaign in China in 2012 (e.g., Lin et al., 2016; Giannetti et al., 2021; Griffin, Liu, and Shu, 2021). Our paper complements these studies by providing empirical evidence on how firms, in response to political turnovers, adjust their perk spending and senior management appointment to build political connections.

Third, our paper adds to the literature that examines the effects of political turnovers on corporate decisions, such as investments (e.g., Bernanke, 1983; Julio and Yook, 2012; Gulen and Ion, 2016; Kim and Kung, 2017; Jens, 2017), cost of equity (Pástor and Veronesi, 2013; Brogaard and Detzel, 2015), political donation (Akey and Lewellen, 2017), and operating performance and stock price (Liu, Shu, and Wei, 2017). Our analysis focuses on the portion of the corporate spending that appears to be building relationship with local government following political turnovers.

The rest of the paper is organized as follows. In Section 2, we describe the institutional background and develop our main hypothesis. In Section 3, we present the data. In Section 4, we report our empirical results. In Section 5, we conclude.

2. Institutional Background and Hypothesis Development

2.1 Institutional Background

There are five levels of government hierarchy in China: the central government and the four levels of local governments: the provincial level, the city/municipality level, the county level, and the township level. Our analysis focuses on the city level. According to the 2014 China City Statistical Yearbook, there are 297 cities across 31 provinces and 4 centrally administered cities (Beijing, Shanghai, Tianjin, and Chongqing). The top two leaders at the city level are the city’s Communist Party Secretary and the mayor, reflecting the dual presence of the Communist Party and the government at each level of China’s political hierarchy (Li and Zhou, 2005). City official turnover is under the control by the Organization Department of the Provincial Party Committee. Typically, a city official’s term is 5 years, and his/her turnover occurs around the meetings of the National People’s Congress of the People’s Republic of China, which convene once every 5 years. However, many city officials do not complete the 5-year terms and leave for other positions. For example, in our sample, an official has around 20% chance of leaving his/her position in the first year of his/her term. This conditional probability increases steadily over the official’s tenure. In the fifth year, for example, an official has a 60% chance of leaving his position.

3 Regarding city officials’ tenure, the Organization Department of the Central Committee of the Communist Party of China issued the “Provisional Regulations on Terms of Cadres of the Party and Government” in August 2006, which states that mayors and officials at or above the county level should serve 5-year terms and that these terms should be relatively stable. Another regulation also stipulates that cadres may not serve in the same position for more than two terms (Article 6) and may not serve in positions of the same rank for more than 15 years (Article 7).
2.2 Hypothesis Development

In this section, we develop a conceptual framework to motivate our hypothesis. Given the importance of political connections in the Chinese economy, it is natural to expect that firms may find it valuable to build relations with their local governments. Our overarching hypothesis is that firms would increase their investment in political connections after major political turnovers in their local governments. First, firms may want to increase their investment in relations after political turnovers because their existing connections lose value; as a result, this is the time when they need to establish new connections rather than simply maintaining their existing ones. Second, connections with new leaders are more valuable because they are expected to be in power for longer. Finally, new officials might make new policies that alter the business environment where firms operate (Gulen and Ion, 2016). Thus, firms face the risk of being adversely affected by new government policies, and hence are more eager to build connections with local governments after new officials take offices.

Due to the opaque nature of the investment in government relations in emerging economies, we attempt to measure it indirectly, through two types of activities. The first is based on insights from prior studies on “perk spending.” Adithipyangkul, Alon, and Zhang (2011) and Cai, Fang, and Xu (2011) argue that Chinese executives commonly use “perks,” such as entertainment, and travel (ETC), to network with government officials, suppliers, clients, and creditors. These networking activities help executives build their relational capital to facilitate their firms’ activities. Yeung and Tung (1996) suggest that the buildup and maintenance of guanxi requires perk spending. Moreover, the compensation of Chinese officials is generally low relative to that in other countries and relative to that in the private sector in China. Officials might be motivated to seek alternative compensation in monetary and non-monetary forms. Perk expenses of local firms may be a convenient way for officials to extract rents due to their opaque nature. These illegitimate expenses are commonly reimbursed as management expenses in Chinese accounting practice (Cai, Fang, and Xu, 2011; Chen, Li, and Liang, 2016). Vast anecdotal evidence suggests that this might be a common practice in China.4

The second type of activities may manifest itself through personnel changes. In other words, a firm may hire a person who is connected to the new local politicians, even if he is otherwise not the most qualified. The decision maker of a firm may decide to sacrifice the firm’s efficiency for the overall benefit of the firm or, perhaps more likely, for his personal interests from the connection with local politicians.

Moreover, SOE and private-firm managers may have different preferences for these two types of activities. Our premise is that, relative to a private firm, an SOE might focus less on the firm’s profitability and be less concerned about the inefficiency of hiring a “friend” of the local official instead of the most productive candidate. In addition, the cost for SOEs to use perk spending to build relationship with local politicians is higher because they are

4 Car expenses: Due to the regulation of prohibiting using government cars for private purposes, government officials tend to use cars provided by firms. See, for example, China Enterprise News, April 9, 2013. http://news.163.com/13/0409/07/8S0KPDP20001124J.html; Travel expenses: three AVON senior Chinese executives were suspected of supporting government officials’ overseas traveling, which was classified as traveling costs in the firm’s balance sheet, http://news.163.com/10/0414/07/647DQROL000146B0O.html; Business entertainment expenses: The entertainment expenses, including eat and drink, for government officials are usually paid by firms (see, e.g., http://news.163.com/15/0513/18/APH1K5DS00014JB5.html).
subject to additional layers of auditing from the State Assets Supervision and Administration Commission. The consequence is that when there is a political turnover, local firms would make efforts to build their relations with the new official. Private firms focus relatively more on perk spending and hence their perk spending is more sensitive to political turnovers, while SOEs focus relatively more on the hiring-a-friend strategy and hence their managerial changes are more sensitive to political changes. In the next section, we examine the above intuition empirically.

We note that, in China, the government retains the ultimate decision right on the appointment of SOEs’ CEOs and chairmen (Fan et al., 2007). These appointments are carried out by the Organization Department of the CCP at the level that is associated with the government that owns the SOEs. Many of the senior managers in SOEs are quasi-government officials rather than professional managers. Their career paths often overlap with local or central government officials (Wong, 2014). Hence, an alternative interpretation of our “hiring a friend” hypothesis is that the managerial turnovers might be initiated by the newly appointed local politicians. We are certainly open to this interpretation, which is also an example of the impact casted by government on the firms. We also note that in many cases, it is difficult, if not impossible, to distinguish which side is the “initiator” of the action. For example, suppose a firm actively decided the hiring of a friend of the politician, one can view the firm as the initiator in this action. However, an equally feasible interpretation is that the firm initiated the hiring because it felt that the action was “expected,” or even felt strong pressure to do so. In this case, it is perhaps not important to distinguish the initiator and the follower in the action. Both interpretations lead to the same consequence: after a political turnover, local firms’ senior management may be replaced by people with connections to the new government officials, reestablishing government-business connections after the interruption caused by the political turnover.

3. Data

Our sample consists of firms that are listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange in China from 2007 to 2018. Our sample starts in 2007 because few firms disclosed their perk expenses before 2007. Moreover, the accounting standard changed on January 1, 2007, making the pre-2007 data less comparable. We manually collect perk expense data from firms’ annual reports. The rest of the financial data are from the China Stock Market and Accounting Research (CSMAR) database. Macroeconomic statistics at the provincial and city levels are from the National Bureau of Statistics (NBS). We also manually collect the information on the executives from the firms’ prospectuses and annual reports.

