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Why Do Farmers Seek Office? Regulatory Capture in Russian Agricultural Subsidization

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ABSTRACT

This study examines whether Russian farmers who enter regional politics can skew local policies in their favor. We hypothesize that Russian regions with more local members of parliament (MPs) owning agricultural businesses and farmer-ministers are more likely to allocate higher agricultural subsidies. To test these hypotheses, we use a unique 2008–2015 panel dataset on agricultural subsidies in combination with qualitative data. We find that the pervasiveness of agricultural interest in local parliaments affects the size of agricultural subsidies. Regional agriculture ministers who own farms may play the role of “gatekeepers” to the subsidies.

KEYWORDS

Political connections; redistribution; agricultural subsidies; businesspeople-politicians; Russia



JEL CLASSIFICATION

D72; H23; H25

Introduction

As scholarly interest in the effects of political connections and favoritism grows, there is a greater need to explore the different mechanisms by which vested interests may alter policy outcomes. Political connections have been found to generate tangible benefits for private firms (Faccio 2006; Acemoglu et al. 2016; Faccio, Masulis, and McConnell 2006; Snyder and Samuels 2004; Cingano and Pinotti 2013; Amore and Bennedsen 2013; Lévêque 2020; Palanský 2020; Blau 2017; Göktepe and Satyanath 2013). However, the mechanisms behind this relationship are less clear. While many papers deal with preferential treatment or favoritism within the existing set of institutions, the question of how political connections can alter policies favoring connected individuals has been explored to a lesser extent. Moreover, what if businesspeople assume political positions and try to lobby for their interests? Although the so-called “moonlighting politicians” represent a widespread phenomenon worldwide, the implications are still not studied sufficiently, especially in contexts with weak institutions and authoritarian regimes.

This paper analyses how businesspeople in regional politics may affect redistributive outcomes in Russia. We treat owning a farm and holding an office in key local legislative and executive bodies as a form of regulatory capture. In doing so, we focus on the allocation and distribution of agricultural subsidies, accounting for 0.93% of the Russian gross domestic product in 2016 (OECD 2017). Russian agricultural subsidization policies are widely criticized for inefficiencies and poor targeting (Uzun 2005). We observe substantial time-persistent differences in the allocation of subsidies among Russian regions¹ that

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cannot be explained by economic factors or fiscally motivated distribution formulas (Uzun 2005; Uzun et al. 2016). Addressing these knowledge gaps, we examine how farmers entering local parliaments may shift subsidization policies to their advantage.

We contribute to the existing literature on political connections and examine one of the possible channels through which firms may benefit from political connections. A growing body of literature finds that Russian businesspeople manage to obtain benefits by assuming key regulatory positions (Szakonyi 2018; E. Yakovlev and Zhuravskaya 2009; Gehlbach, Sonin, and Zhuravskaya 2010; Lamberova and Sonin 2018; Slinko, Yakovlev, and Zhuravskaya 2005). However, concrete mechanisms of how firms acquire these benefits have been analyzed to a lesser extent. We propose to consider one such mechanism: businesspeople in local parliaments may try to influence the allocation of subsidies in their favor and fellow farmers' favor. They may be hoping to internalize the benefits or have an industry bias. The Russian context may be particularly fruitful for this analysis because of its weak institutional framework, prevailing corruption,² and reliance on informal connections in running a business (Slinko, Yakovlev, and Zhuravskaya 2005; Schulze and Zakharov 2018). Despite the co-funding of agricultural subsidies from the federal budget, agricultural subsidization is predominantly a regional policy in Russia with substantial regional decision-making power (Shagaida et al. 2015). Thus, using local institutional ambiguities, Russian farmers who made it to key governmental offices may attempt to obtain more agricultural subsidies.

We primarily use a unique 2008–2015 panel dataset on oblast-level subsidies from 78 Russian regions³ to test for regulatory capture in the allocation of regional agricultural subsidies. We complement this dataset with the “SPARK” database, which contains information on the ownership structure of Russian registered enterprises. Moreover, we use qualitative data from semi-structured interviews conducted in early 2017. Because regional officials are allowed to run businesses parallel to their political positions and have substantial discretion over the allocation and distribution of funds, we focus exclusively on regional funding. In particular, we investigate the relationship between the proxies for the degree of agricultural interest represented in legislative and executive regional state bodies and the size of agricultural subsidies. Regional parliaments with higher shares of members of parliament (MPs) owning agricultural enterprises, as well as ministers of agriculture owning such enterprises, are expected to allocate more regional subsidies to the sector.

Our results suggest that businesspeople in local parliaments can affect policy outcomes that favor their and other farms' businesses. In particular, we generally find that regions where the interests of agricultural enterprises are more strongly represented in legislative and executive state bodies are more likely to allocate more agricultural subsidies. In particular, funding from a region's budget appears to be higher in regions with higher shares of MPs owning an agricultural enterprise or where more companies are registered per MP. In addition, we find this effect to be larger in regions with ministers of agriculture active in agricultural production.

The rest of the paper is organized as follows. [Section 2](#) presents our theoretical framework, and [Section 3](#) elaborates on the Russian context of regional politics and the allocation of agricultural subsidies. [Section 4](#) presents the data utilized and the methods. [Section 5](#) walks the reader through the results and backs them up with robustness checks in [Section 6](#). Finally, the major conclusions, along with the policy implications, are outlined in [Section 7](#).

Literature Review and Theoretical Background

We examine how firms decide to enter politics and embed our discussion in the broader regulatory capture literature. Regulatory capture as a concept explains how “special interests affect state intervention in any of its forms” (Dal Bó 2006). In addition, Hellman and Schankerman (2000) underline the wrongful nature of state capture: “the capacity of vested interests to shape government policy through illicit and non-transparent methods” (p. 546). Driven by profit maximization, private sector agents may have incentives to influence parliamentary legislation, presidential decrees, judicial decisions, or any other regulatory outcomes that may deliver tangible benefits. Thus, firms may invest in changing political outcomes in hopes of favorable regulatory outcomes, thereby increasing their profits via rents (Mueller 2003).

