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THE POLITICAL ROOTS OF INTERMEDIATED LOBBYING: EVIDENCE FROM RUSSIAN FIRMS AND BUSINESS ASSOCIATIONS⁴

How does political competition shape the way that firms pursue legislative change? A rich political economy literature describes various ways in which firms influence the design and enforcement of laws, rules and regulations germane to their business activities. Although helpful, this literature is disconnected from work on legislative accountability and political concentration. Making a distinction poorly developed in prior research, we contrast firms that choose to influence policy *directly*, through un-mediated contacts with executive and legislative branch personnel, and those that do so *indirectly*, through lobby groups acting as intermediaries. We propose a simple theory that relates the relative costs of lobbying and the strategies firms select to the extent of political competition and concentration. As competition increases and concentration decreases in a region, the use of indirect channels of lobbying becomes more attractive (and vice versa). We test our theory using a survey of 1013 firms across 61 Russian regions. Exploiting substantial variation in political competition and concentration across Russia's regions, we find that firms in politically competitive environments, where there is less concentration, are more likely to use business associations to influence their institutional environment. Using a survey of 315 business associations, we show that these effects may be explained by the variation of the willingness of regional decision-making officials to support more or less encompassing policies depending on local political environment.

JEL Classification: D71, D72.

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Introduction

A business enterprise interested in influencing the design, adoption or enforcement of a particular law, rule or regulation often confronts a choice. Does it pursue its objective directly and independently, through un-mediated contacts with executive and legislative branch personnel? Or does it do so indirectly, through a lobbying group, which acts as an intermediary? Despite the attention given to the question of who lobbies ([Chong and Gradstein, 2010], [Grier *et al.*, 1994] or [Weymouth, 2012]), the literature highlighting how one lobbies, we feel, is rather poorly developed.⁵ In this article, we draw on data from industrial and service-sector enterprises in Russia to demonstrate that use of indirect lobbying – specifically, through non-profit business associations – increases relative to direct lobbying in more democratic, politically-competitive federal regions. One explanation for this propensity points to public officials’ incentives and the manner in which they are apt to change with the institutional environment. Specifically, we hypothesize that where competitive, democratic pressures are stronger, government responsiveness to more encompassing interests increases, enhancing the attractiveness of collective lobbying via associations. Conversely, where those pressures are weaker, the direct, more particularistic interests of single actors are apt to encounter relatively greater success.

We further explore this hypothesized relationship between the institutional environment and lobbying mechanisms by drawing on a second dataset collected from the managers of Russian business associations. If as conjectured, greater political competition raises the relative return of more encompassing approaches to lobbying, we should also observe that politicians’ interest in the least encompassing associations – those that exclusively represent firms from a single sector or those whose members contribute a relatively small share to the local economy – declines in more democratic settings relative to interest in more encompassing associations. And, indeed, this is what our evidence suggests. Whereas assessments of government receptivity to lobbying appeals appears unrelated to the degree of regional political competition among managers of multi-sector business associations, managers of both single-sector associations and associations whose members account

⁵A somewhat related literature draws attention to the distinction between “inside” lobbying, direct interactions between interest groups and policymakers, and “outside” lobbying, involving efforts of groups to pressure elected officials indirectly through their constituents, for instance by making appeals through the media [Kollman, 1998]. While acknowledging the breadth of lobbying strategies, we choose to focus on the slightly different question of collective versus individual lobbying mechanisms in this paper, however.

for a relatively small share of regional output report that politicians are more receptive to their policy advice in the least politically competitive regions.

