Bureaucrats as Managers – Evidence from China

Joseph P.H. Fan
Faculty of Business Administration, The Chinese University of Hong Kong
pjfan@cuhk.edu.hk

Jun Huang
School of Accountancy, Shanghai University of Finance & Economics
sufehuang@gmail.com

Felix Oberholzer-Gee Harvard Business School foberholzer@hbs.edu

Mengxin Zhao School of Business, University of Alberta mengxin.zhao@ualberta.ca

March 15, 2009

Abstract

Former civil servants lead a large number of companies in both developed and emerging In this paper, we ask whether these managers make effective chief executives. To study this question, we examine strategic choices and the financial performance of publicly listed companies in China during the 2001 to 2005 period. Our results indicate that the bureaucratic past of CEOs has a profound influence on company strategy and financial returns. Former civil servants are more likely than other corporate leaders to enter new industries, and those who manage state-owned enterprises (SOEs) diversify their firms in a manner that is largely inconsistent with the recommendations of scholars of corporate strategy. As a result, the performance effects of diversification differ sharply across SOEs and private firms. More generally, we find little evidence that shareholders benefit from appointing former bureaucrats to the position of CEO despite their extensive knowledge of government processes in an economy where the influence of the state is all pervasive. Our findings add to the recent literature on the importance of managerial style and CEO characteristics. In our study CEOs matter, but we also show that private-sector incentives can largely mute the influence of personality. Specifically, former bureaucrats who manage private companies show few of the weaknesses that are characteristic of their peers at state-owned enterprises. In the context of private firms operating in China, private-sector incentives trump managerial style.

JEL Classifications: D23; G32; G38; K42; P26; P31

Key Words: Bureaucrat Managers, Corporate Diversification; Institutions; China

1. Introduction

In many economies, former civil servants play an important role in the private sector. In France, for example, former bureaucrats run more than 10% of all publicly traded companies, and these companies represent almost 70% of the assets listed on the French stock market (Bertrand et al., 2005). "Revolving doors" link the private and public sectors in the United States where many former government officials take executive positions (Eckert, 1981; Salant, 1995). Former civil servants and elected officials are perhaps even more prominent among the captains of industry in emerging economies. Well-known examples include Taiwan's Chungwa Telecom Company (with CEO Chen-Tan Ho, a former vice minister), the Korea Electric Company (with CEO Wan-Gul Lee, a former deputy minister of energy), and Brazil's Companhia Ener de Minas Ger (with CEO Djalma Bastos de Morais, a former minister of communications). In China, executives with experience in the state bureaucracy make up close to 20% of chief executive officers of publicly listed firms, and they manage about a fifth of the assets listed on the country's exchanges.

Do former civil servants make effective CEOs? Do they favor particular strategic choices? And how do these choices impact the financial performance of companies? Despite the important role of former bureaucrats in private enterprise, we have little evidence on these questions. We seek to fill this gap in the literature using the Chinese economy as our example. China offers ample opportunity to document the managerial success of former civil servants. In our sample, which comprises almost all publicly traded non-financial companies during the 2001 to 2005 period, 1.6% of CEOs held a central government position and 17% have experience working in the local bureaucracy.

Besides the ubiquity of former bureaucrats who serve as chief executives, China also makes an interesting case study because the government owns a majority stake in numerous publicly traded companies. This allows us to investigate how the institutional environment – public as opposed to private ownership – influences strategic decisions and financial performance. We use companies' diversification policies as our example for an important decision that illustrates how managerial style and incentives shape strategy.

Our results indicate that the bureaucratic past of CEOs has a marked influence on strategic decision-making and financial returns. We observe four broad patterns in our data. First, CEOs who served as bureaucrats are more likely than other executives to enter new industries. Second, former civil servants at the head of state-owned enterprises (SOEs) choose a mix of business activities that is largely at odds with the recommendations of scholars studying corporate strategy (Montgomery, 1994). particular, these executives enter industries that are less profitable, have lower rates of growth, and are less related to the firm's core business. Third, given these regularities, it is perhaps not surprising that CEOs without government experience managing private firms make the most successful leaders in our sample. Fourth, we find that private-sector incentives can be even more important than executives' career paths. Specifically, former civil servants in charge of private companies are statistically indistinguishable from executives without a bureaucratic past. In our sample, it is the strategic choices characteristic of private companies that tend to benefit shareholders, irrespective of whether these companies are run by former civil servants or by executives who lack government experience.

Our study adds to two distinct bodies of research. The literature on the importance of CEO characteristics for company performance dates back at least to Barnard (1938). But in the past two decades, many studies in strategic management and industrial organization focused on firms' competitive environment to explain the variation in financial performance across companies, neglecting the influence of manager personalities and human capital (Montgomery, 2008). More recently, there has been a renewed interest in the persona of chief executives and managerial styles, at times at the expense of a careful accounting of managerial incentives and competition. As our results indicate, it is important to marry these two approaches to studying organizations: personality *and* incentives matter. For example, without considering the difference between private companies and SOEs, we find that a firm's return on assets declines by more than 50 percent if it chooses a former bureaucrat as CEO. However, this result is

_

¹ Recent contributions to this quickly growing literature include Baranchuk, MacDonald and Yang (2007), Bebchuk, Cremers, and Peyer (2007), Bertrand and Schoar (2003), Bolton, Brunnermeier and Veldkamp (2008), Hambrick, Cho and Chen (1996), Kaplan, Klebanov and Sorensen (2007), Malmendier and Tate (2005), Pérez-González (2006), and Van den Steen (2007).

misleading because it is entirely driven by SOEs appointing former civil servants. The board of a private firm should expect a former bureaucrat to perform no worse than a private-sector candidate.

Our paper also complements the literature on the value of government expertise and political relationships. Former civil servants have detailed knowledge of the government's inner workings, knowledge that might be particularly valuable in an economy like the Chinese where state influence is all pervasive and government regulation is often ambiguous. Former bureaucrats also had an opportunity to personally get to know other officials and regulators and these relationships might influence their strategic decisions. As our examples in the first paragraph illustrate, many former civil servants lead regulated businesses in the telecom and energy industries, possibly because they better understand the regulatory processes and know the regulators. While we have substantial evidence that close political ties can increase the overall financial performance of companies (Fisman, 2001; Johnson and Mitton, 2003; Faccio, 2006), we know much less about the mechanisms that lead to changes in profitability. In particular, there are only a handful of papers that look at the competitive strategies of firms led by government insiders.² We believe our paper is the first to study the diversification policies of executives with substantial government expertise. As in our performance results, we find that CEO characteristics as well as private-sector incentives matter for firms' choice of scope and profitability. Former civil servants heading SOEs systematically enter structurally unattractive industries. As a result, the performance effects of diversification differ sharply across SOEs and private firms.

