Politically Connected CEOs and Corporate Outcomes:

Evidence from France

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Abstract

A number of recent papers have documented that the political elite may use its power to bestow favors onto connected private firms. In this paper, we investigate the reverse perspective: we ask whether the connected business elite alter its corporate decisions to bestow "re-election favors onto incumbent politicians. We study this question in the context of France, where we document that there is a tight overlap in educational and professional background between the CEOs of publicly-traded firms and politicians: more than half of the assets traded on the French stock markets are managed by CEOS who were formally civil servants, many of them holding government posts.

Overall, our results provide support for the hypothesis that connections between CEOs and politicians factor into corporate decisions relating to job creation and destruction. We find that firms managed by connected CEOs create more jobs (open more plans, destroy less plants) in politically more contested areas, and that this is especially so around election years. We find only weak evidence that these politicans-firms networks follow partisan lines. The most robust evidence, if any, appears to be coming from the left of the political spectrum, with left-wing CEOs appearing to react more to the needs of left-wing political incumbents. Lastly, we explore whether the "economic favors" extended by connected CEOs to politicians are in some way reciprocated. We find evidence consistent with such reciprocation through privileged access to subsidy programs.

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1 Introduction

The nexus between business and government has been of intense interest as a topic of public debate and academic research alike. A number of recent papers have documented the prevalence of personal connections between politicians and firms in many countries around the world. See for example Fisman (2000), Johnson and Mitten (2003), Sapienza (2003) or Faccio, Masulis and McConnell (2004). These papers have focused on documenting the economic advantages firms can gain from maintaining close relationship with politicians. Their results suggest that political elites widely use their power to bestow favors onto connected firms.

In this paper, we propose a reverse perspective on the nature of the exchanges that may occur between politicians and firms. We investigate whether the politically connected business elite alter its business decisions to bestow favors on politicians. At the core of this reverse perspective is that, the same way businesses can economically benefit from political favors, the (re)election chances of politicians can be favorably affected by positive economic outcomes.

Starting with Nordhaus (1975), a large literature on political business cycles has highlighted the potential of incumbent governments to use economic policy tools to affect election outcomes, see for example Alesina and Rosenthal (1995) or Alesina and Sachs (1988). While incumbent politicians may directly use their economic power to improve their re-election chances, they can also potentially benefit from the corporate decisions of large firms in the economy. One such corporate decision that could be the key to many re-election outcomes is employment. As has been shown in earlier work, aggregate employment conditions are of great importance to voters when deciding whether or not to re-appoint an incumbent politician (see for example Wolfers, 2001). Therefore, a business leader who wants to help an incumbent politician stay in power could postpone large layoffs or plants closures until after the election date or accelerate hiring in the time just before the election.

This argument of favors being traded between firms and politicians is loosely related to Shleifer and Vishny (1994). However, Shleifer and Vishny (1994) develop this argument in the context of state-owned firms. In the analysis below, we will focus on the behavior of *publicly-traded*, who are therefore not directly controlled by the government, but whose CEOs may be socially connected to politicians. More in line with Shleifer and Vishny (1994), Khwaja and Mian (2004) document corruption in government-controlled firms (and banks) that favors connected politicians.

Contemporary France offers a unique research setting to study the networks between politicians

and the business elite and their possible implications for corporate decisions. First, social connections between CEOs and politicians are very prevalent in France. This results from two main factors. To start, a large fraction of political and business leaders share the same educational background and attended the same very limited set of elite schools (known as "Grandes Ecoles"). In fact, 90% of the assets traded on the French stock markets in the 1990s are managed by graduates of only two schools. Also, the largest private companies in France are managed by CEOS that were formally civil servants, and often even had experience serving in a government position. As we will show below, former civil servants control 11% of the firms and 69% of the assets listed on the French stock market in the 1990s. More than half of these former civil servants also served in a government: 37% were part of a right-wing government and 14% were part of a left-wing government. These two facts about common education and government experience are inter-related: one of most frequent "Grandes Ecoles" attended by French CEOs is the Ecole Nationale d' Administration (ENA), whose purpose is to form top civil servants. These shared educational and experience background between politicians and CEOs in France are sources of social, political and potentially ideological connections between the political and business elites. We will investigate the importance of these networks along a number of dimensions: (1) the school a CEO attended, (2) how long (if at all) a CEO was employed as a civil servant, and (3) the political party of the government the CEO served under.

A second important reason to focus on France lies in the quality of the data available to study whether politically connected CEOs distort employment decisions to extend favors to politicians. Since even the biggest firms in a country might not have the ability to affect nationwide employment levels, we will focus on the relation between regional politics (city and state-level) and corporate decisions at this level. This requires the ability to measure hiring and firing decisions at a regionally disaggregated level for each firm. The French statistical office compiles very detailed plant-level information. Based on this information, we can measure for every firm in France how many jobs are created and destroyed annually at the state and city-level. We can therefore analyze whether connected CEOs are sensitive to local election cycles in their hiring and firing decisions.

In the analysis that follows, we start by comparing the profitability of firms managed by "connected CEOs" to those that are not connected. In contrast to earlier work in other countries, we find that firms managed by connected CEOs have, if anything, lower rates of return on assets than

those managed by non-connected CEOs. This simple cross-sectional analysis suggests that the net benefits from political connections may not be significantly positive to give connected firms an economic advantage above non-connected firms.

While this cross-sectional pattern provides an interesting starting point for our analysis, it is however, subject to concerns about possible sorting of CEOs across firms. In fact, we do find that connected CEOs are over-represented among larger firms, former state-owned enterprises and financial service firms. In the rest of the paper, we attempt to provide more direct evidence for politically induced distortions at connected firms, mostly by relying on the timing of the election cycles and variations in regional political forces.

An important assumption underlying our identification approach is that politically motivated employment policies are costly for a firm in the long run if they distort efficiency. To the extent that connected CEOs have only limited leeway to engage in such activities, one would assume that these "political favors" are granted selectively. They should be used predominantly in situations where they can provide large political gain. For example, we would expect that the negative impact of layoffs and plant closure decisions are most pronounced the closer the election year (and vice versa for job creation), since most political science models postulate that voters are myopic. Similarly, we could expect that these "favors" are more important in areas where the re-elections prospects of an incumbent are less secure. In contrast, in areas where the party in power has a large majority, there is no need for connected CEOs to incur these costs, since the incumbent will be reelected without help from the business community.

As a first step, we show that firms managed by connected CEOs have especially low performance and high labor-to-capital ratios if a larger fraction of their employment is located in politically contested states, i.e. states where the party in power has switched between left and right-wing over the last few election cycles.

Second, we improve on the identification strategy by exploiting the timing of both state-level (legislative) elections and city-level (municipal) elections. At the state-level we find that politically connected CEOs (those that are former civil servants) create more jobs in election years than in years further away from an election. Similarly, at the city-level, we show that connected CEOs create more jobs in politically less stable cities, and that this is especially so around municipal election years. We show that these results are robust to different measures of employment change.

This evidence is consistent with the idea that connected CEOs take political election cycles into account when making decisions about layoffs and new job creations.

Third, we analyze whether the connections between CEOs and politicians are purely based on joint backgrounds in government or even common education, or whether they follow ideological lines. Are CEOs that formerly served under a right-wing government especially likely to bestow favors to right-wing political incumbents, and vice versa for left-wing CEOs? Our results thus far only provide limited evidence for the importance of such partisan networks in allocating economic favors to politicians. The most robust evidence, if any, appears to be coming from the left of the political spectrum.

Finally, in the last part of the paper, we explore whether the "economic favors" extended by connected CEOs to politicians are in some way reciprocated. This analysis ties more closely to the prior research that has stressed the role of government in allocating political favors to connected firms. Two of the most important levers through which politicians can affect businesses are discretionary tax breaks and subsidies. Therefore, we investigate whether firms managed by connected CEOs are relatively more likely to receive corporate tax breaks or higher subsidies. We conduct this analysis using city-level data, since many corporate tax and subsidy programs are decided at the city level in France. We find that firms managed by connected CEOs have on average lower corporate tax payments and receive more subsidies. If this favorable treatment is indeed in return for politically beneficial employment creation, we would expect that connected firms are especially more likely to receive tax breaks (or subsidies) when a high fraction of their employment is located in "swing" cities. The evidence here is somewhat mixed. We find that connected firms in swing cities are more likely to receive subsidies, but we do not find an effect on taxes. Moreover, we find patterns that are consistent with the idea that political favors extended to politically connected CEOs follow partisan lines: right-wing CEOs tend to pay lower taxes and receive higher subsidies in right-wing cities and vice versa for left-wing CEOs in left-wing cities (though the results are somewhat weaker for the left).

Overall these results provide first suggestive evidence that the connections between CEOs of private-sector firms and politicians factor into important economic decisions at these firms, such as job creation and destruction. These favors could either be the result of personal friendships or social ties. Or they could be part of a larger "gift exchange" between the political and business

elites. CEOs might be willing to help a politician get reelected if they know that in return they will receive economic rents, maybe in the form of tax breaks or corporate subsidies. We find so far some limited evidence that could support the interpretation of a two-way gift exchange between politicians and CEOs.

The remainder of the paper is organized as follows. Section 2 provides a historical perspective on the development of the CEO labor market in France. Section 3 lays out the construction of the different data sets we use in the empirical analysis. In section 4, we report descriptive statistics on the background of CEOs and the firms they manage. The main findings of our analysis are presented in Section 5. Section 6 summarizes and offers some concluding remarks.

2 The French Business Elite: Historical Perspective

French CEOs usually follow one of three distinct career paths to get to their position: they are either members of a firm's founding family, engineers, or former civil servants. The following section explains the historical forces behind this partition, and in particular describes why civil servants have become ever more prevalent in French business.

The French business elite today is largely recruited from within the two most prestigious graduate schools in France, also called "Grandes Ecoles (Swartz, 1986): the "Ecole Nationale d'Administration and "Ecole Polytechnique. Entry into these graduate schools is highly selective and only a very limited number of students come out of these schools every year. The "Ecole Polytechnique is an engineering school, originally founded to train officers during the French Revolution; it soon evolved into the top engineering school in the country. The "Ecole Nationale d'Administration (ENA) was only created after the second World War to supply the civil service with highly trained professionals.

