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FIRM-LEVEL EVIDENCE FROM LATVIA

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DO POLITICAL CONNECTIONS MATTER? FIRM-LEVEL EVIDENCE FROM LATVIA

This paper examines the effect of political connections on firm performance. It draws on the universe of all registered firms in Latvia to construct a unique dataset of firms connected to politicians in 1996 to 2005. This paper shows that the effects of connections to politicians vary depending on the type of connection. Using fixed effects framework, it finds that firms that acquire politicians as their shareholders or board members experience a drop in the sales by 40%, followed by an increase in sales by 75% in the following year. This finding suggests that politicians join the firms in distress and help with political favors. However, this paper finds no effect from changes in the strength of political connections caused by changes in the ruling coalition. It also finds that connection with ex-politicians has no effect on firm performance.

1. Introduction

There has been much interest in the social costs of rent-seeking activities by special interest groups, at least since the seminal contributions of Tullock (1967), and Krueger (1974). Mancur Olson (1982) famously suggested that special interest groups could be one of the main causes of stagnation and decline of nations. Shleifer and Vishny (1993) argued that corruption, an evil twin of rent-seeking, is a destructive force in developing countries with weak public institutions. North, Wallis, and Weingast (2006) argued that limiting entry and creation of rents is a salient feature of countries with what they call ‘limited access orders’. Empirically, a growing number of studies using firm-level data documented connections between firms and politicians, found that political connections add to firms’ value, and identified some of the channels through which connections pay off.² Yet most of this literature uses data on publicly listed firms, which raises the issues of whether the market was fully aware of the benefits conferred by political connections, and whether findings generalize to the whole population of firms.³ These issues are especially important for potentially more interesting cases of countries with under-developed capital markets.

This paper uses a novel firm-level dataset to estimate the effect of political connectedness on firm performance in Latvia. There are two reasons why Latvia is a good case to investigate the impact of political connections. First, the value of political connections in Latvia is likely to be greater than in more developed countries because it is a transition economy with relatively weak democratic institutions. There is substantial survey-based evidence of rent-seeking and corruption. *Transparency International*, an international corruption watchdog, has consistently ranked Latvia as one of the most corrupt countries in Europe.⁴ Latvia was also characterized as “high-capture” economy in

² A non-exhaustive list of contributions in this literature is by Faccio (2005), Fisman (2001), Faccio, Masulis, and McConnell, (2005), Khwaja and Mian (2005), Slinko, Yakovlev, and Zhuravskaya (2005), Claessens, Feijen, and Laeven (2006), Goldman, Rocholl, and So (2006); Faccio and Parsley (2007), Fisman, Fisman, Galef, and Khurana (2007).

³ To the best of my knowledge, only Khwaja and Mian (2005), as well as Slinko, Yakovlev, and Zhuravskaya (2005) employ data on non-listed firms.

⁴ On a scale 0 to 10 (10 being least corrupt), Latvia achieved a score of 4.7 in 2006, putting it in the same group with South Africa, Tunisia, and Dominica. This was an improvement as compared with 2000, when it scored 3.4 points.

World Bank's Business Environment and Enterprise Performance Survey's (BEEPS) ranking of "state capture" by special interest groups in 22 transition countries in 1999. A second important reason to focus on Latvia lies in the quality of the available data. *Lursoft LLC*, a private firm, compiles detailed data on all firms registered in Latvia, which allows me to identify *any* firm in which a particular individual (e.g. a politician or a donor) has *ever* been a board member or a shareholder in 1991-2005. My data have four advantages: (i) unlike most related studies which use a sample of publicly-listed firms, I draw on the *universe* of all registered firms; (ii) they enable use of objective measures of political connection; (iii) they enable me to use detailed measures of the strength of connection; (iv) they allow me to use firm fixed effects to control for unobserved heterogeneity within the same firm over time.

The measure of connections employed in this paper follows recent work by Faccio (2006) and others, and focuses on firms with a politician or an ex-politician as a board member or a significant shareholder. There are many ways in which politicians may confer benefits on private firms. First, they may pass legislation that would result in redistribution to specific firms, or increase entry costs into some industries. Or, legislators may kill legislation that would hurt specific business interests. Second, through their control of the executive, politicians may grant public procurement to favored firms. Third, through their influence in the courts and police politicians may selectively enforce property rights. Unfortunately, these actions are difficult for a researcher to observe or measure. Therefore, following previous studies, this paper abstracts from the particular channels that politicians may use to help firms and uses a simple measure of growth in sales to measure how helpful politicians are to a firm. The hypothesis in this paper is that better connected firms have significantly higher sales growth.

An important concern in the study of the effect of political connections is endogeneity between connectedness and firm performance. This paper employs two approaches to mitigate concerns about endogeneity. First, I focus on frequent changes in the political strength of political parties caused by instability of the Latvian political system. There were nine changes in the ruling coalition in 1995-2005, which provide a source of exogenous variation on the strength of firms' political connections. Second, I

perform matching using a set of controls that influences assignment to the “treated” or “untreated” groups. Previous studies observe that connected firms are typically relatively large (Faccio, 2006; Faccio, Masulis, and McConnell, 2006; Ferguson and Voth, 2008). It is also likely that the opportunities for rent seeking differ by industries. Therefore, each connected firm is matched to a non-connected firm of similar size in the same industry.

The first main result is that politicians have strong effect on the firms that they become connected to. Firms that acquire politicians as their shareholders or board members experience a drop in sales by 40%, followed by an increase in sales by 75% in the following year, after controlling for firm and year fixed effects, as well as firm characteristics that vary over time. This suggests that either (i) politicians join the firms in distress and help with political favors, or that (ii) politicians predate some firms in order to secure ownership shares or board positions. The second main result is that changes in the strength of politicians tend to have large effects on the performance of firms: performance improves in the year following politician joining the ruling coalition, and deteriorates substantially in the year when politician leaves the ruling coalition. However, these results are not robust to alternative specifications because of relatively small number of firms that experienced such events. The third main result is that this paper finds no evidence that ex-politicians matter to the performance of firms. Fourth, this paper does not find statistically significant effect of the businessmen becoming politicians.

This paper contributes to a growing literature that uses micro-level datasets to study the effects of rent-seeking on firm-level outcomes. Hellman, Jones, and Kaufmann (2000) use survey of firms in 22 transition countries to identify ‘captor’ firms, which are engaged in ‘state capture’ activities. They find that the sales of those captor firms grow at substantially higher rates, especially in ‘high-capture’ environments. Fisman (2001) finds that politically dependent firms in Indonesia lost more of their market value in the events when President Suharto’s health deteriorated. Using measures of special favors granted to large firms by Russia’s regional legislatures Slinko, Yakovlev, and Zhuravskaya (2005) find that politically powerful firms perform better.

