Governors and Governing Institutions

A Comparative Study of State-Business Relations in Russia's Regions

Gulnaz Sharafutdinova

Gregory Kisunko

WORLD BANK GROUP

Governance Global Practice Group

September 2014

Abstract

The paper uses the latest 2011 round of the Business Environment and Enterprise Performance Survey for the Russian Federation, which for the first time was designed to be representative of Russian regions. The paper takes a closer look at regional-level factors influencing the business environment in Russia and, more specifically, conditions that favor the emergence of symbiotic relations between regional authorities and regional businesses. Considering the argued significance of informal rules, norms, and agreements for the regional-level business environment in Russia, the paper

uses proxy variables such as tenure and origin of regional governors to identify how these rules are being institutionalized. The findings reveal that, at least in case of Russia, juxtaposing the state and business actors as separate and opposed to each other may overstate the distinction between these two groups of actors and understate the fact that many localities in Russia have witnessed the emergence of mutually beneficial state-business arrangements. Defining whether these arrangements are beneficial or harmful to regional development is beyond the scope of this exploratory paper.

This paper is a product of the Governance Global Practice Group. It is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The authors may be contacted at gulnaz@gwmail.gwu.edu or gkisunko@worldbank.org.

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

Governors and Governing Institutions: A Comparative Study of State-Business Relations in Russia's Regions

Gulnaz Sharafutdinova and Gregory Kisunko*

Key words:

Russian regions, informal institutions, state-business relations, corruption.

JEL codes:

D73 Bureaucracy; Administrative Processes in Public Organizations; Corruption

O17 Formal and Informal Sectors; Shadow Economy; Institutional Arrangements

P26 Socialist Systems and Transitional Economies: Political Economy; Property Rights

* Gulnaz Sharafutdinova is Sr. Lecturer at King's College London, Gregory Kisunko is Sr. Public Sector Specialist at the World Bank.

This paper has greatly benefited from comments provided by peer reviewers: Birgit Hansl (Program Leader, ECCU1), Steve Knack (Lead Economist, DECHD), Jevgenijs Steinbuks (Economist, DECEE) of the World Bank and Prof. Timothy Frye of Columbia University. Authors are also grateful to Adrian Fozzard and David M. Nummy and Sergei Ulatov (Sr. Economist CMFDR) for their reviews and comments on the drafts and to participants of two discussion meetings at the World Bank office in Moscow for their comments and critique. Special thanks are to Michal J. Rutkowski, Director of the World Bank Programs in Russia for his support and guidance. All mistakes and omissions are, indeed, authors' own.

Introduction

Treating Russian regions¹ as a natural laboratory for studying state-business relations is beneficial both analytically and from a policy-making perspective. Analytically, it allows us to hold many variables constant (i.e. historical legacies, national institutions and policies), avoiding problems associated with cross-country research. The recent proliferation of subnational level research in political science and economics is one of the indications of these advantages (Tsai and Ziblatt 2010). From a policy-making perspective, it is important to investigate regional-level variation because regional governments and institutions have an impact on the business climate in Russia. Other scholars have argued based on their research findings that efforts to level the economic playing field in Russia should focus on regional level government (Frye 2002, Stoner-Weiss 2002). Some analysts have explored the role of regional level political institutions for regional economic growth (Libman 2010), firms' entry and exit (Bruno et al. 2013), and firm behavior with regard to limiting government predation (Pyle 2009). Others have pointed to the existence of special relations between firms and regional governments that are consequential for firm-level decision-making as well as for the regional-level business environment (Yakovlev 2011, 2006; Slinko, Yakovlev, Zhuravskaya 2005; Frye 2002). Contributing to this literature, this study highlights the importance of regional-level political factors for the regional business environment in Russia and, specifically, factors linked to the role of the regional governor.

Various studies have shown that the business environment and state-business interaction in Russia's regions vary considerably (Kisunko & Knack 2013; Plekhanov & Isakova 2011; Yakovlev 2006; CEFIR 2006). The results of the most recent 2011 Business Environment and Enterprise Performance Survey (BEEPS) conducted jointly by the EBRD and the World Bank once again highlight the regional diversity in business climate: regional location was found to be significantly correlated with firms' perceptions of administrative burden, corruption, and state capture indicators. Further complicating the picture is the fact that regions that rank high on some business climate indicators rank low on others. Thus, a region that is low on perceptions of administrative corruption might at the same time be

¹ The Russian Federation is divided into 85 federal subjects (constituent units), 22 of which are republics, 9 krais, 46 oblasts, 3 federal cities, 1 autonomous oblast and 4 autonomous okrugs. For the purposes of this paper, all these federal subjects are called "regions".

burdened with heightened perceptions of state capture, or a region where firms complain about regulatory obstacles might do really well on incidents of corruption in interactions between business and the state.

While it is evident that firms' geographical location matters and that regional variation in business environment might potentially be an important factor for explaining differences in firms' entry, growth and productivity and, consequently, regional economic development and prosperity, the question of *why* regions matter has not been yet answered convincingly. Plekhanov and Isakova (2011) used 2008-09 BEEPS data to study regional differences in the business environment in Russia but due to data constraints, they could not reach far in their analysis of the institutional determinants of regional variation in the business environment. Kisunko and Knack (2013) conducted an exploratory analysis using the more recent BEEPS data (that is regionally representative as opposed to previous similar surveys) and pointed out the potential importance of regional level policy and institutional differences. According to their analysis, regional dummy variables account for 12% of the variation in 'time tax' (average reported senior management's time spent on dealing with government regulations) and 20% of the variation in firms' perceptions of 'state capture' (Kisunko and Knack 2013, 23). Their focus however was on regional and national trends in the business environment rather than on factors associated with regional differentiation. This study instead posits regional differences in the business climate as the central issue to be explored and builds on the rich literature dealing with the institutional determinants of state-business relations in Russia.

A number of scholars focused on the role of formal institutions and, specifically, business associations in providing firms with lobbying services and collective action opportunities that became especially important in the new environment of a more consolidated bureaucratic state machine in the 2000s (Duvanova 2011; Pyle 2009; Markus 2007; Yakovlev 2006; Frye 2002). More recently, scholars exploring state-business relations in Russia's evolving institutional landscape emphasized the importance of both formal and informal institutions on the regional level (Rochlitz 2013; Bruno et al. 2013; Frye, Yakovlev, Yasin 2009). Indeed, the role of informal institutions, personal ties and informal elite networks has been shown to be crucially important for the operation of post-Soviet Russia,

both on the national and regional level (Ledeneva 2013, 2006; Sharafutdinova 2011). This study therefore aims particularly at analyzing the effect of informal institutions on varying patterns of state-business relations in the regions.

The sphere of informal institutions generally represents an underexplored realm in the studies of state-business relations in Russia and other countries. This is understandable given the difficulty of studying these institutions systematically. Only small-N², in-depth ethnographic studies are usually able to capture the variety of particular rules, norms and agreements that structure social relationships, including the interactions among state and business actors. Still, their significance in state-business relations is critical. The prevailing informal rules and agreements explain not only how these relations *actually* function; their understanding is crucially important for designing realistic pro-growth policies. At a minimum, informal norms and agreements constitute the broader institutional environment that can constrain and/or enable policy implementation. At the maximum, informal norms could even serve as substitutes for weak or non-existing formal institutions. Thus, criticizing the general scholarly obsession with the lack of rule of law in Russia, Allina-Pissano (2009, 187) argued that property rights in Russia could often be secured selectively through informal mechanisms rather than through institutional channels intended for securing property rights. These mechanisms depend on “social networks, knowledge of the informal rules, and skill in deploying these rules” (Ibid, 187).

The economics literature had also moved in the direction of recognizing the importance of second-best institutions (Rodrick 2008). Avinash Dixit, then president of the American Economic Association, suggested that, “no institution or system will prove perfect or ideal—the economist’s first-best—under all circumstances. Everything is “second-best” at best, subject to numerous constraints of information, incentives, commitment, and rules of the political game” (Dixit 2009, 8). Based on that, Dixit further argued that any policy recommendations coming from international organizations, western governments or academic circles should be based on a good understanding of “the structure and properties of the existing institutional equilibrium” (Ibid, 21). For the students of Russia’s state-

² Designs that involve a very small number of participants. Rather than reporting measures of central tendency, focus is placed on observations of individual scores/behaviors.

business relations, this suggests that scholars need to work on identifying the existing and changing parameters of the present institutional equilibrium and attempt to get at the underexplored informal rules of the game that make a difference for regional economic activity.

In the spirit of the aforementioned challenge, this study takes a closer look at regional-level factors that influence the business environment in Russia, trying to get at, more specifically, conditions that favor the emergence of symbiotic relations between regional authorities and regional businesses. Informal governance mechanisms – rules, norms and agreements – are important even in advanced industrialized countries (Dixit 2009). In developing countries, they may however dominate all other institutions as the primary means of governance (Bardhan 2005). Russia's institutional context is much closer to that of developing countries in this regard. Personal ties, networking, social capital, and shared knowledge constitute a critical aspect of the existing institutional equilibrium along with a variety of informal rules, norms and agreements that structure social, political and economic interactions in Russia's regions.³ Given such realities, it seems plausible to suggest that Russia's localities differ on the degree to which such informal governance mechanisms - rules, norms, and inter-elite agreements - have emerged and stabilized. Some regions have experienced stabilization of such rules and agreements, while others have been going through a continuous process of their contestation and re-building.