The tendency for firms to hire managers with engineering background dates back to the 19th century, a time when most French firms were still family-owned. As some firms grew larger, they tended to hire professional managers who were engineers from "Polytechnique and "Ecole Centrale (see Cassis (1997)). ¹

Until World War I, the government held few levers over the economy and firms mainly relied on engineers for their top positions. But in the 1930s, the state started to intervene in the economy

¹ "Ecole Centrale has no tie with the civil service. Most of its graduates join the private sector right after graduation.

through nationalizations and regulation. Knowledge and connections of the internal workings of government started to be valuable for private firms, in particular in the financial industry, which was accompanied by the progressive rise of former civil servants as executives in private corporations (Garrigues (2002). However, civil servants became truly pervasive among the business elite *after* World War II. In 1945, the government took de facto control of most of the financial industry as well as of a number of large manufacturing firms (such as Renault), with the intent of channeling resources to priority industries (Melitz, 1990). At that point, the Treasury and the ministry of industry became the real centers of power in finance and industry (Garrigues, 2002).

Around the same time, ENA was created to increase the supply of highly trained civil servants who would typically join the Treasury or the Ministry of Finance. The new prestige and power linked with civil service also led an increasing number of engineers from the "Ecole Polytechnique to join the Ministry of Industry. The career paths of these young civil servants would typically include a short stay within government, a few years spent as advisors to a powerful minister (membre du cabinet) and finally a promotion to the top level of a state-owned firm. Private firms would also hire former civil servants partly because of their highly selective education, and partly because of their political and social connections.

This trend was reinforced starting in 1981, when the newly elected socialist government decided to nationalize the remaining private banks and a number of industrial firms in order to revamp job creation (L'année politique (2004)). But by the middle of the 1980s, it became clear that the solution to the ensuing economic crisis was less state intervention. Between 1984 and 1988, the socialist government undertook a number of dramatic reforms in the banking industry (see Bertrand, Schoar and Thesmar, 2004) and financial markets (see Thesmar and Thoenig, 2004).

In 1986, a center right coalition was elected that started a large privatization program. By the late 1990s, only a few firms remained under state control, mainly utilities and transportation. However, the reduction of state intervention in the economy did not alter the way the French business elites were recruited over this time period. As we will see below, *Grandes Ecoles graduates*, in particular those from Ecole Polytechnique and ENA, remain prevalent among CEOs of publicly listed firms in the late 1990s.business schools were stable at around 35% and 17% respectively, , while the fraction of ENA graduates went up from 10% to 14%. Overall, the share of Grandes Ecoles graduates went up from 55% to 60% over the 1990s. In fact, the share of firms managed by

3 Data

Our data set combines several sources of information on French listed firms and their CEOs. We use firm level accounting and employment information that starts from consolidated accounts at the group-level and goes down to detailed employment information at the plant-level. CEO-level information is gathered from various sources, such as the Who's Who of France and "Grandes Ecoles' alumni directories. Finally, we will also exploit information on local election outcomes to support our analysis.

Given the large number of data sets involved in this study, Figure 1 presents a simple diagrammatic summary of the data construction process. In the following, we describe the data collection process in more detail.

3.1 Firm Data

Our firm-level data set covers the period 1989 to 2002. To construct this data set, we combine four different sources. The first source is the DAFSA directory of firms that are publicly-traded on French stock markets. These listed firms are very often the head (or holding company) of a group. Subsidiaries of these firms are in general fully owned, but registered as separate entities. The DAFSA directory contains information on the groups' employment and consolidated financial statements - balance sheet and statement of cash flows.

Because a large part of our analysis below will be focused in studying how CEO background affect job creation and destruction patterns across regions and cities of France (and over the political cycle within these geographic units), we need to complement this group-level data with more disaggregated information.³ We therefore also use three other datasets to identify employment and

²The reason partly lies in the way the privatization program was conducted. Most privatizations were deliberately implemented via IPOs so that the shareholder base would not be too dispersed for a controlling owner to emerge. Loyal top ranking bureaucrats could therefore maintain de facto control of the privatized companies. To further ensure that these management teams were protected from possible takeover threats a network of cross shareholding and cross directorships (the "noyaux durs," or hard cores) was set up between privatized manufacturing firms, banks and insurance companies (Garrigues, 2002). The social networks based on school connections and careers in the civil service helped to perpetuate a system in which CEOs of formerly state-owned enterprises chose their successors from a pool of younger civil servants with similar training.

³This is especially so given that the group-level employment figures also include jobs located abroad. Some French

economic performance at a more disaggregated level.

For each group head listed on the Stock Exchange, the LIFI survey conducted by INSEE – the French statistical office – provides the ownership links to most of its subsidiaries.⁴ Accounting and employment data at the subsidiary level are obtained from tax filings, which are made available to INSEE by the tax authorities. All firms, even fully owned subsidiaries, have to file separate financial statements for tax purposes. We can thus obtain balance sheet and cash flow information and total employment at the subsidiary level from these filings. One caveat about the data is that it is often difficult to interpret the liability side of the balance sheet because of accounting for within group capital flows and transfer pricing. We will therefore restrict ourselves to value added, wage bill, sales, fixed assets which would be less affected by these concerns.

While the subsidiary-level data offers a better indication on the location of economic activity, most subsidiaries have multiple plants, often located in different geographic areas. We therefore further use information on plant-level employment for each subsidiary, as available in the SIREN files from the French statistical office. The SIREN files provide us with the precise location (city within a "departement) and total employment of each plant that belongs to a given subsidiary.⁵

3.2 Politics Data

We then complement this firm-level data with information on election outcomes both at the department and city-levels. First, we compile information on the outcome of parliamentary elections held in 1988, 1993 and 1997. These elections are held to elect 600 French members of Parliament, for a term of 5 years, one for each "circonscription within France. France is geographically and administratively divided into 95 departments, each of them containing on average some 6 circonscriptions, with one representative elected for each circonscription. We have information on electoral outcomes at the department-level, i.e. aggregated across circonscriptions within a given department. Political outcome variables at this level contain the number of registered voters, voter

groups are very international and employ more than 50% of their workforce abroad.

⁴This survey is exhaustive among firms exceeding 500 employees or 30 million euros of revenues. For groups below that size threshold, the ownership information for subsidiaries tend to be less reliable if ownership links within the group vary frequently or are too far apart from the group leader or one of its big subsidiaries.

⁵There are 95 different départements in France. In this paper, the words "département" and "state" are meant to describe the same geographic unit. The definition of a city here is comparable to the MSA classification in the U.S.

turnout, and the number of votes obtained by each party at the first round of each election.⁶ This information is matched to the firm-level data using a department identifier.

The second political dataset we use contains information on municipal elections, which were held in 1989, 1995 and 2001. Again, the political outcomes available are number of registered voters, turnaround and the number of votes obtained by each party in the first round of each election. We also combine this city-level election data with 1990 Census information on city attributes such as total and active population and unemployment rate. We match this information to the firm-level data using a city identifier.

The last part of our data construction exercise consists in collecting information on the background of the CEOs heading the firms in our sample.

3.3 CEO Data

The DAFSA yearbook of French listed firms provides us with the name of the CEO (directeur général or président du directoire) at the head of each of the company in our sample in a given year. To code the education, career, and general background of these CEO, we take each name and use the French editions (1994-1995 and 2000) of the Who's Who. For those CEOs not found in the Who's Who, we use the ENA and Polytechnique Alumni Directories.

The Who's Who in France compiles a list of prominent people in politics, business and entertainment. It is an annual publication, even though there are relatively few updates from one year to the next. For each individual, the Who's Who contains self-reported information on: parent's occupation, place and date of birth, marital status, number of children, education, current position and past career profile. The information on past career is in general quite extensive, tracing starting date at a given employer, name of employer (e.g. a firm or a ministry) and position held. Changes in position held at a given employer (and dates at which these changes occur) are also reported.

Using this information, we hand-coded for each CEO the year of entry in the private sector and, when relevant, in the civil service. For positions held in the civil service, we also coded the specific "Corps d'Etat" (such as Inspection des Finances, Conseil d'Etat, etc.), whether the person entered a "Cabinet Ministeriel" (government post) and, if yes, the political orientation (right-wing

⁶Apart from 1988, parliamentary elections are held in France using a two-round majority system. The second round gathers all candidates that passed a threshold of 12.5% of votes in the first one. The second round generally takes place two weeks after the first round.

or left-wing) of the government the CEO served under. When a person had multiple such cabinet jobs, we selected the highest position that was attained. Finally, we coded the year of exit of the civil service for those CEOs that held public sector jobs. We also used Who's Who information to compile, for each CEO, tenure at the current firm and tenure as CEO of the current firm.

We were able to retrieve such Who's Who information for a little more than 50% of the CEOs in our sample. For those CEOs that were not found in the Who's Who, we relied on recent directories of all Polytechnique (2001) and ENA alumni (2002-2003) to assess whether these CEOs had attended any of these two schools. These directories, while they do not provide information on the socio-economic background of the CEO, do report some information on career path. More precisely, based on these directories, we can code whether a given CEO held a public sector job or not and, if yes, in which "Corps d'Etat." Because these directories are exhaustive, we can track with very limited measurement error whether any given CEO in our sample (whether or not that CEO is in the "Who's Who") is a former ENA or Polytechnique graduates. Also, because the vast majority of CEOs that were former civil servants went through ENA or Ecole Polytechnique, we can also track with limited measurement error whether any given CEO in our sample was a former civil servant and/or held a government post.

4 Descriptive Statistics: Who Manages French Listed Firms?

Table 1 reports summary statistics on CEO educational and political background for the firms in our sample. Seven percent of the CEOS in our sample attended ENA and another 11% attended Ecole Polytechnique. As column 2 shows, the CEOs trained at these Grandes Ecoles head the largest firms in our sample. More than 90% of the assets listed on the French stockmarkets over the period under study are managed by graduates of ENA or Ecole Polytechnique. Eleven percent of the CEOs in our sample had some prior work experience in the French public sector. These ex-public servants control more than 60% of the assets in our sample.

The statistics in the second panel of Table 1 confirm that there is a strong overlap between past experience in the public sector and having attended ENA or Ecole Polytechnique. Close to 95 percent of the CEOs that are former civil servants are also graduates of either ENA or Ecole Polytechnique. Half of the former civil servants are also former cabinet members. About two-

thirds of these can be linked back to a right-wing administration; the remaining third were involved in a left-wing government.

Also, as discussed earlier, an analysis of trends over the 1990s shows that, in spite of a vigorous process of privatization and deregulation in all sectors of the economy during that period, civil servants remain prevalent in the French top executive ranks in the early 2000s. Figure 2 computes the change in the share of listed assets controlled by CEOs from various backgrounds. This trend analysis shows that former civil servants with pure administrative background - ENA graduates, mostly member of the top Corps d'Etats - control a growing share of assets over the period under study.