Why is it important that we understand how the institutional environment affects the attractiveness of different channels for exercising influence? As a general proposition, the more encompassing the channel chosen for lobbying success, the greater the probability that a particular policy outcome aligns with social welfare (see e.g. [Olson, 1982], [Guriev *et al.*, 2010] and [Harstad and Svensson, 2011]). Consider an enterprise with multiple policy-related aims that would impose varying levels of externalities. An enterprise lobbying individually faces no external constraints in the sense that it chooses which of its policy aims to pursue purely on the basis of private costs and benefits. However, out of deference to co-members, it might have to forego the pursuit of certain aims if it lobbies through an intermediary. The more encompassing the intermediary – *i.e.*, the more broadly representative are its interests – the more restricted the feasible set of policy aims. Conditions that give preference to more encompassing lobbying mechanisms should thereby produce lobbying efforts that produce fewer externalities, thus falling in line more with social welfare.

This paper's focus on variation in lobbying strategies across more and less democratic settings within a single country is also a contribution to work on autocratic institutions. Numerous recent works have focused on the role of institutions in less democratic settings, arguing that they are valuable tools for allocating rents amongst elites ([Boix and Svobik, 2013], [Blaydes, 2010], [Brownlee, 2007]) and negotiating concessions with opposition ([Gandhi and Przeworski 2006], [Gandhi, 2008]). We build on this work by providing more evidence that while institutions play an important role as mediators between government and society, the nature of this mediation is fundamentally different in less democratic settings. In particular, we are among the first to provide micro-level evidence that links the incentives of politicians in more democratic settings to pursue encompassing interests results to concrete differences in lobbying behavior among firms. These differences, in turn, reinforce the argument that institutions in less democratic settings tend to be focused on the narrow needs of, and guaranteeing property rights for, competing elites rather than broader social welfare concerns (c.f. [Haber, 2007], [Reuter and Remington, 2009], [Gehlbach and Keefer, 2011]).

Our choice to study sub-national patterns of lobbying strategy selection in the Russian Federation carries several advantages. First, by limiting our analysis to a sub-national, rather than cross-national, sample we are able to control for a large number of potential sources of unobserved

heterogeneity – lobbying regulations, electoral systems, culture, federal structure, etc.– that complicate identification in cross-national samples. Second, the use of Russia provides us a large number of regions that differ substantially along both political and socio-economic dimensions (c.f. [Petrov, 2001], [Remington 2010]). This variation, especially in regional political accountability, provides both the opportunity to test our theory and reassurance as to the potential external validity of our findings. Finally, as we discuss in depth below, Russia has a well-developed web of business associations, with widespread membership across most spheres of economic activity. The substantial variation in use of business associations to lobby is also puzzling given their ubiquity in Russia, however. This rich ecosystem of business associations thus provides ample variation for exploring how and when firms rely on associations to lobby.

Our paper proceeds as follows. The following section lays out our theory, highlighting its relationship to existing literatures as to both how firms choose to lobby and how their choices affect social welfare. Section 2 then briefly introduces Russian business associations and discusses the context in which they operate. Section 3 introduces the two unique surveys – one of Russian enterprises and the other of Russian business associations – used to test our theory and introduces the empirical methodology. Section 4 presents our main findings concerning the link between lobbying channels and the institutional environment. Specifically, our data point to regional political competition raising the profile of more encompassing mechanisms relative to those that are less so. Finally we conclude by discussing implications and potential avenues for future research.

1 Business lobbying channels and their effects

The political economy literature presents a mixed picture with respect to the overall effects of business lobbying. One strand envisions distortions arising from what amount to either policy “auctions” or socially-harmful exchanges between self-interested officials and enterprises ([Grossman and Helpman, 1994], [Shleifer and Vishny, 1994]). Another points to business influence deriving more benignly from lobbying activities that mitigate informational asymmetries faced by policymakers [Downs, 1957].