To measure local political turnovers, we manually collect the detailed information on city level Party Secretaries and mayors such as their names, positions, ages, and résumés from city government official websites. These résumés also contain detailed personal information such as education and work experience prior to their current positions. If the information is not available on the official website, we then manually search the information through Baidu (www.baidu.com), China’s most popular search engine. The yearly distribution of newly appointed city officials is reported in Panel A of Table I. Our sample contains 1,098 newly appointed city level Party Secretaries and 1,372 newly appointed mayors.

We merge the officials’ personal data with the firm-level perk spending and financial data by matching the province, city, and fiscal year. We classify a firm into a city according to the location of its headquarter. After matching with firm-level variables and excluding
Table I. Summary statistics

Panel A reports the distribution of newly appointed city officials by year. Panel B presents the descriptive statistics of main variables.

Panel A: The distribution of city-level political turnovers

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall</th>
<th>Secretary</th>
<th>Mayor</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>176</td>
<td>94</td>
<td>148</td>
</tr>
<tr>
<td>2008</td>
<td>195</td>
<td>138</td>
<td>162</td>
</tr>
<tr>
<td>2009</td>
<td>93</td>
<td>33</td>
<td>78</td>
</tr>
<tr>
<td>2010</td>
<td>70</td>
<td>37</td>
<td>52</td>
</tr>
<tr>
<td>2011</td>
<td>150</td>
<td>90</td>
<td>114</td>
</tr>
<tr>
<td>2012</td>
<td>187</td>
<td>118</td>
<td>148</td>
</tr>
<tr>
<td>2013</td>
<td>185</td>
<td>130</td>
<td>137</td>
</tr>
<tr>
<td>2014</td>
<td>90</td>
<td>47</td>
<td>63</td>
</tr>
<tr>
<td>2015</td>
<td>162</td>
<td>96</td>
<td>106</td>
</tr>
<tr>
<td>2016</td>
<td>162</td>
<td>103</td>
<td>119</td>
</tr>
<tr>
<td>2017</td>
<td>212</td>
<td>145</td>
<td>149</td>
</tr>
<tr>
<td>2018</td>
<td>120</td>
<td>67</td>
<td>96</td>
</tr>
<tr>
<td>Total</td>
<td>1,802</td>
<td>1,098</td>
<td>1,372</td>
</tr>
</tbody>
</table>

Panel B: Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs.</th>
<th>Mean</th>
<th>STD</th>
<th>10%</th>
<th>25%</th>
<th>Median</th>
<th>75%</th>
<th>90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perk</td>
<td>6,541</td>
<td>1.563</td>
<td>2.211</td>
<td>0.249</td>
<td>0.469</td>
<td>0.883</td>
<td>1.682</td>
<td>3.262</td>
</tr>
<tr>
<td>APerk</td>
<td>6,541</td>
<td>−0.194</td>
<td>1.748</td>
<td>−2.129</td>
<td>−1.307</td>
<td>--0.376</td>
<td>0.637</td>
<td>1.742</td>
</tr>
<tr>
<td>Perk_hat</td>
<td>6,541</td>
<td>1.754</td>
<td>1.918</td>
<td>−0.642</td>
<td>0.561</td>
<td>1.725</td>
<td>2.862</td>
<td>4.069</td>
</tr>
<tr>
<td>Induction</td>
<td>6,541</td>
<td>0.445</td>
<td>0.497</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Leverage</td>
<td>6,541</td>
<td>0.463</td>
<td>0.218</td>
<td>0.183</td>
<td>0.300</td>
<td>0.457</td>
<td>0.614</td>
<td>0.741</td>
</tr>
<tr>
<td>ROA</td>
<td>6,541</td>
<td>0.036</td>
<td>0.068</td>
<td>−0.008</td>
<td>0.011</td>
<td>0.033</td>
<td>0.065</td>
<td>0.103</td>
</tr>
<tr>
<td>Dual</td>
<td>6,541</td>
<td>0.285</td>
<td>0.451</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Indir</td>
<td>6,541</td>
<td>0.371</td>
<td>0.051</td>
<td>0.333</td>
<td>0.333</td>
<td>0.333</td>
<td>0.429</td>
<td>0.429</td>
</tr>
<tr>
<td>SOE</td>
<td>6,541</td>
<td>0.327</td>
<td>0.469</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Insholder</td>
<td>6,541</td>
<td>0.248</td>
<td>0.224</td>
<td>0.011</td>
<td>0.054</td>
<td>0.178</td>
<td>0.405</td>
<td>0.605</td>
</tr>
<tr>
<td>DirHolding</td>
<td>6,541</td>
<td>10.680</td>
<td>7.651</td>
<td>0.000</td>
<td>0.000</td>
<td>12.930</td>
<td>17.760</td>
<td>18.920</td>
</tr>
<tr>
<td>Male_CEO</td>
<td>6,541</td>
<td>0.937</td>
<td>0.242</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Salary_CEO</td>
<td>6,541</td>
<td>13.030</td>
<td>0.830</td>
<td>11.980</td>
<td>12.570</td>
<td>13.060</td>
<td>13.550</td>
<td>14.000</td>
</tr>
<tr>
<td>Age_CEO</td>
<td>6,541</td>
<td>48.620</td>
<td>6.967</td>
<td>40.000</td>
<td>44.000</td>
<td>49.000</td>
<td>53.000</td>
<td>57.000</td>
</tr>
<tr>
<td>Male_Chairman</td>
<td>6,541</td>
<td>0.949</td>
<td>0.220</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Age_Chairman</td>
<td>6,541</td>
<td>52.280</td>
<td>7.760</td>
<td>43.000</td>
<td>47.000</td>
<td>52.000</td>
<td>57.000</td>
<td>62.000</td>
</tr>
<tr>
<td>GDP_Growth</td>
<td>6,541</td>
<td>0.118</td>
<td>0.128</td>
<td>0.057</td>
<td>0.078</td>
<td>0.106</td>
<td>0.154</td>
<td>0.201</td>
</tr>
<tr>
<td>Pop_Growth</td>
<td>6,541</td>
<td>0.057</td>
<td>0.053</td>
<td>0.000</td>
<td>0.020</td>
<td>0.050</td>
<td>0.080</td>
<td>0.132</td>
</tr>
</tbody>
</table>
financial service firms, we obtain our final sample of 6,541 firm-year observations. We winsorize all unbounded continuous variables at the 1% level of both tails to mitigate the influence of outliers.

To measure the major personnel change in a city, we construct a dummy variable Induction\(_{c,t}\), which is 1 if a new Party Secretary or mayor takes office in city \(c\) between July 1 of year \(t-1\) and June 30 of year \(t\), and 0 otherwise. That is, if an official takes office between January 1 and June 30 in year \(t\), we treat year \(t\) as his/her first year in power; if an official takes office between July 1 and December 31 in year \(t\), then we treat year \(t+1\) as his/her first year in power.

In the “Footnotes to Financial Statements” section of the annual reports, firms may voluntarily disclose details of expenses, from which we identify items related to perk spending. In our sample, around 80% of the firms choose to disclose. Prior to 2010, the disclosure was mainly in the notes of Cash Flow Statements, especially from “Other Cash Flows Related to Operating Activities.” After 2010, detailed expenses are disclosed in the notes to the Management Expenses item in Income Statements. Following Cai, Fang, and Xu (2011) and Huang and Li (2013), we construct our measure of perk spending as the entertainment and travel expenses normalized by the firm’s revenue. Entertainment and travel expenses include the expenses for eating, drinking, gifts, karaoke, sports club membership, and travel, etc., some of which may serve the function of relationship building.