Table 1 also highlights that the allocation to firms of CEOs with these educational and political background characteristics is not random. As we already indicated, the CEOs that attended one of these Grandes Ecoles or spent some time in the public sector or government manage larger firms on average. As column 3 shows, and as expected based on our discussion in Section 2, they are also more likely to be heading firms that were previously state-owned. Finally, there is evidence of non-random allocation across industrial sectors. For example, there is a relatively high fraction of former civil servants at the head of financial firms.⁷

5 Results

5.1 CEOs' Background and Firm Performance

We start our investigation of the possible real effects of CEO political background on corporate decisions with a simple correlation analysis: is there any systematic relationship between a CEO's past public sector experience and the performance of the firm this CEO heads? Obviously, given the non-random pattern discussed above in the allocation of CEOs with these characteristics to firms, this exercise should *not* be interpreted as a way to assess any causal relationship but instead as an informative first step.

We use return on assets (ROA) as a measure of accounting performance. We present our results for all firms in the sample, as well as for a sub-sample that excludes firms in the finance, insurance and real estate (FIRE) sectors of the economy, as we do not expect ROA to be a precise measure

⁷This in part related to the previously discussed pattern as a large fraction of these financial firms were formally state-owned.

of performance for these firms. Under Model 1 (columns 1 and 2 of Table 2), we simply regress firm ROA on CEO characteristics, controlling only for year fixed effects. Under Models 2 and 3, we further control for the firm characteristics that have been identified in Table 1 as relevant determinants of the allocation of politically connected CEOs across firms. In Model 2, we add as control variables 2-digit industry dummies, the logarithm of the firm's total assets and a dummy variable for whether the firm is listed on the "Premier Marche." In model 3, we further control for whether the firm was previously state-owned.

We first correlate firm performance to whether the CEO is an ENA graduate or not. ENA graduation is associated with about 1.5% lower ROA. Most of this lower performance, however, can be explained by the industry, size and previous state-ownership of the firms that ENA graduates manage. In the second panel, we correlate performance to both ENA graduation and whether the CEO is a former public servant. We find a more robust negative correlation between prior public sector experience and performance, especially in the sub-sample of non-FIRE firms. While this correlation is weakened by the addition of firm characteristics, it stays negative and significant under all estimation models in the sample of non-FIRE firms.

Panel 3 assesses whether the negative correlation between performance and past public sector experience relates to the number of years spent in the public sector. We find that tenure in the public service is negatively correlated with firm performance. P. A longer tenure in the public sector may in part reflect that the CEO had a more successful career in government. In Panel 4, we therefore correlate performance with a dummy variable for past public service experience without cabinet membership, and a dummy variable for cabinet membership. Indeed, the negative correlation between firm performance and public sector experience is mostly driven by those CEOs that were at some point cabinet members. The negative correlation is robust to the addition of firm characteristics for the sub-sample of non-FIRE firms. Non-FIRE firms manage by CEOs that were previously cabinet members have rates of return on assets that are about 2 percent below that of the average firm in their industry, size and former-SOE status category. Finally, Panel 5 separates those CEOs with prior governmental involvement into those that served under a right-wing administration and those that served under a left-wing administration. We find that the

⁸Firms quoted on the "Premier Marche" are typically larger and older. The difference between the "Premier Marche" and "Second Marche" in France is not unlike the difference the NYSE and the NASDAQ in the U.S.

⁹This result is robust to controlling for CEO age.

negative correlation between firm performance and prior cabinet membership is roughly the same on average for "right-wing" and "left-wing" CEOs.

In summary, the results in Table 2 suggest an overall negative correlation between firm performance and the political-connectedness of the CEO. Obviously, as we discussed earlier and found some evidence for in Table 2, this negative correlation might in part reflect the sorting of connected CEOs into lower-performing industries and previously state-owned firms. To the extent that we cannot control for all the performance-relevant firm characteristics, the negative correlations estimated in Table 1 cannot be regarded as causal. However, it is still interesting to contrast this negative correlation with results in earlier papers that have tried to measure the performance effects of the firm-politics networks. For example, both Fisman (2000) and Faccio et al. (2003) find evidence of positive effects on stock market valuation for firms that are politically connected. This difference suggests that the net benefit from connections might be lower in France.

5.1.1 CEOs' Background, Firm Performance and Politically Contested Areas

Table 3 reexamines the correlation between CEOs' political background and firm performance. However, in this table, we try to start establishing whether the political connections of CEOs can explain the negative correlation observed in Table 2. More specifically, we conjecture that politically motivated distortions in corporate decisions may be stronger in areas that are politically more contested. If connected CEOs bestow favors on incumbent politicians to help their reelection chances, these efforts should be more concentrated in areas where reelection chances are more tenuous. For that purpose, we compute the fraction of a firm's total employment that is located in politically contested departements. We define a departement as contested if it experienced more than two changes in political majority over the period under study. We then ask whether the negative correlation between CEOs' political background and firm performance is especially pronounced for those firms that have a large fraction of their total employment in contested areas.

Columns 1 and 2 of Table 3 replicate the negative performance correlation already observed in Table 2, respectively in the full sample and in the sub-sample of non-FIRE firms. In columns 3 and 4 of Table 3, we regress firm ROA on year and industry effects, the logarithm of the firm's total assets, a dummy variable for whether the firm was formally state-owned, a dummy for whether the

¹⁰Alternative regressions that control for firm fixed effects deliver very noisy results, likely due to the limited amount of managerial turnover in our 13-year panel.

firm's CEO is a former cabinet member, the fraction of the firm's employment that is located in politically unstable departements and the interaction of these last two variables. Given the non-random sorting of CEOs across industries, we also allow for interaction effects between industry categories and the fraction of firm's employment in contested areas. Column 3 uses the full sample of firms, while column 4 focuses on non-FIRE firms. The variable of interest, the interaction between CEO political connection and the fraction of employment in contested areas, is negative in both regressions, but only statistically significant in the full sample (column 3). The magnitude of the effect is economically not trivial. An increase in the fraction of a firm's employment in contested areas from 0% to 50% is associated with a 1% decrease in ROA.

The regressions in columns 5 and 6 additionally allow for an interaction effect between the former state-owned status of a firm and the fraction of the firm's employment in politically contested areas. Again, this should help account for the non-random allocation of CEO types across firms observed in Table 1. Interestingly, the addition of the interaction term makes our main result both statistically and economically stronger. In both columns 5 and 6 (full sample and non-FIRE sample, respectively), we find a statistically significant and negative effect on the interaction term between the political background of the CEO and the fraction of the firm's employment in contested departements. The estimated effect indicates that an increase in the fraction of a firm's employment in contested areas from 0% to 50% is associated with about a 2% decrease in ROA.

In summary, the findings in Table 3 suggest the negative correlation between CEOs' political background and performance is stronger when the firms managed by these CEOs operate mostly in politically contested areas. One concern about the regressions in Table 3 is that the higher likelihood of party turnover in a department may be correlated with other department-level characteristics, which may also create heterogeneity in performance within the set of firms that are managed by politically connected CEOs. In complementary analysis not reported here, we have examined the determinants of party turnover at the department level. The most robust correlate we found is a department's size. Larger departments have on average more party turnover. Based on this finding, we replicated the regressions in Table 3 adding interaction terms between all variables of interest (including whether the CEO is a former cabinet member) and the fraction of the firm's employment that is in departments of above median size. Our main result, i.e. that firms with politically connected CEOs perform especially poorly if located in politically contested areas, was

qualitatively unaffected. In fact, this effect became in most regressions both economically and statistically more significant.

5.2 CEOs' Background and Firm-level Employment Decisions

What could be the possible sources of lower performance among connected firms, especially in politically contested areas, i.e. areas with higher turnover of majority political parties? If this is indeed the result of politically motivated decisions by connected CEOs, what corporate decisions are more likely to be altered to achieve political objectives?

The political business cycle literature has shown that voters appear to hold incumbent politicians accountable for aggregate economic performance. Often incumbents even attribute developments at the local (or country) level to incumbent candidates, even when they had no control over the events, such as weather patterns or world business cycles. One major economic indicator that is of special interest to voters in most European countries such as France is employment. From a wide range of anecdotal evidence, we find that job security and employment issues are one of the central concerns to the French electorate. Our tests in the following analyses rely on the idea that positive news about new jobs or plant creations will benefit the reelection chances of the incumbent, while negative news such as plant closures or large layoffs hurt the incumbent party's prospects.

We start in Table 4 by replicating the analysis in Table 3 but using the logarithm of the firm's total employment as the dependent variable. Importantly, all the regressions in Table 4 also control for the logarithm of the firm's total assets. The first two columns of Table 4 show that firms managed by CEOs who were former cabinet members are on average more labor-intensive. While this positive correlation is interesting, again, we have to be cautious that the results might driven by selection bias, since connected CEOs might be sorted into labor intensive firms. More relevant for our hypothesis are the results in the last four columns of Table 4, where we include an interaction term between the political background of the CEO and the fraction of firms employment located in politically contested departements. In all of these regressions, the estimated coefficients on this

¹¹In regressions not reported here, we directly investigated whether such political business cycles are indeed present in France in the department-level legislative elections. We regressed a dummy variable for whether or not the incumbent party was re-elected on the change in unemployment between two years prior to the election and one year prior to the election. While the estimated coefficient was somewhat noisily estimated, we found that the likelihood of incumbent's re-election dropped if the unemployment rate in the department increased.

¹²We obtain similar results when we use the ratio of the firm's total assets to total employment as an alternative dependent variable.

interaction term are positive and statistically significant. This indicates that firms with politically connected CEOs are particularly more labor intensive if they are located in politically contested areas. This evidence is consistent with the hypothesis that connected CEOs may be more willing to help the reelection chances of an incumbent by increasing employment. Note that in regressions not reported here, we verified that these findings are robust to adding interactions of the main independent variables with the fraction of the firm's total employment located in departements of above median size.

While these aggregate firm-level findings are interesting, our ability to disaggregate firm-level employment by detailed geographic areas allows us to examine more directly whether there are distortions of employment decisions due to political connections of CEOs. We can measure employment creation and destruction, both on the intensive and extensive margin (job creation within firms and new plant creation) for each subsidiary of a firm in our sample at geographically disaggregated levels. We can therefore directly measure whether it is indeed in those politically contested areas that more jobs are being created (or fewer jobs destroyed). As prefaced in Section 3, we implement two different levels of geographic disaggregation: departement-level and city-level.

Another dimension we can exploit to improve our identification strategy is the timing of elections. Given our disaggregated data we can also test whether employment distortions by politically connected CEOs vary over the election cycle. If voters are myopic, as a large literature on voter behavior confirms, we would predict that job (plant) creation should be concentrated in election years while large layoffs (and plant shut downs) should be postponed till after the election. In Table 5, we will analyze whether departement-level employment creation by politically connected CEOs systematically follows such legislative election time cycle. In Table 6, we will investigate the same patterns using *city-level* election cycles.