Private actors may use several strategies to influence regulatory outcomes. First, much scholarly attention has been devoted to lobbying and campaign contributions. The logic is that firms may contribute resources to politicians with the expectation that the probability of their favorable policy will be implemented (Mueller 2003). Although the evidence of the effectiveness of this influence strategy is abundant (e.g., Bonardi, Holburn, and Vanden Bergh 2006; Faccio 2006), some studies do not find a pronounced effect (Hadani and Schuler 2012). The problem with this strategy is its uncertainty because politicians may not manage to get elected, or they may simply disrespect the agreements about the policies “purchased” once in office. Because politicians may extract a share of rent themselves, firms will invest in attempts to influence politicians only if the marginal benefit of action outweighs its marginal costs (Shleifer and Vishny 1994). Because of these uncertainties, Szakonyi (2018) calls this type of firms’ influence “indirect” and points out a commitment problem arising between the firms and politicians.

Another way for firms to influence political outcomes with a higher degree of certainty is to generate a direct political connection or to assume the regulator’s position directly. Bypassing political intermediaries, firms may put incumbent politicians on their boards of directors, providing them with a stake (Hillman 2005) or assume executive or legislative seats (Szakonyi 2018). Individuals holding executive or legislative offices and working in the private sector are typically referred to as “moonlighting politicians” (Geys and Mause 2013; Gagliarducci, Nannicini, and Naticchioni 2010). Assuming a political position by businesspeople could be thought of as a strategy to reduce the risk of noncompliance by a political agent that would otherwise be influenced by businesspeople who didn’t choose to run for office. Assuming sufficient entrepreneurial freedom in a political post, businesspeople-politicians may attempt to skew policy outcomes in their favor.

Firm directors or owners may enjoy an unprecedented influence on regulatory outcomes should they manage to secure these positions. In the Russian context, seats in regional legislative bodies imply substantial control over executive bodies of power (Sakaeva 2012). Local MPs can exert considerable pressure on local bureaucracies and even come up with legal initiatives that potentially favor their business interests. However, regulatory capture may be more difficult in regions with stronger institutions, which may limit rent-seeking possibilities. Thus, Gehlbach, Sonin, and Zhuravskaya (2010) demonstrate that businesspeople seek gubernatorial positions in Russian regions where the media is less free and governance is less transparent. Furthermore, political competition may discipline

businesspeople-politicians, forcing them to please the electorate and spend fewer resources on rent-seeking (Palanský 2020).

However, the additional ability to influence regulatory outcomes comes at a cost. In particular, winning a regional parliamentary seat may involve campaign costs that do not guarantee winning. In the case of a political loss, it may actually damage the business due to negative publicity. Szakonyi (2018) estimates a typical campaign of a Russian regional MP to cost within a range of 160,000–200,000 USD. In case of success, newly elected businesspeople-politicians will have to allocate some time to activities not intended for direct rent extraction. This will further inflate the costs of holding offices for business owners. Higher expected costs may either incentivize them to extract more rent to compensate for the losses or discourage them from trying to obtain a position in the first place. Furthermore, investing in the ability to influence regulatory outcomes may redirect resources from productive innovation investments, thereby undermining enterprises' competitiveness (Desai and Olofsgard 2008). As a result, it may undermine a firm's long-term economic sustainability and jeopardize the return on investment in political representation.

Apart from the cost–benefit calculus, businesspeople-politicians may possess an entrepreneurial bias in their policy decisions. Biases arising due to individual career changes between the public and private sectors are described by the concept of “revolving doors” (Dal Bó 2006). Typically, this literature examines how former government officials use their connections in the private sector (Hong and Lim 2016; Baturu and Mikhaylov 2016). However, we are more interested in the question of how business background may affect decisions in the office. Thus, Szakonyi (2021) finds that elected Russian businesspeople prioritized policies that funded economic-oriented infrastructure instead of socially oriented public goods. Furthermore, having a business background along with the availability of industry-specific information may bias businesspeople-politicians' decision-making toward the specific industry they represent (Veltrop and de Haan 2014). In our study, we cannot distinguish whether Russian businesspeople-politicians expect tangible returns for their policies or are simply biased in their decisions in favor of the agricultural sector.

Institutional Context

Regional legislature seats represent an attractive option for attempting to influence local regulatory outcomes in Russia. Because an overregulated business environment puts substantial pressure on small and medium enterprises, businesspeople in local regulatory bodies may reduce that pressure and thus generate a competitive advantage (Sakaeva 2020, 2019). For instance, they can reduce the number of checks from the controlling bodies, mitigate a bureaucratic burden, or influence court decisions. Apart from effectively fending off Russian predatory institutions, politically connected firms may be in a position to obtain additional rent from the public budget. Thus, in a country-wide study, Slinko, Yakovlev, and Zhuravskaya (2005) find that the rents these firms extracted in the vast majority of the cases were tax breaks and the second largest form of rent extraction represented by various kinds of subsidies. Since the focus of our study is agricultural subsidies, we need to briefly describe the mechanism of their allocation.