An increasing number of studies in this literature proxy rent-seeking by “political connections”, typically defined as having a politician on a firm’s board, or among

shareholders, or making a campaign contribution. Faccio (2006) finds evidence that political connections have an effect on corporate value of publicly-listed firms in 47 countries. Khwaja and Mian (2005) using loan-level data from Pakistan find that politically connected firms enjoy exclusive borrowing privileges from government-owned banks. Faccio, Masulis, and McConnell (2006) find that connected firms are more likely to be bailed out. Faccio and Parsley (2007) use an unanticipated effect – a politician’s death, to document the value of political connectedness. Goldman, Rocholl, and So (2006) find that the market value of S&P500 companies connected to the Republican Party increased in response to Republicans’ victory in the 2000 Presidential Election. However, Fisman et al (2007) using event study methodology finds that news of political fortunes of U.S. Vice-President Dick Cheney had no effect on returns of companies with board linkages to Dick Cheney. Finally, Ferguson and Voth (2008) trace political connections of German firms to the Nazi party in early 1933 and find that connected firms experienced unusually high returns following the ascension of the Nazis to power.

The paper is organized as follows. The next section describes the Latvian political system. Section 3 outlines hypotheses, measurement, and econometric methodology. Section 4 describes the data. Section 5 provides a discussion of the results. Section 6 concludes.

2. Overview of political system

Latvia is one of transition’s success stories: an ex-Soviet republic, it joined European Union in 2004 and is now one of Europe’s fastest growing economies. Unlike the United States, it is a parliamentary republic with executive power concentrated in the Cabinet of Ministers, headed by the Prime Minister. The Parliament (*Saeima*) has 100 members, elected for a four year term by proportional representation with a 5% threshold. Locally, Latvia elects municipal councils consisting of 7 to 60 members, depending on the size of the municipality, also by proportional representation for a four year term. Another important difference between the two countries is that whereas U.S. has a two-party system, Latvia has about seven significant political parties. Coalition politics is

important in Latvia because parliamentary majority chooses members of the Cabinet of Ministers.

Proportional system of representation and the turbulences of transition period produced substantial instability in the political system, especially in the 1990s. Since restoration of independence in 1990 and up to 2005 there were 12 changes in the ruling coalition. On average during the period a ruling coalition consisted of four parties and its average life expectancy was about 500 days.

There are two more features of Latvian politics worth noting. First, anecdotal evidence suggests that some of the largest political parties are closely associated with influential businessmen and their affiliated businesses. Thus, the *People's Party* is associated with Andris Skele, who is rumored to control much of the food industry. *Union of Greens and Farmers* is often associated with Aivars Lembergs, a tycoon from the port city of Ventspils, who has a substantial stake in the transport sector. *First Party* is linked to Ainars Slesers, a businessman with interests in wholesale and retail trade. Second, Latvia has a sizable Russian-speaking minority and much of voting takes place along the ethnic lines. To this date, parties that represent interests of Russian-speaking voters (*FHRUL* in 2002 elections) have never been admitted into a ruling coalition.

During most of the post-Soviet period politicians there were very few legal restrictions on politicians' involvement with private businesses. In the early 1990s this matter had not been regulated at all. The 1995 Corruption Prevention Act prohibited MPs to receive remuneration from private sector jobs but allowed them to be shareholders and board members in private companies.⁵ Only in April 2002 the new law on prevention of conflict of interests barred MPs from holding any board member positions in the private sector. However, during the whole period MPs were allowed to be shareholders of private companies.⁶

⁵ There were some exceptions. MPs could not be shareholders in off-shore companies, and ministers were not allowed to be involved with companies that received

⁶ From 2002 ministers were barred from owning shares in private companies that stood to benefit from public procurement. This restriction was extended to MPs only in 2007.

3. Methodology

This section discusses the specific hypotheses tested in this paper, the construction of measures of the strength of political connections, and the econometric methodology used to explain variation in the performance of firms.

If political connections benefit individual firms because of favors from politicians, performance of firms (i.e. sales or profits) should increase in the years when the firm is politically connected. If the connection is to an individual politician, changes in performance can be expected in the year when connection is established and when the political strength (and the ability to grant favors) of the politician changes as a result of him becoming part of the ruling coalition, or leaving the Parliament. Similarly, if the connection is to an ex-politician, performance can be expected to increase in years when the ex-politician's party is in the ruling coalition.

This paper does not examine the specific channels through which political connections pay off. Firms may benefit because of legislation that confers monopoly power by limiting entry, through better chances to win government contracts, or through faster track through the government bureaucracy. It is hypothesized that political connectedness buys favors from politicians, which are reflected in the performance of connected firms. It is therefore expected that the performance of politically connected firms increases in the years when the connection is active (after the elections in case of contributions) relative to the control group of not connected firms.

Based on this discussion a number of empirical hypotheses are developed. The first hypothesis is that firms connected to politicians are more likely to receive firm-specific political favors, which improve performance of these firms. Specifically, the POLITICIANS hypothesis is: Using connections to politicians and ex-politicians as a proxy for political connectedness, better connected firms have significantly better performance. Second, I formulate the COALITION sub-hypothesis because politicians in the ruling coalition are expected to be better able to provide political favors: Using connections to politicians from the ruling coalition as a proxy for political connections, better connected firms have significantly better performance. A version of the above hypothesis related to ex-politicians is: Using connections to ex-politicians when their

party is in the ruling coalition as a proxy for political connections, better connected firms have significantly better performance.

Importantly, the COALITION hypothesis helps to identify whether there is a causal link from connections to firm performance, thereby alleviating concerns about endogeneity. In case of connections to politicians, it can be argued that there is reverse causality because politicians may choose to sell their services to high-performing (or under-performing) firms.⁷ However, changes in the ruling coalition cause *exogenous* shifts in the strength of politicians *already* connected to a firm.

To test these hypotheses, I construct a novel dataset by matching the data on politicians to financial data in the *Lursoft* database of the Business Registry. I argue that the aim of connections to politicians is to acquire political influence and secure economic rents. Then, I construct a number of simple proxies for the strength of political connections.

My first measure is simply whether a firm has a politician (Member of Parliament or a minister) as a board member or a significant shareholder (holding >10% of shares). A related measure is whether an ex-politician is a board member or a significant shareholder. A politician (or an ex-politician) will have greater incentives to provide firm-specific favors if he stands to gain from them directly. My second measure is whether a connected politician is in the ruling coalition. A related measure is whether the party that an ex-politician was last affiliated with is in the ruling coalition. A politician is likely to be in a better position to provide firm-specific favor if he is in the ruling coalition, because the coalition controls the executive power. Similarly, an ex-politician's influence is likely to increase if his cronies are in the ruling coalition. I also construct a number of measures of connected firm's transitions into different stages of political connection: making first connection to a politician, making first connection to an ex-politician, a firm's board member or shareholder becoming a politician, connected politician becoming an ex-politician, connected politician moving in and out of the ruling coalition, and ex-politician's party moving in and out of the ruling coalition.

For my dependent variables, I use a firm's total sales and growth in sales, both measured in natural logarithms. I choose a firm's sales as my main proxy for

⁷ It could also be the case that under-performing firms might seek rents from corrupt politicians.

performance because of its reliability and simplicity as compared with other proxies. Measuring performance in a transition economy is tricky because of widespread tax evasion. Thus, accounting profits are likely to be under-estimated because of underreporting. Measures of productivity are also inaccurate because many companies (nearly a third in my sample) do not report number of employees. Moreover, underreporting of the number of employees is likely to be correlated with performance because firms with large sales and small number of employees may be afraid of attracting attention of the tax authorities.