5.2.1 Departement-level Analysis

In Table 5, we explore whether connected CEOs disproportionately create more jobs around legislative election years. The unit of analysis is at the subsidiary-departement-year level. We construct three different dependent variables. First, we compute annual change in employment for each given subsidiary in each given departement. We define change in employment as employment in year t minus employment in year (t-1), divided by the sum of employment in year t and (t-1). We also

construct two dummy variables that measure employment changes on the extensive margin. We measure whether the subsidiary created any plant in that departement in year t and whether the subsidiary destroyed any plant in that departement in year t. We also experimented with several other measures of employment changes, such as change in levels, dummy variables for large positive changes (more than 50 jobs created) or large negative changes (more than 50 jobs destroyed), number of plants created or numbers of plants destroyed. We found qualitatively similar results for all these measures and therefore only report results for a subset of them.

The explanatory variable of interest in Table 5 is the interaction term between a dummy variable for whether or not the CEO is a former cabinet member and whether the current year is one prior to a legislative election. All regressions in Table 5 control for year and departement fixed effects, as well fixed effects for the subsidiary's industrial sector. All regressions also control for total assets, whether the firm was formally state-owned, and include interaction of these 2 variables with the election time dummy. Finally, standard errors are clustered at the firm-departement level.

In column 1, we find that subsidiaries of politically connected firms create disproportionately more jobs around election times. While we do not find economically or statistically strong evidence that they are also more likely to open new plants at around election times (column 3), it appears that politically connected firms are about 3 percent less likely to destroy plants around those politically-sensitive times (column 5). This last effect is statistically very significant.

In the even columns of Table 5, we estimated these effects separately for CEOs that have previously served under a right-wing administration versus a left-wing administration. Column 2 shows that both those firms with right-wing CEOs and those with left-wing CEOs significantly create more jobs around election times. While we find positive likelihoods of plant creation by both right-wing and left-wing firms around election time, the effect is only statistically significant for left-wing firms (column 4). Finally, only firms that are managed by a CEO that was formerly part of a right-wing cabinet show reduced likelihood of plant destruction around election times.

In summary, the findings in Table 5 suggest that the politically connected CEOs may alter their hiring and firing decisions, as well as their plant closing decisions, around election time. Note that in regressions not reported here, we found similar results when we focus on the subset of non-FIRE firms.

5.2.2 City-level Analysis

We next turn to analyze job creation and destruction patterns at the *city level*, now exploiting city-level politics and municipal elections as a source of variation in "political priorities." Municipal elections play an important role in the political landscape in France. In particular, many decisions that are important for companies are decided at the city level, such as part of corporate taxation and many subsidies.

In parallel with the departement-level analysis above, we construct measures of employment, employment change, plant creation and plant destruction at the subsidiary-city-year level. We also construct a variable that captures whether or not a city is politically contested. We define as "swing" a city that experienced at least one change in political majority over the three municipal elections that occurred between 1980 and 1999. In all regressions in Table 6, we weigh each observation by the fraction of employment that a given firm has in a specific city. The rationale behind this weighting scheme is that it puts more weight on the behavior of larger employers, who are most able to affect aggregate outcomes at the city-level.¹³

In Column 1 of Table 6, we show that politically-connected CEOs create disproportionately more jobs in swing cities. We regress change in employment on a dummy variable for whether the CEO is a former civil servant, a dummy variable for whether the city is a "swing" city and the interaction of these two dummy variables. The regression also includes firm, city and year fixed effects, as well as industry-specific time trends. We find that CEOs who are former civil servants are more likely to create jobs in politically contested cities. The coefficient on the interaction term is 0.11 with a standard error of 0.04.

In column 2 of Table 6, we study job creation patterns by politically-connected CEOs around municipal election time. For that purpose, we again create a dummy variable equal to one in a municipal election year, and zero otherwise. Since city level elections are held every six years, there are only three elections that fall into our sample period: 1989, 1995 and 2001. As in the department-level analysis, we interact this election year dummy with whether the CEO is a former civil servant. The findings in column 2 show that former bureaucrats are more likely to increase employment around election time. The coefficient on the interaction term is 0.24 with a standard

¹³We also repeated the regressions using different weighting schemes (for example counting the number of plants an employer has in a given city) or equal weighting observations. We found results that were qualitatively similar to the ones reported here.

error of $0.11.^{14}$

In column 3, we test whether politically-connected CEOs are *especially* more likely to create jobs in contested cities in municipal election years. The coefficient of interest in that column is the triple interaction term "CEO was Bureaucrat x swing city x election year." The coefficient on this triple interaction term is positive and highly significant. This indicates that politically connected CEOs create jobs especially in areas and time periods that are politically most sensitive. Again, this evidence suggests that connected CEOs may alter their corporate decisions as a way to extend favors to incumbent politicians.

Columns 4 to 6 respectively replicate columns 1 to 3 but use plant creation as a dependent variable. We construct a dummy variable that equals 1 if the subsidiary created a plant in a given city in that year and 0 otherwise. ¹⁵ Again we first look at the interaction between "CEO was bureaucrat x swing city." While the sign on the interaction term is positive, it is not statistically significant. We find in column 5 that former bureaucrats are more likely to open plants around election time, and this effect is somewhat more precisely estimated. Finally, column 6 shows that former bureaucrats are more likely to bunch their plant openings in swing cities around election time. This effect is economically and statistically significant.

Columns 7 to 9 of Table 6 focus on plant destruction. As above, we define a dummy variable that equals 1 if at least one plant as shut down by the subsidiary in that year, and 0 otherwise. Parallel with our findings on plant creation, we find that former bureaucrats are less likely to shut down plants in swing cities (column 7) and are also less likely to close down plants in election years (column 8), even though that last effect is quite noisily estimated. Column 9 shows that firms managed by former bureaucrats have disproportionately few plant shutdowns in swing cities in election years. That last effect is statistically very significant and economically large.

In summary, the results in this section suggest that French listed firms managed by CEOs who are politically connected due to some earlier experience in the public sectors display systematically different hiring and firing patterns over the political election cycle. More specifically, employment decisions at these firms appear to respond to the political cycle, and especially so in areas that are politically more contested. These findings are in line with our hypothesis that politically connected

¹⁴We also repeated this analysis using a dummy for the year before the election (not reported). The results are qualitatively similar but statistically less significant.

¹⁵This estimation does not allow for a model where each city is "at risk" of being picked for plant opening by any firm in any given year.

CEOs in private firms might alter their employment decisions as a way to extend favors to incumbent politicians.

5.3 Do Political Networks Follow Partisan Lines?

The evidence we have put together so far suggest that CEOs that previously spent time in the public sector may receive more pressures from (or at least be more responsive to pressures by) regional political incumbents to alter their employment decisions when the political stakes are highest (election time, swing areas). An additional dimension of political networks that we are interested in is the party affiliation of CEOs. In particular, we ask whether CEOs that previously served in a right-wing cabinet are more likely to change their employment decisions if the political incumbent is right-wing, and vice versa for left-wing CEOs.

A priori, one could imagine that political connections and networks might simply be based on social ties and friendships. The descriptive statistics above show that the majority of former bureaucrats are graduates of ENA. The graduating class of ENA is comprised of a very small group of people who most likely developed strong social ties and friendships during their years in school, whatever their political ideology. Similarly, a CEO who has been part of the government establishment might have better access to the political representatives if they know one another from former assignments in government, independent of party politics. On the other hand, it is possible that the micro-foundations of our prior results on political connections are based on political party affiliations of CEOs. CEOs who are connected to a right-wing party might actively support the reelection efforts of a right-wing candidate by increasing job creation around election years, and vice versa for a left-wing CEO.

Before proceeding, we should note that any evidence for such partisan networks could also be interpreted in at least two different ways. On the one hand, one could interpret any such evidence as indicating that, say, right-wing CEOs are only willing to "help" a right-wing political incumbent as this incumbent shares his political views. Another possible interpretation, however, is that a right-wing CEO may be more likely to know or have previously met a right-wing politician. This would indicate that political networks between a right-wing CEO and right-wing politicians are tighter not because of shared ideology but because of a higher likelihood of having met in the past and maybe befriended one another. The analyses performed below will not allow us to distinguish

between these different interpretations of the partisan networks.

5.3.1 Department-level Analysis

Table 7 displays our first attempt at answering these questions. In that table, we slightly modify the empirical model used in Table 4 to account for the political color of both the departements and CEOs. More specifically, for each firm/year observations in our sample, we construct the fraction of a firm's total employment that is located in "swing" departements that are currently under right-wing and left-wing administrations. This implies breaking down the fraction of employment in swing areas computed for Table 4 into 2 components: the fraction in swing departements with a right-wing incumbent administration and the fraction in swing departements with a left-wing incumbent administration. We then interact these fractions with whether the CEO was formerly part of a right-wing or left-wing cabinet.

All regressions reported in Table 7 control for year and industry effects, as well as firm total assets and whether the firm was previously state-owned. In addition, in columns 3 and 4, we interact the fractions of employment in "swing departements with right-wing incumbents and "swing departements with left-wing incumbents with industry effects and former state-ownership status. Finally, we present our findings for both all firms (columns 1 and 3) as well as the sub-sample of non-FIRE firms (columns 2 and 4).

The findings in Table 7 only provide weak evidence that political networks follow ideological lines. While the estimated coefficients of interest have a sign consistent with a partisan interpretation (for example, a firm run by a right-wing CEO appears to be especially labor intensive when it has a high fraction of jobs in swing areas currently controlled by the right), the statistical significance of these effects is weak and varies quite a lot across specification. The most robust finding appears to be coming from the left-wing spectrum: firms managed by left-wing CEOs appear to have higher employment levels (everything else equal) when a higher fraction of their employment is in swing departements currently controlled by the left-wing parties.

5.3.2 City-level Analysis

In Table 8, we now explore the possibility of partisan networks at the city-level. As mentioned before city-level politics might be especially important for firms, since many economic decisions in

France are decided at the city level. The dependent variables in Table 8 are similar to those in Table 6: employment change, plant creation and plant destruction.

In column 1, we analyze whether right-wing CEOs create more jobs in right-wing cities (measured as the fraction of votes that right-wing parties received in the most recent municipal election) and vice versa for left-wing CEOs. We also include the direct effects for all these interacted variables as regressors, as well as city, firm and year effects. Finally, we also allow differential time trends in employment change by industrial sector. In that regression, we find very little evidence of in support of a partisan interpretation. In fact, we find a negative and significant coefficient on the interaction term for right-wing CEOs is positive but statistically insignificant.