A more nuanced account ties the impact of lobbying activities to the nature of the lobbyist. This strand of the literature originates with Olson [1982], who like others starts from an assumption that lobbies for particular interests wish to increase the welfare of constituents, irrespective of the

effects of these interests on others. Although the desired policies are often socially damaging in this framework, Olson adds a caveat:

[In] organizations that encompass a substantial portion of the societies of which they are a part ... the incentives ... are dramatically different from those facing an organization that represents only a narrow segment of society ... [T]he encompassing organization, if it has rational leadership, will care about the excess burden arising from distributional policies favorable to its members and will out of sheer self-interest strive to make the excess burden as small as possible. ... [Olson, 1982, p. 48]⁶

In highlighting this potential variation, Olson does not settle on a single metric for assessing the degree to which organizations are encompassing. He perhaps gives clearest attention to the extent to which a group's constituents own (or represent) the "income-producing capacity" of a society. That is, the more its members contribute to the economy, the stronger its preferences for policies that lift overall social welfare and the weaker its preferences for measures whose effects may impose net social costs. He qualifies this characterization, however, by suggesting that a business lobby that merely adds firms from a single sector that it already represents need not develop a more encompassing interest.

There is, in addition, little or no gain in concern for the society as a whole when a special-interest organization expands from, say, firm to industry size ... The circumstance in which an increase in the extent to which a special-interest organization is encompassing is likely to be most constructive is when it is already so substantial that it encompasses many different industries. At that stage further expansion ... would create an incentive to give greater weight to the organization's impact on social efficiency. [Olson, 1982, p. 50]

Olson thus links greater membership contribution to the economy and, secondarily, sectoral diversity to the probability that an organization expresses encompassing interests more in line with social welfare.⁷

Much of the research on interest groups and their influence on both policy and economic outcomes overlooks the distinction between more and less encompassing groups. The formal

⁶ A recent retrospective article honoring the twenty-fifth anniversary of the publication of Olson's *Rise and Decline* highlighted the "distinction between *distributional coalitions*, which are seen as leading to outcomes inimical to economic growth, and *encompassing coalitions*, which are seen as potentially aiding economic growth ..." as the first of the book's two "crucial innovations" [Rosser, 2007].

⁷With reference to Japanese political economy, Jankowski [1989] links Olson's discussion of encompassing-ness to the concrete difference between the narrower objectives of a sector-specific association, like the steel lobby, and one that represents enterprises from the steel sector as well as those in other sectors. [Pyle and Solanko, 2013] demonstrate that managers of both single-sector associations and the enterprises that belong to them are more apt than their multi-sector-association equivalents to respond positively to rent-redistributing policy interventions.

modeling literature, for instance, effectively treats groups as homogenous in terms of the degree to which their exogenously-given interests align with social welfare ([Grossman and Helpman, 1994, 1996 and 2001], [Felli and Merlo, 2006], [Baldwin and Robert-Nicoud, 2007]). Due to data limitations, Olson-inspired large-n empirical studies also largely ignore the potential for inter-group heterogeneity in alignment with social welfare ([Heckelman, 2007], [Coates and Heckelman, 2003], [Coates *et al.*, 2011]).⁸ Instead, most investigations of organizational encompassing-ness have relied upon case-study evidence ([Lehner, 1983], [Doner and Schneider, 2000]).

Olson's linkage of the encompassing-ness of the lobbyist and the likely effects of its lobbying activity could just as well be applied to the difference between a single firm and a multi-member association. As Gray and Lowery [1988] point out, "trade associations are definitionally more encompassing than individual firms."⁹In the limit, in other words, the narrowest of business lobbies is a single enterprise making lobbying choices purely on the basis of its own private costs and benefits. Conversely, within a multi-member organization, particularistic, enterprise-specific issues are apt to be crowded out by those that have broader appeal [Smith, 2010]. This distinction calls to mind literature that characterizes "corruption" and "lobbying" as strategic substitutes, the former a more individualized, less transparent and ultimately socially harmful channel for exercising influence ([Harstad and Svensson, 2011], [Campos and Giovannoni 2007]).