I begin by estimating the following regression model:

$$\bar{y}_i = \beta \bar{x}_i + \gamma c_i + \mu_i + \varepsilon_i \quad (1)$$

where \bar{y}_i is the log of sales growth rate of firm i averaged over time; \bar{x}_i is a vector of firm-level control variables averaged over time; c_i is a dummy variable for politically connected firms; μ_i is the industry fixed effect, and ε_i is the error term. This approach avoids serial correlation in the data and reduces measurement error concerns. Model (1) uses cross-sectional data and, therefore, raises concerns of omitted variable bias because political connections could be correlated with unobserved factors such as managerial ability. To address this concern I estimate the following regression model using panel data:

$$y_{it} = \beta x_{it} + \gamma z_{it} + \alpha_i + \theta_t + \varepsilon_{it} \quad (2)$$

where y_{it} is the log of firm i sales in year t ; x_{it} is a vector of firm-level control variables; z_{it} is a vector of firm-level measures of political connectedness; α_i is a firm fixed effect; and θ_t is a year fixed effect. This model is estimated using OLS with firm and year fixed effects and heteroskedasticity-consistent robust standard errors clustered at the firm level. By including firm fixed effect I mitigate an omitted variables problem.

In addition, I analyze the impact of changes in the strength of political connections by estimating the following model:

$$\dot{y}_{it} = \beta \dot{x}_{it} + \eta_0 w_{it} + \eta_1 w_{i,t-1} + \lambda_0 p_{it} + \lambda_1 p_{i,t-1} + \alpha_i + \theta_t + \varepsilon_{it} \quad (3)$$

where \dot{y}_{it} is log growth rate of firm i sales in year t ; \dot{x}_{it} is a vector of first differences of firm-level control variables; w_{it} is a vector of firm-level events that increase the strength of political connections (e.g. politician joining the firm, politician getting into the ruling coalition); p_{it} is a vector of firm-level events that reduce the strength of political

connection; α_i is a firm fixed effect; and θ_t is a year fixed effect. Specification (3) eliminates firm-specific growth trend. I also include one year lag of each event to allow for lasting effects of changes in the strength of political connections. I estimate this model using OLS with firm and year fixed effects, and heteroskedasticity-consistent robust standard errors clustered at the firm level.

The POLITICIANS hypothesis predicts that the coefficient γ for political connections measures in Models (1) and (2) is positive and statistically and economically significant. The COALITION hypothesis predicts that the coefficients η_0 and η_1 in Model (3) are positive and statistically and economically significant, whereas the coefficients λ_0 and λ_1 are negative and statistically significant.

The following control variables are included: log of total assets (proxy for firm size), long-term leverage (proxy for access to capital), and dummy variable for whether the firm was registered in the capital city of Riga (proxy for accessibility of political connections). I also include dummy variables for the first and last years of a firm's operations to account for the possibility that the firm could have been operating for less than full year in those years.

4. Data and Summary Statistics

This section describes the sources of the data, the process of matching firms to politicians and donors, matching of connected firms to their matched peers, and provides some descriptive statistics.

a. Sources of the data

I construct a new dataset of politically connected firms from two sources of data. First, there are Business Registry data on all registered firms in Latvia, their owners and board members in 1991-2005. Second, I use data on members of parliament and ministers in 1991-2005. Each of the data sources is briefly described below.

Firm-level data are provided by *Lursoft* Inc., a private firm which operates online electronic database of the Business Registry, with detailed information on all firms

registered in Latvia.⁸ Data on firms' shareholders and board members are available for 1991-2005, whereas annual data on balance sheets and profit/loss accounts are available only for 1996-2005.

The data on members of parliament (MP) in 1991-2005 are obtained from the official website of Latvia's Parliament (*Saeima*).⁹ For each MP I know first and last names, year of birth, and party affiliation. As the Cabinet of Ministers is usually formed from MPs, I also collect data on any ministerial appointments that MPs had during his political career, as well as on ministers who were not in the Parliament. There were a total of 527 individual MPs and ministers in 1991-2005.

b. Matching firms to politicians

I say that a firm is “politically connected” if one of the company's large shareholders (defined as controlling at least 10 percent of a company's shares) or board members is: (1) a member of parliament, or (2) a minister. This definition of connectedness is similar to what is used in the literature (e.g. Faccio, 2005; Faccio, Masulis, and McConnell, 2005; Khwaja and Mian, 2005). I am able to match politicians to firms as my firm-level data contains information on the identities of shareholders and board members. For any registered firm the *Lursoft* database contains the names and personal codes of shareholders and board members. Using this information I match politicians data to firm-level data. Matching is done using a carefully developed algorithm that identifies politically-connected firms.¹⁰

A firm is matched *whenever* a politician was a large shareholder or a board member in 1991-2005. Banks, government-owned firms, and non-profit organizations are excluded.¹¹ Since a politically connected firm may own other firm(s), I also identify

⁸ See www.lursoft.lv

⁹ See www.saeima.lv

¹⁰ To make sure that the algorithm worked correctly, we began by matching 53 randomly selected politicians to firms by hand, using *Lursoft's* online database. These hand-collected data were then compared to the data produced by the algorithm to identify any differences and make corrections to the algorithm when necessary. When the data produced by the algorithm perfectly matched hand-collected data, we used the algorithm to do the matching for remaining donors and politicians.

¹¹ The main rationale for excluding banks was that it would probably be impossible to match to a non-connected bank. Not only are the Latvian banks relatively few but most likely all of them seek political influence in one way or the other.

companies in which politicians or donors have shares through other companies.¹² Matching is done very accurately because firm-level data contains information on shareholders' and board members first names, last names, and eleven-digit *personal codes*, which are functionally similar to social security numbers in U.S. The first six digits of a personal code represent a person's date, month, and year of birth. Data on MPs contain politicians' first and last name, as well as year of birth, resulting in two digits of the personal code. Given that there is less information about MPs' personal codes, there is a small chance of matching to a wrong firm. However, matching firms to politicians is still more accurate compared to similar studies, which mostly used information on politicians' names.