In columns 2 and 3, we respectively restrict the sample to those times or cities where we expect political pressures to be the strongest: election years and swing cities. We find more support for partisan networks in these theoretically relevant sub-samples of the data, especially on the left. In column 2, we condition only on election years; the coefficient on "right-wing CEOs x right-wing areas" is positive but insignificant. The coefficient for "left-wing CEOs x left-wing areas" is also positive and significant. This suggests that left-wing CEOs are more likely to create jobs in an election year if an area has a left-wing incumbent in power. In column 3 we condition only on swing cities. Again, the coefficient on the interaction term "right-wing CEOs x right-wing areas" is positive but not statistically significant. However, the interaction term between left-wing CEO and left-wing area is positive and statistically significant. The fact that we obtain stronger results for left-wing candidates could suggest that employment issues are more important campaign issues for left-wing parties than for right-wing parties. However, we cannot rule out that measurement error reduces the significance of the results for right-wing parties.

In columns 4 through 6 of Table 8, we focus on plant creation as the dependent variable. The results for left-wing CEOs are parallel to the prior results. Left-wing CEOs are more likely to create plants if the incumbent party is left-wing, and these results are stronger when we focus on swing cities and election years. However, surprisingly, we find a lower likelihood of plant creation by right-wing CEOs in right-wing areas. This is true even if we restrict our sample to election years or swing cities. This latter result is somewhat surprising and difficult to reconcile with our model of political favors.

Our findings on plant destruction in the last 3 columns of Table 8 again are hard to reconcile with our model of politically motivated employment policies. We find a *higher* likelihood of plant destruction by former cabinet members in cities that currently share their political color, even around election years or when these cities are politically less stable. We plan to explore the nature of this surprising finding at more length in the future.

In summary, the preliminary evidence we have put together so far only provide weak evidence in support of partisan networks. If any, the more robust findings so far come from left-wing CEOs responding more to election cycles if the incumbent party is left-wing. However, more work is needed to draw any conclusive statement on this specific empirical question.

5.4 Do Politicians Reciprocate the Favors They Received?

Our analysis so far suggests that politically connected CEOs take into account that their hiring and firing decisions can be important in the re-election prospects of an incumbent party. We have put forward the hypothesis that CEOs who have closer ties to a politician may change their employment decisions to help an incumbent get re-elected. The question now is why CEOs might be willing to engage in this type of behavior. On the one hand, we could imagine that connections are based on social ties and friendships between people who share a joint career in politics or a common educational background. As a result, connected CEOs might be willing to help their friends in power without any expectation of "reciprocity." On the other hand, an alternative theory suggests that there is an active and explicit two-way gift exchange between politicians and connected CEOs. CEOs may be willing to distort employment decisions to help an incumbent get reelected in order to received favors or political rents from politicians. A number of prior studies have pointed out that political connections are beneficial to the firms, for example through preferential access to loans or increased willingness to bailout failing companies. See for example recent papers by Dinc (2004) or Faccio et al. (2004).

In this last section of the paper, we ask whether political favors from CEOs to politicians are returned in some way. Two of the most important levers by which government can affect businesses are taxes and subsidies. Therefore, we investigate whether firms run by connected CEOs are relatively more likely to receive tax breaks or get access to subsidies. Obviously, any favors given in the form of personal perks or other non-disclosed benefits would not be captured in

our analysis. Moreover, if the gift exchange extends to acts that are outside our sample period we would not be able to observe this. For example, connected CEOs might have been aided by their connections to obtain their position in the first place. In return, these connected CEOs might be expected to help the re-election of the party that helped them to obtain their current job. Since we do not have data on how someone was selected for their job, we would only be able to see one side of this tradeoff.

We conduct this analysis at the city-level. As discussed earlier, the rationale for this is that a substantial fraction of corporate taxation and subsidy programs are decided at the city-level in France. Unfortunately, however, firms do not report city-level taxes or subsidies. Instead, we only observe this information at the subsidiary-level. Thus, we propose to ask whether subsidiaries that have a larger fraction of their employment in cities where the "political stakes matter more, pay fewer taxes or receive more subsidies. For that purpose, we compute the following measures for each subsidiary and year: fraction of employment in "swing" cities, fraction of employment in cities with right-wing majority and fraction of employment in cities with left-wing majority.¹⁶

5.4.1 Taxes

We first analyze whether firms managed by CEOs who are former bureaucrats pay on average lower taxes. Taxes are measured as the ratio of total tax expenditures over total sales at the subsidiary level.¹⁷

In column 1 of Table 9, we regress subsidiary level taxes per year on a dummy for whether the CEO is a former civil servant or not. We control for firm fixed effects, subsidiary industry fixed effects, and year fixed effects in all regressions. The coefficient on the "former bureaucrat" dummy is negative and significant. In column 2, we further include as a control the fraction of the subsidiary's employment that is located in swing cities. The coefficient on "fraction of employment in swing cities" is positive and highly significant. This result is consistent with our hypothesis: firms in swing cities should receive more transfers from politicians, since as we saw that these are the cities where politically favorable job creation is more frequent.

¹⁶In doing this, we need to keep in mind that any employment that is not located in a city would not be included in this calculation.

¹⁷In the following regressions we will not condition on election years as before, since we believe that firms do not fall prey to the same myopia as voters. Therefore, we conjecture that political rents, if any, will be more evenly distributed over time.

However, the real test of our story is to see if firms managed by connected CEOs have especially lower tax burdens when they are predominantly located in swing cities. If preferential tax treatment is reciprocity for employment policies that help incumbent politicians, connected CEOs should receive more tax breaks in swing cities. We test for this hypothesis in column 3, where we add an interaction term between "former bureaucrat" and fraction of employment in swing cities. The coefficient on the interaction term is insignificant. In other words, we find no evidence that the lower corporate tax rates in swing cities are predominantly enjoyed by politically connected firms. Of course our inability to find significant results here might be partly due to the noisiness of the tax data.

In column 4, we again investigate whether political networks are separated by party affiliation. We include interaction terms between "right-wing CEOs x fraction of employment in right-wing cities" and "left-wing CEOs x fraction of employment in left-wing cities". We find that right-wing CEOs pay lower taxes in right-wing cities and that left-wing CEOs pay lower taxes in left-wing cities, but only the first of these two interaction terms is statistically significant. In column 6 of Table 9, we also include cross-interaction terms for "right-wing CEOs x fraction of employment in left-wing cities" and vice versa. The results in column 6 show that the coefficients on the cross-terms are positive and economically significant. The results are significant for left-wing CEOs in right-wing areas (point estimate of 0.008 and standard error of 0.004), but not significant at traditional level for right-wing CEOs in left-wing areas (point estimate of 0.004 and standard error of 0.003). The results on the same party interactions are still negative and significant for right-wing CEOs and insignificant for left-wing CEOs.

These findings suggest that political party lines may be important in explaining whether firms run by former bureaucrats receive favors from the incumbent city administration. CEOs that were formally part of a right-wing government appear to receive tax breaks in right-wing cities and vice versa for the left. In addition, the results in column 6 indicate that right-wing CEOs may in fact pay relatively more taxes in left-wing cities and vice-versa for left-wing CEOs.

5.4.2 Subsidies

Table 10 replicates the analysis of Table 9 but use subsidies as an alternative dependent variable. We construct a dummy variable that equals 1 if the subsidiary receives any subsidy in that year,

and 0 otherwise. We focus on the extensive margin for this exercise, since we only observe positive subsidies in less than 25% of the subsidiary-year observations in our sample.¹⁸ We use a linear probability model to estimate these relationships.

First, in column 1 we find that firms run by former bureaucrats have a 2% higher likelihood to receive subsidies, everything else equal. This coefficient is statistically significant (standard error of 0.009). More interestingly, column 3 shows that firms run by connected CEOs are more likely to receive subsidies if a high fraction of their employment is located in swing cities. These results suggest that being part of the bureaucratic network helps CEOs to obtain subsidies for their firm, especially when local political incumbents expect more contested elections. These subsidy results are parallel in direction to those on corporate taxes (first three columns of Table 9) but are statistically much stronger.

Finally, in the last columns of Table 10, we differentiate connected CEOs based on the political party they have ties to. In column 5, we interact whether the CEO is connected to a right-wing (left-wing) party with the fraction of employment the subsidiary has in right-wing (left-wing) cities. We find that the coefficients on these interaction terms are positive, but only significant for right-wing CEOs. Hence, subsidiaries managed by right-wing CEOs appear more likely to receive subsidies in right-wing cities. The cross-interaction terms included in column 6 ("right-wing CEOs x fraction of employment in left-wing cities" and vice versa) are statistically insignificant (with positive point estimates). In other words, right-wing CEOs appear to receive preferential access to subsidies in right-wing cities. But there is no evidence that their access to such subsidies in left-wing cities is worse than that of non-connected CEOs. This result is somewhat different from the findings on taxes in Table 9, where we saw that right-wing (left-wing) CEOs pay more taxes if a higher fraction of their employment is in left-wing (right-wing) cities.

Overall the results suggest that politically connected CEOs seem to have better access to corporate subsidies, in particular if they are located in political battle ground areas. This evidence is consistent with the idea that politically connected firms might receive rents in return for aiding politicians in their re-election attempts. However, we find less consistent evidence that this reciprocity follows party lines. If any, there is some evidence that firms managed by right-wing CEOs receive more subsidies if they are located in right-wing areas.

¹⁸We replicated this analysis using actual subsidy amounts (as a fraction of the subsidiary sales). The estimated effects are qualitatively similarly but more noisily estimated.

6 Conclusion

This paper offers an analysis of the networks between political leaders and the business elite in France. While previous research has focused on the advantages firms can get from having connections to politicians, we focus here on the opposite perspective. We investigate whether CEOs of publicly-traded companies that have, through their educational and professional background, ties to the political elite are willing to bestow "economic favors" on politicians to help their re-election chances.

We find that firms managed by such connected CEOs have, if anything, lower rates of return on assets, than those managed by non-connected CEOs. This simple cross-sectional analysis suggests that the net benefits from political connections in France may not be significantly positive to give connected firms an economic advantage above non-connected firms. More directly, we find that connected CEOs create more jobs in election years than in years further away from an election. Similarly, connected CEOs create more jobs in politically less stable areas, and that this is especially so around election years. The opposite holds for plant closures and layoffs. We show that these results hold at the state and the city level and are robust to different measures of employment change. This evidence is consistent with the idea that connected CEOs at private companies take political election cycles into account when making decisions about layoffs and new job creations.

In addition, we analyze whether the connections between CEOs and politicians are purely based on their joint backgrounds in government or even common education, or whether they further follow ideological lines. Our results thus far only provide limited evidence for the importance of such partisan networks in the allocation of economic favors to politicians. The most robust evidence, if any, appears to be coming from the left of the political spectrum.