The paper proceeds as follows. We develop our hypotheses and describe our data in section 2. Section 3 reports the empirical results. We offer concluding remarks in section 4.

_

² Political relationships appear to influence the timing of job creation (Bertrand et al., 2005), the decision to cross-list shares (Leuz and Oberholzer-Gee, 2006), and the vertical scope of the firm (Fan, Huang, Morck, and Yeung, 2008).

2. CEOs and Corporate Performance

An extensive literature in management, finance, and economics documents that both industry characteristics and firm-internal resources influence companies' financial performance. The quality and managerial acumen of the firm's top executive team is considered to be a particularly important resource (Hambrick and Mason, 1984; Waldman, Ramirez, House and Puranam, 2001; Wasserman, Nohria and Anand, 2002). Top managers matter both because they help set the company's strategic direction and because more competent managers are better at executing a given strategy (Terviö, 2008). Influenced by their education and career path, many managers exhibit a personal style of management. For example, Bertrand and Schoar (2003) document that younger executives and executives with MBA degrees tend to make a larger number of diversifying acquisitions.

In our models, we allow the type of manager (former civil servants and executives without government experience) as well as executives' strategic decisions (the company's diversification policy) to impact financial performance. There are several reasons why one might expect former bureaucrats to exhibit a distinct managerial style. First, they are a highly selected group with an unusual educational background, skill set, and work experience. For example, as in many European countries, individuals who join China's civil administration tend to be highly educated (Nanjing Daily, 2005; Xiangfan News, 2008). In addition, former bureaucrats have a deep understanding of government processes, and many maintain close ties to their colleagues in government even after their departure from the civil service (Wu, Wu, and Liu, 2008). In the Chinese context, close ties to the bureaucracy are a mixed blessing. On the one hand, well-connected companies benefit from preferential access to capital markets and reduced red tape (Li, Meng and Zhang, 2006; Bai, Lu and Tao, 2006; Fan, Rui and Zhao, 2008). On the other hand, there is also anecdotal evidence to suggest that government officials encourage connected companies to pursue strategies that may not be in the best interest of shareholders. Some connected companies are asked to absorb excess labor and help jump-start local

³ One of many examples is the publicly listed Create Technology & Science Co. Ltd, located in Suzhou. Thanks to its excellent local connections, the firm receives preferential loans directly from the City Finance Bureau.

industries (Lin, Cai and Li, 1998; Young, 2000). Because well-connected companies face more attractive business opportunities and greater social obligations, the net impact of bureaucratic ties on financial performance is not obvious. A prominent example is Baosteel, China's premier producer of steel. The company benefits from access to state assets, subsidized research funding, state investments and protective tariffs. Being a national champion comes at a cost, however. In 1998 the government asked Baosteel to merge with four loss-making companies, taking on 80,000 redundant workers. Baosteel was not allowed to lay off more than 10,000 workers a year (Sirkin et al., 2008). By studying the performance consequences of appointing a former bureaucrat to the position of CEO, we hope to shed light on the net impact of bureaucratic ties on financial performance.

Studying the managerial decisions of former civil servants in China is also interesting because the Chinese government maintains a controlling stake in a majority of listed companies (Sun and Tong, 2003).⁵ Because we observe both types of companies – state-owned firms with former civil servants at the helm and SOEs with chief executives that lack government experience – we can study, separately, how private-sector incentives and CEO characteristics influence strategic decision-making and financial performance.

Our example for a major strategic decision is companies' diversification policy. Diversification recommends itself because there is substantial interest in the relation between diversification and corporate performance (Lang and Stulz, 1994; Stein, 1997; Scharfstein, 1998; Rajan, Servaes, and Zingales, 2000; Maksimovic and Phillips, 2003; specifically for China, see Lin and Su, 2008). Early studies on the performance effects of diversification tended to find that a broad horizontal scope was detrimental to firm value (Comment and Jarrell, 1995; Berger and Ofek, 1995; Servaes, 1996; Lins and Servaes, 1999). More recent papers that control for firm and industry heterogeneity often fail to find significant effects (Hyland, 1999; Maksimovic and Phillips, 2002; Campa and Kedia,

_

⁴ For instance, to clean up the Chuanzi river, the city of Changde (Hunan) asked the publicly listed Hunan Jinjian Cereals Industry Co., a producer of grains and oils, to enter the sewage control business.

⁵ There is a large literature on SOEs that documents how government ownership influences the resource allocation and financial performance of these firms (for a survey, see Megginson and Netter, 2001).

2002; Graham, Lemmon, and Wolf, 2002; Villalonga, 2004a) or even support for the idea that closely related diversification enhances financial returns (Villalonga, 2004b).

2.1. Empirical Specification and Hypotheses

We begin by analyzing whether former civil servants pursue distinct corporate policies:

(1) Diversification_{it} =
$$\alpha_1 FCS_{it} + \alpha_2 X_{it} + \alpha_3 I_{it} + \lambda_t + \eta_i + \varepsilon I_{it}$$

In this model, the firm's diversification policy is a function of the CEO's career path – the indicator FCS_{it} equals one if the CEO is a former civil servant – a vector of firm characteristics X_{it} , and a vector of institutional variables I_{it} . Our models include a time trend λ_t , which we implement as year fixed effects. The firm fixed effects η_i control for time-invariant unobserved heterogeneity among the sample companies. Including these fixed effects is important because companies' diversification opportunities vary across industries, locations and firm capabilities in ways that we cannot directly observe. In model (1), α_I is identified from turnover in CEOs. In our sample, we observe 184 instances in which the FCS status of the new CEO differs from the status of his predecessor.

We expect α_l to be positive because former civil servants can rely on their expertise in government affairs and personal ties to obtain preferential financing and favorable regulatory treatment. This group of executives is also more likely to diversify if bureaucrats encourage them to enter industries that are considered important from a public point of view.

In all our models, we control for institutional variation that might influence diversification policies. As the literature on diversification in emerging markets documents, companies with a wider scope might outperform more narrowly focused firms because it is difficult to engage in arms-length exchange in markets with weak institutions (for recent evidence on China, see Du, Lu and Tao, 2008; more generally, see Khanna and Palepu, 2000; Almeida and Wolfenzon, 2006; Khanna and Yafeh, 2005). While some of China's provinces have developed institutions that support markets, others

lag far behind (Fan and Wang, 2006). A first control in our models reflects the development of a province's financial market. Better developed markets facilitate mergers and acquisitions, easing changes in firm scope. We use the fraction of loans extended to private enterprise as a proxy for financial market development. While better developed financial markets encourage deals, increased bureaucratic interference and red tape make it more difficult for companies to enter and exit industries. Our proxy for the influence of the bureaucracy in a province is the fraction of the workforce that is employed by the civil administration. An increase in this fraction is associated with greater government influence.