Panel B of Table I presents the summary statistics for our sample. One average, a firm’s perk spending is about 1.563% of its revenue. Its standard deviation is 2.21%, suggesting that there are significant variations across firms. The mean of Induction is 0.445, which indicates that about half of firm-year observations in our sample period experience at least one major personnel change in their local city governments.

4. Empirical Analysis

4.1 Abnormal Perk

Our perk spending measure is a mixture of the expenses from normal business activities and relationship building. Hence, to examine the investment in relationship building after political turnovers, we follow Cai, Fang, and Xu (2011) and first decompose our perk spending measure through the following regression:

\[
\text{Perk}_{i,c,t} = \alpha + \beta \times X_{i,c,t} + \epsilon_{i,c,t},
\]

where \(\text{Perk}_{i,c,t}\) is the ratio of perk spending to revenue of firm \(i\), which is headquartered in city \(c\), in year \(t\), and \(X_{i,c,t}\) includes a list of firm-level and city-level control variables: firm age, number of subsidiaries, number of employees, executive compensation, sales, investment, and the GDP per capita of the firm’s local city. Firm- and year-fixed effects are included in the regression.

We run the regression using our entire sample to obtain the coefficient estimates: \(\hat{\alpha}\) and \(\hat{\beta}\). We will then denote the projected perk spending, \(\text{Perk}_{i,c,t}\), as

\[
\text{Perk}_{i,c,t} = \hat{\alpha} + \hat{\beta} \times X_{i,c,t},
\]

and denote the regression residual as the “abnormal perk,” \(\text{APerk}_{i,c,t}\). Presumably, \(\text{Perk}_{i,c,t}\) reflects the “business-related” component of perk spending. Our hypothesis
implies that political turnovers should affect the abnormal perk, $A_{Perk_{i,c,t}}$, rather than the business-related component $Perk_{hat_{i,c,t}}$.

4.2 Political Turnovers and Abnormal Perk Spending

To examine the effect of political turnover of key city government officials on the abnormal perk spending of firms in the city, we first run the following panel regression:

$$A_{Perk_{i,c,t}} = \alpha + \beta \times Induction_{i,c,t} + \gamma \times Mi_{i,c,t} + \epsilon_{i,c,t},$$

where $A_{Perk_{i,c,t}}$ is a measure of the abnormal perk spending of firm $i$, which is headquartered in city $c$, in year $t$. Induction$_{i,c,t}$ is a dummy variable, which is one if there is a change of Party Secretary or mayor in city $c$ during year $t$, and zero otherwise. $M_{i,c,t}$ includes a list of firm-level, CEO-level, and regional-level control variables. Firm-level control variables include the following. FirmSize$_{i,c,t}$ is the natural log of the book value of the total assets of firm $i$, headquartered in city $c$, in year $t$. Leverage$_{i,c,t}$ is the debt-to-asset ratio, ROA$_{i,c,t}$ is the net income divided by total assets. Dual$_{i,c,t}$ is a dummy variable which takes value 1 if the board chairman is also the CEO, and zero otherwise. InDir$_{i,c,t}$ is the independence of the board, measured as the ratio of the number of independent directors over the total number of directors on the board. SOE$_{i,c,t}$ equals 1 if the firm is a SOE, and zero otherwise. InsHoldPer$_{i,c,t}$ is the percentage of the shares owned by institutions. DirHolding$_{i,c,t}$ is the percentage of the shares owned by the board directors. Analysts$_{i,c,t}$ is the logarithm of the number of analysts following the firm. The second set of control variables is about CEO characteristics. Male_CEO$_{i,c,t}$ takes value 1 if the CEO of firm $i$ in year $t$ is a male and zero otherwise. Salary_CEO$_{i,c,t}$ is the natural logarithm of the annual salary of the CEO of firm $i$ in year $t$. Age_CEO$_{i,c,t}$ is the age of CEO of firm $i$ in year $t$. City-level control variables include GDP_Growth$_{c,t}$, the GDP growth of city $c$ in year $t$, and Pop_Growth$_{c,t}$, the population growth rate of city $c$ in year $t$. In addition, firm- and year-fixed effects are included in the regression.

A positive coefficient $\beta$ implies that the abnormal perk spending tends to increase after a local political turnover. A positive $\beta$ is consistent with our hypothesis that after a political turnover, local firms increase their investment in building relations with the government, and this extra expense shows up in the annual reports as higher-than-usual spending on travel expenses, business entertainment expenses, etc.

The regression results are reported in Panel A of Table II. In Column (1), the coefficient of Induction is 0.076, with a $t$-statistic of 2.93. This is consistent with our hypothesis that after the turnovers of the Party Secretary or the mayor of a city, firms headquartered in that city significantly increase their perk spending. The economic magnitude of this increase is also significant. The average revenue in our sample is RMB 4,760 million. Hence, if we ignore the non-linear effect, our estimate implies that during the first year after a change in the Party Secretary or mayor of a city, an average firm that is headquartered in this city has an extra RMB 3.62 million ($=4,760 \times 0.076\%$) perk spending that cannot be attributed to usual business activities. Note that the average perk spending in our sample is RMB 15.34 million. That is, this excess perk spending is over 20% of the average perk spending. Note also that a city often has multiple publicly listed firms. It is also reasonable to expect the non-publicly listed firms to engage in similar activities, which are more difficult to analyze due to the lack of data. Hence, our estimate suggests that the estimated excess perk spending is quite significant for a local economy.
Table II. Political turnover and abnormal perk spending

Panel A reports the results from regression of abnormal perk spending $A_{\text{Perk}}_{i,c,t}$ on political turnover $\text{Induction}_{c,t}$. Columns (1)–(3) report the results based on all turnovers of Party Secretaries and mayors, Secretary turnovers, and mayor turnovers, respectively. Panel B reports the results from regression of abnormal perk spending $A_{\text{Perk}}_{i,c,t}$ on political turnover $\text{Induction}_{c,t} / C_0^k$ for $k = -2, -1, 0, 1, 2$. Firm-level control variables include the $\text{FirmSize}_{i,c,t}$, $\text{Leverage}_{i,c,t}$, $\text{ROA}_{i,c,t}$, $\text{Dual}_{i,c,t}$, $\text{IndDir}_{i,c,t}$, $\text{SOE}_{i,c,t}$, $\text{Insholdper}_{i,c,t}$, $\text{DirHolding}_{i,c,t}$, $\text{Male}_{\text{CEO}}_{i,c,t}$, $\text{Salary}_{\text{CEO}}_{i,c,t}$, $\text{Age}_{\text{CEO}}_{i,c,t}$, $\text{Male}_{\text{Chairman}}_{i,c,t}$, $\text{Salary}_{\text{Chairman}}_{i,c,t}$, $\text{Age}_{\text{Chairman}}_{i,c,t}$, City-level control variables include the $\text{GDP}_\text{Growth}_{c,t}$ and $\text{Pop}_\text{Growth}_{c,t}$, All variables are defined in the Appendix. Firm- and year-fixed effects are included in all regressions. The $t$-statistics, in parentheses, are based on standard errors clustered by city. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