The presence of relatively stable exchange arrangements between businesses and regional government that reflect the development and stabilization of such informal rules and agreements is likely to be valued by business actors because they provide predictability and stability. This appreciation will only hold for those actors though who are part of these arrangements and part of this institutional equilibrium. Being an insider to such equilibrium would mean that a firm would have knowledge of the rules, the social capital and necessary personal connections to pursue its interests. Such equilibrium that might involve the government extend a 'helping hand' to businesses in exchange for services and resources contributed back, might, however, also involve restricting entry for outsiders and reducing market competition at the regional level. Thus, it seems plausible to suggest that

³ Such exchange-based relations are usually studied using concepts of 'patronage' or 'cronyism.'

such arrangements might be welfare-increasing in the short-to-medium term (Evans 1995); however, their beneficial aspect may be dependent on the extent to which political actors are willing to control the degree of corruption in the system and promote efficiency and competitiveness, even if for selected firms. This paper only analyzes how business environment is related to the existence of such informal governance mechanisms. Determining whether these mechanisms are beneficial for economic growth and regional economic development is beyond the scope of this paper and is a matter for further empirical investigation.

Getting to Regional Level Informal Governance Mechanisms

Considering the argued significance of informal rules, norms and agreements for regional level business environment in Russia and the enormity of the challenge associated with identifying their regional constellations and making comparisons among Russia's 85 regions, this study seeks to identify these institutions using proxy variables. Although it is too burdensome and therefore prohibitively costly to study the presence of informal agreements and rules of interaction in each region,⁴ it is possible to identify different factors and conditions characterizing Russian regional institutional environments that are likely to be associated with an increased probability of the emergence and stabilization of the aforementioned informal rules, norms and collaborative arrangements between regional government and business actors. In the Russian political context characterized by an overwhelming dominance of the executive branch of power both on the national and regional levels and prevailing practices of exercising political authority through selective transfers of resources,⁵ a place to start the analysis of regional-level informal rules and agreements is the institution of the governor and his team.

Administrative Continuity

Governors – or regional chief executives – represent the ultimate authority in their regions, and usually play a role of ultimate arbiters in the region's politics and economics. Given

⁴ Usually, this challenge is met through small-N studies of crony networks in specific countries or regions (Chekir & Diwan 2013; Rijkers et al. 2013; Sharafutdinova 2011).

⁵ On patronage and clientelism in Russia, see, for example, the recent issue of *Demokratizatsiya* (Fall 2013). Henry Hale's concept of 'patronal presidentialism' captures these practices at the very top of the national power pyramid (Hale 2005).

that many regions of Russia are larger in size than entire nation-states,⁶ regional chiefs never govern alone, and have to develop and rely on their teams to get things done. This regional chief along with his or her team (frequently referred to by Russian experts as *regional'naya vlast'* or *administratsiya*) is arguably the key regional actor with the potential to make a difference in the business climate in Russia's regions. A recent regional rating of Russian regions by the Russian Information Agency (RIA), for example, highlighted the role of regional authorities in regional development.⁷ One of the key indicators of political skills and managerial qualities is the length of gubernatorial stay in office. Since each governor develops an administrative team of his own and relies on it, usually without major changes, a governor's longevity in office is also a precondition for the administrative continuity in the region, which is, in turn, necessary for creating stable linkages between the regional government and regional businesses. Russian regional analysts have always highlighted the role of regional 'heavyweights' – those governors that have stayed in their positions for many years.⁸ However, it seems plausible to suggest that the time factor itself allows for the consolidation of informal rules and agreements as well as for a more predictable application of formal rules, creating a more stable institutional environment and allowing for greater influence of these leaders. Administrative continuity is one of the crucial pre-conditions for striking informal agreements and maintaining them over time, thus allowing regional businesses a greater degree of stability and predictability.⁹

Therefore, ***the first hypothesis*** in this study is that the probability of the emergence of stable informal rules and agreements and mutually beneficial inter-elite arrangements is higher in regions with longer serving governors.

It is also plausible to suggest that informal institutionalization might be associated with more bribes and greater corruption as well as higher degree of 'state capture,' normally considered a negative factor for the business environment. Therefore, the effect of

⁶ The largest Sakha republic is five times the size of France, for example, in territory.

⁷ <http://ria.ru/economy/20130619/944444129.html>

⁸ Yuri Luzhkov, Mintimer Shaimiev, Murtaza Rakhimov, Eduard Rossel, Egor Stroev, and Viktor Ishaev were formerly among such regional heavyweights, for example.

⁹ It is also true those governors who are in power for longer are more likely to have gone through both the electoral and appointment based mechanisms of gubernatorial selection, indicating once again a higher likelihood of political skills than those governors that have only gone through appointment mechanism.

administrative continuity associated with gubernatorial tenure in office on business climate – actual and perceived – is a matter for empirical testing in this study.

Regional Authorities' Local Roots

There is another factor associated with the figure of the regional governor that might be important as a precondition for the consolidation and stabilization of regional-level informal networks and rules – a governor's *local roots*, i.e. the degree to which she or he is a regional insider, a local politician who made his or her career within the region; or an outsider brought into the region by the Kremlin. This issue emerged in 2005, when the gubernatorial selection mechanism changed from election-based to appointment-based and the Kremlin, faced with problems of availability of acceptable local cadre or other political issues, made decisions to appoint '*varyags*' – the commonly used nickname for the governors whose roots lie outside the region, or "governors-outsiders". Since regional-level informal networks and arrangements are, by definition, local, governors-outsiders lack social and political capital in the region, are not familiar with local 'heavyweights' and brokers, lack local knowledge that might be helpful in inter-elite interaction, and therefore are at a disadvantage when compared to regional insiders. Even further, governors-outsiders tend to bring in other outsiders; the key members of their teams are usually individuals that come along with them, thus causing greater anxiety and uncertainty among the local elites.

Russian regional analysts have developed a widely shared consensus that governors-*varyags* were frequently ineffective because they lacked the necessary knowledge, connections and support base in the region.¹⁰ There are very few exceptions from this rule.

The second hypothesis, therefore, is that the consolidation and stabilization of informal rules, networks and agreements is more likely in regions with local governors than in regions with governors-outsiders.

¹⁰ For an illuminating case-study of Samara oblast, see Chirikova 2011.

Of course, after a while, outsiders might *become* insiders, and, given time, political skill, will and favorable conditions, governors who initially lacked local knowledge and local social and political capital might with time gain these resources. Therefore, it appears plausible to suggest that if outsider governors persevere through the initial difficulties and forge working relationships with regional elites, the disadvantages they faced initially will dissipate with time.

Operationalization and Data

The analysis of the quality of state-business relations in Russian regions in this study relies on the conceptualization of state-business relations used in the Business Environment and Enterprise Performance Survey (BEEPS) implemented by the World Bank and the EBRD. The latest 2011 round of BEEPS for the Russian Federation was for the first time designed to be representative of Russian regions and provides the most systematic instrument available today for measuring regional variation in state-business relations in Russia in the last few years. The survey combines perception and experience-based questions designed to explore patterns of interaction between firms and state actors across a variety of spheres. Respondents – senior managers – were asked, among other things, to assess the importance to their firms' operation of 16 governance and administrative obstacles such as political instability, corruption, access to land and finance, labor regulations, etc. The survey questions were conceptualized to also serve as measures of administrative corruption and state capture across Russian regions. A total of 4220 firms were surveyed across 37 regions with approximately 120 firms per region.¹¹

The explanatory variables of main interest, as discussed above, comprise two proxy indicators for the likely consolidation of regional-level informal rules and inter-elite arrangements.

Administrative continuity is constructed by calculating the number of months a governor was in office in a region as of January 1, 2011, and used as a first proxy for the presence of regionally shared informal rules and agreements in Russia. Firms value political stability,

¹¹ For a more detailed description of the BEEPS data and the methodology used to create it, see Kisunko and Knack (2013).

and there is a higher chance that the longer serving governors with their longer serving teams had been able to establish a system of rules and agreements amounting to a working administrative system (*sistema upravleniya*) that can provide businesses with a more predictable operating environment. In regression specifications described below this variable was converted into a logarithm to allow for elasticity interpretation.

In order to control for non-linear impact of administrative continuity (i.e. relationships that sometimes are driven by the regions with very short- or very long-serving governors), four tenure dummy variables were created based on quartile distributions (see Table A3 in the appendix).

A Regional Authorities' Local Roots dummy variable assigns 1 to regions run by governors who are regional insiders and 0 to outsiders and is another proxy used in this study to capture the likelihood of consolidated and regionally-shared informal rules and agreements between regional government and businesses. As discussed above, in the Russian context it matters a lot whether a governor is a local and has developed his career inside a region or an outsider brought to the region through the appointment mechanism. Governors with preexisting ties to and in the region would have had a greater opportunity to be part of and forge further inter-elite exchange relationships, while the outsiders can develop such relations only provided time and political skills.