Agriculture subsidization in Russia is essentially a regional policy, although it stipulates the involvement of the federal government. Regional ministries of agriculture have full

discretion over locally funded regional agricultural support and can apply for federal funding programs⁴ (Shagaida et al. 2015). Regional funds can stipulate crop, livestock, or investment-related subsidies for a given fiscal year, depending on farming conditions. These three broad categories include 34 distinct subsidies for a region's specific needs. Eligible farms can apply for each type of subsidy separately. A different kind of agricultural support is represented by target programs for indirect support⁵ that typically stretches over several years and requires some degree of coordination with the federal government. In our study, we abstract from the second type of subsidy and focus on the first because it is subject to yearly budgeting and is more under the discretion of local governments. The allocation of these subsidies happens before the beginning of a fiscal year. Members of the agricultural committees of regional legislatures typically participate in the development of these programs formally and informally. Moreover, during a fiscal year, numerous budgetary adjustments typically occur with the participation of agricultural committees and ministries. Although the adjustments are typically justified by unexpectedly arising needs, in practice, they represent opportunities for influence by agricultural interest groups.

Regional parliaments, governors, and regional ministers of agriculture enjoy significant powers in Russian regional politics that allow them to influence redistributive outcomes. The development and implementation of regional agricultural support programs require close collaboration between regional legislatures and the ministries of agriculture. First, MPs may use official platforms to influence ministries' decisions on subsidies. As key stakeholders in agricultural policy formation, ministers of agriculture regularly report to legislative agricultural committees. Moreover, so-called commissions and deputy hearings represent institutions involving regular interactions between MPs and ministry representatives. However, regional parliamentarians can exert pressure on executive branches simply by virtue of their status (Sakaeva 2012). For instance, local deputies enjoy authority over numerous executive bodies because of their immunity and the possibility of issuing so-called "deputy requests." The latter has the potential to initiate bureaucratic action (including the judicial branch) against a specific executive body. A threat of such action generates substantial power in the ability to create favorable conditions for the business. Moreover, informal interactions between MPs and representatives of the ministries of agriculture happen not only at the planning stage but also during the disbursement period, leading to budgetary adjustments during the fiscal year (Uzun 2015). Finally, it is important to mention that local governors play a crucial role in local politics and enjoy unprecedented power in setting agendas and promoting local legislative initiatives (Yakovlev and Aisin 2019; Rochlitz et al. 2015). By virtue of their status, governors can influence redistributive outcomes via both legislative and executive branches.

Apart from MPs with a potential vested interest, the Russian private sector appears to be active in attempting to influence regulatory outcomes. Numerous enterprises have attempted to lobby for favorable outcomes via consultations with regional administrations, legislatures, and governors (Frye 2002; Guriev, Yakovlev, and Zhuravskaya 2010). Since Russia hosts some of the largest agricultural enterprises in the world (Shagayda and Lerman 2017; Epshtein, Hahlbrock, and Wandel 2013; Wegren, Nikulin, and Trotsuk 2019), they may attempt to project their power into regional politics. Thus, Uzun (2017) argues that large agricultural enterprises obtain the majority of state agricultural subsidies, speculating that political pressure was a predominant mechanism.

Regional legislatures differ substantially across Russian regions. The size of the parliaments depends on the population and ranges from 15 (e.g., Chukotka Autonomous Area) to 110 deputies (e.g., Bashkortostan). The vast majority of regions apply a mixed voting system, with at least half of all deputies elected based on party lists and the rest based on single- and multi-member districts. Only the North Caucasus regions and Moscow use a proportional voting system. It is also important to point out that elections are held every fifth year but dates differ across regions.

Having decided to run for office, businesspeople may increase their chances of associating themselves with the major incumbent party, United Russia. Closely controlled by Putin, United Russia was the leading political party in all Russian regions during the period of our interest: 2008–2015. Thus, running for office with United Russia may increase the chances of a more effective policy production process once in office. Along these lines, Reuter et al. (2016) argued that United Russia served as a vehicle for the central authoritarian government to co-opt local elites, providing them with a certain degree of autonomy at the same time. As a result, the central government may have incentives in granting regional elites the freedom to set local policies in exchange for their loyalty in helping produce favorable electoral results.

Empirical Strategy

Building on the above discussion of the goals that businesspeople may pursue running for regional offices in the Russian context, we develop our major hypotheses. First, we test whether there is a statistical link between the persistence of agricultural interest in regional parliaments and the levels of funding for regional agricultural subsidies. Second, because local ministries allocate regional funding, we analyze whether farmer-ministers increase the likelihood of higher subsidies in a region. Finally, considering close interactions between local legislatures and the ministries of agriculture in subsidy allocation, we examine how the effect of agricultural interest in regional parliaments is facilitated by the ministers of agriculture who actively farm. To test these hypotheses, we use quantitative and qualitative data and methods.

Quantitative Data

The panel data from the Russian Ministry of Agriculture covers the expenditure of state support for a range of agricultural sectors for 78 regional budgets. The data cover the period of 2008–2015. However, 2011 is a year with missing observations, which will have implications for the calculation of the statistical tests below. Because regional governments have substantial discretion over regional agricultural subsidies, we include them as a dependent variable. More specifically, our dependent variable contains all the subsidies at the discretion of local governments: crop and livestock production, including direct payments, along with the subsidies for the interest rates of short- and long-term credit. Because target programs require some degree of coordination with the federal government, we construct two dependent variables: the subsidies with and without target programs. We use the dependent variables in real terms using OECD deflators, with 2010 as the base year. [Table 1](#) presents the descriptive statistics.

Table 1. Descriptive statistics.