Although financial markets and bureaucratic interference are likely to be related to firm diversification, we do not have a strong prior as to the direction of their influence because the effect of the institutional environment on diversification depends on the type of adjustment that companies seek to make. To see this, consider a situation in which firms experience a shock that increases their optimal scope. In this case, more sophisticated financial markets will facilitate greater diversification ($a_{3finance} > 0$) while more red tape will delay firms' entry into new industries ($a_{3bureaucracy} < 0$). In contrast, if firms experience a shock that leaves them too diversified, more red tape will slow down firms' exit from unattractive industries ($a_{3bureaucracy} > 0$) while better developed financial markets can assist in selling assets ($a_{3finance} < 0$). Because the shocks that firms experience are unobserved, it is difficult to predict the influence of the institutional environment on our sample companies.

In some specifications, we will replace the variable $Diversification_{it}$ with characteristics of the industries that companies enter. These models allow us to check whether former civil servants enter industries that differ in systematic ways from the industries that attract their peers. Specifically, we will test if former bureaucrats enter attractive industries, namely sectors of the economy that grow quickly and exhibit favorable returns for the average firm.

In a second step, we study the performance consequences of former civil servants taking on the role of CEO.

(2) Performance_{it} =
$$b_1FSC_{it} + b_2Diversification_{it} + b_2X_{it} + b_3I_{it} + \lambda_t + \eta_i + \varepsilon 2_{it}$$

In this model, former bureaucrats influence performance directly and via their choice of diversification. As before, we include year and firm fixed effects as well as time-varying controls at the level of the firm and the province. If the group of former civil servants is positively selected or if its government expertise prove valuable to the firm, we will find $b_1>0$. The effect of diversification on performance is more difficult to predict. If former bureaucrats have access to attractive diversification opportunities that are foreclosed to less-connected CEOs, the performance effect will be positive. On the other hand, if former civil servants are asked to enter unattractive industries for reasons of public policy or local pride, the performance of their companies is likely to suffer.

2.2. Econometric Issues

A difficulty for all studies in this stream of research is that managers are not randomly assigned to companies. As a consequence, our results must be interpreted with care. We observe the strategic choices and the performance of companies led by former civil servants, not the causal effect of appointing a former bureaucrat on diversification and profitability. Formally, equations (1) and (2) form a recursive system in which the effects of interest are identified if $cov(\varepsilon I_{it}, \varepsilon 2_{it}) = 0$. This condition might be violated if, for instance, boards match CEOs and firms using executive characteristics that we cannot observe.

We pursue several strategies to address this issue. As discussed, we include firm fixed effects in all our models. If companies in industries with more attractive business opportunities are more likely to choose former civil servants as CEOs, we would tend to overestimate the performance effect associated with appointing former bureaucrats. The fixed effects in our models alleviate this concern. In addition, the timing of CEO appointments might be important. If boards select a specific type of executive at a time when more attractive diversification opportunities become available, the coefficients in the performance equation will still be biased. We explore the importance of this type of matching in three ways. First, we add firm-specific time trends to model (2), asking whether the presence of a former civil servant shifts the (linear) trend in firm performance. If the most knowledgeable managers are asked to run the companies facing

the most complex regulatory environments, the firm-specific time trends help distinguish firms with bright past and future performance from firms where incoming CEOs make a difference. In a second set of specifications we include lagged measures of profitability to see whether CEOs proved successful conditional on a firm's past performance. Finally, we test whether the performance effects vary with CEO tenure. The matching argument suggests that the bias in our estimates will be particularly strong right after the installation of a new top executive because boards choose CEOs for particular tasks. For instance, they appoint an M&A expert at a time when the firm faces attractive acquisition opportunities. As it is more difficult for board members to predict future challenges and prospects, the bias introduced by matching should weaken with a CEO's tenure. We investigate the importance of matching by estimating CEO effects for the latter part of their career at a firm.

2.3. Data

Our initial sample includes all companies that are listed on the Shanghai Stock Exchange and the Shenzhen Stock Exchange during 2001 to 2005 period. The China Securities Regulatory Commission requires that publicly traded companies disclose segment information for all business segments comprising more than 10% of consolidated sales, assets, or profits. The available information typically includes an industry designation, a description of the company's products and services, as well as segment sales, costs and profits. We manually collect these data from annual reports starting in 2001. Data for prior years are available, but the reporting quality is considered poor. From this sample, we exclude companies for which segment and industry information is incomplete. We also omit financial services firms from our study because their financial statements are not easily comparable to those of other companies. With these criteria we obtain data for 1,352 firms.

We collect financial data for our sample firms from the China Stock Market and Accounting Research (CSMAR) financial statement database. The annual reports of Chinese companies contain a brief biographical sketch of the CEO, listing previous positions in industry and government (Fan, Wong, and Zhang, 2007). From these reports,

we manually collect information on whether a CEO held a position in government. We complement these data with provincial-level institutional data that come from various sources, including the China Information Bank and the China National Bureau of Statistics. Table 1 provides summary statistics and variable definitions.

3. Results

Do former bureaucrats pursue more aggressive diversification strategies? We test our first hypothesis in table 2. Former civil servants do in fact enter a larger number of industries. The main effect is moderate in size, representing not quite 10% of a standard deviation in the number of business segments. Former bureaucrats' influence on diversification policy is not significantly different across state-owned and private firms. Growing firms and firms operating in provinces with more fully developed financial markets compete in a larger number of industries. In table 2, we measure diversification using 3-digit Standard Industry Classification (SIC) codes. We find similar results for the 2-digit and the 4-digit classification.

Former civil servants might use their bureaucratic ties and regulatory expertise to enter attractive industries and leave segments of the economy that provide little opportunity. We test this conjecture by looking at the mix of industries in which diversified firms decide to compete. Our dependent variables are industry profitability (measured as the sales-weighted historical industrial three-year average ROS of all segments in which the firm operates), growth (an equivalently constructed historical growth rate) as well as a relatedness measure that is calculated from commodity flow information in the national economy's input-output matrix (see table 1 for details). These variables do not vary by firm – the historical growth rate of the residential construction industry is the same for all construction companies in a particular year – but our measures vary within firm over time because companies enter and leave segments. As a result, we can estimate the models in table 3 with firm fixed effects. We think of our industry profitability and growth measures as broad indications of industry attractiveness (Porter, 1980). The relatedness measure is of interest because a common

⁶ Our approach is a modified version of Fan and Lang (2000).

finding in the corporate strategy literature is that diversified firms perform better if they operate in more closely related industries (Montgomery, 1994).