Additionally, an **origin longevity** variable was constructed based on the interaction term between variables of governor origin and tenure by multiplying these two variables. There are grounds to suspect that the impact, hypothesized above, of governor origin might be mitigated by the time a governor-outsider spends in office. It seems plausible to expect, for example, that given time and skills, some outsiders might be able to develop effective informal rules and coalitions with business actors in their regions making them more comparable with insiders (i.e. the insider-outsider gap might lessen with tenure). Hence, the difference between insider and outsider governors might lessen with time.

Summary descriptive statistics for the two key variables are available in Table A1 and correlation matrix in Table A2 in the appendix.

Limitations of the data used in this study are mostly related to data characteristics and operationalization issues. Perhaps the most important data limitation is the selection bias engrained in the survey. The survey can only be conducted with those firms that have survived in Russia's challenging institutional environment. This means that the composition of firms surveyed in 2011 is likely to be qualitatively different from firms surveyed in all previous surveys and especially from those surveyed in the 1990s. In short, there is a 'success' bias in the data and BEEPS does not provide any information on firms that have exited the regional economy or have gone informal.

Moreover, given the complexities of doing business in Russia, no survey, even as comprehensive as BEEPS, can capture all factors that could be perceived as obstacles as well as factors that may be necessary for success when doing business in various Russian regions; a number of the BEEPS questions might have been perceived as too sensitive by top managers, presumably concerned with potential political fallout; therefore, there are grounds to question the accuracy of specific responses.¹²

Finally, the two variables that have been conceptualized in this study as proxies for informal institutionalization might not be the most accurate measures of actual informal institutionalization and might also stand for a number of other things. Governor tenure, in particular, is likely to capture political skills of the governor as well as more established relationships in the federal center and, therefore, potentially greater lobbying capacities (all of which will produce better outcomes for regional businesses).

Methodology

The underlying econometric model with latent variables is characterized in this study as

$$y^* = x' \beta + \epsilon, \text{ where}$$

y^* is the exact but unobserved dependent variable (in BEEPS case e.g., respondents' exact

¹² This might be especially true for questions about the share and particular amounts of informal payments and gifts given to get things done.

level of dissatisfaction with various obstacles related to business environment); x is the vector of independent variables, and β is the vector of regression coefficients which we wish to estimate.

This study employs three different econometric methods for analyzing limited dependent variable (DV) data. The continuous limited DVs, such as number of days to obtain an operating license or the size of informal payments as the percentage of annual sales were estimated using the Heckman selection model that allows for correcting the sample selection bias introduced by responses such as 'don't know' or 'refuse to answer'. In the first stage of Heckman's two-stage correction, a logit model was employed to obtain the predicted values for the 'don't know' and refusal answers. An instrumental variable used in the first stage was the quality of firms' book keeping records (as reported by the interviewers). It is negatively correlated with 'don't know' answers and assumed not correlated with the unobserved endogenous latent variable (e.g., the respondents' sensitivity to questions due to their political connections). In the second stage we estimated the relationship between X and Y with the least squares method, using a predicted selection variable as an exogenous covariate. The binary limited DVs such as 'did you apply for a government contract' (yes/no answers) were estimated by the logit model. The ranked limited DVs were estimated using an ordered logit model that allowed for analyzing non-uniform intervals in observed outcomes.

In all three methods, robust standard errors allowing for clustered correlations by region, industry and size were estimated.

There are three model specifications: (1) including a dummy variable for measuring governor origin (1 for insiders and 0 for outsiders) and a measure of the governor tenure; (2) including governor tenure, origin, and interaction variables between tenure and origin; and (3) including dummies for governor tenure (based on quartile distribution), and governor origin variable.

Same control variables are used in each of the model specifications. They include firm age, size, sector, ownership, gross regional product (GRP) composition (construction, retail, and

extractive sectors as % of GRP); log of regional GRP; population density; and regional shares of state-owned and privately owned enterprises.

Results

- a. Greater administrative continuity not only provides for greater institutional stability, but also for more corruption*

Administrative continuity plays a significant role in shaping firms' perceptions of the business environment in Russia. The results of the analysis demonstrate that longer governor tenure is associated with the amelioration of firms' perceptions of most obstacles to business operation measured by BEEPS. Specifically, on access to land, customs and trade regulations, crime/theft/disorder, tax administration, business licensing and permits, courts, and labor regulations, firms in regions with longer serving governors express less concern than in regions where governors have shorter tenure (see Tables 1, 2, 3, 4, 5, 6, and 7 in the appendix). On such obstacles as access to finance, corruption, informal competition and lack of skilled and educated workers, the direction of relationship remains negative, although not statistically significant (see Table 1). Only on one obstacle – tax rates – the analysis produces a statistically significant positive impact of long tenure. This exception appears to be an exception that proves the rule. Tax rates are the most generic concern for all the businesses around the world and they can arguably dominate in the situations when other concerns – especially those related to state officials - are relatively insignificant.

Additionally, administrative continuity is associated with a number of other positive outcomes and attitudes expressed by respondents. Firms in regions with longer serving governors report less impact from state capture (private payments and other illicit benefits to government officials and parliamentarians in order to affect content of decree and/or voting) and lesser frequency of informal payments to get things done and to deal with customs, courts and tax collection (see Tables 8-14 in the appendix). At the same time, however, the results are not straightforward and reveal some interesting discrepancies between firms' *perceptions* and their reported *experiences* of interactions with state

authorities.¹³ Longer governor tenure is also associated with more informal payments needed to obtain construction permits and with a larger percentage of annual sales paid as informal payments (Tables 15 and 16 in the appendix). The effect of tenure on informal payments is not only statistically significant but is also quite substantial in size. Thus, a 100 percent increase in governor tenure (i.e., if tenure doubles) produces a .22 percentage points increase in the reported share of sales paid as informal payments to various authorities to ‘get things done’ (see Table 16 in the appendix).¹⁴ There are some additional indicators that the amount of corruption grows with administrative continuity. BEEPS obtained firms’ responses to a series of vignettes describing a corruption situation in an imaginary town/village with one town featuring a no bribes case and four other towns featuring different combinations of corruption-efficiency scale. On all but the ‘free-of-bribery’ case, longer governor tenure is associated with firms’ greater perceptions of corruption as an obstacle (see Tables 17-21 in the appendix). Given such substantial differences, it is surprising that firms in regions with longer-serving governors actually tend to choose corruption as their number one obstacle less often (see Table 2).

Table 1: Impact of Regional Political Factors on Firms’ Perceptions of Obstacles

Obstacles	Tenure	Insider Origin	Origin Longevity	
			Effect of origin at short tenure	Effect of origin at long tenure
Access to land	↓***	↓***	↑***	↓***
Access to finance	↓	↓**	↓	↓
Tax rates	↑***	↑	↑	↓
Tax administration	↓***	↓***	↓	↓
Corruption	↓	↓**	↑	↓
Informal competition	↓	↓***	↓	↓
Political instability	↑	↑	↑*	↓*
Courts	↓*	↓***	↓**	↓**
Business licensing and permits	↓***	↓***	↓**	↑**
Customs and trade regulations	↓***	↓	↑	↓
Crime, theft and disorder	↓***	↓***	↓**	↓**
Labor regulations	↓***	↓***	↓	↓

¹³ These results confirm earlier studies on regional corruption in Russia (Sharafutdinova 2010).

¹⁴ Given the average of 1.06% of annual sales paid as informal payments on average for 4220 firms, .22 appears as a big effect.

Uneducated labor force	↓	↓***	↓	↓
------------------------	---	------	---	---

Table 2. Impact of Regional Political Factors on Firms' Perceptions of #1 Obstacle

An Issue as #1 obstacle	Tenure	Origin	Origin Longevity	
			Effect of origin, short tenure	Effect of origin, long tenure
Access to land	⊖	↓	↑**	↓**
Access to finance	↑	↓	↑	↓
Tax rates	↑**	↑	↓	↑
Corruption	↓*	↓**	↓	↓
Informal competition	↑**	↓	↑	↓
Political instability	↓	↑***	↓	↑

Notes:

↑ - positive impact

↓ - negative impact

⊖ - inconclusive

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Statistical significance is reported only when the results are robust across all model specifications.

Also negative is the effect of administrative continuity and governor tenure on firms' perceptions of courts. Although courts are viewed as lesser of an obstacle in regions with longer serving governors, firms tend to have a lower opinion of their courts, i.e. disagreeing more with statements about courts being fair, quick and non-corrupt (see Tables 22 and 23 in the appendix). It appears that informal institutionalization might be also associated with some deterioration of formal institutions (e.g.. courts) or, once again, firms' view of courts might be associated with their understanding of the growing corruption in the region.

Additional tests using tenure dummies confirmed that, controlling for other factors, the impact of administrative continuity is not always linear and the relationships are sometimes driven by the regions with very short- or very long-serving governors and sometimes even change twice going from short tenure, to medium and then long tenure.¹⁵

¹⁵ The four tenure dummies were created based on quartile distributions. See Table A3 in the appendix.