I now describe the results of matching firms to politicians. 302 politicians (out of a total of 527) were matched to 1054 unique firms. After removing firms that were never economically active (i.e. non-zero sales), firms that were not active in the years of being connected to politicians, and firms that were connected with future politicians well before their political career, I am left with 638 firms connected to 259 politicians and ex-politicians.

c. Matching to non-connected firms

For every connected firm, a match is sought in the whole universe of registered firms, *except* firms that were already identified as politically connected. A necessary eligibility condition is that a potential match must be active in the years that a connected firm was active. Matching is done in the year preceding the establishment of political connection. Henceforth, I define political connection to a politician (or ex-politician) to exist in a particular year if the politician was a board member or a shareholder in that particular year and the firm was economically active. In the case the firm is connected to more than one politician I use the earliest connection. For each connected firm, a match is identified among all the firms meeting eligibility requirements (not connected, active in the period, same industry) using the nearest-neighbor matching in terms of assets. Another necessary condition is that the difference between assets of the connected firms

¹² However, firms owned by a politically connected firm in which a politician or a donor is only a board member are not considered to be politically connected.

and it matched peer should not exceed 40% of the assets of connected firm. Size of the caliper is the same as used in a study by Faccio, Masulis, and McConnell (2006). Matching is done without replacement. When identifying all potential matches in the same industry I begin with the primary 4-digit NACE classification, assigned by the Latvian Central Statistical Bureau. If no company satisfies these criteria, the process is repeated at 3-digit NACE, and then at 2-digit NACE.

I now report the results of matching connected firms to their peers. After removing firms with missing industry classification, 616 firms connected to politicians were submitted for matching and 559 of them were successfully matched to their peers. No match could be found for 56 (typically very large) firms that would satisfy all the criteria. Of those firms that were successfully matched, 486 firms were matched at four digit NACE level, 29 firms at three digit level, and 44 firms at two digit level. Matched firms operate in a variety of industries, with the most popular activities being “other business” (14% of all firms), “real estate activities” (9%), “wholesale trade” (7%), “manufacture of food products and beverages” (7%), and “retail trade” (6%).

d. Descriptive Statistics

In this section I report descriptive statistics for the datasets on politicians and donors, as well as their respective control groups of matched firms. Table 2 provides the definitions and the sources of the variables I use.

Table 3 compares selected financial characteristics for firms connected to politicians and their matched peers in the year of matching. The table shows that, in terms of assets, firms connected to politicians have very similar size as compared to their matched peers. Interestingly, Table 3 also indicates that the distribution of sales for connected firms is skewed to the right, as compared with their matched peers. Another interesting fact is that connected firms have lower profits and somewhat lower leverage. None of the differences are statistically significant, however.

Table 4 shows basic structure of the data on 554 firms connected to politicians and summarizes changes in the strength of connection. This is a panel, although an unbalanced one, with a maximum length of ten years. Politicians, on average, are connected to more than one firm. There are 286 unique politicians (and ex-politicians) in

the data. Most of connections are when ex-politicians become shareholders or board members, connection with an acting politician, or a businessmen becoming politician are less frequent events. Changes in the strength of already existing political connection affected by changes in the government are relatively rare: there are only 21 cases when the party of connected politician joins the ruling coalition and only 11 cases when the party of connected politician leaves the ruling coalition. It is possible that acting politicians attempt to conceal their connections to companies by selling their shares to relatives, or hiding behind off-shore companies. Observing such connections is difficult for a researcher. However, to address this concern I construct a broader measure of connections by including what I call ‘conspiracy’ connections. I define conspiracy connections to exist when politician abandons the company right before the election, or at any point during his political career. Using this broader measure of connectedness, I identify more events when changes in the ruling coalition affect the strength of the existing connection: 46 cases when the politician joins the ruling coalition and 28 cases when he leaves the ruling coalition.

Table 5 presents means and medians for firms connected to politicians and their matched peers, and tests for differences in means. Mean growth rates of sales of connected firms are nearly twice as high as compared with their matched peers, but it is not statistically significant. Given that there are many extreme growth rates, I windsorize growth of sales by removing the top and bottom 1% of the distribution. Windsorized growth rate of connected firms is substantially higher as compared with matched firms, and the difference is statistically significant at a 5% level. I also note that the return on assets (ROA) of connected firms is very small as compared with their matched peers, and the difference is statistically significant at a 1% level. There is no statistically significant difference in total sales, total assets, and leverage between connected and matched firms. Thus, there is evidence that connected firms have higher growth rates of sales, but lower reported profitability. Because the distribution of the growth rates of sales has many extreme values I use difference in the log of sales (log growth rates) in the estimations.

5. Empirical Results

In this section I provide results of my empirical analysis. Table 6, Panel A presents between effects regressions for the POLITICIANS hypothesis that firms connected to politicians perform better as compared with their matched peers. The dependent variable is log of growth in sales. My pooled sample for 1996-2005 data contains 5608 observations for 1108 firms. For all the regressions I report heteroskedasticity-consistent standard errors corrected for clustering at the firm level. In addition, dummy variables for the first and last years of operation are included in each regression, but not reported.

Regression (1) does not confirm the POLITICIANS hypothesis by showing a somewhat negative but not statistically significant coefficient of -0.026 for having politically connected board member or shareholder. In regression (2) I control for total assets (size), measured in logs, leverage, and being registered in Riga. In regressions (3) and (4) I also add industry fixed effect, on the 2 digit and 4 digit levels of aggregation, respectively. In all the regressions the coefficient for connected firms does not change in magnitude and remains statistically insignificant. In regression (5) I use a more balanced panel with at least 7 years of data for each firm and replicate the results of regression (4). The coefficient of interest in regression (5) is 0.002 and it is not statistically significant.

Next, in Table 6, Panel B, I use firm fixed effects and split my general measure of political connections to distinguish whether the firm is connected to a politician or an ex-politician. My dependent variable now is log of firm's gross sales. Regression (1) shows that the coefficient on connection to politician is -0.01 and not significant. The coefficient on connection to ex-politician is 0.21 and it is significant at the 5% level. In regression (2) I control for size, measured in log of total assets, and leverage. This results in the coefficient on connection to ex-politician dropping to 0.009 and losing significance. This suggests that ex-politicians are connected to larger firms, and do not explain much of the firm's growth once size is controlled for. Further, inclusion of controls decreases the coefficient on connection to politician becomes more negative. In regression (3) I add year fixed effects but this does not change the results in a substantial way. Thus, my main results so far do not lend empirical support to the POLITICIANS hypothesis. In regressions (4) to (6) I test COALITION hypothesis, i.e. whether politicians in the ruling coalition matter more than opposition politicians. In regression (4) I use interaction terms of connection to politician with whether politician was in the ruling coalition. In case of

connection to ex-politician, the interaction term is with a dummy of whether ex-politician's last party is in the ruling coalition. The coefficients on both interaction terms are positive, which is consistent with the COALITION hypothesis but not statistically significant. Interestingly, the coefficient on connection to politician increases in magnitude to -0.25 and becomes statistically significant at the 10% level. Connection with an opposition politician implies a decrease in sales by 22.4%. The sum of the connection to politician coefficient with its interaction with ruling coalition is -0.059 and it is not statistically significant. Coefficients on connection to an ex-politician and interaction with the ruling coalition have the positive signs, confirming my hypotheses, but are not statistically significant.