The discussion to this point suggests a spectrum of lobbying channels arrayed according to their degree of encompassing-ness. At one end, the individual channel – *i.e.*, approaching officials directly – is the least encompassing. Since the firm need not coordinate with others, this channel offers the freedom to pursue policies without concern for possible externalities. Further along the spectrum lie options that involve intermediating organizations. Their use may preclude the pursuit of some policy ambitions because of their potential harm to constituents. However, they offer some obvious advantages. They allow a firm both to defray the costs of lobbying and to amplify its influence on matters of shared importance. Moving further down the spectrum, as the channels

⁸These studies use cross-sectional data to explore the relationship between the simple number of registered interest groups and various macro-level measures, effectively disregarding potential differences across groups in composition, policy preferences and influence ([Heckelman, 2007], [Coates and Heckelman, 2003], [Coates *et al.*, 2011]). Similar assumptions of homogeneity also hold for other empirical studies (see e.g. [Potters and Sloof, 1996] and [Goldberg and Maggi, 1999]).

⁹Focusing on the United States, the authors create state-level measures for encompassing-ness by comparing the number of registered lobbyists representing firms to the number representing trade associations; states with relatively more of the former are taken to have business communities with less-encompassing interests. Although their aggregate measure of encompassing-ness assumes a difference between a single firm and a single collective actor, it treats the group from which the latter is drawn as wholly homogenous; they view all trade associations, that is, as equally encompassing.

become more encompassing, the set of pursuable policies continues to shrink but the corresponding advantages of cost defrayal and voice amplification grow.

Consider, for example, particularistic policies such as a firm-specific tax break or a protective tariff whose benefits redound to a single sector. Although these reasonably might represent aims of a single enterprise or industry, respectively, they would likely impose externalities elsewhere in the economy. Tax rates may have to be raised on others; or retaliatory tariffs may harm non-protected sectors. More encompassing lobbying organizations tend to screen out these sorts of narrow policy goals. Instead, we might expect them to be more likely to push for measures that might improve the macro-institutional environment – reduced corruption, enhanced security of property, *etc.* – whose payoffs could be enjoyed by a broader swath of economic actors.

How might these tradeoffs between more and less encompassing channels be affected by the political environment? Ample evidence suggests that business tries to influence policy design, implementation and enforcement in both autocratic and democratic settings. But their chosen mix of direct (less encompassing) and indirect (more encompassing) lobbying channels has not been heretofore carefully explored. We hypothesize here that firms consider their costs and benefits from various strategies, but that ultimate decisions derive from the (policy) supply side, where politicians are more likely to favor some strategies rather than others. Knowing this, firms choose the lobbying strategy that maximizes the probability of achieving their policy aims, while minimizing costs.

To see the argument, consider the incentives of public officials. In order to retain power, public officials in both autocracies and democracies require the aid and tacit support of a critical mass of social groups, comprising the selectorate. In classic models of political support, this can be done through the use of policy, which builds ideological affinity between politicians and their constituents, or direct transfers ([Dixit and Londregan, 1996], [Przeworski and Gandhi, 2006], [Cox, 2010]). The more politically inclusive a regime, the broader is the array of social forces that politicians need to please in order to stay in power, and the more heterogeneous demands for policy and transfers become [Bueno de Muesquita *et al.*, 2003]. The heterogeneous, large selectorates found in more competitive settings create incentives for politicians to provide public goods and look to policies which generally improve social welfare, since these strategies provide economies of scale in pleasing broad swathes of the selectorate ([Sokoloff and Engerman, 2000], [Lake and Baum, 2006]). While politicians may certainly advocate particularistic policies that benefit narrowly-defined interests, such policies are particularly costly in highly competitive settings, since they benefit groups too small to guarantee the politician sufficient support to hold office alone.

([Ferejohn, 1986], [Adsera and Boix, 2002]). By contrast, politicians in less competitive settings need to please fewer constituents to stay in power, allowing them to focus on more particularistic policies that benefit the small number of social forces they depend on. We refer to this as the *accountability hypothesis*.