The results in table 3 indicate that, with a former civil servant in the corner office, the mix of industries in which the firm competes deteriorates. For example, in periods when a former bureaucrat is CEO, sales-weighted industry profitability declines by 15% of a standard deviation. However, this decline only occurs in SOEs. In private companies, appointing a former bureaucrat to the position of CEO has no effect on profitability and growth. There is an interesting difference between our results for profitability and growth and our findings for relatedness. Former bureaucrats always enter less-related industries, irrespective of whether their company is a state-owned enterprise or a private firm. On the other hand, private companies operate in more closely related segments, again irrespective of CEO type. Taken as a whole, the results in table 3 are inconsistent with our conjecture that former bureaucrats use their ties to enter attractive industries.

In table 4, we study the performance consequences of appointing a former civil servant to the position of CEO. Although the results in table 3 indicate that former bureaucrats who manage SOEs tend to enter more difficult segments of the economy, the business acumen of these CEOs and their expertise in government affairs might perhaps help them outperform their private rivals. We use two accounting measures of performance – ROS and ROA – and we follow Berger and Ofek (1995) in our construction of a market-based measure of firm value (see table 1). We present three specifications. The first includes main performance effects for former bureaucrats and for diversification along with firm and year fixed effects. The second and third specifications allow the CEO effect to vary by form of ownership and by diversification policy. The third specification also includes firm-specific time trends.

As in tables 2 and 3, we find that former civil servants' influence on performance differs across public and private companies. Starting with the CEO main effects, our results show that accounting performance, but not a firm's market value, declines

⁻⁻⁻

⁷ The sum of the main effect and the interaction (bureaucrat + bureaucrat × private) is statistically not different from zero for the growth and profitability variables (Prob > F = 0.92 (profitability), Prob > F = 0.69 (growth)), but is significant for the relatedness variable (Prob > F = 0.02 (relatedness)).

significantly when a former civil servant assumes the post of CEO in a state-owned enterprise (models 2 and 5). There is no corresponding effect for private companies (F=0.49 and F=0.96, respectively). In specifications with firm-specific time trends (models 3 and 6), we find results that are more favorable to former bureaucrats: their accounting performance no longer lags the achievements of executives without government experience. And capital markets even attach a premium to SOEs run by former bureaucrats (model 9).

The presence of multiple interaction effects in our specifications makes it difficult to read table 4. We summarize our findings in table 5 which reports Wald tests for the hypothesis that the sum of main and interaction effects is zero. There are three interesting patterns in our data. Executives without government experience who manage private firms pursue the most successful diversification policies. For these firms and executives, increases in the number of business segments significantly improve accounting performance and firm value. Second, bureaucrats in charge of SOEs – the group that pursued a more challenging diversification strategy – never achieve a diversification-related premium in accounting performance or firm value. Third, in private companies the performance of both types of executives is so similar that we cannot reject a hypothesis that there is no difference between the top two cells in the matrices in table 5. For our diversification-related measures of corporate success, the form of ownership appears to be more important than the career path of the CEO.

3.1. Robustness Tests

We conduct a number of tests to see whether our results are robust to changes in specification. In table 6, we include a measure of lagged performance to see if the timing of CEO appointments drives our results. The estimates in table 6 are similar to our earlier findings, although the main performance effects of former bureaucrats leading SOEs are now less favorable. As before capital markets assign a premium to SOEs that are run by former civil servants. The diversification results are little affected by the inclusion of measures of past performance. In unreported specifications, we replaced the lagged variable with other measures of past success, including last year's performance

and separate annual measures for past performance. Our results are robust to these changes.

In table 7, we drop a CEO's first year of tenure to get a sense of the importance of temporal matching of CEO skills to business situations. As in our previous robustness tests, we find more negative performance effects for former civil servants when they manage SOEs. As before, financial success does not decline when a former bureaucrat heads a private company. The results for diversification are summarized in table 8. Private-sector executives leading private firms continue to be most successful. An interesting change in these results is the improved accounting performance when former civil servants diversify SOEs. However, capital markets appear to look at these improved financials with skepticism. Unlike private companies under private leadership, which achieve a diversification-related premium, the firm value of SOEs does not respond to increases in firm scope.

3.2. Discussion

Chinese former civil servants are a highly selected group. They are well educated, understand the government's inner workings, and they have personal relationships with former colleagues in an economy where government is all pervasive. Yet, we find little evidence that shareholders benefit from the appointment of former bureaucrats to the position of CEO. This group of executives never outperforms managers without government experience, and we find consistent evidence that former civil servants underperform their peers when they are in charge of SOEs. Because we observe executives' diversification policies, our study sheds direct light on one of the sources for the observed differences in performance. Former bureaucrats choose to compete in more challenging competitive environments, namely in sectors of the economy with lower profitability and growth rates.

An interesting question is whether the diversification policies of SOEs are due to push or pull factors. Do bureaucrats push their former colleagues to compete in difficult environments? Or is it the case that former civil servants see themselves pulled to take advantage of opportunities in these segments of the economy? Our results are more

consistent with the second explanation. If Chinese bureaucrats wanted to push SOEs into specific sectors of the economy, they could force entry irrespective of a CEO's career path, i.e. the bureaucratic or non-bureaucratic past. However, our results apply only to former civil servants. Managers without government experience do not enter unattractive industries even if they run a state-owned enterprise.

One possible explanation for the observed pull forces is that former bureaucrats enjoy a competitive advantage in difficult markets, perhaps because they benefit from better access to financing and reduced red tape. Our main results in table 5 (columns 1 and 2) provide no support for this view. However, if we drop the CEO's first year of tenure from our sample, the SOE's accounting performance, but not its market value, is positively related to diversification (table 5, column 3). One interpretation of this finding is that it reflects a quid pro quo. Former bureaucrats can do better in difficult markets – their accounting performance improves with greater diversification – but capital markets discount these gains, perhaps because they expect the former bureaucrats to be forced to meet social obligations of some sort in the future. Interestingly, this divergence of accounting performance and market value is absent in our results for private companies managed by private managers. For these companies, increases in diversification lead to improved accounting performance and greater market value.

More broadly, the results presented here speak to two areas of inquiry. First, our findings suggest that it is interesting to push beyond the general insight that government relations can create value. In the Chinese context – and we suspect this might be true in other economies as well – bureaucratic ties influence the strategic choices of companies, and these choices have consequences for short-run profitability and the sustainability of competitive advantage. Opening up the black box of "political ties" can help us better understand the trade-offs that executives face when they invest in improved government relations.