In regression (5) I subject my main result to a more detailed analysis by using alternative measure of political connection to politician. In my standard "connection to politician" variables I include all 'conspiracy' connections to acting politicians. A conspiracy connection occurs when a politician (i) abandoned the company a year before becoming the politician, or (ii) abandoned the company at any point during his political career. This makes the main result less susceptible to the critique that politicians may conceal their connections to companies (e.g. by 'selling' their shares to a relative) in years when they provide political favors to these companies. Nevertheless, the regression shows that the results are largely similar in magnitude: the coefficient on connection is -0.19 but not statistically significant, and the coefficient on interaction term is 0.21 and significant at the 10% level. In regression (7) I subject my results regarding connections to politicians to further tests by using another alternative measure of the strength of connection. Instead of using the ruling coalition dummy in the interaction term, I use more detailed measures of (i) number of days in the ruling coalition in the year, and (ii) number of days as a minister in the year. When including these two alternative measures of the strength of connection, I find a negative effect of connection to an opposition politician and positive effect for the interaction term with the number of days in the ruling coalition. Interaction with number of days as a minister is not significant in real world or statistical sense.

In regression (7) I use a more balanced sample by including only firms with at least 7 years of observations and replicate the results of Regression (5). The main drawback of

using a more balanced sample is the sharp fall in the number of observations from 6774 to 4263. The coefficient of the interaction of connection with the ruling coalition falls to 0.079 and loses statistical significance. In regression (8) I exclude all firms that were connected to more than one politician and replicate the results of regression (5). This makes the coefficient on connection to politician more negative and statistically significant at the 5% level, and the coefficient on the interaction term falls and becomes insignificant. Interestingly, the coefficients on connection to ex-politician and its interaction with ruling coalition also fall sharply. This suggests that my main results for the effect of the ruling coalition are driven by companies that are connected to more than one politician or ex-politician.

Taken together, the results in Table 6 do not confirm the POLITICIANS hypothesis but provide some support for the COALITION hypothesis. Moreover, the results imply that connection to opposition politicians has the effect of decreasing total sales, which is mitigated if the politician is in the ruling coalition. One way to interpret these results is if political connections are endogenous to the performance of firms. If politicians boost performance of firms, but firms invite politicians when they experience fall in performance, or, alternatively, if politicians offer their ‘services’ to firms in trouble, then regression of performance on connections will suffer from the simultaneous causality bias and the coefficient on connections will be underestimated. The above results are broadly consistent with the hypothesis of simultaneous causality. Furthermore, in some unreported regressions I break down the connection dummy into a set of dummies indicating the year of connection. I find that the negative effect is the biggest in the first year of connection and then falls sharply, which is also consistent with the story that politicians help ailing firms.

To mitigate the endogeneity issues I use even more detailed measures of political connections and investigate the effect of changes in the strength of the connections. First, I analyze whether establishment of political connection is the result of (i) politician joining the firm, (ii) ex-politician joining the firm, or (iii) businessman becoming politician. The main source of changes in the strength of existing connection is provided by relatively frequent changes in the ruling coalition, which are exogenous to the performance of connected firms. I construct dummy variables for the years in which

politician's party joins the ruling coalition, and leaves the ruling coalition. For ex-politician, similar measures are constructed for the last party he was affiliated with. In addition I construct a dummy variable for the year when politician leaves the parliament. The estimation results are reported in Table 7. The dependent variable is log of growth in sales. Firm fixed effects are included in all regression. For all the regressions I report heteroskedasticity-consistent standard errors corrected for clustering at the firm level. In addition, dummy variables for the first and last years of operation are included in each regression, but not reported. An advantage of this specification is that it removes firm-specific linear growth rates.

Regression (1) shows that businessman becoming politician has a positive, but not statistically significant effect. The coefficient on politician joining the firm is -0.44 but not statistically significant, whereas the coefficient on ex-politician joining the firm is 0.006 and not statistically significant. The coefficient on the politician leaving the parliament is positive but not significant. Changes in the ruling coalition provide mixed evidence. On the one hand, in the year when politician joins the ruling coalition the estimated effect is negative, but not statistically significant. On the other hand, in the year when politician moves from the ruling coalition to opposition the coefficient is -0.45 and statistically significant at the 10% level. The coefficient for the year when ex-politician's party moves to the ruling coalition is somewhat positive, and coefficient for the year when he goes to opposition is negative, but neither is statistically significant. In regressions (2) I add controls for size and leverage, and in regression (3) I add year fixed effects. This results in the following changes in the main results. First, the coefficient on politician joining the firm increases in magnitude and becomes weakly significant at the 10% level. Second, the coefficient on politician going from ruling coalition to opposition decreases in magnitude and loses statistical significance. Third, the coefficient on ex-politician's party joining the ruling coalition becomes negative but not statistically significant.

Next, in regression (4) I allow changes in the strength of connections to have lasting effects on performance by including one year lags for all the variables of interest.¹³ This

¹³ Because I only have a maximum of ten years of observations for each firms and the panel is very unbalanced, including more than one year lag results in sharp loss in the number of observations.

further strengthens the evidence of the effect of political connections on firm performance. First, although the coefficient on the politician joining the firm remains negative but falls in magnitude to -0.52, the coefficient on the lagged effect is 0.55, and statistically significant at the 5% level. This implies that the firm's growth rate falls by some 40% in the year when politician joins, but then increases by 75% in the following year. Second, the coefficient on ex-politician joining the firm is slightly negative and small, but the coefficient on the lagged effect is 0.16. Although neither estimate is statistically significant, this implies a large increase in the growth rates of sales by 17% in the following year. Third, the coefficient on the lagged effect of politician becoming ex-politician is 0.17 and statistically significant at the 10% level of significance, implying 18.5% increase in the growth rate.

Then, I further refine my analysis. In regressions (5) and (6) I use alternative measures of connections that include 'conspiracy' connections. The advantage of including conspiracy connections is that the number of transitions to and from the ruling coalition in the sample is increased. In regression (5) I replicate the results in regression (3), and in regression (6) I replicate the results of regression (4). This does not change the main results substantially except for when politician leaves the parliament or ministerial post. This coefficient drops substantially and the lagged effect ceases to be statistically significant. I conclude that politicians may have terminated official connection shortly before providing political favors to the firm. Further, as in Table 6, I subject my results to robustness check using a more balanced sample and excluding firms with connections to multiple politicians. Thus, regressions (7) and (8) replicate the results in Regression (4) with more balanced sample and firms with a single connection, respectively. The main results largely survive both of these robustness checks.

The above results raise the question of why does the firm's sales growth drops sharply in the year when the politician joins, and then increases substantially in the following year. One explanation is that joining of the politician is correlated with broader changes in the ownership and/or board structure, which may have an adverse effect of its own, followed by a recovery once things return to normal. In an additional robustness check we identified all cases when politician joins the firm and this coincides with substantial changes in the board or ownership composition. In a number of unreported

regressions we controlled for these changes but the main results were not changed. A second explanation is that of reverse causality. Firms seek political connections in bad years, and political favors help firms to recover. A third explanation is that politicians may target certain firms with regulation (or excessive attention of law enforcement agencies) in order to secure ownership shares or management positions in these firms.