Lastly, we explore whether the "economic favors" extended by connected CEOs to politicians are in some way reciprocated. We find that firms managed by connected CEOs have on average lower corporate tax payments and receive more subsidies. If this favorable treatment is indeed in return for politically beneficial employment creation, we would expect that connected firms are especially more likely to receive tax breaks (or subsidies) when a high fraction of their employment is located in "swing" areas. The evidence here is somewhat mixed. We find that connected firms in swing cities are more likely to receive subsidies, but we do not find an effect on taxes. However, we find patterns that are consistent with the idea that the favors extended by politicians to connected CEOs

may follow partisan lines: right-wing CEOs tend to pay lower taxes and receive higher subsidies in right-wing cities and vice versa for left-wing CEOs in left-wing cities (though the results are somewhat weaker for the left).

Overall, these results provide first suggestive evidence that the political (and potentially the social) connections between CEOs and politicians factor into important corporate decisions, such as job creation and destruction. Private sector firms managed by connected CEOs appear adjust some their business decisions in ways that are consistent with helping incumbent politicians. We also find some preliminary evidence that could support the interpretation of a two-way gift exchange between politicians and CEOs.

References

- Alesina, Alberto, and Howard Rosenthal, 1995, Partisan Politics, Divided Government, and the Economy, Cambridge University Press: Cambridge, U.K.
- Alesina, Alberto, Nouriel Roubini, and Gerald D. Cohen, 1997, *Political Cycles and the Macroe-conomy*, MIT Press: Cambridge, MA.
- Alesina, Alberto and Jeffrey Sachs, 1988, "Political Parties and the Business Cycle in the United States 1948-1984, Journal of Money, Credit, and Banking, vol 20, 63-82.
- Bauer, Michel and B. Bertin-Mourot, 1997, "La Tyrannie du Diplome Initial et La Circulation des Elites: La Stabilit du Modele Franais, in Mendras and Suleiman eds., Le Recrutement des Elites en Europe, La Decouverte: Paris, France.
- Bertrand, Marianne, Antoinette Schoar and David Thesmar, 2004, "Banking Deregulation and Industry Structure: Evidence From the French Banking Reforms of 1985, CEPR Discussion Paper No. 4488.
- Cassis, Youssef, 1991, Big Business in Europe, Oxford University Press: Oxford, U.K.
- Frank, Kenneth, and J. Yasumoto, 1998, "Linking Action to Social Structure in the System: Social Capital Within and Between Subgroups, American Journal of Sociology, vol 104 (3), 642-686.
- Dinc, Serdar, 2004, "Political Influence on Government-Owned Banks in Emerging Countries, Unpublished Working Paper.
- Faccio, Mara, Ronald W. Masulis and John J McConnell, 2004, "Political Connections and Government Bailouts, Unpublished Working Paper.
- Fisman, Raymond, 2001, "Estimating the Value of Political Connections, American Economic Review, vol 91, 1095-1102.
- Garrigues, Jean, 2002, Les Patrons et la Politique: De Schneider a Seilliere, Editions Perrin: Paris, France.
- Johnson, Simon and Todd Mitten, 2003, "Cronyism and Capital Controls: Evidence from Malaysia, Journal of Financial Economics.
- Kadushin, Charles, 1995, "Friendship Among the French Financial Elite, American Sociological Review, vol 60 (2), 202-221.
- Khwaja, Assim and Atif Mian, 2004, "Corruption and Politicians: Rent seeking in an Emerging Financial Market, Unpublished Working Paper.
- Melitz, Jacques, 1990, "Financial Deregulation in France, European Economic Review, vol 34, 394-402.
- Nordhaus, William, 1975, "The Political Business Cycle, Review of Economic Studies, vol 42, 169-190.
- Sapienza, Paola, 2003, "The Effects of Government Ownership on Bank Lending, *Journal of Financial Economics*.

- Shleifer, Andrei and Robert W. Vishny, 1994, "Politicians and Firms, *The Quarterly Journal of Economics*.
- Shleifer, Andrei and Robert W. Vishny, 1993, "Corruption, The Quarterly Journal of Economics.
- Sraer, David and David Thesmar, 2004, "Performance and Behavior of Family Firms: Evidence From the French Stockmarket, CEPR Discussion Paper No. 4520.
- Suleiman, Ezra, 1997, "Les Elites de l' Administration et de la Politique dans la France de la V Republique: Homogeneite, Puissance, Permanence, in Mendras and Suleiman eds., Le Recrutement des Elites en Europe, La Decouverte: Paris, France.
- Swartz, David, 1986, "French Corporate Leadership: A Class Based Technocracy, Research in Political Sociology, vol 2, 49-79.
- Wolfers, Justin, 2002, "Are Voters Rational? Evidence from Gubernatorial Elections, Research Paper No. 1730, Stanford University.

Table 1: Descriptive Statistics on French CEOs: 1989-2003

	(1)	(2)	(3)	(4)	(5)
	Fraction	Fraction	Fraction	Fraction	Fraction
_	Firms	Assets	Old SOEs	Manuf.	Finance
All CEOs					
ENA Graduates	0.07	0.52	0.18	0.04	0.13
Polytechnique Graduates	0.11	0.41	0.23	0.12	0.10
Former Bureaucrats	0.11	0.63	0.30	0.10	0.15
Obs.	11,567	7,795	1,645	3,328	2,080
Former Bureaucrats					
ENA Graduates	0.54	0.79	0.55	0.32	0.78
Polytechnique Graduates	0.39	0.43	0.44	0.58	0.25
Tenure in the Civil Service	12.2	15.8	12.7	9.6	15.0
Former Cabinet Member	0.50	0.80	0.50	0.42	0.53
of which					
Right Wing Government	0.37	0.54	0.36	0.33	0.41
Left Wing Government	0.14	0.25	0.16	0.09	0.13
Obs.	1,289	902	501	247	308

Sources: DAFSA directory of corporations listed on the French stockmarkets 1989-2003, supplemented with CEO level information using the 1994 and 2000 issues of the Who's Who in France, and from alumni directories of the Ecole Polytechnique and the Ecole Nationale d'Administration (ENA). Note: This table provides the fraction of each category of CEO in the sample of listed firms. Column 1 reports unweighted fractions. Column 2 reports the asset-weighted fractions. Column 3 reports unweighted fractions among formerly state-owned firms. Column 4 reports unweighted fractions among manufacturing firms. Column 5 reports unweighted fractions among financial firms.

Sample in Panel 1 is all CEOs of firms listed on French stock exchanges over the period 1989-2003. Sample in Panel 2 is the subset of those CEOS that are former bureaucrats.

Table 1(Cont'd): Descriptive Statistics on French Listed Firms and their CEOs: 1989-2003

	Mean	Std Dev.	Obs.
Firm level characteristics			
Total Assets (bn euros)	4.5	40.1	7,795
Total Employment (000's)	9.8	28.2	6,299
Leverage	0.56	0.26	6,929
ROA	0.07	0.08	6,834
Premier Marche Listing	0.59		8,021
Finance / Real Estate	0.26		10,096
Manufacturing	0.32		10,096
CEO level characteristics			
CEO in the Who's Who	0.51		11,567
CEO age (years)	56.6	8.8	5,917

Sources: DAFSA directory of corporations listed on the French stockmarkets 1989-2003 (for accounting data), supplemented with CEO level information using the 1994 and 2000 issues of the Who's Who in France, and from alumni directories of the Ecole Polytechnique and the Ecole Nationale d'Administration (ENA). Note: This table provides summary statistics for our panel of firms and for their CEOs. Leverage is the ratio of financial debt to financial debt and equity (which includes retained earnings). ROA is the ratio of operating profit (net of amortization and depreciation) to net assets. "Premier Marche" is an indicator variable for firms listed on the "Premier Marche" (higher trading-volume firms).

Table 2: Performance of Firms Managed by Former Bureaucrats

	Model 1		Model 2		Model 3	
	All	Real	All	Real	All	Non Real
CEO is ENA Graduate	-0.014	-0.015	0.001	-0.005	0.002	-0.006
	(0.008)	(0.009)	(0.007)	(0.009)	(0.007)	(0.009)
CEO is ENA Graduate	0.000	0.002	0.006	0.002	0.005	0.002
	(0.008)	(0.009)	(0.007)	(0.009)	(0.007)	(0.009)
CEO was Bureaucrat	-0.017	-0.020	-0.005	-0.010	-0.005	-0.012
	(0.004)	(0.005)	(0.004)	(0.005)	(0.005)	(0.005)
CEO was Bureaucrat	-0.006	-0.009	0.002	0.000	0.003	-0.001
	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)
Tenure in Bureaucracy	-0.011	-0.012	-0.005	-0.011	-0.006	0.011
(in decades)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
CEO was Bureaucrat	-0.015	-0.018	-0.001	-0.008	-0.001	-0.009
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)
Left Bureaucracy after	-0.016	-0.015	-0.017	-0.017	-0.017	-0.017
Political Turnover	(0.009)	(0.009)	(0.007)	(0.009)	(0.008)	(0.009)
CEO was Bureaucrat,	-0.011	-0.012	-0.000	-0.003	0.000	-0.004
not Cabinet Memb.	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)
CEO was Cabinet Memb.	-0.023	-0.029	-0.007	-0.019	-0.007	-0.020
	(0.006)	(0.005)	(0.006)	(0.005)	(0.006)	(0.005)
CEO was Bureaucrat,	-0.010	-0.010	-0.000	-0.002	0.000	-0.003
not Cabinet Memb.	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)
CEO was Cabinet Memb.:	-0.022	-0.030	-0.006	-0.019	-0.006	-0.020
Right Wing	(0.006)	(0.005)	(0.007)	(0.005)	(0.007)	(0.005)
CEO was Cabinet Memb.:	-0.024	-0.027	-0.010	-0.016	-0.009	-0.018
Left Wing	(0.009)	(0.009)	(0.007)	(0.010)	(0.007)	(0.010)
Observations	6,816	5,836	6,212	5,534	5,977	5,319

Sources: DAFSA directory of corporations listed on the French stockmarkets 1989-2003 (for accounting data), supplemented with CEO level information using the 1994 and 2000 issues of the Who's Who in France, and from alumni directories of the Ecole Polytechnique and the Ecole Nationale d'Administration (ENA). Note: This table reports results of regressions of firm performance on CEO characteristics, focusing on education and career in the civil service. The dependent variable is Return on Assets (ROA). The CEO characteristics under study are reported for each regression. Models 1, 2 and 3 vary with respect to the list of (non-reported) additional controls. Model 1 only controls for year dummies; Model 2 further controls for industry dummies, log of firm assets and listing on the "Premier Marche," Model 3 further controls for whether the firm was formerly state owned. Each model is estimated both on the whole sample of listed firms and on the sub-sample of non-financial / non-real estate firms ("real"). Standard errors are in parentheses

and are corrected for clustering of the error term at the CEO level.