A second insight relates to managerial style and organizational incentives. In the current literature, some studies focus on organizational incentives and the firm's competitive environment to understand variation in financial performance. Others concentrate on CEO personality and executive careers. As our results indicate, we can

gain a fuller understanding by combining these two approaches. Our CEO's career paths influence their strategic thinking. But whether these intuitions come to bear largely depends on companies' form of ownership. Admittedly, our measure for differences in incentives is crude. What is it about private firms that largely mutes the influence of CEO type? Differences in executive compensation? CEO career concerns? These are interesting questions for future research.

4. Conclusion

In this paper, we ask whether former civil servants make effective chief executives. We study a sample of CEOs leading publicly traded firms in China, an economy in which the influence of the state is all pervasive and government expertise might be particularly valuable. Despite this premise, we find little evidence to recommend former civil servants for the post of CEO. When they lead SOEs, these executives systematically underperform their peers, in part because their strategic choices differ significantly from the choices of executives without government experience. Interestingly, the differences between the two types of executives largely vanish in private firms. In the context of this study, private-sector incentives appear to be more important for strategic decision-making and financial performance than differences in managerial style.

References

- Almeida, H. and Wolfenzon D., 2006. A Theory of Pyramidal Ownership and Family Business Group. *Journal of Finance* 61, 2637-2680.
- Bai Chong-En, Lu Jiangyong and Tao Zhigang, 2006, Property rights protection and access to bank loans, *The Economics of Transition*, 14(4), 611-628.
- Baranchuk, Nina, Glenn MacDonald and Jun Yang, 2007, The Economics of Super Managers. University of Texas at Dallas Working Paper.
- Barnard, C. I. 1938. The Functions of the Executive. Cambridge, MA: Harvard University Press.
- Bebchuk, L. A., Cremers, M. & Peyer, U. 2007. CEO Centrality. Harvard University, John M. Olin Center for Law, Economics, and Business, Discussion paper No. 601.
- Bertrand, M. & Schoar, A. 2003. Managing with Style: The Effect of Managers on Firm Policies. Quarterly Journal of Economics, 118:1169-1208
- Bertrand, Marianne, Francis Kramarz, Antoinette Schoar, and David Thesmar (2005). Politically Connected CEOs and Economics Outcomes: Evidence from France. University of Chicago Working Paper.
- Berger, P.G., and Ofek E., 1995, Diversification's effect on firm value, *Journal of Financial Economics* 37, 39-65.
- Bolton, Patrick, Markus K. Brunnermeier, and Laura Veldkamp (2008). Leadership, Coordination and Mission-Driven Management. Columbia University Working Paper.
- Campa, J. M., and Kedia S., 2002, Explaining the diversification discount, *Journal of Finance* 57, 1931-1962.
- Comment, R., and Jarrell G.A., 1995, Corporate focus and stock returns, *Journal of Financial Economics* 37, 67-87.
- Du, Julan, Yi Lu and Zhigang Tao (2008). Property Rights Protection and Firm Diversification: Evidence from China. Chinese University of Hong Kong Working Paper.
- Eckert, R. D., 1981. "The Life Cycle of Regulatory Commissioners," Journal of Law and Economics 24, 1: 113-120
- Faccio, M., 2006, Politically Connected Firms, American Economic Review 96, 369-386.
- Fan, G., and Wang, X., 2006. NERI index of marketization of China's provinces. Economics Science Press, Beijing.
- Fan, P.H. J., Huang, J., Morck, R. and Yeung, B., 2008, Vertical Integration, Institutional Determinants and Impact: Evidence from China, working paper, Chinese University of Hong Kong.
- Fan, P.H. J., and Lang, L. H.P., 2000, The measurement of relatedness: An application to corporate diversification, *Journal of Business* 73, 629-660.

- Fan, J. P.H., Rui, O. M. and Zhao, M., 2008, Public Governance and Corporate Finance: Evidence from Corruption Cases, *Journal of Comparative Economics* 36, 343-364.
- Fan, P.H. J., Wong T.J., and Zhang T., 2007, Politically-connected CEOs, corporate governance and post-IPO performance of China's partially privatized firms, *Journal of Financial Economics* 84, 330-357.
- Fisman, R., 2001, Estimating the value of political connections, *American Economic Review* 91, 1095-1102.
- Graham, J. R., Lemmon M. L., and Wolf J. G., 2002, Does corporate diversification destroy value?, *Journal of Finance* 57, 695-720.
- Hambrick, D. C. and Mason, P.A., 1984, Upper Echelons: The Organization as a
- Reflection of Its Top Managers, *The Academy of Management Review*, 9(2):193-206.
- Hambrick, D. C., Cho, T. S. and Chen, M.-J. 1996. The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. Administrative Science Quarterly, 41:659-684
- Hyland, D., 1999, Why firms diversify: An empirical examination, Unpublished manuscript, University of Texas at Arlington.
- Johnson, S., and Mitton T., 2003, Who gains from capital controls? Evidence from Malaysia, *Journal of Financial Economics* 67, 351-382.
- Kaplan, Steven N., Mark M. Klebanov, and Morten Sorensen (2007). Which CEO Characteristics and Abilities Matter? University of Chicago working paper.
- Khanna, T., and Palepu K., 2000, Is group membership profitable in emerging markets? An analysis of diversified Indian business groups, *Journal of Finance* 55, 867-891.
- Khanna, T., and Yafeh Y., 2005, Business Groups and Risk Sharing Around the World, *Journal of Business*, 78:1, 301-340.
- Lang, Larry H.P., and Stulz R.M., 1994, Tobin's Q, corporate diversification, and firm performance, *Journal of Political Economy* 102, 1248-1280.
- Leuz, C., and Oberholzer-Gee F., 2006, Political Relationships, Global Financing, and Corporate Transparency, *Journal of Financial Economics* 81, 411-439.
- Li Hongbin, Lingsheng Meng and Junsen Zhang, 2006, Why Do Entrepreneurs Enter Politics? *Economic Inquiry* 44(3), 559-578.
- Lin, Chen, andDongwei Su, 2008. Industrial diversification, partial privatization and firm valuation: Evidence from publicly listed firms in China," Journal of Corporate Finance, 14(4), 405-417.
- Lin, Justin Yifu, Fang Cai and Zhou Li, 1998, Competition, Policy Burdens, and State-Owned Enterprise Reform, *American Economic Review*, 88 (2), 422-27.
- Lins K., and Servaes H., 1999, International evidence on the value of corporate diversification, *Journal of Finance* 54, 2215-2239.