In total, the results in Tables 6 and 7 provide mixed evidence for the POLITICIANS and COALITION hypothesis. Having politician or ex-politician on board or among shareholders as such does not correlate strongly with firm performance in those years. However, the results point to simultaneous causality between political connections and performance. Moreover, my results suggest that politicians either join the firms when those are not doing well in the marketplace, or target some firms with harmful regulation to grab shares or management positions. The results also suggest that politicians conceal their connection to the company before making political favors. Sorting out the causality between connections and performance using changes in the ruling coalition is difficult because only a relatively small number of firms were affected. When politician goes to the opposition, there is a large negative effect implying about 34% drop in the growth of sales, but it is not statistically significant in many specifications. On the other hand, politician going to the ruling opposition has a negative contemporaneous effect and positive lagged effect, implying a drop in the sales growth by 13%, and the following year increase by 17%. Neither coefficient is statistically significant in any specification.

Moreover, there is no evidence that connection to ex-politicians affects firm performance. This may suggest that ex-politicians receive board positions or shares in the company as rewards for prior service to business interests.

6. Conclusions

This paper addresses the question whether political connections translate into better company performance. It investigates firm-level connections to politicians and ex-politicians using unique dataset that draws on the universe of all registered firms in Latvia. The paper focuses on the effects of changes in the strength of political connections on the performance of connected firms.

Using a measure of connectedness based on having (ex)politicians as board members or shareholder, the paper derives three main results. First, the firms experience a plunge in sales in the year when politician joins, followed by a sharp recovery in the following years. This suggests that politicians join the firms in distress and help with political favors. An alternative explanation, however, is that politicians use the opposite of favors to secure ownership or management positions at the firm. Second, there is no robust evidence that changes in the strength of political connection caused by changes in the ruling coalition have effect on performance of connected firms. Third, I find no evidence that ex-politicians matter to the performance of firms.

It should be noted that my main measure of political connections may underestimate the number of politically connected firms. For example, previous studies pointed to the importance of connections through relatives and friends (e.g. Faccio, 2006) and there is some evidence that these types of connections are also pervasive in Latvia.¹⁴ However, such connections are hard to pinpoint accurately, because of lack of reliable information on relatives of the politicians.

¹⁴ In earlier stages of this project we also used the Lursoft database to identify business connections of close relatives of 72 ministers. We found that 27 ministers have had relatives who were board members or shareholders of private companies.

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Table 1: Ruling coalition in 1996-2005

This table reports the political parties which made up the ruling coalition in the Latvian Parliament in 1996-2005 period. The party with an * held Prime Minister's office.

21-Dec-95 to 13-Feb-97	13-Feb-97 to 7-Aug-97	7-Aug-97 to 26-Nov-98	26-Nov-98 to 16-Jul-99	16-Jul-99 to 2-May-00	5-May-00 to 7-Nov-02	7-Nov-02 to 9-Mar-04	9-Mar-04 to 2-Dec-04	2-Dec-04 to 7-Nov-06
Latvian Way*	Latvian Way*	For Fatherland and Freedom*	Latvian Way*	People's Party*	Latvian Way*	New Era*	Union of Greens and Farmers*	People's Party*
Union of Greens and Farmers	Union of Greens and Farmers	Latvian Way	For Fatherland and Freedom	For Fatherland and Freedom	For Fatherland and Freedom	Latvia's First Party	Latvia's First Party	Latvia's First Party
For Fatherland and Freedom	For Fatherland and Freedom	Latvian Christian Democratic Uni on	Latvian Christian Democratic Union	Latvian Way	People's Party	Union of Greens and Farmers	New Era	New Era
Latvian National Independence Movement	Latvian National Independence Movement	Latvian Farmers' Union	New Party	New Party	New Era	For Fatherland and Freedom	People's Party	Union of Greens and Farmers
Democratic Party 'Saimnieks'	Democratic Party 'Saimnieks'	Democratic Party 'Saimnieks'						
Latvia's Unity party								

Table 2: Definition of variables

This table reports the variables used in my regression analyses and their description. Data sources are *Lursoft LLC* (L) - a copy of the Registry of Enterprises of Latvia, and *Saeima web-page* (S) - the official homepage of the Parliament of Latvia.

Variable	Description	Source
Connection to politician	Dummy variable equal to 1 if (i) a Member of Parliament or (ii) a minister is a major shareholder (with >10% of shares) or a board member of an active company.	L
Connection to ex-politician	Dummy variable equal to 1 if an ex-politician is a major shareholder (with >10% of shares) or a board member of an active company.	L
Ruling coalition	Dummy variable equal to 1 if politician is (i) a Member of Parliament in the party which is in the ruling coalition, or (ii) a minister. An ex-politician is 'in the ruling coalition' if the last party that he was affiliated with is in the ruling coalition.	S
Number of days in ruling coalition	Number of days that a politician was an MP in the ruling coalition in a year.	S
Number of days as minister	Number of days that politician served as a minister in a year.	S
Businessman becomes politician	Dummy variable equal to 1 if a major shareholder (with >10% of shares) or a board member of an active company became (i) a Member of Parliament or (ii) a minister in this year.	L
Politician joins a firm	Dummy variable equal to 1 in the year when (i) a Member of Parliament or (ii) a minister first became a major shareholder (with >10% of shares) or a board member of an active company.	L
Ex-politician joins a firm	Dummy variable equal to 1 in the year when an ex-politician first became major shareholder (with >10% of shares) or a board member of an active company.	L
Politician becomes an ex-politician	Dummy variable equal to 1 in the year when a politician quits from (i) a Parliament or (ii) leaves a minister position.	S
Politician moves from opposition to the ruling coalition	Dummy variable equal to 1 in the year when a politician's party (i) joins the ruling coalition or (ii) politician switches party to the one in a current ruling coalition.	S
Politician moves from ruling coalition to opposition	Dummy variable equal to 1 in the year when a politician's party (i) leaves the ruling coalition or (ii) politician switches party to the one not in the ruling coalition.	S
Ex-politician's party moves from opposition to ruling coalition	Dummy variable equal to 1 in the year when an ex-politician's party joins the ruling coalition.	S
Ex-politician's party moves from ruling coalition to opposition	Dummy variable equal to 1 in the year when an ex-politician's party leaves the ruling coalition.	S
Total assets	Total assets of the firm at the end of the year in thousands of 2000 Latvian lats.	L
Total sales	Total sales of the firm at the end of the year in thousands of 2000 Latvian lats.	L
Growth in sales	Sales in this year less sales in the previous year, divided by sales in the previous year.	L
ROA	Net profits after taxes divided by total assets times 100, obtained from the company's financial report	L
Leverage	Ratio of long-term debt divided by total assets, obtained from the company's financial report in thousands of 2000 Latvian lats.	L
Registered in Riga	Dummy variable equal to 1 if the company was registered in Riga in 2006.	L

Table 3: Selected financial data for connected firms and their matched peers in the year of matching

Thus table reports means and medians of selected financial characteristics for politically-connected firms and their matched peers at years of matching. Year of matching is the year preceding first political connection or the year of political connection if this was the first year of the data. ROA are net profits after taxes divided by total assets times 100 from the company's financial report. Leverage is long-term debt divided by total assets times 100 from the company's financial report. Amounts are in 2000 Latvian lats (1LVL \approx 2\$). P-values are for the difference in means.