### Panel A: Abnormal perk spending

<table>
<thead>
<tr>
<th>Dep. Var. = $A_{\text{Perk}}_{i,c,t}$</th>
<th>(1) Overall</th>
<th>(2) Secretary</th>
<th>(3) Mayor</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{Induction}_{c,t}$</td>
<td>0.076***</td>
<td>0.065**</td>
<td>0.063**</td>
</tr>
<tr>
<td>(2.93)</td>
<td>(2.48)</td>
<td>(2.38)</td>
<td></td>
</tr>
<tr>
<td>Firm-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>City-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed effects</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
</tr>
<tr>
<td>Cluster</td>
<td>City</td>
<td>City</td>
<td>City</td>
</tr>
<tr>
<td>$N$</td>
<td>6,541</td>
<td>6,427</td>
<td>6,541</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Number of firms</td>
<td>1,189</td>
<td>1,186</td>
<td>1,189</td>
</tr>
</tbody>
</table>

### Panel B: The dynamic pattern

<table>
<thead>
<tr>
<th>Dep. Var. = $A_{\text{Perk}}_{i,c,t}$</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{Induction}_{c,t-2}$</td>
<td>0.004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.021</td>
</tr>
<tr>
<td>(0.18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.54)</td>
</tr>
<tr>
<td>$\text{Induction}_{c,t-1}$</td>
<td>0.024</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.052</td>
</tr>
<tr>
<td>(1.07)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1.21)</td>
</tr>
<tr>
<td>$\text{Induction}_{c,t}$</td>
<td>0.076***</td>
<td></td>
<td></td>
<td>0.125***</td>
<td></td>
<td>(2.94)</td>
</tr>
<tr>
<td>(2.94)</td>
<td></td>
<td></td>
<td></td>
<td>(2.81)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\text{Induction}_{c,t+1}$</td>
<td></td>
<td>-0.039</td>
<td></td>
<td>0.032</td>
<td></td>
<td>(0.78)</td>
</tr>
<tr>
<td>(−1.44)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\text{Induction}_{c,t+2}$</td>
<td></td>
<td></td>
<td>-0.019</td>
<td>0.042</td>
<td></td>
<td>(−0.56)</td>
</tr>
<tr>
<td>(−0.56)</td>
<td></td>
<td></td>
<td></td>
<td>(1.12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm-level controls</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>City-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed effects</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
</tr>
<tr>
<td>Cluster</td>
<td>City</td>
<td>City</td>
<td>City</td>
<td>City</td>
<td>City</td>
<td>City</td>
</tr>
<tr>
<td>$N$</td>
<td>5,654</td>
<td>6,192</td>
<td>6,541</td>
<td>5,736</td>
<td>5,000</td>
<td>3,972</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>0.08</td>
<td>0.08</td>
<td>0.07</td>
<td>0.05</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>Number of firms</td>
<td>1,121</td>
<td>1,153</td>
<td>1,189</td>
<td>1,137</td>
<td>1,094</td>
<td>996</td>
</tr>
</tbody>
</table>
Column (2) reports the regression result based on the turnovers of Party Secretaries only. The coefficient of Induction is 0.065 \( (t = 2.48) \). Column (3) reports the results based on the turnovers of mayors and the results are very similar.\(^{5}\)

Next, we examine the dynamic of perk spending during the years surrounding political turnovers. Specifically, we rerun regression (3), but replace its dependent variable by \( \text{APerk}_{i,c,t+j} \) for \( j = -2, -1, 1, 2 \). That is, we now examine the abnormal perk spending during the 5 years around political turnovers. Panel B reports the regression results. It shows that, in all six columns, the coefficient of Induction is insignificant except for \( \text{Induction}_{c,t} \). This evidence further supports the earlier results that firms increase their perk spending immediately after the incoming local officials take offices.

### 4.3 Selection Effect

Note that our measurement of perk spending is only possible if a firm chooses to disclose the details of its expenses. Naturally, the firms’ voluntary disclosure decisions may cause a concern of selection bias. In this section, we attempt to address the potential selection effect based on the Heckman (1979) selection model.

Specifically, in the first stage, we use \( \text{Industry}_{i,c,t} \) as the instrument in the selection equation, where \( \text{Industry}_{i,c,t} \) is the percentage of other firms in firm \( i \)'s industry that disclosed their perk spending in year \( t \). As shown in Table III, in the first-stage regression, the coefficient of the instrument is 0.088 \( (t = 4.25) \). Then, in the second stage, we extend the regressions in Table II with the inverse mills ratio as an additional control. As shown in Column (1), where a political turnover in a city is defined as a change in its Party Secretary or mayor, the estimate of the coefficient of Induction is almost the same as that in Table II. Moreover, the coefficient of the inverse mills ratio is statistically insignificant, suggesting that there is no evidence of significant selection effect. In Columns (2) and (3), a political turnover in a city is defined as a change in its Party Secretary and mayor, respectively. Again, the coefficient estimates of Induction are almost the same as those in Table II and the coefficients of the inverse Mills ratio are statistically insignificant. Hence, our analysis suggests that there is no evidence that the disclosure decisions have a significant selection effect on our estimates in Table II.

### 4.4 Instrumental Variable

Our evidence so far is consistent with the hypothesis that firms increase their perk spending to establish connections after a political turnover in their local city governments. However, one can imagine that omitted variables might affect both political turnovers and perk spending. In this section, we try to address this concern using instrumental variable regressions. Specifically, Ru (2018) shows that, due to the 5-year political cycles in China, the

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\(^{5}\) We repeat our analysis after excluding turnovers that occurred within 2 years an official’s tenure and the results remain similar. We also obtain similar results when we use only the sample after 2010 when the income statements are available for measuring perk spending, and when we only use the sample after the 18th National Congress of the Chinese Communist Party in 2012. Moreover, we obtained the data on political turnovers at the provincial level and conducted similar analysis on the effect on abnormal perk spending. Our evidence suggests a similar pattern: a political turnover at a provincial government leads to higher abnormal perk spending of the firms in the province.
fifth year after an official takes office is a strong predictor of a political turnover. Hence, we follow Ru (2018) to use Induction_t to Induction_t as an instrument for Induction_t.

Specifically, we run the following regressions:

First stage: \[ \text{Induction}_{t} = \beta_{1} \times \text{Induction}_{t-5} + \gamma_{1} \times M_{t,x,t} + \epsilon_{t}, \] (4)

Second stage: \[ \text{APerk}_{i,c,t} = \alpha_{2} + \beta_{2} \times \text{Induction}_{t} + \gamma_{2} \times M_{i,c,t} + \epsilon_{i,c,t}, \] (5)

where Induction_{t} is the projected value of Induction_t from the first-stage regression, and M_{t,x,t} stacks the list of control variables as in the regressions in Table II.

We first run regressions (4) and (5) with k = 5. That is, we use Induction_{t-5} as an instrument. The results are reported in Columns (1) and (2) of Table II. In the first-stage regression, the coefficient of Induction_{t-5} is 0.255 (t = 4.03). Hence, this instrument is highly relevant for political turnover. Column (2) reports the second-stage results. The coefficient of Induction_{t} is 1.017 (t = 2.26). That is, consistent with our hypothesis, political turnover increases perk spending.7

We thank an anonymous referee for this suggestion.

We note that the size of this coefficient is thirteen times of that in Table II. One possibility is that, relative to an expected turnover (as captured in the 2SLS), an unexpected turnover (as captured in the OLS) is associated with higher uncertainty in the local political economy. Facing higher uncertainty, firms may respond more cautiously, leading to a smaller increase in perk spending. This is the “corrective endogeneity” case discussed in Jiang (2017), where the IV result is stronger than the OLS result.
As placebo tests, we also run regressions (4) and (5) with $k = 4$ and $k = 6$. That is, we repeat this analysis using $\text{Induction}_{c,t-k}$ as alternative instruments. As shown in Columns (4) and (6), the coefficient of the instrumented Induction is statistically insignificant for both “placebo” instruments. These results further support our hypothesis that after a political turnover, local firms in the city increase their perk spending to establish connections.