- Maksimovic, V., and Phillips G., 2002, Do conglomerate firms allocate resources inefficiently across industries? Theory and evidence, *Journal of Finance* 57, 721-767
- Malmendier, U. & Tate, G. 2005. CEO Overconfidence and Corporate Investment. Journal of Finance, 60:2661-2700
- Megginson, William L. and Jeffry M. Netter, 2001, From State to Market: A Survey of Empirical Studies on Privatization. *Journal of Economic Literature* 39: 321-389.
- Montgomery, Cynthia A., 1994, Corporate diversification, *Journal of Economic Perspectives* 8, 163-178.
- Montgomery, Cynthia A., 2008. Putting Leadership Back Into Strategy. Harvard Business Review, January:
- Nanjing Daily, 2005;
- Pérez-González, F. 2006. Inherited Control and Firm Performance. American Economic Review, 96:1559-1588
- Porter, Michael E. (1980). Competitive Strategy: Techniques for Analyzing Industries and Competitors, New York: The Free Press.
- Rajan R., Servaes H., and Zingales L., 2000, The cost of diversity: The diversification discount and inefficient investment, *Journal of Finance* 55, 35-80.
- Salant, D. J., 1995. "Behind the Revolving Door: A New View of Public Utility Regulation," The Rand Journal of Economics 26, 3: 362-377.
- Scharfstein, D.S., 1998, The dark side of internal capital markets II: Evidence from diversified conglomerates, unpublished manuscript, No. 6352.
- Servaes, H., 1996, The value of diversification during the conglomerate merger wave, *Journal of Finance* 51, 1201-1226.
- Sirkin, Harold L., James W. Hemerling. and Arindam K. Bhattacharya (2008). *Globality:* Competing with Everyone from Everywhere for Everything. New York: Business Plus.
- Stein, J.C., 1997, Internal capital markets and the competition for corporate resources, *Journal of Finance* 52, 111-133.
- Sun, Qian and Wilson Tong, 2003, "China Share Issue Privatization: The Extent of Its Success", *Journal of Financial Economics*, 70(2) 183-22
- Terviö, Marko (2008). The Difference That CEOs Make: An Assignment Model Approach. *American Economic Review* 98(3): 642-668.
- Van den Steen, Eric J. "Interpersonal Authority in a Theory of the Firm." MIT Sloan Research Paper Working Paper Series, No. 4667-07, July 2007.
- Villalonga, B., 2000, An empirical analysis of diversification motives, unpublished manuscript.
- Villalonga, B. Does Diversification Cause the 'Diversification Discount? 2004a, *Financial Management* 33 (2): 5-27

- Villalonga, B., Diversification Discount or Premium? New Evidence from the Business Information Tracking Series, 2004b, *Journal of Finance* 59 (2): 475–502.
- Waldman, David, Gabriel Ramirez, Robert House, and Phanish Puranam (2001). Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. Academy of Management Journal, 44: 134-143.
- Wasserman, Noam. "Founder-CEO Succession and the Paradox of Entrepreneurial Success." Organization Science 14, no. 2 (March April 2003): 149-172.
- Wu, Wu and Liu, 2008, Political Connection and Market Valuation: Evidence from

China Individual controlled Listed Firms, *Economic Research*, 130-141.

Xiangfan News, 2008

Young Alwyn, 2000, The Razor's Edge: Distortions And Incremental Reform In The People'S Republic Of China, *Quarterly Journal of Economics*, 115 (4), 1091-1135.

Table1 Summary Statistics

	Definition	Mean	Std. Dev	Min	Max
CEO was bureaucrat	CEO served in state bureaucracy at one point in his career (indicator)	0.185	0.388	0	1
Private company	Company is owned by private investors (indicator)	0.241	0.428	0	1
Number of segments	Number of business segments with different 3-digit SIC codes	2.663	1.614	1	13
Profitability of portfolio	Three-year historical industrial mean ROS of industry segments, weighted by sales	-0.102	0.432	-2.813	1.236
Growth of portfolio	Three-year historical industrial mean growth rate of industry segments, weighted by sales	0.440	0.737	-0.326	13.910
Relatedness of portfolio	Sales-weighted average of the relatedness coefficients of industry <i>i</i> and <i>j</i> , calculated as the average of the correlation coefficient of the two industries' input and output flows.	0.415	0.397	-0.095	1.000
Return on sales (ROS)	Ratio of net earnings to total sales	-0.057	0.626	-4.919	0.492
Return on assets (ROA)	Ratio of net earnings to total assets	0.032	0.093	-0.499	0.195
Excess Value	The natural logarithm of the ratio of firm market value to its imputed value. A firm's imputed value is the sale-weighted sum of each segment's industry median ratio of market value to total assets. The industry median ratio is based on the narrowest SIC grouping that includes at least three single-segment firms.	0.103	0.358	-0.210	2.280
Firm size	The natural logarithm of firm total assets	21.110	0.966	16.884	26.978
development	Ratio of bank loans to the private sector to total bank loans (index)	6.831	3.156	0.000	12.220
Provincial bureaucratization	Ratio of workforce employed by civil service to total workforce (index)	5.954	2.481	-11.94	10.44

Table 2 – Determinants diversification

	(1)	(2)	(3)
	# Segments	# Segments	# Segments
CEO was bureaucrat	0.178***	0.182***	0.162***
	(0.053)	(0.053)	(0.062)
Private company		-0.145*	-0.162*
		(0.083)	(0.088)
Bureaucrat × private company			0.0664
			(0.11)
Firm size	0.411***	0.411***	0.411***
	(0.041)	(0.041)	(0.041)
Provincial financial market development		0.0269**	0.0268**
		(0.011)	(0.011)
Provincial bureaucratization		-0.0191	-0.0189
		(0.023)	(0.023)
Year fixed effects?	Yes	Yes	Yes
Firm fixed effects?	Yes	Yes	Yes
Observations	5724	5724	5724
R-squared	0.86	0.86	0.86

The dependent variable is the number of segments in which the firm is active. Variable definitions are given in table 1. Standard errors are in parentheses.