Table 3: Do Firms Managed by Former Cabinet Members Perform Worse If Located in Politically Unstable Areas?

	Model 1		Mod	Model 2		Model 3	
	All	Real	All	Real	All	Real	
CEO was Cabinet Memb.	-0.011 (0.005)	-0.011 (0.006)	-0.001 (0.008)	-0.005 (0.009)	0.007 (0.008)	$0.005 \\ (0.009)$	
Fraction of Empl. in Swing Depts			-0.001 (0.006)	-0.001 (0.006)	0.002 (0.014)	0.002 (0.015)	
CEO was Cabinet Memb. x Fraction of Empl. in Swing Depts			-0.024 (0.014)	-0.017 (0.015)	-0.042 (0.014)	-0.039 (0.015)	
Log(Assets)	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)	
Former SOE	-0.008 (0.006)	-0.006 (0.008)	-0.008 (0.007)	-0.006 (0.008)	-0.024 (0.013)	-0.024 (0.015)	
Former SOE x Fraction of Empl. in Swing Depts				·	0.036 (0.024)	0.041 (0.027)	
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes	
Industry Effects x Fraction of Empl.	No	No	No	No	Yes	Yes	
In Swing Depts Year Effects	Yes	Yes	Yes	Yes	Yes	Yes	
Obs.	4,360	4,061	4,205	3,950	4,205	3,950	

Sources: DAFSA directory of corporations listed on the French stockmarkets 1989-2003 (for accounting data), supplemented with CEO level information using the 1994 and 2000 issues of the Who's Who in France, and from alumni directories of the Ecole Polytechnique and the Ecole Nationale d'Administration (ENA). The share of group employment in each departement is computed using the LIFI survey on group structure from the French statistical office (INSEE) and the SIREN database, which provides the breakdown of plant employment into establishments, available for every year between 1989 and 2002. Note: The dependent variable is Return on Assets (ROA). Model 1 looks at the direct correlation between ROA and whether the CEO is a former cabinet member. Model 2 looks at how this correlation varies depending on the fraction of the firm's total employment that is in politically unstable departments (defined as departments with more than 2 changes in political majority over the period under study). Model 3 further allows for SOE

and industry effects to vary depending on the fraction of the firm's total employment that is in politically unstable departments. Each model is estimated both on the whole sample and on the sub-sample of non-financial / non-real estate (real) firms. Standard errors are in parentheses and are corrected for clustering of the error term at the firm-level.

Table 4: Are Firms Managed by Former Cabinet Members More Labor-Intensive If Located in Politically Unstable Areas?

	Mod	iel 1	Mod	del 2	Mod	del 3
	All	Real	All	Real	All	Real
CEO was Cabinet Memb.	$0.64 \\ (0.34)$	0.53 (0.39)	-1.04 (0.63)	-1.63 (0.68)	-0.55 (0.53)	-1.03 (0.57)
Fraction of Empl. in Swing Depts		٠	1.11 (0.21)	1.07 (0.22)	0.93 (0.60)	0.93 (0.60)
CEO was Cabinet Memb. x Fraction of Empl. in Swing Depts			3.46 (1.13)	4.44 (1.26)	2.27 (1.00)	3.10 (1.12)
Log(Assets)	0.52 (0.03)	0.54 (0.38)	0.54 (0.03)	$0.55 \\ (0.04)$	0.54 (0.03)	$0.55 \\ (0.04)$
Former SOE	0.62 (0.24)	$0.63 \\ (0.27)$	$0.60 \\ (0.22)$	$0.62 \\ (0.25)$	0.24 (0.39)	$0.35 \\ (0.47)$
Former SOE x Fraction of Empl. in Swing Depts					-0.92 (0.63)	$0.64 \\ (0.76)$
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry Effects x Fraction of Empl. in Swing Depts	No	No	No	No	Yes	Yes
Year Effects	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	4,963	4,485	4,963	4,485	4,963	4,485

Sources: DAFSA directory of corporations listed on the French stockmarkets 1989-2003 (for accounting data), supplemented with CEO level information using the 1994 and 2000 issues of the Who's Who in France, and from alumni directories of the Ecole Polytechnique and the Ecole Nationale d'Administration (ENA). The share of group employment in each departement is computed using the LIFI survey on group structure from the French statistical office (INSEE) and the SIREN database, which provides the breakdown of plant employment into establishments, available for every year between 1989 and 2002. Note: The dependent variable is Log(employment). Model 1 looks at the correlation between firm employment and whether the firm's CEO is a former cabinet member. Model 2 looks at how this correlation varies depending on the fraction of the firm's total employment that is in politically unstable departments (defined as departments with more than 2 changes in political majority over the period under study). Model 3 further allows for SOE

and industry effects to vary depending on the fraction of the firm's total employment that is in politically unstable departments. Each model is estimated both on the whole sample and on the sub-sample of non-financial / non-real estate firms ("real"). Standard errors are in parentheses and are corrected for clustering of the error term at the firm-level.

Table 5: Are Firms Managed by Former Bureaucrats Creating More Jobs Around Election Time?

Department-Level Analysis

Dependent Variable	E	Empl. Change			Plants Created			Plants Destruction		
CEO was Bureaucrat x Election Year	.106 (.020)	•		.005 (.004)		٠	034 (.004)		•	
CEO was Cabinet x Election Year	•	.106 (.022)		•	.010 (.004)	•		030 (.004)	•	
CEO was RW Cab. x Election Year			.121 (.024)			.008 (.005)	•		031 (.004)	
CEO was LW Cab. x Election Year	٠	•	.050 (.034)			.016 (.007)	٠		004 (.007)	
SOE F.E.?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
SOE x Election Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Log(Firm Assets)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Log(Firm Assets) x Election Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Dept. F.E.? Subs. Industry F.E.?	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	
Obs	222723	222723	222723	264088	264088	264088	264088	264088	264088	

Sources: Each observation in the present dataset corresponds to a subsidiary in a given departement in a given year. DAFSA directory of corporations listed on the French stockmarkets 1989-2003, 1994 and 2000 issues of the Who's Who in France. Subsidiary level information is obtained through the Financial Relation Survey (LIFI) on group structure from the French statistical office (INSEE) and Tax files (Bnfices Rels Normaux, also from INSEE) for accounting information. For each subsidiary, plant level job numbers and locations is obtained from the SIREN database (INSEE). Political information at the departement level is obtained from the ministry of interior. Note that in this dataset, while employment may vary across departement for a given subsidiary, accounting variables, like sales, are provided by tax files at the subsidiary level, and hence do not vary across departement within a single subsidiary. Legislative election years were 1989,1993,1997 and 2002. Note: "Employment Change" is defined as: change in subsidiary employment in a given department between t and t-1, divided by half the sum of subsidiary employment in that department in t plus t-1. "Plants Created" and "Plants Destroyed" are defined as dummy variables that equal 1 if at least one plant was created or destroyed by the subsidiary in a given department and a given year, respectively.

"Election Year" is an indicator variable that equals 1 if the year is a department-level election year or one year prior, 0 otherwise. "Swing Dpt" is an indicator variable that equals 1 if the department where the jobs are located experienced more than 2 changes in political majority over the sample period, 0 otherwise. "RW" stands for "right-wing"; "LW" stands for "left-wing." Also included in each regression is the direct effect of the CEO characteristic under study. Standard errors are in parentheses and are corrected for clustering of the error term at the firm-department level.

Table 6: Are Firms Managed by Former Bureaucrats Creating More Jobs Around Election Time?

City-Level Analysis

Dependent Variable	Employment Change			Pl	ants Crea	ted	Plants Destroyed		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CEO was Bureaucrat x Swing City	0.011 (0.004)		-0.021 (0.027)	$0.005 \\ (0.007)$		0.032 (0.013)	-0.078 (0.040)		0.001 (0.014)
CEO was Bureaucrat x Election Year		0.024 (0.011)	0.018 (0.041)		0.136 (0.069)	0.046 (0.031)		-0.045 (0.020)	$0.05 \\ (0.024)$
CEO was Bureaucrat x Swing City x Election Year			0.116 (0.047)			0.032 (0.014)			-0.066 (0.004)
Swing City x Election Year			-0.041 (0.130)			-0.029 (0.011)			0.0032 (0.014)
Industry Trends? Firm F.E.? City F.E.? Year F.E.? Obs	Yes Yes Yes Yes 261598	Yes Yes Yes Yes 261598	Yes Yes Yes Yes 261598	Yes Yes Yes Yes 344240	Yes Yes Yes Yes 344240	Yes Yes Yes Yes 344240	Yes Yes Yes Yes 344240	Yes Yes Yes Yes 344240	Yes Yes Yes Yes 344240

Sources: Each observation in the dataset corresponds to a subsidiary in a given city in a given year. DAFSA directory of corporations listed on the French stockmarkets 1989-2003, 1994 and 2000 issues of the Who's Who in France. Subsidiary level information is obtained through the Financial Relation Survey (LIFI) on group structure from the French statistical office (INSEE) and Tax files (Bnfices Rels Normaux, also from INSEE) for accounting information. For each subsidiary, plant level job numbers and locations is obtained from the SIREN database (INSEE). Political information at the city level is obtained from the Ministry of Interior. Note that in this dataset, while employment may vary across cities for a given subsidiary, accounting variables, like sales, are provided by tax files at the subsidiary level, and hence do not vary across cities within a single subsidiary. Note: "Employment Change" is defined as: change in subsidiary employment in a given city between t and t-1, divided by half the sum of subsidiary employment in that city in t plus t-1. "Plants Created" and "Plants Destroyed" are defined as the number of plants that are started or shut down by a firm in a given city, respectively. "Election Year" is an indicator variable that equals 1 if the year is a city-level election year, 0 otherwise. The election years at the city level are 1989, 1995 and 2001 in our sample period. "Swing City" is an indicator variable that equals 1 if the city where jobs are located experienced at least one change in political majority over the sample period, 0 otherwise. (About 30% of the cities in the sample had no change in political majority over the period). All observations are weighted by the fraction of the firm's employment in total city employment. Also included in each regression is the direct effect of the CEO characteristic under study. Standard errors are in parentheses and are corrected for clustering of the error term at the firm-level.