### 4.5 Cross-Sectional Variations

We acknowledge that our evidence is circumstantial for the interpretation that the increase in perk spending is for the purpose of building relations with the local governments. To further bolster this interpretation, we examine the cross-sectional variations of the effect of local political turnover on perk spending. Under our interpretation that the perk spending is used to build relations with local governments, we should expect the effect to be stronger when firms’ incentive to build relations is stronger or when officials are less deterred from accepting perks. In the following, we examine four types of variations.

First, the variation can result from the changes in the political environment. For example, after a recent arrest of a local official in a city, other officials would become more
reluctant to accept perks. To test this, we manually collected information of arrested city officials, and there are sixty-five cases of arrested officials in our sample period. Then we define a dummy variable Arrest\(_{c,t}\), which takes value 1 if there is a change in the Party Secretary or mayor of city \(c\) in year \(t\) and the leaving official was arrested due to a corruption case, and zero otherwise. We augment the regression in Table II by including an interaction term Induction \(\times\) Arrest. The results are reported in Column (1) of Table V. Consistent with our hypothesis, the interaction coefficient is \(-0.307\) \((t = -2.22)\). That is, a recent local arrest reduces the effect of local political turnover on abnormal perk spending. This effect is so strong that the total induction effect on perk spending becomes negative. Similarly, we construct a dummy variable Inspection\(_{c,t}\), which takes value 1 if the Central Disciplinary Inspection Team is conducting an investigation in year \(t\) in the province where city \(c\) is located, and zero otherwise. As shown in Column (2), the coefficient of the interaction term, Induction \(\times\) Inspection, is \(-0.129\) \((t = -1.96)\). This is consistent with the interpretation that due to the deterrence of the Central Disciplinary Inspection Team, the abnormal perk spending during political turnovers is reduced.

Second, the variation can result from geographic heterogeneity. Specifically, we obtain the city-level Government-Business-Relationship Index, which measures the government transparency and corruption level for each city. Since this data start in 2018, we use the data in 2018 as the measure of the government–business relationship for each city during our entire sample period. Hence, we construct a dummy variable Corruption\(_{c}\), which takes value 1 if city \(c\) is ranked at the bottom 20% according to the government–business relationship index among all the cities in our sample, and zero otherwise. That is, Corruption\(_{c}\) = 1 indicates that city \(c\) is among those with the highest corruption level. Column (3) shows that the interaction coefficient is 0.129 \((t = 1.88)\). This is consistent with the intuition that the effect of political turnover on relationship building is stronger in areas with more corruption.

Third, the variation can result from the differences across the appointed officials. For instance, the effect of local political turnover on abnormal perk spending is expected to be weaker if the new official is from the same city. Presumably, if the incoming official is from the same city, the turnover causes fewer interruptions in the existing connections, resulting in less need to reinvest in relationship. To test this, we construct a dummy variable SameCity\(_{c,t}\), which takes value 1 if there is a turnover in Party Secretary or mayor in city \(c\) in year \(t\) and the incoming official has a position in the same city before the appointment, and zero otherwise. Column (4) shows that the interaction coefficient is \(-0.135\) \((t = -2.26)\). This is consistent with the intuition that the relationship interruption is weaker if the incoming official is from the same city and hence its effect on abnormal perk spending is weaker.

Finally, the variation can result from the differences across firms. If a firm is more politically connected, the change in the city Party Secretary or mayor is likely to have a smaller interruption on its existing connections with the local government. Hence, its adjustment in perk spending should be smaller than less connected firms. To test this, we use two variables as proxies for a firm’s political connection. One proxy is SOE\(_{i,c,t}\), which takes value 1

8 Note that Arrest\(_{c,t}\) = 1 implies Induction\(_{c,t}\) = 1 (that is, Arrest\(_{c,t}\) = Arrest\(_{c,t}\) \(\times\) Induction\(_{c,t}\)). Hence, the regression does not includes Arrest\(_{c,t}\) as a control. For similar reasons, there is no control of Di\(_{i,c,t}\) in Columns (3) and (4).

9 http://www.niehuihua.com/a/chuban/487.html
Table V. Cross-sectional variations

This table reports the results from regressions that extend the regression (3) by including $D_{i,c,t}$ and the interaction term $\text{Induction}_{c,t} \times D_{i,c,t}$, where $D_{i,c,t}$ is Arrest$_{c,t}$, Inspection$_{c,t}$, Corruption$_{c,t}$, SameCity$_{c,t}$, and PC$_{i,c,t}$ in Columns (1)–(6), respectively. Arrest$_{c,t}$ is 1 if the latest departed Party Secretary or mayor were arrest, and 0 otherwise. Inspection$_{c,t}$ is 1 if the Central Inspection Team is conducting an investigation in year $t$ in the province where city $c$ is located, and 0 otherwise. Corruption$_{c}$ is 1 if city $c$ is ranked in the bottom 20% of all cities in China according to the government–business relationship index, and 0 otherwise. SameCity$_{c,t}$ is 1 if there is a turnover in Party Secretary or mayor in city $c$ and the new official is from the same city, and 0 otherwise. SOE$_{i,c,t}$ is 1 if the firm is a SOE, and 0 otherwise. PC$_{i,c,t}$ is 1 if the CEO or chairman of firm $i$ is a former government official, a member of the Committee of the Chinese People’s Political Consultative Conference, or a member of the National Congress of Communist Party of China, and 0 otherwise. Firm-level and city-level control variables are the same as those in Table II. All variables are defined in the Appendix. Firm- and year-fixed effects are included in all regressions. The $t$-statistics, in parentheses, are based on standard errors clustered by city. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

<table>
<thead>
<tr>
<th>Dep. Var. = APerk$_{i,c,t}$</th>
<th>Arrest$_{c,t}$</th>
<th>Inspection$_{c,t}$</th>
<th>Corruption$_{c,t}$</th>
<th>SameCity$_{c,t}$</th>
<th>SOE$_{i,c,t}$</th>
<th>PC$_{i,c,t}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td></td>
</tr>
<tr>
<td>Induction$_{c,t}$</td>
<td>0.076***</td>
<td>0.101***</td>
<td>0.045</td>
<td>0.093***</td>
<td>0.095***</td>
<td>0.111***</td>
</tr>
<tr>
<td>(2.95)</td>
<td>(3.60)</td>
<td>(1.56)</td>
<td>(3.46)</td>
<td>(2.81)</td>
<td>(3.30)</td>
<td></td>
</tr>
<tr>
<td>Induction$<em>{c,t} \times D</em>{i,c,t}$</td>
<td>-0.307***</td>
<td>-0.129*</td>
<td>0.129*</td>
<td>-0.135**</td>
<td>-0.104**</td>
<td>-0.113***</td>
</tr>
<tr>
<td>(-2.22)</td>
<td>(-1.96)</td>
<td>(1.88)</td>
<td>(-2.26)</td>
<td>(-1.98)</td>
<td>(-2.63)</td>
<td></td>
</tr>
<tr>
<td>$D_{i,c,t}$</td>
<td>-0.008</td>
<td>-1.646***</td>
<td>-0.106</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(-0.25)</td>
<td>(-2.62)</td>
<td>(-1.49)</td>
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<td>Firm-level controls</td>
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<td>Yes</td>
<td>Yes</td>
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<td>City-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed effects</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
</tr>
<tr>
<td>Cluster</td>
<td>City</td>
<td>City</td>
<td>City</td>
<td>City</td>
<td>City</td>
<td>City</td>
</tr>
<tr>
<td>$N$</td>
<td>6,541</td>
<td>6,444</td>
<td>6,177</td>
<td>6,541</td>
<td>6,541</td>
<td>6,541</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>0.066</td>
<td>0.07</td>
<td>0.071</td>
<td>0.067</td>
<td>0.066</td>
<td>0.069</td>
</tr>
<tr>
<td>Number of firms</td>
<td>1,189</td>
<td>1,171</td>
<td>1,144</td>
<td>1,189</td>
<td>1,189</td>
<td>1,189</td>
</tr>
</tbody>
</table>