Variable	Description	Mean/ Percentage	Std. Deviation
<i>Dependent variable</i>			
Agricultural subsidies	Total amount of regional ag subsidies (million RUB)	619.67	840.75
Agricultural subsidies with target programs	Total amount of regional ag subsidies with target programs (million RUB)	1196.72	1607.78
<i>Independent variables</i>			
Average agricultural firms per MP	Average number of agricultural companies owned by an MP before and during office	13.88	8.97
Share of MPs with agricultural firms	Share of MPs having at least one agricultural company before and during office	31.88	19.48
Governor with an agricultural firm (1=yes, 0=no)	Dummy for a governor having at least one agricultural company before and during office	4.49	20.72
Minister with an agricultural firm (1=yes, 0=no)	Dummy for a regional minister of agriculture	38.46	48.69
Share of ag in GRP	Share of agricultural sector in GRP (%)	8.53	5.66
Share of extr in GRP	Share of extracting industries in GRP (%)	8.00	12.72
Index of budgetary self-sufficiency	Extent to which a region can cover its fiscal needs with locally generated taxes (recipient if value belongs to (0;1); donor if value is above 1)	0.67	0.40
GRP growth	GRP growth	2.61	5.69
Population	Region's population (thousand persons)	1623.36	1279.68
Ag area	Agricultural area (thousand ha)	2811.76	2575.24
Livestock headcount	Livestock headcount (thousands of cattle)	257.55	251.46

We use several independent variables to test our hypothesis about regulatory capture generated with the help of the firm-level data from the “SPARK” database. We define an agricultural company following the official Russian enterprise classification, including crop- and animal-producing enterprises. First, we proxy farms’ political connections with the share of MPs owning or co-owning at least one agricultural firm in region i before assuming office. Second, we use a similar metric in a separate specification – the average number of agricultural firms per MP. The latter should provide clues on the intensity of the MPs’ vested interests in agriculture because some entrepreneurs may own several companies at the same time. To minimize the risk of endogeneity, we consider only those agricultural companies that MPs owned at least a year before assuming office. Thus, we disregard those companies established during the time in the office. Third, we include a dummy reflecting whether a regional minister of agriculture (co-)owned an agricultural company before and during the office term. Ministers of agriculture are key figures in the design of regional agricultural support. We also considered including an analogous dummy for the governors, as they are arguably the most influential persons in a region, setting the tone for the region’s economic and political development (Yakovlev and Aisin 2019). However, the variation in agricultural firm ownership is insufficient (only 4.5%).

We use several variables to control for the economic factors that should affect subsidy allocation. In line with Freinkman, Kholodilin, and Thießen (2011), budgetary fiscal self-sufficiency is an important variable that reflects regional fiscal strength. Published regularly by the Ministry of Finance, the index indicates that a region is a net recipient if the values are between zero and one. Values above one mean that a region is a net donor. In 2007, 15 regions had donor status, whereas this number decreased to 10 in 2015.

Furthermore, we control for the share of agriculture in the total gross regional product (GRP), which should attract more subsidies and the share of extracting industries in the regional economic portfolio, as this should imply that more fiscal resources are available for redistribution. On the other hand, GRP growth may also reflect expectations about future budgetary revenues and reinforce subsidization incentives. Finally, we control for agricultural area, livestock headcount, and regional population.

Qualitative Data and Methodology

We conducted a series of qualitative semi-structured interviews in early 2017. First, we interviewed representatives of research institutes, universities, and think tanks dealing with agricultural subsidization, intergovernmental relations, and rural development in Moscow. Subsequently, we chose two regions with large differences in fiscal strength and shares of agriculture in the GRP but having a comparable structure of the agricultural sector and production conditions: the Republic of Tatarstan and Altai Krai. The latter is a net recipient of intergovernmental transfers, whereas the former is one of the major donors to the federal budget due to its flourishing oil and gas industry. Both regions have agricultural sectors of considerable size. However, for Altai Krai, its contribution to the GRP is naturally higher (17.3% vs. 7.5% in 2015). We interviewed representatives of executive and legislative bodies, as well as think tanks and NGOs. In total, we conducted 10 interviews with tailored semi-structured questionnaires on intergovernmental fiscal relations, agricultural subsidization, and local MPs' roles in regional politics (a list of the interviews can be found in [Appendix](#)).

To obtain farmers' perspectives, we conducted a focus group interview with six farmers operating in Aleysk Rayon, Altai Krai. These were representatives of small and medium agricultural enterprises and one large corporate farm focusing on livestock and crop production. The participants were confronted with questions about the procedures for obtaining agricultural subsidies, their role in their businesses, and their relationships with local governmental officials. The focus group interviews lasted approximately 2.5 hours. The majority of the interviews were recorded⁶ and transcribed to prepare for analysis.

Following the framework introduced by Ritchie and Spencer (1994), we analyzed the qualitative data obtained via expert and focus-group interviews. In particular, the approach stipulates several distinct stages of qualitative data analysis. First, we familiarize ourselves with the data and identify a general thematic framework. Then, the approach stipulates indexing the transcribed data and charting the concepts occurring within the indexed data. Finally, and most importantly, we mapped and interpreted the data. The last two stages allow the use of identified key concepts and their role in the mapped data to answer our research questions.

Quantitative Methods

The choice of our methods is primarily driven by the availability of data on Russian regional agricultural subsidies. Because the observations are at the regional level, we cannot trace the distribution of subsidies to individual enterprises. Consequently, we estimate Y_{it} , which represents regional funds allocated for agricultural subsidization in region i at period t . Since the Russian budgeting process is highly dependent on previous years, our data may have a dynamic nature, implying that unobserved panel-level effects may be correlated with

the dependent variable. To deal with this challenge, we include a lagged dependent variable Y_{it-1} on the right-hand side of the regressions, following Arellano and Bond (1991). We identify the model by instrumenting this variable with the regressors exogenous to the region-level fixed effects (Blundell and Bond 1998). We employ a two-step generalized method of moments (GMM) with finite sample-corrected standard errors (Windmeijer 2005) in estimating the following model:

$$Y_{it} = \beta_1 Y_{it-1} + \beta_2 AgInt_{it-1} + \beta_3 X_{it-1} + \alpha_i + d_t + u_{it},$$

where the vector $AgInt_{it-1}$ represents our proxies for the pervasiveness of agricultural interest in regional politics, which we expect to be positively associated with the level of regional subsidization. Furthermore, X_{it-1} represents the control variables, such as the region's fiscal strength or the economic relevance of the agricultural sector. Finally, α_i is a set of regional fixed effects, d_t represents year fixed effects, and u_{it} is an error term that is idiosyncratic, serially correlated, and heteroskedastic.