Thus, the firms' responses on corruption as an obstacle are revealing. Firms in regions with governors who have served less than one year complain about corruption significantly more than firms in regions with the longest serving governors, and tend to also choose corruption as the number one obstacle significantly more often (see Tables 24 and 34 in the appendix). However, in regions of the second tenure quartile (governor tenure between 1-3 years), firms complain about corruption significantly less than firms in the regions with longest serving governors. Firms of the third tenure quartile (governor tenure 3-10 years) do not display significant differences in their corruption assessments with firms of the second quartile (see Table 24 in the appendix). It is plausible to suggest that complaints about corruption among firms of the first quartile are related more to the political uncertainty and the changing rules of the game introduced by new governors. At the same time, growing complaints with corruption with increasing tenure are likely to be associated with the actual informal institutionalization, and the degree to which bribes, gifts and informal payments become expected and taken for granted.

Indeed, the reported percentage of annual sales paid as informal bribes is significantly lower for firms of the first tenure quartile; similarly, reported propensity to bribe at tax meetings is significantly lower for firms of the second quartile (see Tables 16 and 25 in the appendix), all indicating that actual corruption levels are lower at shorter tenure though complaints about corruption (and thereby state officials) are much higher in regions that have undergone political discontinuity in the previous year. Firms of the first quartile emerge as the most discontented group on many indicators: customs and trade, access to land, access to finance, informal competition, crime/theft/disorder, tax administration, business licensing, paying bribes to get things done, state capture and even courts (which they display a higher opinion for in other court-related questions, see Tables 22, 23 and 26 in the appendix).

In regions with the longest serving governors, firms tend to complain significantly less about access to land, informal competition and state capture revealing, arguably, a more stable institutional environment with predictable rules of the game and the selection process that firms would have undergone by then with only those firms surviving or

entering into operation that have reliable links to the government and administrative resources (see Tables 8-10 in the appendix).

Despite lesser complaints on access to land and state capture, these are not generally the 'happiest' firms in Russia because the amounts of corruption seem to be increasing in regions where the governors serve the longest (see Table 16 in the appendix). Access to finance also becomes more problematic for firms of the fourth quartile in tenure even though it appears to be compensated to a certain extent by larger subsidies received from the government (see Tables 27 and 28 in the appendix). The most content firms in the regions are apparently those of the second quartile in tenure: their perceptions of corruption and the need for informal payments to get things done, tax rates and tax administration, political instability, courts and uneducated workforce as obstacles are significantly lower than in regions where governors serve the longest (see Tables 29, 4, 30, 24, 6, and 31 in the appendix).

When considered along the results describing firms' perceptions in regions with the least serving governors, these results seem to indicate both that businesses do not like political change and changing gubernatorial teams; and on many issues they reveal their dislike of the administrative impunity associated with the longest-serving governors. In short, the results of this analysis reveal that administrative continuity plays a significant role in shaping the business environment in Russia's regions and its impact is not linear. The discussion section will provide further interpretation of these results.

b. Governor Origin – Rejection of Varyags

The governor origin variable highlighted the numerous benefits associated with governors-insiders, as perceived by firms. Thus, access to land, access to finance, corruption and informal competition are seen as less of an obstacle in regions with insider-governors than in regions with governors-outsiders (see Table 1). The same relationship holds for crime/theft/disorder, tax administration, business licensing, labor regulations, courts and inadequately educated workforce as obstacles (Ibid). State capture is also perceived to be less of an issue in regions with governors-insiders as firms report less impact from private payments to parliamentarians and regional officials in these regions (see Tables 8-10 in the

appendix). Similarly, firms in regions with insider governors tend to admit less the necessity of informal payments ‘to get things done’ in general and in dealing with customs, courts and the tax authorities, in particular (see Tables 11-14 in the appendix). They also report less bribes paid at tax meetings (by 2.5% across different model specifications, see Table 25 in the appendix), and less bribes needed to get an operating license (by about 5%, see Table 32 in the appendix).

At the same time, the actual weight of informal payments as a percentage of annual sales is significantly higher in regions with insider governors (by .83 percentage points given the average of 1.06 %). As in the analysis of the effect of tenure, there seems to be a considerable divergence between the actual and the perceived state of affairs.

c. Tenure and Origin Interaction – Entrenchment of the Locals and Assimilation of Varyags

Besides the revealed significance of governor tenure and origin, the indicator of the interaction between these two variables also produced interesting results, adding further nuance to our understanding of how things work in Russia’s regions. The interaction variable was used in the second model specification to test for the effect of origin with changing tenure.

The model reveals once again the advantages associated with insider-governors: on senior management time spent on regulation, the interaction variable is statistically significant and indicates that, while at short tenure the time spent on regulations is longer in regions with insider governors, at long tenure the direction of the impact reverses and firms in insider-governed regions report shorter time spent on regulation (see Table 33 in the appendix). The same relationship holds on the question of access to land as an obstacle, on perceptions of courts’ being fair, impartial, quick, and able to enforce their decision and on political instability as an obstacle. In all these cases insiders’ tenure has a more positive effect than that of outsiders’ (see Tables 2, 22, 23, 26, and 30 in the appendix). Even perceptions of tax rates as an obstacle go through a more positive transformation in insider-governed regions (see Table 29 in the appendix).

On business licensing and permits as well as on courts, the model reveals more positive trends for outsider-governed regions as firms there demonstrate greater improvement in their perceptions of business licensing and permits as obstacles to their operation (see Tables 5 and 6 in the appendix). The same dynamic is seen on the issue of informal payments frequency when dealing with courts, taxes and tax collection. The model shows that, although at both ends – short and long tenure – insider-governed regions produce better results (less frequency reported), the changing coefficients show that at long tenure, the responses get closer for both type of regions (see Tables 13 and 14 in the appendix).

Revealingly, on the issue of state capture, the analysis of the interaction term uncovers a worsening situation with time in insider-governed regions: while at short tenure insider-governed regions, produce less state capture (as measured through firms' perceptions), at long tenure state capture is apparently greater in the insider-governed regions than it is in the outsider-governed (even if the magnitude of difference is much lower). This result holds across three different measures of state capture and provides an important correction to the findings of the other two models with regard to state capture.

Discussion

The results pertain to the importance of administrative continuity (when measured through the tenure of the regional chief executive), local roots of regional authorities (measured through the origin of the governor) and the changing dynamic of the effects of governor's origin depending on tenure. Although these indicators have been conceptualized in this study as proxies for the degree of informal institutionalization, the findings arguably relate to formal rules as well.

The arbitrary application of formal rules in Russia is notorious. Therefore, besides informal norms and agreements that are frequently person-based, institutional stability is associated with *predictable* application of formal rules. In Russia's regional context administrative continuity provides not only for a greater opportunity to arrive at inter-elite agreements but to also establish an environment of more predictable formal rules. This study, therefore, highlights the importance of more stable and predictable institutional environment overall with more predictable formal and informal rules and their consistent

application enhanced, as we argue, by administrative continuity and regional authorities' local embeddedness.

The analysis of the effect of tenure broken into quartiles brings two important findings: firms display an unusually high degree of discontent associated with very short tenure (arguably reacting to the circumstances of a recent political shake-up) and a somewhat unexpected degree of content on some of the issues in regions where governors have served over ten years (arguably revealing the unhealthy symbiosis with regional authorities).

Consequently, perhaps the most striking finding in this analysis is the degree of insecurity and the level of complaints emerging from the regions that have undergone political discontinuity as expressed through gubernatorial change (firms from the regions of the first quartile in tenure, where governors have served under one year). This initial anxiety seems to go away quickly because in regions with governors serving between one and three years (second quartile), firms display higher confidence on many issues as discussed in the results section. When the governor's tenure reaches the 10-year mark (the fourth quartile), the most stable institutional environment could be expected to be in place.

The analysis confirms however that such stability comes with a price and a very long tenure means increasing corruption levels. While the perceptions of state capture and access to land as an obstacle are the lowest, firms in these regions report higher level of actual bribes (as percentages of annual sales paid as informal payments) and higher expectations of bribes paid to tax authorities. Firms' perceptions of corruption, though highest in regions of the first quartile, also heighten as gubernatorial tenure increases beyond three years (in the third and fourth quartiles).

The expectation of bribery might be significantly higher in the regions of the first quartile due to political change, uncertainty and a common expectation that corruption will be higher with the political 'newcomers' who have yet to 'enrich' themselves, purportedly, using their official positions.

While the significant difference between regions with governors serving three to ten and over ten years (the third and fourth quartiles) does not have a clear explanation, it could be suggested that such a difference might reflect an extreme symbiosis between the regional government and businesses and such a degree of habituation to corruption patterns that the firms in regions where governors are serving more than 10 years would be 'under-reporting' the frequency of bribes in defense of themselves and the state authorities. In short, their existence as firms on the regional scene might be indicative of their access to and dependence on administrative resources, which they would want to defend and use against potential challengers. In such circumstances, close links between these firms and the government would work to exclude competitors from entering the market. Alternatively, the actual bribery level might indeed be lower due to, once again, symbiotic relationships between the firms and the government officials and the lack of necessity for bribes, i.e. regional government officials could be working on behalf of these firms closely associated with them personally.

A more optimistic interpretation is also plausible: a somewhat greater content in regions of the fourth quartile in tenure might be associated with governors' extra-political skills and extra-political connections in the federal center that would presumably be translated into enhanced lobbying capacities. Firms that perceive their governors as good lobbyists working on behalf of the regional economy are likely to 'forgive' the institutionalized bribery and attach value to gubernatorial political skills and regional political stability.