if the controlling shareholder of firm $i$ is a government or its agency in year $t$, and zero otherwise. Consistent with our conjecture, Column (5) shows that the interaction coefficient is $-0.104$ ($t = -1.98$). That is, the effect of local political turnover on perk spending is substantially stronger for non-SOEs. The second proxy is a dummy variable PC$_{i,c,t}$, which takes value 1 if the chairman or CEO of firm $i$ is a former government official, a member of the Committee of the Chinese People’s Political Consultative Conference, or a member of the National Congress of Communist Party of China, and zero otherwise. The idea is that if the chairman or CEO of a firm is well connected to the government, a change in local official should be a smaller interruption to the firm’s political connection. Hence, its perk spending would respond less to the local political turnover. Consistent with this hypothesis, as shown in Column (6), the coefficient of the interaction term Induction $\times$ PC is $-0.113$ ($t = -2.63$).

These cross-sectional and time-series variations in the effect of local political turnover on abnormal perk spending lend further support to our interpretation that the increase in
abnormal perk spending after the local political turnovers is to build up relations with the local governments.

4.6 Alternative Explanations

In this section, we examine alternative explanations of our earlier results. First, we examine whether firms face major changes in their business environment after political turnovers. Political leaders often start new strategies, policies, and infrastructure constructions in their first years at their new positions, especially in emerging market (An et al., 2016). These changes in business environment may increase firms’ costs as they make adjustments. Thus, the rise in perk spending after new government officials taking office may be due to changes in the business environment, rather than the cost of building relations with local governments. In order to test this alternative explanation, we examine whether political turnover affects local firms’ investment expenditure. We regress the ratio of the fixed-asset investment to the total asset on Induction. As shown in Column (1) of Table VI, the coefficient of Induction is close to zero and is statistically insignificant.10

Second, the uncertainty during political turnover may adversely affect firms’ business performance (Bo, 1996; Xu et al., 2016). Since our main variable is the ratio of perk expenses to revenue, our findings may result from the decline of revenues, rather than the increase of perk spending. To test this interpretation, we regress firms’ revenues on Induction. As shown in Column (2), local political turnover has no significant effect on local firms’ revenues.

Third, we examine if a political turnover in a city affects the major customers or suppliers for local firms and hence increases their perk spending. Specifically, we construct \( \Delta \text{Customer}_{i,c,t} \) as the fraction of firm \( i \)’s top five customers that have changed in year \( t \). \( \Delta \text{Supplier}_{i,c,t} \) is constructed similarly for the top five suppliers. We then regress \( \Delta \text{Customer}_{i,c,t} \) and \( \Delta \text{Supplier}_{i,c,t} \) on Induction. As shown in Columns (3) and (4), the coefficient of Induction is insignificant in both regressions. In summary, we do not find evidence of major changes in business environment that can potentially lead to higher perk spending after political turnovers.

Finally, we examine if our main results are caused by new officials’ visits to local firms. Newly appointed government officials often visit local firms to gain a better understanding of the local economy before introducing their new policies (Li et al., 2016; Wang, Yao, and Kang, 2019). Such government officials’ activities could increase the perk spending of the firms they visited. Although one can still interpret this spending as relationship building, it differs from the interpretation that firms actively increase their perk spending to build relationship with local officials, since those on-site visits are mainly initiated by government officials (Wang, Yao, and Kang, 2019).

---

10 We also examined the correlation between abnormal perk spending and the firm’s future performance measures such as ROA and ROE. Our evidence shows that the correlation is statistically insignificant. One possible explanation is that firms’ perk expenses are mostly a “rat race,” that is, all firms have to invest in relationship building with the local government just to avoid falling behind other firms, but they do not get ahead of other firms. This is reminiscent to the finding in Kang (2016) that lobbying in the USA has a statistically significant but small effect on the probability of a policy being legislated into law (only 0.05 percentage points), partly because the effects of lobbying expenditures by supporting and opposing lobbies partially cancel each other out.
To examine this alternative explanation, we hand-collect the information on local government officials’ corporate site visits. Specifically, we first download all the news that mentioned the names of Party Secretaries and mayors from the city-level daily newspapers. We then search among those articles to identify the articles that mention publicly listed local firms by their full names, short names, or stock symbols. Finally, we read those news articles to determine if those articles are related to local government officials’ corporate site visits.

### Table VI. Alternative interpretations: corporate decisions and official visits

Panel A reports the estimates of regressions of variables on corporate decisions (investment, operation, and supply chain) on Induction\(_{i,c,t}\). Panel B reports the estimates of regressions of APerk\(_{i,c,t}\) on Induction\(_{i,c,t}\), Visit\(_{i,c,t}\), and their interaction term, where Visit\(_{i,c,t}\) is a dummy variable which equals 1 if firm \(i\) in city \(c\) receives at least one site visit from the Party Secretary or mayor in year \(t\), and 0 otherwise. Firm-level and city-level control variables are the same as those in Table II. All variables are defined in the Appendix. Firm- and year-fixed effects are included in all regressions. The \(t\)-statistics, in parentheses, are based on standard errors clustered by city. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

#### Panel A: Corporate decisions

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment(_{i,c,t})</td>
<td>0.001</td>
<td>0.001</td>
<td>-0.011</td>
<td>-0.002</td>
</tr>
<tr>
<td>(0.70)</td>
<td>(0.59)</td>
<td>(-1.16)</td>
<td>(-0.47)</td>
<td></td>
</tr>
<tr>
<td>Firm-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>City-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed effects</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
</tr>
<tr>
<td>Cluster</td>
<td>City</td>
<td>City</td>
<td>City</td>
<td>City</td>
</tr>
<tr>
<td>(N)</td>
<td>13,178</td>
<td>13,172</td>
<td>13,178</td>
<td>11,438</td>
</tr>
<tr>
<td>Adj. (R^2)</td>
<td>0.08</td>
<td>0.10</td>
<td>0.58</td>
<td>0.02</td>
</tr>
<tr>
<td>Number of firms</td>
<td>1,811</td>
<td>1,810</td>
<td>1,811</td>
<td>1,479</td>
</tr>
</tbody>
</table>

#### Panel B: Government official visits

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Secretary</th>
<th>Mayor</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>Induction(_{i,c,t})</td>
<td>0.074***</td>
<td>0.060**</td>
<td>0.070***</td>
</tr>
<tr>
<td>(2.85)</td>
<td>(2.24)</td>
<td>(2.63)</td>
<td></td>
</tr>
<tr>
<td>Induction(<em>{i,c,t}) × Visit(</em>{i,c,t})</td>
<td>-0.075</td>
<td>-0.169</td>
<td>0.053</td>
</tr>
<tr>
<td>(-0.69)</td>
<td>(-1.43)</td>
<td>(0.50)</td>
<td></td>
</tr>
<tr>
<td>Visit(_{i,c,t})</td>
<td>0.128</td>
<td>0.229</td>
<td>-0.049</td>
</tr>
<tr>
<td>(0.76)</td>
<td>(1.24)</td>
<td>(-0.24)</td>
<td></td>
</tr>
<tr>
<td>Firm-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>City-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed effects</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
</tr>
<tr>
<td>Cluster</td>
<td>City</td>
<td>City</td>
<td>City</td>
</tr>
<tr>
<td>(N)</td>
<td>6,444</td>
<td>6,329</td>
<td>6,444</td>
</tr>
<tr>
<td>Adj. (R^2)</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Number of firms</td>
<td>1,171</td>
<td>1,168</td>
<td>1,171</td>
</tr>
</tbody>
</table>
visits. We further cross-validate the information with firms’ annual reports and other internet searches.