One observable implication of this *accountability story* is that politicians in more competitive political settings should be more attuned to interests and actors who advocate policy that generates public goods or promotes overall social welfare. Consistent with Olsen's account of policy formulation in encompassing organizations, we would expect officials to be relatively more receptive to more encompassing lobbying channels, such as business associations, since their heterogeneous memberships are better able to filter out particularistic and negative externality generating policy proposals. The more encompassing the organization, the more politicians can be reassured that the policy being advocated benefits large segments of the selectorate, thus building support for the politician and helping her secure office. This has two observable implications. First, politicians are more likely to seek out policy advice from associations in setting with more competitive political systems. Second, knowing that politicians are more likely to look to encompassing lobbying channels for policy, enterprises in more democratic, politically-competitive environments are more apt to lobby through business associations rather than pay the costs to lobby themselves.¹⁰ Conversely because less competitive settings incentivize the provision of particularistic benefits, since the selectorate is smaller, we should observe that politicians are more likely to seek out policy proposals by individual firms and less encompassing (single sector) associations. Because politicians do not look to the most encompassing organizations *and* firms can propose their particularistic policies more easily, firms are more likely to engage in less encompassing lobbying strategies. In this paper, we therefore test the following propositions:

H₁: As the level of democracy increases, firms should be more likely to use more encompassing, group oriented lobbying strategies.

H₂: As the level of democracy increases, the influence of less-encompassing lobbying organizations should diminish.

¹⁰It is also possible that the relative costs of employing different channels may be connected to the number of actors that must be persuaded in order to lobby successfully ([Tsebelis 1995, 2002], [Londregan 2000]). The more concentrated is political power, the smaller that number of political actors and thus the lower the costs of lobbying. More democratic settings, having less concentration of political power than those that are more autocratic ([North and Weingast, 1989], [Bueno de Mesquita *et al.*, 2003]), may create incentives to defray the more substantial lobbying costs by using intermediaries.

2 Lobbying Groups in Russia

Before moving to our empirical analysis, it is important to make some brief notes about the context of Russian business associations and their relationship to Russian firms. Many of the first organized business lobbies in Russia grew up to advocate on behalf of small private initiatives that were permitted during the late Soviet period.¹¹ Others that date back to this era were organized by large state enterprises that shared an interest in preserving inter-firm ties and access to state subsidies as the mechanisms of centralized economic coordination evaporated. Some were instead first established from the top down, by ministry officials hoping to hedge against future uncertainty [Lehmbruch, 1999]. And still others probably served as fronts for corrupt or profit-motivated ventures. Generally speaking, these first associations were neither well organized nor transparent in purpose [Sulakshin and Romanikhin, 2003].

The reforms of the 1990s gave rise to a wave of national-level, sector-specific organizations as well as a number of multi-sector and sector-specific organizations that operate at the regional and municipal levels. Since then new associations in Russia have been appearing regularly till recent years (see Figure 1).¹² Although the lack of a comprehensive registry continues to render an accurate accounting of their numbers impossible, one recent estimate puts the numbers of business associations nationally at close to five thousand.¹³ Unlike in some continental European countries, business association membership in Russia has always been voluntary.

Like many of the organizations that populate civil society, the functions of business associations can be divided along two dimensions. First, they help develop and strengthen “horizontal” ties among non-state actors by facilitating inter-firm communication regarding, for instance, new technologies [Pyle, 2006] and the reliability of potential trade partners [Pyle, 2005]. Second, they can be instrumental in the “vertical” relationship between the business community and state actors by aggregating, transmitting and advocating business interests to public officials.

A number of studies have documented the important role that Russian business associations play in translating these “vertical” relationships into concrete outcomes preferred by their members. At the national level, business associations have played a critical role in shaping legislation on the

¹¹This section draws closely on the narrative in [Pyle and Solanko, 2013].

¹² This figure depicts the distribution of foundation year of 315 business associations surveyed in late 2010. Some description of this survey is provided in the next paragraph.