***, ** and * denote significance at 1%, 5% and 10% level, respectively.

 $Table\ 3-Characteristics\ of\ Target\ Industries$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Profitability	profitability	profitability	growth	growth	growth	relatedness	relatedness	relatedness
CEO was bureaucrat	-0.0693**	-0.0704**	-0.103***	-0.113**	-0.113**	-0.176***	-0.0618***	-0.0645***	-0.0643***
	(0.030)	(0.030)	(0.035)	(0.049)	(0.049)	(0.057)	(0.016)	(0.016)	(0.019)
Private company		0.0394	0.0123		-0.00250	-0.0547		0.0903***	0.0905***
		(0.047)	(0.050)		(0.077)	(0.081)		(0.026)	(0.027)
$Bureaucrat \times \\$			0.108*			0.209**			-0.000917
private company			(0.061)			(0.10)			(0.033)
Firm size	0.0475**	0.0483**	0.0472**	0.172***	0.171***	0.169***	-0.0766***	-0.0773***	-0.0772***
	(0.023)	(0.023)	(0.023)	(0.038)	(0.0378)	(0.0378)	(0.013)	(0.013)	(0.013)
Provincial financial		-0.00484	-0.00492		-0.00491	-0.00508		-0.00470	-0.00470
market development		(0.0060)	(0.0060)		(0.0099)	(0.0099)		(0.0033)	(0.0033)
Provincial		0.0138	0.0141		-0.00838	-0.00774		0.00479	0.00479
bureaucratization		(0.013)	(0.013)		(0.022)	(0.022)		(0.0072)	(0.0072)
Year fixed effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5661	5661	5661	5661	5661	5661	5724	5724	5724
R-squared	0.39	0.39	0.39	0.44	0.44	0.44	0.78	0.78	0.78

Variable definitions are given in table 1. Standard errors are in parentheses. ***, ** and * denote significance at 1%, 5% and 10% level, respectively

Table 4 – Corporate Performance

	(1) ROS	(2) ROS	(3) ROS	(4) ROA	(5) ROA	(6) ROA	(7) Excess Value	(8) Excess Value	(9) Excess Value
CEO was bureaucrat	-0.0664*	-0.153**	-0.0794	-0.0171***	-0.0351***	-0.0240	0.0110	0.0342	0.0948**
	(0.039)	(0.078)	(0.109)	(0.0056)	(0.011)	(0.0154)	(0.017)	(0.035)	(0.0451)
Private company	-0.136**	-0.437***	-0.402***	-0.00400	-0.0426***	-0.0342*	-0.0428	-0.0862**	0.0542
Till woo company	(0.061)	(0.091)	(0.131)	(0.0089)	(0.013)	(0.0186)	(0.027)	(0.040)	(0.0531)
Number of segments	0.0396***	0.00678	0.0173	0.00149	-0.00234	-0.00206	0.0211***	0.0166***	0.0114
- · · · · · · · · · · · · · · · · · · ·	(0.011)	(0.013)	(0.0193)	(0.0016)	(0.0019)	(0.00273)	(0.0050)	(0.0060)	(0.00791)
Bureaucrat ×	(, ,	0.0679	0.256	(1111)	0.0342	0.00947	()	-0.0110	-0.0501
private company		(0.14)	(0.190)		(0.021)	(0.0270)		(0.064)	(0.0772)
Bureaucrat × segments		0.0252	0.0176		0.00410	0.00451		-0.000695	-0.0155
Ü		(0.022)	(0.0301)		(0.0032)	(0.00427)		(0.0098)	(0.0124)
Private × segments		0.109***	0.131***		0.0125***	0.0141***		0.0229**	0.00497
· ·		(0.024)	(0.0346)		(0.0035)	(0.00491)		(0.011)	(0.0141)
Bureaucrat ×		-0.00520	-0.0464		-0.00462	-0.00619		-0.0219	-0.0181
private × segments		(0.042)	(0.0587)		(0.0061)	(0.00833)		(0.019)	(0.0237)
Firm size	0.410***	0.397***	0.701***	0.0627***	0.0612***	0.101***	-0.0995***	-0.0999***	-0.203***
	(0.031)	(0.031)	(0.0555)	(0.0044)	(0.0044)	(0.00787)	(0.014)	(0.014)	(0.0228)
Provincial financial	0.00434	0.00493	-0.0163	0.00110	0.00115	0.00113	-0.0154***	-0.0154***	0.00418
market development	(0.0078)	(0.0078)	(0.0133)	(0.0011)	(0.0011)	(0.00189)	(0.0035)	(0.0035)	(0.00547)
Provincial	0.0252	0.0235	0.0131	-0.000206	-0.000352	-0.00582*	0.0142*	0.0137*	0.00423
Bureaucratization	(0.017)	(0.017)	(0.0228)	(0.0025)	(0.0025)	(0.00323)	(0.0077)	(0.0077)	(0.00939)
Year fixed effects?	Yes	Yes	Yes						
Firm fixed effects?	Yes	Yes	Yes						
Firm × Year FE?	No	No	Yes	No	No	Yes	No	No	Yes
Observations	5724	5724	5724	5689	5689	5689	5568	5568	5568
R-squared	0.497	0.500	0.713	0.518	0.520	0.737	0.706	0.706	0.861

Variable definitions are given in table 1. Standard errors are in parentheses. ***, ** and * denote significance at 1%, 5% and 10% level, respectively

Table 5 – Summary of Diversification-Related Performance Effects

Return on Sales

Firm and Year FE				Inc	Including Firm × Year FE				
		Burea	aucrat			Bure	aucrat		
		yes	no			yes	no		
Private	Yes	0.135***	0.115***	Private	yes	0.119**	0.148***		
	No	0.032	0.007		no	0.035	0.017		

Return on Assets

Firm and Year FE				Ir	Including Firm × Year FE			
Bureaucrat						Burea	aucrat	
		yes	no			yes	no	
Private	Yes	0.010**	0.010***	Private	yes	0.010	0.012***	
	No	0.002	-0.002		no	0.002	-0.002	

Excess Value

Firm and Year FE				Including Firm × Year FE				
Bureaucrat						Burea	nucrat	
		yes	no			yes	no	
Private	Yes	0.017	0.039**	Private	yes	-0.017	0.016	
	No	0.016	0.017		no	-0.004	0.011	

For each cell, we report Wald tests for the hypothesis that the sum of the main and interaction effects is not different from zero.

^{***, **} and * denote significance at 1%, 5% and 10% level, respectively.