To quantify the effect of official site visits on perk spending, we create a dummy variable \( \text{Visit}_{i,c,t} \), which takes value 1 if firm \( i \) in city \( c \) received at least one government official’s site visit in year \( t \), and zero otherwise.\(^{11}\) We include the interaction term \( \text{Visit}_{i,c,t} \times \text{Induction}_{c,t} \) to the baseline regression (3). The results are reported in Panel B of Table VI. As shown in Columns (1)–(3), the coefficient estimates of Induction remain similar to those in Table II while the interaction coefficients are not statistically significant. Hence, our evidence suggests that government officials’ site visits cannot explain the increase in perk spending in the first year after a political turnover.

4.7 Political Turnovers and Managerial Turnovers

In Section 2.2, we discussed two types of relationship building activities: perk spending and hiring people connected to local officials. However, our analysis so far focused on only the former. The primary reason is data limitation. While around 80% of the firms disclose their perk spending, they generally do not disclose detailed information on personnel changes. Nevertheless, firms do disclose changes to their senior management teams, making some analysis feasible. In this section, we examine top managerial changes around local political turnovers.

We construct a dummy variable, \( \text{Turnover}_{i,c,t} \), which takes value 1 if firm \( i \)’s CEO or Chairman is replaced in year \( t \), and zero otherwise. We then regress \( \text{Turnover}_{i,c,t+1} \) on \( \text{Induction}_{c,t} \). We control for Firmsize, Leverage, ROA, as well as the characteristics of the firm’s CEO and Chairman, including Tenure and Age. As the impact of managers’ tenure and age on their turnover may be non-linear, we also add their square terms in the regressions. We also include a control variable \( \text{ST}_{i,c,t} \), which takes value 1 if firm \( i \) is a “ST or PT firm,” and zero otherwise.\(^{12}\) City level controls include local GDP and population growth rates.

The results are reported in Table VII. In Column (1), the sample includes only non-SOEs and the coefficient of Induction is 0.003 (\( t = 0.41 \)). That is, there is no evidence that local political turnovers lead to excess managerial turnovers in non-SOEs. The sample in Column (2) includes only SOEs that are controlled by central or provincial governments. Again, the coefficient estimate of Induction and its \( t \)-statistic are near zero. In contrast, in Column (3), where the sample includes only SOEs controlled by city governments, the coefficient estimate of Induction is 0.033 (\( t = 2.57 \)). That is, on average, a change in leadership of a city government increases the probability of CEO or Chairman changes in the city-level SOEs headquartered in that city by 3.3% next year.

These results are consistent with the interpretation that, after political turnovers, the connections between governments and local firms are reestablished partly through

\(^{11}\) We also used the number of official visits to firm \( i \) in year \( t \) to replace \( \text{Visit}_{i,c,t} \) and rerun the analysis in Panel B of Table VI. We obtained similar results.

\(^{12}\) In 1998, the China Securities Regulatory Commission (CSRC) introduced the ST and PT designation policy to the Chinese stock market. Under the CSRC’s guideline, a firm can become an ST (PT) firm if it experiences a net loss for two (three) consecutive years. Such firms will receive stricter scrutiny from regulators, including a narrower daily price fluctuation range (5% versus 10% for normal stocks) and mandatory audited semi-annual financial reports. When a firm is denoted as a ST or PT firm, their managers are more likely to be changed.
managerial changes. It is worth discussing the nature of those managerial changes. Our analysis was motivated by the hypothesis that the local firms hire people with connections to the new officials to establish connections with the local government. SOEs, especially those controlled by local governments, are more likely to adopt this approach perhaps because they have weaker incentive for profit maximization and face stronger influences from their local governments. However, it is entirely feasible that those managerial changes are “initiated” by the local government. For example, the newly appointed officials may seek lucrative positions for their “friends.” This alternative interpretation also naturally implies that the effect should be concentrated in the city-level SOEs.

Although these two interpretations are different, they have the same consequence on the reestablishment of government–business connections: after a political turnover, local firms’ senior management may be replaced by people with connections to the new government officials. Moreover, in many cases, it is difficult, if not impossible, to distinguish which side is the “initiator” of the managerial changes. For example, suppose a firm actively decided to hire a friend of the new politician. It is reasonable to view the firm as the initiator. However, an equally feasible interpretation is that the firm initiated the hiring because it felt that the action was “expected,” or even felt pressure to do so. In this case, it is perhaps not meaningful to distinguish the initiator and the follower in the action.13

<table>
<thead>
<tr>
<th>Turnover_{i,c,t+1}</th>
<th>Non-SOE</th>
<th>Central or provincial SOE</th>
<th>City SOE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Induction_{i,c}</td>
<td>0.003</td>
<td>0.000</td>
<td>0.033**</td>
</tr>
<tr>
<td></td>
<td>(0.41)</td>
<td>(0.03)</td>
<td>(2.57)</td>
</tr>
<tr>
<td>Firm-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>City-level controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed effects</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
<td>Firm, Year</td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>City</td>
<td>City</td>
</tr>
<tr>
<td>N</td>
<td>9,212</td>
<td>4,375</td>
<td>3,302</td>
</tr>
<tr>
<td>Adj. R^2</td>
<td>0.16</td>
<td>0.15</td>
<td>0.18</td>
</tr>
<tr>
<td>Number of firms</td>
<td>1,043</td>
<td>528</td>
<td>423</td>
</tr>
</tbody>
</table>

Table VII. The impact of official turnover on managerial turnover

This table presents the effect of a turnover of the Party Secretary or mayor of a city in year \( t \) on the turnovers of CEOs or Chairmen of the firms in the city in year \( t + 1 \). Columns (1)–(3) are based on the subsamples of non-SOEs, SOEs controlled by Central or provincial governments, and SOEs controlled by city governments, respectively. Firm-level control variables include FirmSize_{i,c,t}, Leverage_{i,c,t}, ROA_{i,c,t}, ST_{i,c,t}, as well as the age and tenure of the CEO and Chairman and their square terms, city-level control variables include GDP Growth_{c,t} and Pop. Growth_{c,t}. All variables are defined in the Appendix. Firm- and year-fixed effects are included in all regressions. The \( t \)-statistics, in parentheses, are based on standard errors clustered by city. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

13 The distinction can be meaningful for certain turnovers. For example, the ultimate decision-maker at an SOE is typically the Chairman. Hence, the change of a Chairman is likely initiated by local politicians rather than the firm. We examine CEO and Chairman turnovers separately and find that the effect on Chairman turnovers is marginally weaker. We are unable to distinguish the two interpretations and are open to both.
Finally, we explore the correlation between managerial turnover and perk spending to shed some light on how these two effects interact. We find little correlation between managerial turnover and perk spending in our sample. Note that both managerial turnover and perk spending are endogenous variables. Our evidence suggests little correlation between the two in equilibrium.