The central finding of this study about the significance of administrative continuity for broader institutional environment and business climate is supported by a recent study of firm entry and exit in Russian regions. Bruno et al. (2013) have demonstrated that industries normally characterized by low entry barriers have lower entry rates in regions characterized by greater political discontinuity. This effect is especially pronounced for medium and large firms that are more likely to depend on access to administrative resources and personal links to government officials. The level of complaints associated with firms in regions of the first quartile, as discussed in our analysis, therefore should be taken seriously -- the complaints are accompanied by falling new firms entry rates into the regional economy.

While the measure of administrative continuity pertains to both informal and formal rules, the significance of governor origin and the benefits of having a local governor highlight further the importance of personalized exchange relations and informal links possessed by locals but not by outsiders. The reality of larger bribes reported in regions with local governors combined with more favorable perceptions about corruption and lower perceptions of state capture (especially at short tenure) are also indicative of the likely selection and adaptation processes the regional firms have undergone under local governors.

It seems plausible to suggest that *varyags*, given their executive powers and the lack of local knowledge and local connections, threaten to dismantle whatever arrangements that have emerged in the regions and thus be a source of acute insecurity for local business actors. It might also indicate that the firms that have been pessimistic on corruption issues all along would expect higher corruption margins from the outsider governors just because they are an ‘unknown evil’ as compared to the ‘known local evil.’ In such circumstances, it is plausible to expect that firms’ insecurities would be reflected in their unhappiness with the state of corruption, state capture, and more generally the operation of any state agency they interact with.

These findings overall reveal that the juxtaposing the state and business actors as separate and necessarily opposed to each other seem to overstate the distinction between these two groups of actors and understate the fact that many localities in Russia have witnessed the emergence of mutually beneficial state-business arrangements. The less flattering interpretation for these results is that, with time, the businesses that have succeeded in Russian regions are only those supported by the regional establishment in the first place¹⁶.

¹⁶ These interpretations highlighting the importance of informal governance mechanisms for the regional business environment and institutional stability overall are also supported by the analysis of the impact of regional openness (the degree to which a region is integrated into the national political and economic space) on business climate in the regions. The preliminary analysis is not included in this study due to a lack of reliable data on regional openness. It is based on expert ratings of regional openness in Russia developed by Nikolai Petrov and Alexei Titkov (Carnegie Foundation, Moscow, See Titkov 2013) and shows that firms complained considerably less in most closed regions. Arguably, it is in the most closed regions with long serving governors that the informal institutionalization is most advanced, institutional environment is most

Worth noting again, this study has revealed a considerable gap between firms' actual experiences and their perceptions. Both types of data are invaluable for understanding state-business relations in Russia and the analysis based only on perceptions or only on actual numbers and estimates might result in inadequate assessments. Thus, in our analysis, if we only assessed business environment by looking at the actual amounts of informal payments, we might have reached different conclusions and missed out on the understanding of the regional business environment entirely. A comprehensive look at both real experience-based and perceptual-based data was necessary in this study to make sense of the variation in state-business relations in Russia's regions.

Concluding Remarks

Focused on firms in the existing, imperfect institutional environment in Russia, the findings reflect years of adaptation and selection that economic actors have undergone in the context of limited choices, high risks and a predatory state apparatus. Such an environment does not reward economic efficiency but promotes links to the state and encourages dependence on the state.

The central question that emerges is whether this institutional environment underpinning firms' operation is amenable to change in a wholesale fashion. If such comprehensive reforms are not conceivable in the short-term, whether for the lack of political will or the absence of a clear template for such reforms, a policy-maker might find it more useful to support economic development in the sub-optimal conditions of crony capitalism, in the hopes that such economic growth – if provisions are made for it to be equitable - might create new social conditions that would allow for the creation of a broadly-based political coalition promoting institutional changes. In such a scenario, it would be imperative to study more in-depth the particular economic success cases and try to discern the underpinnings of these successes. For example, getting access to federal funds in support

stable and the selection process is most radical in terms of favoring particular businesses with good or even direct family connections to government officials. That such businesses tend to convey more optimism is likely due to the fact that they can rely on secure access to administrative resources and feel protection from the regional government. The envy of firms from neighboring, more open, regions reflects the perceived advantages accrued from systematic government protection.

of regional projects appears to be one of the means for bolstering regional governors' support and recognition from regional economic elites. An exploration of lobbying strategies of regional elites and other rationale behind intergovernmental transfers, especially the part of transfers that is more politically sensitive, might provide further clues to regional success cases.

The regional institutional environment is never defined only by informal but also formal rules and regulations. Therefore, another promising research direction is the assessment of regional bureaucratic capacity and rule-making and their effects on regional economic prospects and business environment. These factors might be especially important for small business development, an underdeveloped sector in Russia (Beazer and Duvanova 2014). Additionally, it might be worthwhile to consider more 'piecemeal' reforms to some of the outstanding problems of the existing institutional order in Russia. As argued in this paper, the actual level of corruption increases with administrative continuity. Finding ways to reduce corruption levels while keeping the benefits of political stability might be a challenging task, but one that brings significant benefits to regions that managed to achieve it and therefore worthwhile of further exploration.

Among the more concrete lessons of this study is that firms in Russia have a big preference for local governors over governors-outsiders. Whether systematically lower perceptions about the need for informal payments and various other obstacles studied by the BEEPS reflect the reality or are a product of increased anxiety caused by outsiders who bring with them more economic and political competition is not entirely clear. Over time, in regions run by local governors the perception of state capture increases more; so it is plausible to suggest that the degree of corruption might actually remain the same or even increase in these regions. Therefore, on the issue of the strength of regional governing teams, leaders' political skills and credentials as well as their access to local networks appear as very important from the regional business perspective.

Bibliography

- Allina-Pissano, Jessica. "Property: What Is It Good For?" *Social Research* 76 (1), 175-200.
- Bardhan, Pranab. 2005. "Institutions Matter, But Which Ones?" *Economics of Transition* 13 (3), 499-532.
- Beazer, Quintin H. and Dinissa Duvanova. 2014. "Administrative Capacity, Bureaucratic Discretion, and Small Business Development in Russia's Regions," *unpublished manuscript*.
- Bruno, Randolph Luca, Maria Bychkova and Saul Estrin. 2013. "Institutional Determinants of New Firm Entry in Russia: A Cross-Regional Analysis," *Review of Economics and Statistics* 95 (5), 1740-1749.
- Cali, Massimiliano and Kunal Sen. 2009. "Do Effective State Business Relations Matter for Economic Growth," *IPPG Discussion Papers*.
- CEFIR. 2006. "Analytical Report on Growth and Investment in Russia's Regions 'Unleashing the Potential,'" *Center for Economic and Financial Research Policy*, Paper 24.
- Chekir, Hamouda and Ishak Diwan. 2013. "Crony Capitalism in Egypt," *CID Working Paper* # 250.
- Chirikova, A.E. 2011. "Moskovskie naznachentsy v gubernatorskom korpuse: analiz samarskogo sluchaya," *Politiya* 4(63), 61-73.
- Dixit, Avinash. 2009. "Governance Institutions and Economic Activity," *American Economic Review* 99 (1), 5-24.
- Duvanova, Dinissa S. 2011. "Firm Lobbying versus Sectoral Organization: The Analysis of Business-State Relations in Post-Communist Russia," *Post-Soviet Affairs* 27 (4), 1-37.
- Evans, Peter. 1995. *Embedded Autonomy: States and Industrial Transformation*. Princeton University Press.
- Frye, Timothy. 2002. "Capture or Exchange? Business Lobbying in Russia," *Europe-Asia Studies* 54 (7), 1017-1036.
- Frye, Timothy, Andrei Yakovlev, and Yevgeny Yasin. 2009. "The "Other" Russian Economy: How Everyday Firms View the Rules of the Game in Russia," *Social Research* 76 (1), 29-54.
- Hale, Henry. 2005. "Regime Cycles: Democracy, Autocracy and Revolution in Post-Soviet Eurasia," *World Politics* 58 (1), 133-165.
- Kisunko, Gregory and Stephen Knack, 2013. "Policy Note. Russian Federation: National and Regional Trends in Regulatory Burden and Corruption."
- Ledeneva, Alena. 2013. *Can Russia Modernize? Sistema, Power Networks and Informal Governance*. Cambridge University Press.
2006. *How Russia Really Works? The Informal Practices That Shaped Post-Soviet Politics and Business*. Cornell University Press.
- Libman, Alexander. 2010. "Government and Companies in The Post-Soviet World: Power, Intentions and Institutional Consistency," *Eurasian Review* 3, 41-66.

Markus, Stanislav. 2007. "Capitalists of all Russia, Unite! Business Mobilization under Debilitated Dirigisme," *Polity* 39 (3), 277-304.

Plekhanov, Alexander and Asel Isakova 2011. "Region-specific constraints to doing business: Evidence from Russia," *EBRD Working Paper* #125.

Pyle, William. 2009. "Organized Business, Political Competition and Property Rights: Evidence from the Russian Federation," *The Journal of Law, Economics and Organization* 27 (1), pp. 2-31.