¹³Author interview in July 2005 in Moscow with the Director of the Department for Cooperation with Business Associations at the Chamber of Commerce of the Russian Federation.

Russian Labor Code, Unified Social Tax, and in the series of Pension Reforms beginning in 2001 (c.f. [Cashu, 2001], [Ashwin and Clarke, 2002], [Gurieiev and Rachinsky, 2005], [Cook, 2007], [Sokhey, 2010]). For additional perspectives on both lobbying and business associations in Russia see [Frye, 2002], [Golikova, 2009] and [Zudin, 2006]. Although few studies have looked at regional level lobbying directly, they provide some evidence that regional level associations also influence industrial policy below the federal level on a regular basis by participating in governors' councils and working groups and arranging meetings with the governor and other top regional officials [e.g. Yakovlev et al., 2010].

3 Data and Methodology

3.1 Firm and Association surveys

In order to test our theory, we make use of two surveys. The first is a survey of 1013 companies conducted by the Higher School of Economics in late 2010. The firm survey covers 61 of Russia's 83 regions, with a roughly balanced number of observations across regions. Moscow and St. Petersburg¹⁴, two cities with status as federal regions, are over-represented in the sample, due to a disproportionate number of firms being located in one of these two cities.¹⁵ More than half of surveyed firms are located in other regional capitals, with the remainder being companies from the peripheral cities, small towns, and villages. The firm survey focuses on ten major sectors, roughly half of which are industrial and half of which are non-industrial.¹⁶ Finally, the average firm size for the sample is a bit larger than the national average. So-called micro-firms (with less than 15 employees) and the largest employers were excluded. While many of these factors are deviations from the ideal representative sample, we think that the bias introduced is limited. Firms in our survey may be more likely to be business association members due to the firm size and sectoral composition of our sample. Nonetheless, to the extent that the original survey was designed to study business association activity, some oversampling of large firms and specific sectors was necessary.

¹⁴Moscow and St. Petersburg make up roughly 9% of the sample each. These two cities are top federal subjects by the number of

¹⁵. These two cities are in the top five federal regions by GRP. They are also two top federal regions by the number of firms and organizations. http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156

¹⁶Sectors include mechanical engineering, metallurgy, chemical, woodworking, light industry, food industry, information technology, trucking, retail, and travel services. Sector distribution is presented in Table A3.

Our firm-level survey allows us to address the relationship between institutions and the choice to lobby through a business association. It therefore gives us some leverage in assessing whether enterprises use a more encompassing lobbying channel in more competitive political environments. Unfortunately, however, the question posed to firms does not distinguish between having lobbied regional officials through sector-specific organizations or their more encompassing multi-sector analogs. As a consequence, it is difficult for us to demonstrate that lobbying behavior is governed by “supply” side considerations of politicians in more competitive settings, the key claim of our *accountability hypothesis*. In order to provide evidence for our proposed mechanism, we turn to a survey of business association managers, which gives us leverage over the degree to which politicians seek out encompassing organizations for policy advice. Recall that one of the observable implications of the *accountability hypothesis* is that politicians should be more likely to approach encompassing organizations for policy proposals in politically competitive settings, making them more attractive lobbying vehicles.

To test this hypothesis, we employ a survey of 315 Russian business associations representing 61 regions. Although we do not have many associations in each region (3 to 5 in most cases), the regional distribution is roughly uniform. Unfortunately, it is difficult to draw conclusions about the degree to which the sample is representative, because little data exists about the population of Russian business associations. To our knowledge, no publicly accessible database of associations in Russia exists and ours is the largest survey of business associations to be conducted. About 45% of our sample consists of regional branches of national level organizations, 29% are region-specific associations with no connections to national level associations, and 26% are national associations with membership across multiple regions. Because our concern is regional level lobbying, we omit the last category from our analysis and focus on associations with a presence predominately in one region.