Table 7: Are Firms Managed by Former Cabinet Members More Labor-Intensive if Located in Politically Unstable Areas Currently Under Control of CEO's Former Party?

		del 1	Model 2		
	All	Real	All	Real	
RW CEO x	1.06	1.51	.22	.89	
Fraction of Empl.	(.56)	(.72)	(.50)	(.60)	
in RW Swing Depts	, ,	, ,	,	, ,	
LW CEO x	.66	1.67	.71	1.63	
Fraction of Empl.	(.99)	(1.37)	(.81)	(1.06)	
in LW Swing Depts	, ,	, ,	, ,	, ,	
Fraction of Empl.	Yes	Yes	Yes	Yes	
in RW Swing Depts					
Fraction of Empl.	Yes	Yes	Yes	Yes	
in LW Swing Depts					
Log(Assets)	Yes	Yes	Yes	Yes	
Former SOE	Yes	Yes	Yes	Yes	
Former SOE x	No	No	Yes	Yes	
Fraction of Empl.					
in RW Swing Depts					
Former SOE x	No	No	Yes	Yes	
Fraction of Empl.					
in LW Swing Depts					
Industry Effects	Yes	Yes	Yes	Yes	
Industry Effects x	No	No	Yes	Yes	
Fraction of Empl.					
in RW Swing Depts					
Industry Effects x	No	No	Yes	Yes	
Fraction of Empl.					
in LW Swing Depts					
Year Effects	Yes	Yes	Yes	Yes	
Obs.	4992	4408	4992	4408	

Sources: DAFSA directory of corporations listed on the French stockmarkets 1989-2003 (for accounting data), supplemented with CEO level information using the 1994 and 2000 issues of the Who's Who in France, and from alumni directories of the Ecole Polytechnique and the Ecole Nationale d'Administration (ENA). The share of group employment in each departement is computed using the LIFI survey on group structure from the French statistical office (INSEE) and the SIREN database, which provides the breakdown of plant employment into establishments, available for every year between 1989 and 2002. Note: The dependent variable is Log(employment). "Fraction of Employment in RW (LW) Swing Depts" is the fraction of total firm employment that is located in politically unstable department with RW (LW) majority in latest election. Each regression includes "CEO was RW cabinet member" and "CEO was left-wing cabinet" as controls. Each model is estimated both on the whole sample and on the sub-sample of non-financial / non-real estate firms

("real"). Standard errors are in parentheses and are corrected for clustering of the error term at the firm-level.

Table 8: Is Employment Creation by Former Bureaucrats Sensitive to Ideology?

City-Level Analysis

Dependent Variable	Change in Employment		Plants Created			Plants Destroyed			
Sample	All	Elec. Years	Swing Cities	All	Elec. Years	Swing Cities	All	Elec. Years	Swing Cities
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
RW CEO x	-0.059	0.001	0.035	-0.051	-0.025	- 0.071	0.033	0.104	0.035
Frac. RW Votes	(0.023)	(0.040)	(0.027)	(0.015)	(0.034)	(0.024)	(0.024)	(0.087)	(0.035)
LW CEO x	0.031	0.186	0.134	0.053	0.065	0.159	0.051	0.164	0.073
Frac. LW Votes	(0.020)	(0.091)	(0.023)	(0.021)	(0.040)	(0.061)	(0.022)	(0.053)	(0.060)
Industry Trends?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Obs	261501	43928	192683	344240	62159	266208	344240	62159	266208

Sources: Each observation in the present dataset corresponds to a subsidiary in a given city in a given year. DAFSA directory of corporations listed on the French stockmarkets 1989-2003, 1994 and 2000 issues of the Who's Who in France. Subsidiary level information is obtained through the Financial Relation Survey (LIFI) on group structure from the French statistical office (INSEE) and Tax files (Bnfices Rels Normaux, also from INSEE) for accounting information. For each subsidiary, plant level job numbers and locations is obtained from the SIREN database (INSEE). Political information at the city level is obtained from the Ministry of Interior. Note: "Employment Change" is defined as: change in subsidiary employment in a given city between t and t-1, divided by half the sum of subsidiary employment in that city in t plus t-1. "Plants Created" and "Plants Destroyed" are defined as the number of plants that are started or shut down by a subsidiary in a given city, respectively. "RW CEO" is a dummy if a CEO formerly was a cabinet member in a right-wing department. "LW CEO" is a dummy if a CEO formerly was a cabinet member in a left-wing department. "Frac. RW (LW) Votes" is the fraction of voters that voted for a right-wing (left-wing) party in the most recent municipal elections. All observations are weighted by the fraction of the firm's employment in total city employment. Standard errors are in parentheses and are corrected for clustering of the error term at the firm-level. Direct effects for "CEO was RW/LW Cab. Member" and "City Fraction RW/LW Votes" are included in each regression.

Table 9: Do Firms Managed by Former Bureaucrats Pay Lower Taxes? City-level Analysis

Dependent Variable			Tames at the	Subsidiary Lev	o1	
Дерепает variaoie	(1)	(2)	(3)	(4)	(5)	(6)
CEO was Bureaucrat	-0.002 (0.001)	-0.103 (0.001)	-0.003 (0.002)	·		
Frac. Emp. in Swing Cities		-0.013 (0.003)	-0.014 (0.002)			
CEO was Bureaucrat x Fract. Emp. in Swing Cities			0.002 (0.003)			
RW CEO				-0.002 (0.001)	-0.001 (0.002)	-0.002 (0.002)
LW CEO				-0.005 (0.003)	-0.006 (0.003)	-0.008 (0.003)
Frac. Emp. in RW Cities		·	·	-0.009 (0.001)	-0.007 (0.002)	-0.007 (0.002)
Frac. Emp. in LW Cities			·	-0.009 (0.001)	-0.009 (0.001)	-0.010 (0.002)
RW CEO x Frac. Emp. in RW Cities					-0.005 . (0.002)	-0.004 (0.002)
LW CEO x Frac. Emp. in LW Cities		·			-0.003 (0.002)	-0.003 (0.03)
RW CEO x Frac. Emp. in LW Cities			·	·		0.004 (0.003)
LW CEO x Frac. Emp. in RW Cities		·	·			0.008 (0.004)
Firm F.E.? Year F.E.? Industry F.E.? Adjusted R ² Number of Obs	Yes Yes Yes 0.11 70480	Yes Yes Yes 0.12 70480	Yes Yes Yes 0.12 70480	Yes Yes Yes 0.13 70480	Yes Yes Yes 0.13 70480	Yes Yes Yes 0.14 70480

Sources: Each observation in the present dataset corresponds to a subsidiary in a given year. DAFSA directory of corporations listed on the French stockmarkets 1989-2003, 1994 and 2000 issues of the Who's

Who in France. Subsidiary level information is obtained through the Financial Relation Survey (LIFI) on group structure from the French statistical office (INSEE) and Tax files (Benefices Rels Normaux, also from INSEE) for accounting information. For each subsidiary, plant level job numbers and locations is obtained from the SIREN database (INSEE). Political information at the city level is obtained from the Ministry of Interior. *Notes:* "RW CEO" is a dummy if a CEO formerly was a cabinet member in a right-wing department. "LW CEO" is a dummy if a CEO formerly was a cabinet member in a left-wing department. "Taxes at the Subsidiary Level" is the ratio of corporate taxes divided over total sales at the subsidiary level. "Fraction Emp. in High Unemp Cities' measures the fraction of the subsidiary's employment that is in cities that have above median unemployment. "Fraction Emp. in Swing Cities" measures the fraction of the subsidiary's employment in cities where the party in power changed at least once over the sample period. "Fraction Emp. in RW (LW) Cities" measures the fraction of the subsidiary's employment in cities where right-wing (left-wing) parties are in power. "RW (LW)" stands for right-wing (left-wing). All regressions include controls for log (assets). Standard errors are reported in parentheses and are corrected for clustering of the error term at the firm level.

Table 10: Do Firms Managed by Former Bureaucrats Receive More Subsidies? City-level Analysis

Dependent Variable		Su	bsidies at the	Subsidiary Le	evel	
•	(1)	(2)	(3)	(4)	(5)	(6)
CEO was Bureaucrat	0.019 (0.009)	0.017 (0.009)	0.003 (0.001)			
Frac. Emp. in Swing Cities		0.108 (0.007)	0.097 (0.008)			
CEO was Bureaucrat x Frac. Emp. in Swing Cities RW CEO			0.029 (0.013)			
				0.016 (0.008)	$0.006 \\ (0.008)$	0.002 (0.009)
LW CEO				0.029 (0.020)	0.022 (0.022)	0.010 (0.021)
Frac. Emp. in RW Cities	·	·		0.092 (0.006)	0.084 (0.007)	0.081 (0.008)
Frac. Emp. in LW Cities		·		0.061 (0.006)	0.058 (0.007)	0.056 (0.008)
RW CEO x Frac. Emp. in RW Cities					0.036 . (0.017)	0.040 (0.018)
LW CEO x Frac. Emp. in LW Cities		·		·	0.025 (0.020)	0.023 (0.020)
RW CEO x Frac. Emp. in LW Cities	·	·				0.012 (0.016)
LW CEO x Frac. Emp. in RW Cities	·					0.028 (0.018)
Firm F.E.? Year F.E.? Industry F.E.? Adjusted R ² Number of Obs	Yes Yes Yes 0.16 70480	Yes Yes Yes 0.16 70480	Yes Yes Yes 0.17 70480	Yes Yes Yes 0.17 70480	Yes Yes Yes 0.17 70480	Yes Yes Yes 0.18 70480

Sources: Each observation in the present dataset corresponds to a subsidiary in a given year. DAFSA directory of corporations listed on the French stockmarkets 1989-2003, 1994 and 2000 issues of the Who's

Who in France. Subsidiary level information is obtained through the Financial Relation Survey (LIFI) on group structure from the French statistical office (INSEE) and Tax files (Benefices Rels Normaux, also from INSEE) for accounting information. For each subsidiary, plant level job numbers and locations is obtained from the SIREN database (INSEE). Political information at the city level is obtained from the Ministry of Interior. *Notes:* "Subsidies at the Subsidiary Level" is a dummy variable that equals 1 if the subsidiary receives any subsidy in a given year, 0 otherwise. "RW CEO" is a dummy if a CEO formerly was a cabinet member in a right-wing department. "LW CEO" is a dummy if a CEO formerly was a cabinet member in a left-wing department. "Fraction Emp. in High Unemp Cities' measures the fraction of the subsidiary's employment that is in cities that have above median unemployment. "Fraction Emp. in Swing Cities" measures the fraction of the subsidiary's employment in cities where the party in power changed at least once over the sample period. "Fraction Emp. in RW (LW) Cities" measures the fraction of the subsidiary's employment in cities where right-wing (left-wing) parties are in power. "RW (LW)" stands for right-wing (left-wing). All regressions include controls for log (assets). Standard errors are reported in parentheses and are corrected for clustering of the error term at the firm level.