Rijkers, Bob, Raballand Gael and Leila Baghdadi. 2013. "Political Connections and Tariff Evasion: Evidence from Tunisia," *unpublished manuscript*.

Rochlitz, Michael. 2013. "Corporate Raiding and the Role of the State in Russia," *Post-Soviet Affairs* 30 (2-3), 89-114.

Rodrick, Dani. 2008. "Second-Best Institutions," *NBER Working Paper* # 14050.

Sharafutdinova, Gulnaz. 2010. "What Explains Corruption Perceptions? The Dark Side of Political Competition in Russia's Regions," *Comparative Politics*, 42 (2), 147-166.

2011. *Political Consequences of Crony Capitalism Inside Russia*. University of Notre Dame Press.

Slinko, Irina, Yevgeny Yakovlev, and Ekaterina Zhuravskaya, 2005. "Laws for Sale: Evidence from Russia," *American Law and Economics Review* 7 (1).

Stoner-Weiss, Katherine. 2002. *Local Heroes: The Political Economy of Russian Regional Governance*. Princeton University Press.

Titkov, Aleksei. 2013. "Raschetnyi indeks demokratii: otsenka politicheskogo perekhoda v regionakh Rossii s serediny 1990-kh po nachalo 2010-kh godov," *unpublished draft*.

Tsai, Lily L. and Daniel Ziblatt. 2010. "The Rise of Subnational and Multilevel Comparative Politics," *Annual Review of Political Science* 14 (1).

Yakovlev, Andrei. 2011. "State-business relations in Russia in the 2000s: From the capture model to a variety of exchange models?" BOFIT Discussion Papers 10.

2006. "Evolution of Business-State Interaction in Russia," *Europe-Asia Studies* 58 (7), 1033-1056.

APPENDIX

Table A1: Descriptive Statistics for Key Explanatory Variables (BEEPS regions)

<i>Region</i>	<i>Governor Tenure (months)</i>	<i>Governor Origin*</i>
Bashkortostan	5	0
Belgorod oblast	207	1
Chelyabinsk oblast	8	1
Irkutsk oblast	19	0
Kaliningrad oblast	3	1
Kaluga oblast	123	1
Kemerovo oblast	164	1
Khabarovsk krai	20	1
Kirov oblast	23	0
Krasnodar krai	121	1
Krasnoyarsk krai	10	1
Kursk oblast	123	1
Leningrad oblast	137	1
Lipetsk oblast	154	1
Mordovia	185	1
Moscow city	2	0
Moscow oblast	132	0
Murmansk oblast	21	0
Nizhny Novgorod	65	0

<i>Region</i>	<i>Governor Tenure (months)</i>	<i>Governor Origin*</i>
Novosibirsk oblast	3	1
Omsk oblast	233	1
Perm krai	62	1
Primorskii krai	116	1
Rostov oblast	6	0
Sakha (Yakutia)	7	1
Samara oblast	40	0
Smolensk oblast	36	1
St. Petersburg	88	0
Stavropol krai	32	1
Sverdlovsk oblast	13	0
Tatarstan	9	1
Tomsk oblast	182	1
Tver oblast	85	0
Ulyanovsk oblast	73	1
Volgograd oblast	11	1
Voronezh oblast	21	0
Yaroslavl oblast	36	1

Notes:

* - regional insiders are coded 1; regional outsiders are coded 0.

Table A2 Correlation Matrix

	Governor Tenure	Governor Origin
Governor Tenure	1	
Governor Origin	0.22**	1

Table A3 Governor Tenure Quartile Distribution

Quartile	Tenure (days)	# of regions
1	72-354	10
2	355-1107	9
3	1108-3704	10
4	3705-6990	8

Table A4.1- Ordered Logit Regressions - customs and trade regulations as an obstacle (d30b) ¹⁷

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.179	0.123	0.567	0.706	-0.321**	0.136
Governor tenure	-0.201***	0.047	-0.131	0.087		
Origin X Tenure			-0.108	0.099		
Tenure, quartile 1					0.758***	0.163
Tenure, quartile 2					0.065	0.155
Tenure, quartile 3					0.315**	0.149
Firm-level and Region-level control variables						
Number of observations	3,420		3,420		3,420	
Pseudo-R2	0.045		0.045		0.047	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.2- Ordered Logit Regressions - access to land as an obstacle (g30a)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.455***	0.097	2.164***	0.668	-0.613***	0.100
Governor tenure	-0.158***	0.040	0.089	0.081		
Origin X Tenure			-0.382***	0.094		
Tenure, quartile 1					0.851***	0.133
Tenure, quartile 2					0.052	0.141
Tenure, quartile 3					0.405***	0.130
Firm-level and Region-level control variables						
Number of observations	3,718		3,718		3,718	
Pseudo-R2	0.023		0.026		0.029	

note: *** p<0.01, ** p<0.05, * p<0.1

¹⁷ In all regression results presented here, same control variables were used in each of the model specifications. They include, firm age, size, sector, ownership, regional gross regional product (GRP) composition (construction, retail, and extractive sectors as % of GRP); log of regional GRP; population density; and regional shares of state- owned and privately owned enterprises.

Table A4.3- Ordered Logit Regressions - crime, theft and disorder as an obstacle (i30)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.513***	0.109	-1.724***	0.586	-0.650***	0.119
Governor tenure	-0.201***	0.038	-0.314***	0.067		
Origin X Tenure			0.175**	0.084		
Tenure, quartile 1					0.570***	0.126
Tenure, quartile 2					0.060	0.119
Tenure, quartile 3					-0.127	0.122
Firm-level and Region-level control variables						
Number of observations	4,096		4,096		4,096	
Pseudo-R2	0.020		0.021		0.021	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.4- Ordered Logit Regressions - tax administration as an obstacle (j30b)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.297***	0.104	-1.167*	0.607	-0.521***	0.108
Governor tenure	-0.110***	0.035	-0.191***	0.071		
Origin X Tenure			0.125	0.083		
Tenure, quartile 1					0.503***	0.117
Tenure, quartile 2					-0.331***	0.111
Tenure, quartile 3					-0.078	0.110
Firm-level and Region-level control variables						
Number of observations	4,174		4,174		4,174	
Pseudo-R2	0.007		0.007		0.012	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.5- Ordered Logit Regressions -- business licensing and permits as an obstacle (j30c)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.351***	0.108	-1.586**	0.644	-0.555***	0.112
Governor tenure	-0.193***	0.040	-0.310***	0.072		
Origin X Tenure			0.179**	0.091		
Tenure, quartile 1					0.841***	0.133
Tenure, quartile 2					-0.092	0.130
Tenure, quartile 3					0.212*	0.119
Firm-level and Region-level control variables						
Number of observations	3,803		3,803		3,803	
Pseudo-R2	0.031		0.032		0.036	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.6- Ordered Logit Regressions - courts as an obstacle (h30)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.413***	0.131	-1.857**	0.754	-0.627***	0.149
Governor tenure	-0.100**	0.048	-0.238***	0.089		
Origin X Tenure			0.209**	0.104		
Tenure, quartile 1					0.554***	0.155
Tenure, quartile 2					-0.368**	0.149
Tenure, quartile 3					0.101	0.139
Firm-level and Region-level control variables						
Number of observations	3,952		3,952		3,952	
Pseudo-R2	0.023		0.024		0.030	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.7- Ordered Logit Regressions – labor regulations as an obstacle (l30a)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.312***	0.116	-0.963	0.651	-0.579***	0.129
Governor tenure	-0.225***	0.043	-0.286***	0.081		
Origin X Tenure			0.094	0.090		
Tenure, quartile 1					0.820***	0.135
Tenure, quartile 2					-0.124	0.126
Tenure, quartile 3					-0.127	0.122
Firm-level and Region-level control variables						
Number of observations	4,186		4,186		4,186	
Pseudo-R2	0.019		0.019		0.024	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.8- Ordered Logit Regressions - do private payments to parliamentarians have an impact? (ECAq44a)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-1.056***	0.145	-4.882***	1.033	-1.116***	0.137
Governor tenure	-0.146**	0.062	-0.501***	0.108		
Origin X Tenure			0.560***	0.153		
Tenure, quartile 1					1.156***	0.248
Tenure, quartile 2					0.468*	0.251
Tenure, quartile 3					0.731***	0.225
Firm-level and Region-level control variables						
Number of observations	3,230		3,230		3,230	
Pseudo-R2	0.053		0.058		0.063	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.9- Ordered Logit Regressions - do private payments to parliamentarians have an impact? (ECAq44b)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-1.000***	0.140	-4.501***	0.980	-1.079***	0.134
Governor tenure	-0.175***	0.057	-0.503***	0.103		
Origin X Tenure			0.513***	0.146		
Tenure, quartile 1					1.118***	0.226
Tenure, quartile 2					0.432*	0.234
Tenure, quartile 3					0.550**	0.215
Firm-level and Region-level control variables						
Number of observations	3,202		3,202		3,202	
Pseudo-R2	0.051		0.055		0.059	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.10- Ordered Logit Regressions - do private payments to local or regional officials have an impact? (ECAq44c)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.853***	0.129	-3.158***	0.918	-0.939***	0.124
Governor tenure	-0.151***	0.047	-0.358***	0.086		
Origin X Tenure			0.335**	0.135		
Tenure, quartile 1					1.093***	0.185
Tenure, quartile 2					0.394**	0.192
Tenure, quartile 3					0.629***	0.174
Firm-level and Region-level control variables						
Number of observations	3,324		3,324		3,324	
Pseudo-R2	0.038		0.040		0.047	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.11- Ordered Logit Regressions - 'it is common to pay informal payments to get things done with regard to customs, taxes, licenses, regulations, etc? (ECAq39)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.946***	0.094	-0.695	0.565	-1.134***	0.094
Governor tenure	-0.137***	0.034	-0.113*	0.060		
Origin X Tenure			-0.036	0.081		
Tenure, quartile 1					0.793***	0.124
Tenure, quartile 2					-0.026	0.122
Tenure, quartile 3					0.234**	0.118
Firm-level and Region-level control variables						
Number of observations	3,838		3,838		3,839	
Pseudo-R2	0.025		0.025		0.030	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.12- Ordered Logit Regressions - frequency of informal payments to deal with customs/imports? (ECAq41a)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.782***	0.127	-2.132**	0.979	-1.017***	0.130
Governor tenure	-0.242***	0.054	-0.369***	0.105		
Origin X Tenure			0.197	0.144		
Tenure, quartile 1					1.231***	0.194
Tenure, quartile 2					0.227	0.198
Tenure, quartile 3					0.449**	0.196
Firm-level and Region-level control variables						
Number of observations	3,499		3,499		3,499	
Pseudo-R2	0.045		0.045		0.053	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.13- Ordered Logit Regressions - frequency of informal payments to deal with courts? (ECAq41b)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.954***	0.119	-3.601***	0.864	-1.166***	0.120
Governor tenure	-0.209***	0.048	-0.459***	0.095		
Origin X Tenure			0.387***	0.129		
Tenure, quartile 1					1.144***	0.175
Tenure, quartile 2					0.189	0.169
Tenure, quartile 3					0.458**	0.179
Firm-level and Region-level control variables						
Number of observations	3,577		3,577		3,577	
Pseudo-R2	0.033		0.036		0.042	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.14- Ordered Logit Regressions - frequency of informal payments to deal with customs/imports? (ECAq41c)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.937***	0.111	-3.245***	0.665	-1.116***	0.112
Governor tenure	-0.120***	0.041	-0.323***	0.068		
Origin X Tenure			0.333***	0.093		
Tenure, quartile 1					0.812***	0.147
Tenure, quartile 2					-0.050	0.143
Tenure, quartile 3					0.259*	0.143
Firm-level and Region-level control variables						
Number of observations	3,741		3,741		3,741	
Pseudo-R2	0.029		0.031		0.036	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.15- Logit Regressions -- informal payment expected to get construction permit? (g4)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.048	0.059	-0.356	0.343	-0.023	0.060
Governor tenure	0.038**	0.019	0.009	0.037		
Origin X Tenure			0.044	0.050		
Tenure, quartile 1					-0.069	0.077
Tenure, quartile 2					-0.000	0.067
Tenure, quartile 3					0.183***	0.064
Firm-level and Region-level control variables						
Number of observations	385		385		385	
Pseudo-R2	0.082		0.084		0.116	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.16- Heckit Regressions - % of annual sales paid in informal payments? (j7a)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	0.829***	0.241	0.033	1.644	0.964***	0.251
Governor tenure	0.217***	0.074	0.143	0.179		
Origin X Tenure			0.115	0.233		
Tenure, quartile 1					-0.916***	0.270
Tenure, quartile 2					-0.341	0.257
Tenure, quartile 3					0.259*	0.143
Firm-level and Region-level control variables						
Number of observations	4,132		4,132		4,132	
Pseudo-R2	0.019		0.018		0.020	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.17- Ordered Logit Regressions -- vin1a¹⁸