The GMM estimation technique is necessary because we assume that lagged dependent variables are correlated with unobserved effects. Using these models requires dealing with the so-called “technical” endogeneity that arises due to the inclusion of the lagged dependent variable Y_{it-1} as a covariate (Blundell and Bond 1998). We instrument the latter with the first differences and levels of its own lags and instrument “predetermined” (potentially endogenous) variables with strictly exogenous ones (Roodman 2009). We consider agricultural area, livestock headcount, and the share of agriculture in the GRP to be “predetermined.” With the help of the second-order lags of the other variables,⁷ we deal with the “technical” endogeneity. In addition, we implement a finite sample correction developed by Windmeijer (2005) to mitigate the downward bias of the standard errors identified by Arellano and Bond (1991) and Blundell and Bond (1998).

Results

The levels of regional agricultural subsidies appear to follow the cycles of general Russian economic activity. Figure 1 presents the dynamics of subsidies with and without target programs, which substantially increase overall transfers to the regional agricultural sector. We observe a dip after the financial crisis, a recovery after 2010, and a subsequent reduction after the 2014 Russian ruble devaluation. Our qualitative data suggest that regions (especially those relying on federal fiscal transfers) struggled to allocate sufficient support funds. However, the regions absorbed a major part of the shock as the dip in 2015 was smaller for regional co-funding compared to the reductions in target programs.

Before turning to the main estimations, it is essential to examine the distribution of regional legislatures with high shares of MPs with agricultural firms. Figure 2 demonstrates the spatial distribution in 2015. We observe a cluster of regions in the North Caucasus with regional legislatures having more than 30% of MPs with agricultural companies. On the other hand, parliaments in the Far East and northern regions demonstrated much lower shares of MPs with agricultural companies. We observe substantial variation among the rest of the regions. For instance, 20.6% of the MPs in Altai Krai had agricultural companies in 2015, whereas the respective figure for the Tatarstan Republic was 16.2%. In both regions, agricultural committees' seats were filled from this pool of MPs. Representatives of the Tatarstan Ministry of Agriculture reported during the interview that the minister and his

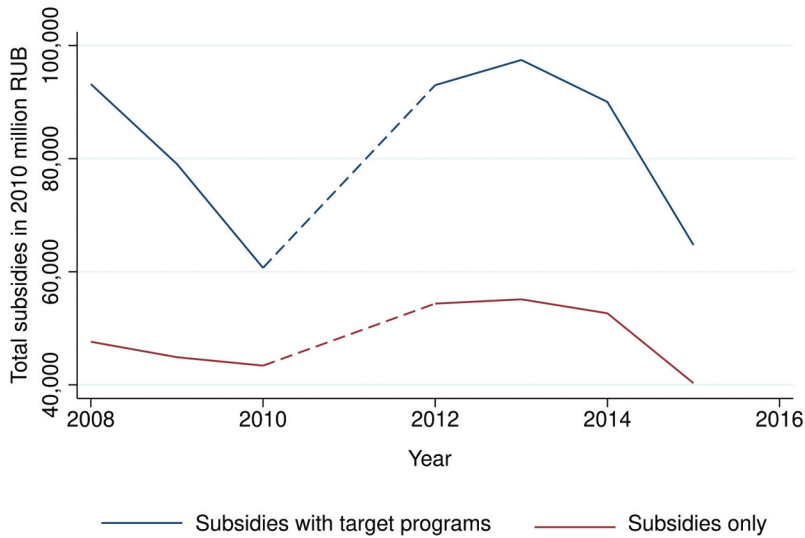


Figure 1. Dynamics of agricultural subsidies with and without target programs.

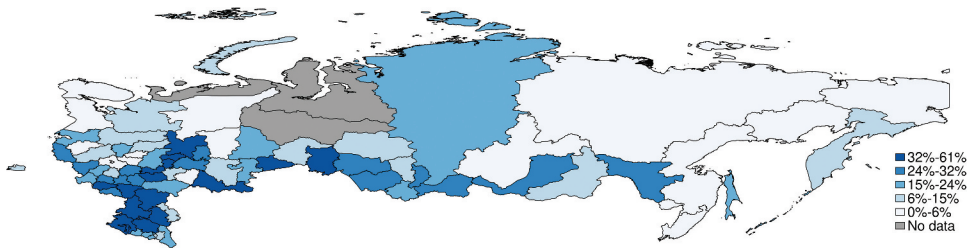


Figure 2. Russian regions by share of MPs with agricultural companies in 2015.

key functionaries interacted with the selected MPs on a monthly basis. Agricultural support within the region was one of the main subjects of these interactions.

We test our hypotheses using the estimations presented in Table 2. We present a battery of models explaining the two dependent variables: regional subsidies without (models (1)–(2)) and with target programs (models (3)–(4)). We distinguish between the specifications with our proxies for the pervasiveness of agricultural interest in local politics, as they are highly correlated with each other. The first observation is that both the share of MPs with agricultural companies and the number of companies per MP are positively and statistically significantly associated with the level of agricultural subsidies. The effect appears to be considerable, as a 10% increase in the share of MPs with agricultural companies translates into 4.1% higher agricultural subsidies. The effect is roughly 1% smaller in the specification with subsidies that include target programs. Furthermore, although we do not observe significant direct effects in the statistical sense of the dummy for an agricultural minister with an agricultural company, the interaction terms between the dummy and our key independent variables appear to be positive.⁸ This facilitating effect implies that a regional parliament with a vested agricultural interest may be more effective in pushing for more subsidies if the minister’s interests are aligned. Along these lines, our qualitative analysis

Table 2. Estimations of the determinants of regional agricultural subsidies.