	Connected firms		Matched firms		T-test
	Mean	Median	Mean	Median	P-value
Total assets (thous. LVL)	847	90	845	95	0.99
Total sales (thous. LVL)	1,161	88	982	110	0.39
ROA (%)	-7.08	0.57	-1.06	2.78	0.27
Leverage (%)	20.11	0	23.81	0	0.53

Table 4: Data description

This table describes the data on political connections, both for the firms connected to (ex)politicians and the firms connected to donors. Political connection to a (ex)politician exists when he is a major shareholder (with >10% of shares) or a board member of an active company (with nonzero sales). Political connection to a donor exists when the firm donated as a corporate entity to the 2002 elections, or when an individual donor is a major shareholder (with >10% of shares) or a board member of this company. Conspiracy connection occurs if politician terminated connection in the year preceding his election, or in any year in his political career. Changes in the strength of political connection are on the level of the firm, not the politician. All donations are in thousands of 2000 Latvian lats (1LVL ≈ 2\$). Donations are on the level of the firm, and not the donor.

	Regular definition	With 'conspiracies'	
No. of years (maximum)	10		
No. of unique firms	554		
No. of unique (ex)politicians	259		
No of firm-year observations	3,496		
No. of events when businessman becomes a politician	75		
No. of events when politician joins a firm	47		
No. of events when ex-politician joins a firm	231		
No. of events when politician leaves the Parliament	58	97	
No. of events when politician joins the ruling coalition	21	46	
No. of events when politician leaves the ruling coalition	11	28	
No. of events when ex-politician's party joins the ruling coalition	43		
No. of events when ex-politician's party leaves the ruling coalition	39		
	<i>Mean</i>	<i>Min</i>	<i>Max</i>
No. of firms connected to a politician in a year	52	40	81
No. of firms connected to a politician from the ruling coalition in a year	32.9	22	57
No. of connections to a politician in a year (including 'conspiracies')	76.3	46	115
No. of firms connected to a politician from the ruling coalition in a year (including 'conspiracies')	54.5	35	84
No. of firms connected to an ex-politician in a year	168.7	74	234
No. of firms connected to an ex-politician in a year when his party is in the ruling coalition	28.3	5	59

Table 5: Summary Statistics for Politically Connected Firms and their Matched Peers

Thus table reports means and medians of selected financial characteristics for politically-connected firms and their matched peers. Growth in sales is calculated as sales in this year less sales in the previous year, divided by sales in the previous year. Winsorizing is performed by removing top and bottom 1% of the distribution of growth in sales. ROA are net profits after taxes divided by total assets times 100 from the company's financial report. Leverage is long-term debt divided by total assets times 100 from the company's financial report. Amounts are in 2000 Latvian lats (1LVL \approx 2\$). P-values are for the tests in difference in means.

	Connected firms		Matched firms		T-test
	Mean	Median	Mean	Median	P-value
Growth in sales	1.995	0.046	1.024	0.033	0.14
Growth in sales (winsorized)	0.371	0.046	0.287	0.033	0.02
Total sales (thous. LVL)	1,382	144	1,491	156	0.38
ROA (%)	-15.5	0.8	6.8	2.5	0.00
Total assets (thous. LVL)	1,279	134	1,176	132	0.34
Leverage (%)	18.2	0	17.8	0.05	0.58
Registered in Riga (dummy)	0.562	1	0.622	1	0.00

Table 6: Impact of connections with politicians

This table reports between-effects regressions of the form: $\bar{y}_i = \beta \bar{x}_i + \gamma c_i + \mu_i + \varepsilon_i$, where \bar{y}_i is the log of growth rates in sales of firm i averaged over time; \bar{x}_i is a vector of firm-level control variables averaged over time; c_i is a dummy variable for politically connected firms; μ_i is the industry fixed effects, and ε_i is the error term. The dependent variable is log of growth rate of firm's sales in the period 1996-2005. Politically connected firms here are those firms that had a politician or an ex-politician as a major shareholder (with >10% of shares) or a board member at any time in 1996-2005 period. I include the following firm-level control variables: log of total assets, and a dummy variable for whether a firm was registered in Riga. Dummy variables for the first and last years of operations are included in all regressions, but these are not reported. In model (3) I include dummies for industry at NACE 2 digit level. In model (4) I include dummies for industry at NACE 4 digit level. In model (5) I use a more balanced sample with at least 7 years of observations for each firm. *, **, *** indicate significance at 10%, 5%, and 1% level, respectively.

Panel A: Between Effects Regressions					
	Log of growth rate of sales				
	(1)	(2)	(3)	(4)	(5)
Politically connected firm	-0.026 (0.043)	-0.024 (0.043)	-0.021 (0.044)	-0.021 (0.045)	0.002 (0.024)
Log of total assets		0.032*** (0.010)	0.033*** (0.011)	0.054** (0.013)	0.028*** (0.007)
Leverage		0.099 (0.088)	0.093 (0.093)	0.12 (0.104)	0.096 (0.06)
Registered in Riga		0.042 (0.044)	0.003 (0.049)	-0.024 (0.054)	-0.008 (0.031)
Industry fixed effects (2 digit level)	NO	NO	YES	NO	NO
Industry fixed effects (4 digit level)	NO	NO	NO	YES	YES
Number of observations	5608	5600	5600	5600	3808
Number of firms	1108	1108	1108	1108	453
R-squared (adjusted)	0.089	0.098	0.096	0.139	0.109

Table 6: Impact of connections with politicians (continued)

This table reports OLS regressions of the form: $y_{it} = \beta x_{it} + \gamma z_{it} + \alpha_i + \theta_t + \varepsilon_{it}$, where y_{it} is the log of firm i sales in year t ; x_{it} is a vector of firm-level control variables; z_{it} is a vector of firm-level measures of political connectedness; α_i is a firm fixed effect; and θ_t is a year fixed effect. The dependent variable is log of firm's sales in the period 1996-2005. Political connection to a (ex)politician exists when he is a major shareholder (with >10% of shares) or a board member of an active company (with nonzero sales). A politician is in the ruling coalition if he is (i) a Member of Parliament in the party which is in the ruling coalition, or (ii) a minister. An ex-politician is 'in the ruling coalition' if the last party that he was affiliated with is in the ruling coalition. Number of days in the ruling coalition is the number of days politicians was an MP in the ruling coalition in a year. Number of days as minister is the number of days politician served as a minister in a year. I include log of total assets as a firm-level control variable. Dummy variables for the first and last years of operations are included in all regressions, but these are not reported. In Model (5) I use alternative measures of connection to acting politicians that account for 'conspiracy' connections. Conspiracy connection occurs if politician disassociated himself from the firm in which he was a major shareholder (with >10% of shares) or a board member in the year preceding his election, or at any year in his political career. In Model (7) I use a more balanced sample with at least 7 years of observations for each firm. In Model (8) I exclude all firms that were connected to more than one politician or ex-politician. Heteroskedasticity-consistent standard errors corrected for clustering at the firm level are reported in parentheses. *, **, *** indicate significance at 10%, 5%, and 1% level, respectively.