Table 6 – Corporate Performance, Controlling for Past Performance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
-	ROS	ROS	ROS	ROA	ROA	ROA		Excess Value	
CEO was bureaucrat	-0.0704	-0.198**	-0.0633	-0.0195***	-0.0428***	-0.0162	0.00419	0.0274	0.112**
	(0.043)	(0.088)	(0.109)	(0.0062)	(0.013)	(0.0151)	(0.019)	(0.039)	(0.0462)
Private company	-0.155**	-0.530***	-0.395***	-0.00254	-0.0530***	-0.0227	-0.0408	-0.0863*	0.104*
	(0.068)	(0.10)	(0.130)	(0.0098)	(0.015)	(0.0180)	(0.029)	(0.045)	(0.0541)
Number of segments	0.0489***	0.00790	0.0135	0.00189	-0.00291	-0.00330	0.0189***	0.0140**	0.00593
	(0.013)	(0.015)	(0.0191)	(0.0018)	(0.0021)	(0.00264)	(0.0054)	(0.0065)	(0.00801)
Bureaucrat ×		0.0840	0.325*		0.0469**	0.00548		-0.0232	-0.0398
private company		(0.16)	(0.189)		(0.023)	(0.0263)		(0.070)	(0.0785)
Bureaucrat × segments		0.0354	0.00957		0.00514	0.00299		-0.000367	-0.0209*
		(0.024)	(0.0300)		(0.0035)	(0.00416)		(0.011)	(0.0126)
Private×segments		0.130***	0.113***		0.0158***	0.0120**		0.0236**	-0.00314
		(0.027)	(0.0340)		(0.0039)	(0.00472)		(0.012)	(0.0142)
Bureaucrat ×		-0.000920	-0.0485		-0.00709	-0.00485		-0.0181	-0.0210
private × segments		(0.047)	(0.0578)		(0.0068)	(0.00803)		(0.020)	(0.0238)
Lagged average	-0.295***	-0.306***	-0.882***	-0.228***	-0.234***	-0.886***	0.0699***	0.0703***	-0.516***
performance (2 years)	(0.030)	(0.030)	(0.0332)	(0.028)	(0.028)	(0.0315)	(0.022)	(0.022)	(0.0290)
Firm size	0.520***	0.505***	0.819***	0.0798***	0.0780***	0.143***	-0.113***	-0.114***	-0.172***
	(0.035)	(0.035)	(0.0551)	(0.0052)	(0.0052)	(0.00774)	(0.015)	(0.015)	(0.0234)
Provincial financial	0.00799	0.00902	-0.0184	0.00218*	0.00229*	0.00112	-0.0161***	-0.0161***	0.00352
market development	(0.0090)	(0.0089)	(0.0136)	(0.0013)	(0.0013)	(0.00189)	(0.0039)	(0.0039)	(0.00573)
Provincial	0.0269	0.0246	0.0247	6.20e-05	-0.000114	-0.00506	0.0177**	0.0174**	0.0197**
bureaucratization	(0.020)	(0.020)	(0.0234)	(0.0028)	(0.0028)	(0.00324)	(0.0085)	(0.0085)	(0.00989)
Year fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm × Year FE?	No	No	Yes	No	No	Yes	No	No	Yes
Observations	4966	4966	4966	4941	4941	4941	4798	4798	4798
R-squared	0.509	0.514	0.777	0.524	0.527	0.801	0.701	0.702	0.876

Variable definitions are given in table 1. Standard errors are in parentheses. ***, ** and * denote significance at 1%, 5% and 10% level, respectively

Table 7 – Corporate Performance – First Year of CEO Tenure Omitted

	(1) ROS	(2) ROS	(3) ROS	(4) ROA	(5) ROA	(6) ROA	(7)	(8)	(9) Excess Value
CEO was bureaucrat	-0.113***	-0.234***	-0.366***	-0.0237***	-0.0454***	-0.0561***	0.0137	-0.00300	0.0796
CEO was buleauciai									
D : 4	(0.043)	(0.085)	(0.131)	(0.0065)	(0.013)	(0.0206)	(0.021)	(0.042)	(0.0660)
Private company	-0.117	-0.437***	-0.480***	0.00607	-0.0405**	-0.0435	-0.0732**	-0.142***	-0.0712
	(0.072)	(0.11)	(0.169)	(0.011)	(0.016)	(0.0265)	(0.034)	(0.051)	(0.0809)
Number of segments	0.0429***	0.00932	-0.00263	0.00275	-0.00161	-0.00216	0.0150***	0.00750	-0.000167
	(0.012)	(0.014)	(0.0199)	(0.0018)	(0.0021)	(0.00313)	(0.0058)	(0.0069)	(0.00973)
Bureaucrat ×		0.143	0.0992		0.0356	0.0197		0.0752	0.0416
private company		(0.17)	(0.257)		(0.025)	(0.0405)		(0.081)	(0.124)
Bureaucrat × segments		0.0415*	0.0835**		0.00542	0.0116**		0.0119	-0.00601
		(0.023)	(0.0334)		(0.0035)	(0.00525)		(0.011)	(0.0166)
Private × segments		0.113***	0.127***		0.0144***	0.0158**		0.0312**	0.0306
		(0.027)	(0.0391)		(0.0040)	(0.00615)		(0.013)	(0.0190)
Bureaucrat ×		-0.0468	-0.112		-0.00407	-0.0121		-0.0513**	-0.0706**
private × segments		(0.049)	(0.0738)		(0.0073)	(0.0116)		(0.023)	(0.0353)
Firm size	0.362***	0.350***	0.715***	0.0578***	0.0563***	0.0964***	-0.0646***	-0.0664***	-0.165***
	(0.032)	(0.032)	(0.0556)	(0.0049)	(0.0049)	(0.00875)	(0.016)	(0.016)	(0.0273)
Provincial financial	0.000523	0.00141	-0.00721	0.00127	0.00140	0.00168	-0.0127***	-0.0126***	0.0143**
market development	(0.0085)	(0.0085)	(0.0135)	(0.0013)	(0.0013)	(0.00212)	(0.0041)	(0.0041)	(0.00660)
Provincial	0.0161	0.0147	0.0136	-0.00218	-0.00234	-0.00581	0.0150*	0.0147*	-0.00443
bureaucratization	(0.018)	(0.018)	(0.0225)	(0.0027)	(0.0027)	(0.00354)	(0.0087)	(0.0087)	(0.0111)
Year fixed effects?	Yes								
Firm fixed effects?	Yes								
Firm × Year FE?	No	No	Yes	No	No	Yes	No	No	Yes
Observations	4752	4752	4752	4717	4717	4717	4600	4600	4600
R-squared	0.550	0.553	0.822	0.586	0.588	0.820	0.733	0.734	0.896

Variable definitions are given in table 1. Standard errors are in parentheses. ***, ** and * denote significance at 1%, 5% and 10% level, respectively

Table 8 – Summary of Diversification-Related Performance Effects – First Year of CEO Tenure Omitted

Return on Sales

Bureaucrat

			yes	no
Private	Private	yes	0.095	0.124***
		no	0.081***	-0.003

Return on Assets

Bureaucrat

			yes	no
Private	Private	yes	0.013	0.014**
		no	0.009**	-0.002

Excess Value

Bureaucrat

			yes	no
Private	Private	yes	-0.046	0.030*
		no	-0.006	0.000

For each cell, we report Wald tests for the hypothesis that the sum of the main and interaction effects is not different from zero.

***, ** and * denote significance at 1%, 5% and 10% level, respectively.