Variables	(1)	(2)	(3)	(4)
	Ag subsidies only	Ag subsidies only	Ag subsidies with target programs	Ag subsidies with target programs
Share of MPs with agricultural companies	0.405* (0.088)		0.285*(0.059)	
Number of agricultural companies per MP		0.538** (0.037)		0.401**(0.012)
Ag minister (co-)owns an agricultural company	-0.116 (0.761)	-0.310 (0.550)	0.067(0.768)	-0.065(0.832)
Index of budgetary self-sufficiency	0.856*** (0.004)	0.707** (0.022)	0.559**(0.017)	0.486**(0.049)
Agricultural area	0.533 (0.103)	0.606 (0.198)	0.362(0.247)	0.494(0.207)
Livestock headcount	-0.338 (0.176)	-0.393 (0.252)	-0.050(0.838)	-0.165(0.563)
Share of agriculture in GRP	-0.679** (0.039)	-0.912** (0.030)	-0.570*** (0.004)	-0.783*** (0.002)
Population	0.146 (0.203)	0.129 (0.223)	0.026(0.741)	0.052(0.466)
GRP growth	-1.777 (0.493)	-2.214 (0.395)	0.086(0.929)	0.175(0.892)
Share of extracting industries in GRP	0.044 (0.541)	0.101 (0.334)	0.078(0.136)	0.068(0.216)
Ag minister (co-)owns an ag company # Share of MPs with ag companies	0.640 (0.169)		0.619(0.115)	
Ag minister (co-)owns an ag company # Number of ag companies per MP		0.903* (0.084)		0.841** (0.026)
Observations	390	390	390	390
Number of instruments/ Hansen overID test	82/0.318	82/0.457	82/0.384	82/0.411

*Significant at 0.1; **Significant at 0.05; ***Significant at 0.01. P-values are reported in brackets and marginal effects are reported instead of the coefficients. Each regression contains year dummies which are not displayed due to space considerations. All specifications were modeled in log-log form.

suggests that ministers are key stakeholders in allocating and adjusting support funds and have agenda-setting powers (e.g., drafting target programs). Supporting these findings, one of the participants in the focus group interview in Altai Krai suggested:

Powerful farmers go into politics because it pays but nothing happens without our minister. Everyone wants to be friends with him.

The control variables support our theoretical prediction that fiscally stronger regions can afford more agricultural support. We find that more fiscally autonomous regions tend to allocate more agricultural subsidies. In particular, a 10% increase in budgetary self-sufficiency is associated with an 8.6% increase in agricultural subsidies and a 5.6% increase in total subsidies that include target programs.

Our qualitative analysis confirmed fiscal capacity to be the major determinant of regional agricultural subsidization. However, the final amounts may differ substantially from the initial plans due to negotiated adjustments within a fiscal year. One of the experts interviewed in Moscow pointed out:

Fiscal strength is the driving force behind subsidies allocation as stipulated by the allocation formula in the legislation. However, life is more complicated than any formulas and the [funds] distribution rules may be disregarded after numerous adjustments [of subsidies amount] during the fiscal year.

Interestingly, the fiscal capacity effect appears to be larger for specifications with agricultural subsidies without target programs. This may be because target programs are less in the control of local politicians. First, a great deal of coordination with federal authorities is required to secure funding for the target programs. Second, they are usually negotiated for a period of three years. Furthermore, we find the coefficient of the share of agriculture in the GRP to be negative and highly significant. Surprisingly, regions with GRPs that are more dependent on agriculture appear to receive less subsidy support in comparison to those where agriculture plays a minor role. One reason for this might be that regions with a higher share of agriculture are typically fiscally more constrained. However, importantly, this finding is in line with a bulk of the literature finding that support for agriculture grows as the sector's economic importance goes down because of its superior ability to organize and influence decision-makers (e.g., Anderson, Rausser, and Swinnen 2013).

Although our quantitative data do not allow us to analyze the distribution of funds among producers, our qualitative analysis indicates that enterprises belonging to local key officials are typically prioritized in allocating public funding. Interestingly, it may often be the case that not all of the farms that applied for support obtained it in the end. Insufficiency of funds appears to be a major reason. Thus, small and medium farmers who participated in the focus group interviews in Altai Krai reported their experiences with rejection after investing their resources in “complicated” application procedures. As a result, larger farms with sufficient administrative capacity and political connections appear to be more likely to be the first in line to obtain funds.

Robustness Check and Limitations

A typical challenge with related studies is the endogeneity problem. First, higher agricultural subsidies may incentivize farmers to seek office. This is unlikely because subsidies alone appear to be an insufficient stimulus for business growth, which is a precondition for internalizing the costs of running for an office. Thus, one participant in the focus group interview suggested:

Although everyone wants more [of the agricultural subsidies], they are not the decisive factor [for business development]. Modern management and connections [with the government] is what counts. If I didn't know the right people, my business would not be where it is today.

Political connections may result in preferential treatment and appear to grant local enterprises competitive advantages far greater than agricultural subsidies (e.g., immunity from controlling authorities or an edge in courts). However, subsidies appear to represent a minor motivation to enter politics, at least for small- and medium-sized agricultural enterprises.