5. Conclusion

This article examines how the relationship between firms and local government officials is built in the largest emerging economy without established rules of political lobbying: China. Our evidence suggests that, following the turnover of the Party Secretary or mayor of a city, firms (especially private firms) headquartered in that city significantly increase their “perk spending” (e.g., expenses for eating, drinking, gifts, and travel). Evidence based on instrumental variable regressions supports the interpretation that the perk spending increase is due to local political turnover. We also find that the effect is weaker when officials are more reluctant to accept perks due to elevated risks of being disciplined, for example, after an arrest of local politicians for corruption cases or while the Central Disciplinary Inspection Team is conducting investigations in the region. The effect is stronger in regions with higher corruption index values, for firms with less political connections, or when the newly appointed official is from another city. Moreover, a political turnover in a city tends to be followed by managerial changes at local SOEs controlled by the city government. In contrast, local private firms and SOEs that are controlled by the provincial or central government do not seem to engage in excess personnel changes following the turnover in the local government leadership. Overall, our evidence is consistent with the view that political turnovers interrupt existing connections between local firms and governments, leading to more relationship-rebuilding activities.

Data Availability

The data underlying this article will be shared on reasonable request to the corresponding author.

References


## Appendix: Definitions of Main Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age_CEO&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Age of the CEO.</td>
</tr>
<tr>
<td>Age_Chairman&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Age of the Chairman.</td>
</tr>
<tr>
<td>Analysts&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Logarithm of the number of analysts following the firm.</td>
</tr>
<tr>
<td>APerk&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Abnormal Perk is Perk&lt;sub&gt;i,c,t&lt;/sub&gt;−Perk&lt;sub&gt;hat,i,c,t&lt;/sub&gt;.</td>
</tr>
<tr>
<td>Arrest&lt;sub&gt;c,t&lt;/sub&gt;</td>
<td>It is 1 if the latest departed Party Secretary or mayor were arrest and 0 otherwise.</td>
</tr>
<tr>
<td>Corruption&lt;sub&gt;c&lt;/sub&gt;</td>
<td>It is 1 if city &lt;i&gt;c&lt;/i&gt; is ranked in the bottom 20% of all cities in China according to the government–business relationship index, and 0 otherwise.</td>
</tr>
<tr>
<td>DirHolding&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Directors’ shareholding percentage on the board.</td>
</tr>
<tr>
<td>Dual&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Dual role for the board chairman.</td>
</tr>
<tr>
<td>FirmSize&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>The natural logarithm of the book value of total assets.</td>
</tr>
<tr>
<td>GDP_Growth&lt;sub&gt;c,t&lt;/sub&gt;</td>
<td>City-level GDP growth for the city in which the firm is located.</td>
</tr>
<tr>
<td>Indir&lt;sub&gt;c,t&lt;/sub&gt;</td>
<td>The number of independent directors divided by the total number of directors.</td>
</tr>
<tr>
<td>Induction&lt;sub&gt;c,t&lt;/sub&gt;</td>
<td>It is 1 if a local official in city &lt;i&gt;c&lt;/i&gt; takes office in year &lt;i&gt;t&lt;/i&gt; and 0 otherwise.</td>
</tr>
<tr>
<td>Industry&lt;sub&gt;c,i,t&lt;/sub&gt;</td>
<td>The ratio of other firms in firm &lt;i&gt;i&lt;/i&gt;’s industry that disclose perk spending in year &lt;i&gt;t&lt;/i&gt;.</td>
</tr>
<tr>
<td>Insholdper&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Institutional ownership of firm &lt;i&gt;i&lt;/i&gt;.</td>
</tr>
<tr>
<td>Inspection&lt;sub&gt;c,t&lt;/sub&gt;</td>
<td>It is 1 if the Central Inspection Team is in the firm’s province and 0 otherwise.</td>
</tr>
<tr>
<td>Investment&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Firm &lt;i&gt;i&lt;/i&gt;’s total investments in year &lt;i&gt;t&lt;/i&gt;, divided by its total assets at the beginning of the year.</td>
</tr>
<tr>
<td>Leverage&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Firm &lt;i&gt;i&lt;/i&gt;’s total liabilities, divided by its total assets.</td>
</tr>
<tr>
<td>Male_CEO&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>It is 1 if CEO is male, and 0 otherwise.</td>
</tr>
<tr>
<td>Male_Chairman&lt;sub&gt;c,t&lt;/sub&gt;</td>
<td>It is 1 if the Chairman is male, and 0 otherwise.</td>
</tr>
<tr>
<td>PC&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>It is 1 if the CEO or chairman of firm &lt;i&gt;i&lt;/i&gt; is a former government official, a member of the Committee of the Chinese People’s Political Consultative Conference, or a member of the National Congress of Communist Party of China, and 0 otherwise.</td>
</tr>
<tr>
<td>Perk&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>The ratio of ETC to revenue × 100. ETC is the total expenses for entertainment (eating, drinking, gifts, karaoke, and sports club membership) and travel in year &lt;i&gt;t&lt;/i&gt;.</td>
</tr>
<tr>
<td>Perk&lt;sub&gt;hat,i,c,t&lt;/sub&gt;</td>
<td>The predicted perk spending according to regression (1).</td>
</tr>
<tr>
<td>Pop_Growth&lt;sub&gt;c,t&lt;/sub&gt;</td>
<td>The population growth rate of the city in which the firm is located.</td>
</tr>
<tr>
<td>Revenue&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Natural logarithm of annual revenue.</td>
</tr>
<tr>
<td>ROA&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Firm profitability, calculated as net income divided by total assets.</td>
</tr>
<tr>
<td>Salary&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>Natural logarithm of annual salary of the CEO or Chairman of firm &lt;i&gt;i&lt;/i&gt;.</td>
</tr>
<tr>
<td>SameCity&lt;sub&gt;c,t&lt;/sub&gt;</td>
<td>It is 1 if the incoming official is from same city, and 0 otherwise.</td>
</tr>
<tr>
<td>SOE&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>It is 1 if the firm is a SOE, and 0 otherwise.</td>
</tr>
<tr>
<td>ST&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>It is 1 if firm &lt;i&gt;i&lt;/i&gt; is in the special treat, and 0 otherwise.</td>
</tr>
<tr>
<td>Tenure&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>The tenure length of an CEO or Chairman of firm &lt;i&gt;i&lt;/i&gt;, which is in city &lt;i&gt;c&lt;/i&gt;, in year &lt;i&gt;t&lt;/i&gt;.</td>
</tr>
<tr>
<td>AT&lt;sub&gt;Customer,i,c,t&lt;/sub&gt;</td>
<td>Turnover ratio of the top 5 customers of firm &lt;i&gt;i&lt;/i&gt; in year &lt;i&gt;t&lt;/i&gt;.</td>
</tr>
<tr>
<td>AT&lt;sub&gt;Supplier,i,c,t&lt;/sub&gt;</td>
<td>Turnover ratio of the top 5 suppliers of firm &lt;i&gt;i&lt;/i&gt; in year &lt;i&gt;t&lt;/i&gt;.</td>
</tr>
<tr>
<td>Turnover&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>It is 1 if there is a change in the firm &lt;i&gt;i&lt;/i&gt;’s senior manager year &lt;i&gt;t&lt;/i&gt;, and 0 otherwise.</td>
</tr>
<tr>
<td>Visit&lt;sub&gt;i,c,t&lt;/sub&gt;</td>
<td>It is 1 if firm &lt;i&gt;i&lt;/i&gt; receives a government official’s site visit in year &lt;i&gt;t&lt;/i&gt;, and 0 otherwise.</td>
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</tbody>
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