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.674***	0.111	0.507	0.708	-0.789***	0.097
Governor tenure	0.156***	0.039	0.263***	0.070		
Origin X Tenure			-0.170	0.105		
Tenure, quartile 1					-0.055	0.132
Tenure, quartile 2					-0.682***	0.128
Tenure, quartile 3					0.261*	0.137
Firm-level and Region-level control variables						
Number of observations	3,673		3,673		3,673	
Pseudo-R2	0.020		0.020		0.028	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.18- Ordered Logit Regressions -- vin1b

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.430***	0.097	-0.845	0.752	-0.463***	0.092
Governor tenure	0.055	0.038	0.017	0.083		
Origin X Tenure			0.060	0.113		
Tenure, quartile 1					0.003	0.128
Tenure, quartile 2					-0.245*	0.127
Tenure, quartile 3					0.267*	0.138
Firm-level and Region-level control variables						
Number of observations	3,689		3,689		3,689	
Pseudo-R2	0.009		0.009		0.012	

note: *** p<0.01, ** p<0.05, * p<0.1

¹⁸ Imagine there are 5 towns, and in each town please imagine some firm which is of similar size as yours. The firm needs to get some permit from the authorities. The situation with informal payments somewhat differs across the towns:

1. In town №1, it is not difficult to obtain the permit without giving a bribe, but an informal payment can facilitate or speed up obtaining the permit. Would you say that in this town, corruption is an obstacle to the current operations of the firm? If yes, to which degree? (vin1a)
2. In town №2, the bureaucrats never take bribes. It is possible to get the permit following the rules, but it takes quite a long time. Would you say that in this town, the law-obedience of the bureaucrats is an obstacle to the current operations of the firm? (If yes, to which degree? No obstacle; Minor obstacle; Moderate obstacle; Major obstacle; Very severe obstacle; DK; Does not apply) (vin1b)
3. In town №3, it is very difficult to obtain permit without the informal payments. But even when you make a payment, the success is not guaranteed. Would you say that in this town, corruption is an obstacle to the current operations of the firm? (If yes, to which degree?) (vin1c)
4. In town №4, it is very difficult to obtain permit without the informal payments. But when you make a payment, the success is guaranteed. Would you say that in this town, corruption is an obstacle to the current operations of the firm? (If yes, to which degree?) (vin1d)
5. In town №5, the situation in general is the same as in town №4. Besides that, it is known that the upper-level bureaucracy of this town is involved in illegal activities. Would you say that in this town, corruption is an obstacle to the current operations of the firm? (If yes, to which degree?) (vin1e)

Table A4.19- Ordered Logit Regressions -- vin1c¹⁹

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.164*	0.091	1.478***	0.509	-0.071	0.089
Governor tenure	0.231***	0.038	0.379***	0.055		
Origin X Tenure			-0.236***	0.071		
Tenure, quartile 1					-0.832***	0.131
Tenure, quartile 2					-0.431***	0.119
Tenure, quartile 3					0.016	0.108
Firm-level and Region-level control variables						
Number of observations	3,691		3,691		3,691	
Pseudo-R2	0.020		0.021		0.023	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.20- Ordered Logit Regressions -- vin1d

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.174*	0.101	3.927***	0.547	-0.066	0.107
Governor tenure	0.168***	0.034	0.537***	0.055		
Origin X Tenure			-0.588***	0.076		
Tenure, quartile 1					-0.546***	0.114
Tenure, quartile 2					-0.020	0.124
Tenure, quartile 3					-0.031	0.113
Firm-level and Region-level control variables						
Number of observations	3,687		3,687		3,687	
Pseudo-R2	0.009		0.017		0.009	

note: *** p<0.01, ** p<0.05, * p<0.1

¹⁹ Imagine there are 5 towns, and in each town please imagine some firm which is of similar size as yours. The firm needs to get some permit from the authorities. The situation with informal payments somewhat differs across the towns:

1. In town №1, it is not difficult to obtain the permit without giving a bribe, but an informal payment can facilitate or speed up obtaining the permit. Would you say that in this town, corruption is an obstacle to the current operations of the firm? If yes, to which degree? (vin1a)
2. In town №2, the bureaucrats never take bribes. It is possible to get the permit following the rules, but it takes quite a long time. Would you say that in this town, the law-obedience of the bureaucrats is an obstacle to the current operations of the firm? (If yes, to which degree? No obstacle; Minor obstacle; Moderate obstacle; Major obstacle; Very severe obstacle; DK; Does not apply) (vin1b)
3. In town №3, it is very difficult to obtain permit without the informal payments. But even when you make a payment, the success is not guaranteed. Would you say that in this town, corruption is an obstacle to the current operations of the firm? (If yes, to which degree?) (vin1c)
4. In town №4, it is very difficult to obtain permit without the informal payments. But when you make a payment, the success is guaranteed. Would you say that in this town, corruption is an obstacle to the current operations of the firm? (If yes, to which degree?) (vin1d)
5. In town №5, the situation in general is the same as in town №4. Besides that, it is known that the upper-level bureaucracy of this town is involved in illegal activities. Would you say that in this town, corruption is an obstacle to the current operations of the firm? (If yes, to which degree?) (vin1e)