We also address the endogeneity challenge by re-estimating the regressions using instrumental variables (IVs). As instruments, we use the share of the rural population within regions based on the expectation that more rural regions should have more farmers within local parliaments. Rural areas typically have fewer nonagricultural industries, limiting the backgrounds of local MPs to agriculture. However, this variable is uncorrelated with the levels of agricultural subsidies because both predominantly rural and urban regions can host farms that apply for agricultural subsidies. As a result, we expect the exclusion restriction to be fulfilled. We present the estimations in [Table 3](#) (Models (1) to (4)). For

Table 3. Estimations for the robustness checks.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	Ag subsidies with target programs	Ag subsidies with target programs	Ag subsidies with target programs	Ag subsidies only	Ag subsidies only	Ag subsidies only	Ag subsidies only
Share of MPs with agricultural companies	0.268*(0.069)			0.428* (0.053)		0.164* (0.088)	
Number of agricultural companies per MP		0.404**(0.024)	0.490**(0.043)		0.206 (0.118)		
Ag minister (co-) owns an agricultural company	0.088(0.720)	-0.082(0.768)	-0.271(0.596)	-0.148 (0.691)			0.353** (0.048)
Index of budgetary self-sufficiency	0.544**(0.039)	0.512*(0.098)	0.797**(0.012)	0.853*** (0.005)	0.930** (0.013)	0.938*** (0.009)	0.905*** (0.001)
Agricultural area	0.364(0.307)	0.473(0.279)	0.548(0.254)	0.511 (0.132)	0.463 (0.291)	0.434 (0.259)	0.780*** (0.003)
Livestock headcount	-0.044(0.865)	-0.151(0.651)	-0.350(0.325)	-0.330 (0.182)	-0.383 (0.249)	-0.308 (0.302)	-0.335 (0.104)
Share of agriculture in GRP	-0.558*** (0.010)	-0.755*** (0.009)	-0.818** (0.032)	-0.703** (0.024)	-0.529 (0.102)	-0.430 (0.163)	-0.511** (0.049)
Population	0.031(0.684)	0.047(0.549)	0.121(0.268)	0.136 (0.229)	0.161 (0.306)	0.142 (0.373)	0.182 (0.242)
GRP growth	0.230(0.798)	0.248(0.854)	-1.999(0.409)	-1.887 (0.479)	-1.215 (0.570)	-1.148 (0.589)	-1.079 (0.511)
Share of extracting industries in GRP	0.069(0.183)	0.068(0.240)	0.103(0.325)	0.051 (0.478)	0.018 (0.826)	0.038 (0.619)	0.013 (0.856)
Observations	386	386	386	386	390	390	390
Number of instruments/ Hansen overID test	83/0.447	83/0.416	83/0.530	83/0.330	65/0.177	65/0.138	65/0.240
IV for political connectedness	Yes ²	Yes	Yes	Yes	No	No	No

*Significant at 0.1; **Significant at 0.05; ***Significant at 0.01. P-values are reported in brackets and marginal effects are reported instead of the coefficients. Each regression contains year dummies which are not displayed due to space considerations. All specifications were modeled in log-log form. ²As an IV, we use the share of rural population out of total within a given region.

both explanatory variables – the number of companies per MP and the share of MPs with agricultural firms – we still observe a positive and statistically significant effect similar to the estimations presented in Table 2. Moreover, the magnitude of the effects for both variables is comparable to our main estimates. The coefficients of the control variables largely parallel those in the primary estimations in Table 2. Moreover, we find neither overidentification nor autocorrelation problems with our specifications. Finally, diagnostic of the IV based on parsimonious 2SLS models reveals no signs of the instrument's weakness with first-stage F-statistics well above 10, as recommended by Stock and Yogo (2005).

A second source of potential endogeneity is the possibility that regional MPs will establish new agricultural enterprises in response to higher subsidies. This is unlikely, as well, for two reasons. First, our qualitative data suggest that subsidies may represent too small a financial incentive for newly established enterprises in the Russian context. Setting up a new sizable agricultural business within the constraints of MPs' duties is unlikely. Accordingly, an interviewed expert on agricultural credit suggested that farms need to reach a certain size before benefiting from subsidies:

The small ones [agricultural enterprises] want to be simply left alone by the government because the game [of applying for subsidies] is not worth it for them. It's the big ones that benefit from the subsidies. The state does not provide stimuli for establishing agricultural enterprises.

A five-year limit in office restricts MPs' opportunities to expand their newly established farms to the extent that they can benefit from subsidies. Second, in our estimations, we include only observations of enterprises that existed before an MP entered a given parliament for the first time. However, we see that out of all MPs with agricultural companies, only 3.7% established new ones after they assumed offices. None of them appears to be larger than 250 ha, which is unsubstantial for a typical Russian farming scale. Time constraints arising due to newly assumed positions may limit the options to establish an enterprise of a sufficient size that would benefit from agricultural subsidies.

Apart from endogeneity challenges, we test our specifications for possible multicollinearity issues in Table 3. Although the dummy for an agricultural minister having a firm is only weakly correlated with the share of MPs having an agricultural firm (correlation coefficient: 0.054) and the average number of agricultural companies per MP (correlation coefficient: 0.061), it is informative to observe how these variables will perform in separate specifications. Models (5)–(7) present the estimation results. Although the number of agricultural firms per MP falls slightly short of being statistically significant, the share of MPs with agricultural firms is statistically significant at the 10% level. Interestingly, the dummy for an agricultural minister owning an agricultural company becomes significant when neither of the other variables is included. The fact that it loses significance when included with the other variables suggests that the effect of political connections transpires mainly via regional parliaments.

Another major limitation of the study is that we cannot observe the distribution of funds among companies because of data limitations. This first-best option, assuming full data availability, would be to link the policies favorable to regional MPs with the subsidies received by their respective companies. Because of the unavailability of data, we have to rely on region-level analysis, but we can obtain some cues based on qualitative data.