Panel B: Fixed Effects Regressions								
	Log of sales							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Connection to politician	-0.010	-0.14	-0.13	-0.25*	-0.19	-0.25*	-0.21	-0.25**
	(0.101)	(0.087)	(0.088)	(0.164)	(0.116)	(0.164)	(0.155)	(0.113)
(Connection) x (ruling coalition)				0.19	0.21*		0.079	0.093
				(0.126)	(0.111)		(0.150)	(0.126)
(Connection) x (number of days in ruling coalition)						0.00068*		
						(0.00035)		
(Connection) x (number of days as minister)						-0.00007		
						(0.00044)		
Connection to ex-politician	0.21**	0.009	0.042	0.028	0.035	0.028	0.049	0.023
	(0.091)	(0.067)	(0.068)	(0.068)	(0.070)	(0.069)	(0.077)	(0.066)
(Connection to ex-politician) x (ruling coalition)				0.11	0.10	0.10	-0.006	0.009
				(0.101)	(0.101)	(0.101)	(0.102)	(0.113)
Log of total assets		0.73***	0.74***	0.74***	0.74***	0.74***	0.76***	0.73***
		(0.035)	(0.036)	(0.036)	(0.036)	(0.036)	(0.050)	(0.035)
Leverage		-0.47***	-0.45***	-0.45***	-0.45***	-0.45***	-0.36***	-0.41***
		(0.106)	(0.105)	(0.105)	(0.105)	(0.105)	(0.122)	(0.104)
Firm fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effects	NO	NO	YES	YES	YES	YES	YES	YES
Number of observations	6783	6783	6774	6774	6774	6774	4263	6331
Number of firms	1108	1108	1108	1108	1108	1108	453	1039
R-squared (adjusted)	0.850	0.894	0.895	0.895	0.895	0.895	0.908	0.896

Table 7: Impact of changes in the strength of political connections

This table reports OLS regressions of the form: $\dot{y}_{it} = \beta \dot{x}_{it} + \eta_0 w_{it} + \eta_1 w_{i,t-1} + \lambda_0 p_{it} + \lambda_1 p_{i,t-1} + \alpha_i + \theta_t + \varepsilon_{it}$, where \dot{y}_{it} is log growth rate of firm i sales in year t ; \dot{x}_{it} is a vector of first differences of firm-level control variables; w_{it} is a vector of firm-level events that increase the strength of political connections (e.g. politician joining the firm, politician getting into the ruling coalition); p_{it} is a vector of firm-level events that reduce the strength of political connection; α_i is a firm fixed effect; and θ_t is a year fixed effect. Model (1) is estimated with variables of interest only. In Model (2) I add control variables, and in Model (3) I add year fixed effects. One year lags of variables of interest are added in Model (4). In Model (5) and (6) I use alternative measure of connections that include ‘conspiracy’ connections. Conspiracy connection occurs if politician disassociated himself from the firm in which he was a major shareholder (with >10% of shares) or a board member in the year preceding his election, or at any year in his political career. Dummy variables for the first and last years of operations are included in all regressions, but these are not reported. Controls for log difference in assets and difference in leverage are included in Models (2) to (8), but are not reported here. In Model (7) I use a more balanced sample with at least 7 years of observations for each firm. In Model (8) I exclude all firms that were connected to more than one politician or ex-politician. Firm fixed effects are included in the regression, and year fixed effects are included in models (3) to (8). Heteroskedasticity-consistent standard errors corrected for clustering at the firm level are reported in parentheses. *, **, *** indicate significance at 10%, 5%, and 1% level, respectively.

	Log of sales growth							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Businessman becomes politician	0.14 (0.122)	0.14 (0.124)	0.14 (0.128)	0.14 (0.130)	0.14 (0.129)	0.14 (0.130)	0.070 (0.116)	0.082 (0.125)
- one year lag				-0.0061 (0.129)		-0.023 (0.131)	-0.0090 (0.139)	-0.024 (0.157)
Politician joins a firm	-0.44 (0.355)	-0.57* (0.328)	-0.60* (0.324)	-0.52* (0.306)	-0.60* (0.325)	-0.52* (0.307)	-0.62* (0.349)	-0.82** (0.369)
- one year lag				0.55** (0.263)		0.54** (0.264)	0.46 (0.307)	0.51* (0.308)
Ex-politician joins a firm	0.0060 (0.0929)	-0.062 (0.0730)	-0.066 (0.0737)	-0.035 (0.0770)	-0.065 (0.0736)	-0.034 (0.0766)	-0.015 (0.0579)	-0.099 (0.0927)
- one year lag				0.16 (0.101)		0.16 (0.101)	0.038 (0.0671)	0.19 (0.127)
Politician becomes an ex-politician	0.14 (0.127)	0.14 (0.123)	0.13 (0.124)	0.085 (0.129)	0.048 (0.0895)	0.015 (0.0903)	0.11 (0.137)	0.020 (0.127)
- one year lag				0.17* (0.0999)		0.0025 (0.118)	0.15 (0.0980)	0.15 (0.0989)
Politician moves from opposition to the ruling coalition	-0.17 (0.154)	-0.16 (0.158)	-0.19 (0.159)	-0.14 (0.195)	-0.021 (0.103)	0.11 (0.147)	-0.26 (0.268)	-0.18 (0.281)
- one year lag				0.15 (0.197)		0.15 (0.155)	-0.080 (0.225)	0.17 (0.261)
Politician moves from ruling coalition to opposition	-0.45* (0.263)	-0.40 (0.283)	-0.39 (0.284)	-0.42 (0.273)	-0.19 (0.125)	-0.20 (0.124)	0.032 (0.218)	-0.50* (0.281)
- one year lag				-0.067 (0.231)		-0.28 (0.224)	-0.014 (0.311)	-0.076 (0.308)

Table 7: Impact of changes in the strength of political connections (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Ex-politician's party moves from opposition to ruling coalition	0.011 (0.274)	-0.10 (0.257)	-0.15 (0.255)	-0.25 (0.234)	-0.16 (0.257)	-0.17 (0.236)	-0.23 (0.154)	-0.25 (0.271)
- one year lag				-0.25 (0.259)		-0.28 (0.253)	-0.0043 (0.162)	-0.34 (0.330)
Ex-politician's party moves from ruling coalition to opposition	-0.076 (0.131)	-0.042 (0.105)	-0.029 (0.111)	-0.027 (0.125)	-0.025 (0.111)	-0.019 (0.128)	0.012 (0.108)	-0.10 (0.144)
- one year lag				-0.041 (0.163)		-0.048 (0.164)	-0.048 (0.167)	-0.18 (0.177)
Controls	NO	YES	YES	YES	YES	YES	YES	YES
Firm fixed effects	YES	YES						
Year fixed effects	NO	NO	YES	YES	YES	YES	YES	YES
Number of observations	5521	5505	5505	5505	5505	5505	3667	5135
R-squared (adjusted)	0.158	0.235	0.238	0.241	0.238	0.243	0.132	0.237