Table A4.21- Ordered Logit Regressions -- vin1e²⁰

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	0.034	0.113	5.037***	0.577	0.106	0.120
Governor tenure	0.163***	0.042	0.627***	0.065		
Origin X Tenure			-0.718***	0.081		
Tenure, quartile 1					-0.773***	0.146
Tenure, quartile 2					-0.220	0.141
Tenure, quartile 3					-0.407***	0.122
Firm-level and Region-level control variables						
Number of observations	3,636		3,636		3,636	
Pseudo-R2	0.012		0.024		0.015	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.22- Ordered Logit Regressions - 'do you agree that that court system is fair, impartial and uncorrupted? (h7a)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	0.080	0.097	-1.571***	0.492	0.014	0.097
Governor tenure	-0.065**	0.032	-0.219***	0.054		
Origin X Tenure			0.238***	0.069		
Tenure, quartile 1					0.207*	0.108
Tenure, quartile 2					-0.057	0.110
Tenure, quartile 3	0.080	0.097	-1.571***	0.492	0.014	0.097
Firm-level and Region-level control variables						
Number of observations	3,791		3,791		3,791	
Pseudo-R2	0.008		0.009		0.008	

note: *** p<0.01, ** p<0.05, * p<0.1

²⁰ Imagine there are 5 towns, and in each town please imagine some firm which is of similar size as yours. The firm needs to get some permit from the authorities. The situation with informal payments somewhat differs across the towns:

1. In town №1, it is not difficult to obtain the permit without giving a bribe, but an informal payment can facilitate or speed up obtaining the permit. Would you say that in this town, corruption is an obstacle to the current operations of the firm? If yes, to which degree? (vin1a)
2. In town №2, the bureaucrats never take bribes. It is possible to get the permit following the rules, but it takes quite a long time. Would you say that in this town, the law-obedience of the bureaucrats is an obstacle to the current operations of the firm? (If yes, to which degree? No obstacle; Minor obstacle; Moderate obstacle; Major obstacle; Very severe obstacle; DK; Does not apply) (vin1b)
3. In town №3, it is very difficult to obtain permit without the informal payments. But even when you make a payment, the success is not guaranteed. Would you say that in this town, corruption is an obstacle to the current operations of the firm? (If yes, to which degree?) (vin1c)
4. In town №4, it is very difficult to obtain permit without the informal payments. But when you make a payment, the success is guaranteed. Would you say that in this town, corruption is an obstacle to the current operations of the firm? (If yes, to which degree?) (vin1d)
5. In town №5, the situation in general is the same as in town №4. Besides that, it is known that the upper-level bureaucracy of this town is involved in illegal activities. Would you say that in this town, corruption is an obstacle to the current operations of the firm? (If yes, to which degree?) (vin1e)

Table A4.23- Ordered Logit Regressions - 'do you agree that the court system is quick?' (ECAj1b)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	0.046	0.092	-1.044**	0.513	-0.116	0.089
Governor tenure	-0.062*	0.033	-0.164***	0.055		
Origin X Tenure			0.157**	0.072		
Tenure, quartile 1					0.323***	0.112
Tenure, quartile 2					-0.318***	0.104
Tenure, quartile 3					-0.165	0.101
Firm-level and Region-level control variables						
Number of observations	3,774		3,774		3,774	
Pseudo-R2	0.003		0.005		0.009	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.24- Ordered Logit Regressions - corruption as an obstacle (j30f)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.186**	0.091	0.397	0.555	-0.337***	0.100
Governor tenure	-0.018	0.034	0.037	0.066		
Origin X Tenure			-0.084	0.077		
Tenure, quartile 1					0.257**	0.117
Tenure, quartile 2					-0.370***	0.116
Tenure, quartile 3					0.065	0.104
Firm-level and Region-level control variables						
Number of observations	3,969		3,969		3,969	
Pseudo-R2	0.010		0.010		0.014	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.25- Logit Regressions - informal payments expected at tax meetings (j5)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.025**	0.011	-0.072	0.066	-0.028**	0.012
Governor tenure	0.006	0.004	0.002	0.007		
Origin X Tenure			0.007	0.009		
Tenure, quartile 1					-0.022	0.014
Tenure, quartile 2					-0.024*	0.013
Tenure, quartile 3					-0.019	0.013
Firm-level and Region-level control variables						
Number of observations	1,930		1,930		1,930	
Pseudo-R2	0.052		0.053		0.055	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.26- Ordered Logit Regressions - 'do you agree that the court system is able to enforce its decisions?' (ECAj1c)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.112	0.085	-1.298**	0.512	-0.226**	0.088
Governor tenure	-0.042	0.031	-0.153***	0.052		
Origin X Tenure			0.171**	0.073		
Tenure, quartile 1					0.102	0.107
Tenure, quartile 2					-0.282***	0.103
Tenure, quartile 3					-0.301***	0.102
Firm-level and Region-level control variables						
Number of observations	3,749		3,749		3,749	
Pseudo-R2	0.005		0.006		0.007	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.27- Ordered Logit Regressions - access to finance as an obstacle (k30a)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.188**	0.084	0.194	0.535	-0.394***	0.101
Governor tenure	-0.027	0.033	0.009	0.062		
Origin X Tenure			-0.055	0.074		
Tenure, quartile 1					0.177*	0.107
Tenure, quartile 2					-0.522***	0.115
Tenure, quartile 3					-0.209**	0.101
Firm-level and Region-level control variables						
Number of observations	4,081		4,081		4,081	
Pseudo-R2	0.008		0.008		0.013	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.28- Logit Regressions - subsidies from the national, regional, local government or the EU sources (yes/no) (ECAq53)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.012	0.008	0.011	0.050	-0.014	0.008
Governor tenure	-0.001	0.003	0.001	0.005		
Origin X Tenure			-0.003	0.007		
Tenure, quartile 1					-0.007	0.010
Tenure, quartile 2					-0.003	0.009
Tenure, quartile 3					-0.019**	0.009
Firm-level and Region-level control variables						
Number of observations	4,164		4,164		4,164	
Pseudo-R2	0.132		0.132		0.135	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.29- Ordered Logit Regressions - tax rates as an obstacle (j30a)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	0.054	0.079	1.409***	0.495	-0.014	0.089
Governor tenure	0.084***	0.029	0.210***	0.051		
Origin X Tenure			-0.195***	0.070		
Tenure, quartile 1					-0.083	0.099
Tenure, quartile 2					-0.386***	0.116
Tenure, quartile 3					0.142	0.091
Firm-level and Region-level control variables						
Number of observations	4,171		4,171		4,171	
Pseudo-R2	0.007		0.008		0.009	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.30- Ordered Logit Regressions -- political instability as an obstacle (j30e)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	0.082	0.086	0.953**	0.479	0.021	0.086
Governor tenure	0.036	0.027	0.117**	0.052		
Origin X Tenure			-0.125*	0.067		
Tenure, quartile 1					0.132	0.097
Tenure, quartile 2					-0.226**	0.105
Tenure, quartile 3					0.246***	0.090
Firm-level and Region-level control variables						
Number of observations	4,090		4,090		008	
Pseudo-R2	0.005		0.006		0.135	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.31- Ordered Logit Regressions - uneducated workforce as an obstacle (l30b)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.347***	0.098	-0.087	0.589	-0.506***	0.107
Governor tenure	-0.072**	0.035	-0.048	0.068		
Origin X Tenure			-0.037	0.085		
Tenure, quartile 1					0.314***	0.118
Tenure, quartile 2					-0.291**	0.121
Tenure, quartile 3					-0.026	0.113
Firm-level and Region-level control variables						
Number of observations	4,166		4,166		4,166	
Pseudo-R2	0.015		0.015		0.015	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.32- Logit Regressions -- informal payment expected to get an operating license (j15)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.046*	0.027	-0.107	0.125	-0.025	0.031
Governor tenure	0.010	0.008	0.005	0.013		
Origin X Tenure			0.009	0.017		
Tenure, quartile 1					-0.052	0.034
Tenure, quartile 2					0.011	0.029
Tenure, quartile 3					0.019	0.026
Firm-level and Region-level control variables						
Number of observations	893		893		893	
Pseudo-R2	0.063		0.064		0.069	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.33- Heckit Regressions - senior management time spent on dealing with regulations (j2)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-1.065	1.033	10.356	6.597	-0.107	1.199
Governor tenure	0.056	0.356	1.112*	0.662		
Origin X Tenure			-1.640*	0.917		
Tenure, quartile 1					-1.896	1.282
Tenure, quartile 2					2.576	1.687
Tenure, quartile 3					-1.620	1.241
Firm-level and Region-level control variables						
Number of observations	4,220		4,220		4,220	
Pseudo-R2	0.023		0.024		0.027	

note: *** p<0.01, ** p<0.05, * p<0.1

Table A4.34- Logit Regressions -- corruption as number 1 obstacle (m1adum6)

	Model 1		Model 2		Model 3	
	coef	se	coef	se	coef	se
Governor origin	-0.023**	0.011	-0.048	0.064	-0.027**	0.011
Governor tenure	-0.009**	0.004	-0.011*	0.007		
Origin X Tenure			0.004	0.009		
Tenure, quartile 1					0.023*	0.013
Tenure, quartile 2					0.010	0.013
Tenure, quartile 3					-0.010	0.013
Firm-level and Region-level control variables						
Number of observations	4,186		4,186		4,186	
Pseudo-R2	0.020		0.020		0.021	

note: *** p<0.01, ** p<0.05, * p<0.1