Conclusion

In this study, we examined whether regional Russian politicians affected policy outcomes by favoring their and fellow farmers' businesses. In particular, we sought to understand whether regional MPs that assumed office owning or co-owning an agricultural firm attempted to skew regional politics toward more redistribution for the agricultural sector. We treat Russian businesspeople as investors in political power who hope to obtain favorable policy outcomes for their businesses. In addition, we analyzed the role of regional ministers of agriculture in the regional allocation of subsidies. Weak institutions in Russia may generate fertile ground for using administrative resources to pursue favorable policy outcomes for businesspeople in politics.

The evidence supports our hypothesis that pervasive agricultural interest in regional legislatures facilitates the allocation of more support to the sector. In particular, high shares of regional MPs (co-) owning at least one agricultural firm at the time of assuming office were associated with more subsidies allocated to agriculture. A 10% change in the share of MPs with agricultural companies was associated with a 4.1% increase in regional

agricultural subsidies and a 2.9% increase in subsidies with target programs. An alternative key dependent variable, the average number of agricultural firms per MP, was positively associated with the levels of regional agricultural subsidies. Moreover, we find that regional ministers of agriculture play an essential role in local redistributive politics. In particular, the ministers who (co-)owned at least one agricultural company before assuming office facilitated the effect of the MPs' influence via the parliament. Regional ministers, as key stakeholders in shaping local agricultural support, may be the "gatekeepers" of the regional distribution of agricultural subsidies. Although we cannot trace the distribution of the benefits of agricultural support to individual firms, evidence from our key informant interviews suggests that local politicians were, as a rule, the first to obtain funding from allocated agricultural support. Administrative power derived from being in the office allowed applications from politically connected enterprises to enjoy preferential treatment.

We contribute to the emerging literature on regulatory capture and businesspeople in politics. Politically connected firms have been found to be more profitable (Faccio 2006; Acemoglu et al. 2016; Faccio, Masulis, and McConnell 2006). The evidence is also mounting in the Russian context as well (e.g., Lamberova and Sonin 2018; Slinko, Yakovlev, and Zhuravskaya 2005). However, scholarly evidence on the mechanisms of how benefits are generated for politically connected firms remains scarce. Our study addresses this gap by demonstrating how redistributive decisions may be biased by the vested interests of the authorities making decisions about redistribution.

Several policy implications are given in light of the results. First, the strategic behavior of businesspeople seeking regional legislative positions may be possible because it is not legally restricted. This provides incentives to seek political connections that can grant not only benefits but also shield from predatory actions of local public institutions (Szakonyi 2018). Limits on business ownership for local MPs and key executive positions could somewhat mitigate rent-seeking efforts. However, implementing such limitations might be challenging, as a weak institutional environment could give rise to new ways of navigating around them. Consequently, strengthening local governance institutions, including improving the transparency and diversification of media outlets, may put additional pressure on the rent-seeking activities of the local agricultural sector.

Notes

1. We focus on the Russian administrative units called oblasts, republics, krais, and autonomous okrugs. Each of these units hosts legislative (parliaments) and executive (ministries) bodies.
2. Russia ranked 137th out of 180 in the Transparency International's 2019 Corruption Perception Index.
3. The cities of Moscow and St. Petersburg, as well as Khanty-Mansiyskiy, Yamalo-Nenetskiy, and Nenetskiy regions, are excluded due to exotic climatic conditions for agriculture and data availability.
4. Conditional on whether regional agricultural development programs adhere to the federal guidelines, the federal government allocates federal co-funding, which should follow legally preset distribution formulas based on the economic relevance of agricultural sector and budgetary strength of a given region. Although federal co-funding is an important part of agricultural subsidization, regional funding is what local governments have the most leverage over; consequently, we focus on this type of funding.
5. For instance, target programs could address issues of R&D, education, infrastructure, and marketing.

6. Some of our interviewees did not agree to be recorded due to a sensitive nature of the topic.
7. Second-order lags should minimize the number of instruments and the probability for autocorrelation.
8. Although the interaction terms in two of our specifications are insignificant in a conventional sense, the p-values are still close to a ten percent significance level.

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Disclosure Statement

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Data Availability Statement

The data that support the findings of this study were obtained from the Russian Ministry of Agriculture. Restrictions apply to the availability of these data, which were used under license for this study.

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Appendix List of qualitative interviews conducted for the study

No.	Date	Organization	Interview location
1.	Feb 13, 2017	Representative of the Higher School of Economics	Moscow
2.	Feb 13, 2017	Representative of the Nikonov All-Russian Institute of Agrarian Issues and Informatics, Department of Institutional Analysis of Agricultural Economics	Moscow
3.	Feb 14, 2017	Representative of the Russian Presidential Academy of National Economy and Public Administration	Moscow
4.	Feb 15, 2017	Representative of the Ministry of Agriculture and Food of the Republic of Tatarstan	Kazan
5.	Feb 15, 2017	Representative of the Russian Association of Peasant (Farmer) Enterprises and Agricultural Cooperatives (AKKOR), Tatarstan Chapter	Kazan
6.	Feb 15, 2017	Representative of a crop-producing agricultural enterprise in the Tatarstan area	Kazan
7.	Feb 15, 2017	Representative of a livestock-producing agricultural enterprise in the Tatarstan area	Kazan
8.	Feb 16, 2017	Representative of Altai State Agricultural University, Department of Planning and Forecasting of Business Processes	Barnaul
9.	Feb 16, 2017	Representative of a local bank (RosSelKhozBank) working with agricultural producers in Altai and Novosibirsk regions	Barnaul
10.	Feb 17, 2017	Focus-group interview with crop- and livestock producing small and medium farmers (six participants)	Aleysk
10.	Feb 17, 2017	Editor of a local newspaper focusing on the agricultural sector "Altayskaya Niva"	Barnaul