3.2 Modeling Strategy

In order to test our theory at the firm level, we estimate a set of multi-level hierarchical (MLH) logistical models of the form:

$$Y_i = \alpha_0 + \gamma_2 Z_j + \gamma_1 Dem_j + \rho X_i + \eta_j + \epsilon_i$$

where Y is the dependent variable of interest, Dem_j is our relevant measure of political institutions, X_i is a matrix of firm-level controls, Z_i is a vector of regional control variables, and η_j are region specific random intercepts.

MLH models are superior to rival estimation techniques for nested data, such as ours, for three reasons¹⁷. First, unlike traditional models, MLH models explicitly acknowledge that the data consist of firms nested in regions. Its primary advantage over more traditional, alternative approaches using clustered errors is that MLH models allow us to estimate the direct effect of multiple regional level variables of interest simultaneously at the same time we include fixed and random effects. Including all of these elements in a non-MLH model would violate identification conditions. Crucially, this technique allows us to both explore the regional level variable of interest – the measure of political institutions – and control for other important regional level characteristics that could shape lobbying strategy.

Second, such specifications use information from within and between higher level units to derive more efficient estimates of variables of interest. This allows us to make good inferences even in cases where there are few units at the higher level or higher level units have few individual observations embedded in them. While the former is less of a concern for this paper, as we have over 60 Russian regions to work with, the latter can be an issue as we explore sub-samples of firms, dropping down to less than 5 observations in some regions. Finally, MLH models have the nice statistical property of requiring fewer distributional assumptions about the correlation of error terms within higher level units, as well as about variation in the effects of variables between units (e.g. random coefficients). Not only are observations within a higher level unit assumed to be correlated, but one can also model unit specific coefficients using random slopes [Gelman and Hill, 2007], [Stenbergen and Jones, 2002].¹⁸

Our primary dependent variable of interest in the firm survey comes from a question that asks respondents to list the channels that they use to lobby for changes in regional policy. Respondents could select from any number of the following options: “personal contacts with representatives from the regional duma”, “personal contacts with the governor and/or members of the regional administration”, “business associations”, “media” and “personal contacts with influential individuals outside of government (e.g., other entrepreneurs or public figures).” The distribution of answers of lobbying firms is given in Figure 2. Because our main interest lies in

¹⁷The following discussion draws heavily on [Gelman and Hill, 2007].

¹⁸For a more thorough discussion of the alternatives for analysis using multi-level models in survey settings, as well as a comparison of their performance given simulated data, see [Leoni, 2009].

whether or not firms use business associations as a means of lobbying, our dependent variable is a dummy variable, which is coded 1 if firms report having used business associations as part of their lobbying strategies and zero otherwise.¹⁹ As Figure 2 illustrates, this was by far the most common lobbying strategy deployed by firms.

Recall that our main independent variable of interest is the extent to which institutions allow voters to hold politicians accountable. Measuring accountability is a subject of great contention in the political science literature, both conceptually and empirically (c.f. [Trier and Jackson, 2008], [Cheibub *et al.* 2008]). In order to test our theory about the relationship between political competition (and degree of political accountability) and lobbying strategy, we therefore remain agnostic about how to measure accountability, instead using a variety of different measures that capture different aspects of accountability. Our first measure is the Carnegie Democracy Index produced as part of the Moscow Carnegie Center's Regional Monitoring Project and averaged for the period from 2005 to 2009. The original measure captures expert assessments of Russia's regions along ten different dimensions, including the competitiveness of regional elections and recruiting, the degree of political plurality, and the strength of civil society.²⁰ These components are added to produce an index ranging from 5 to 50, where higher scores indicate more democratic regions [McMann and Petrov, 2000].²¹

Second, we also use a measure for the effective number of parties in the most recent regional elections, which gives us a more objective, direct measure of the degree of political pluralism in

¹⁹We choose to focus primarily on lobbying through business associations, because this has the clearest connections with our framework of direct and indirect lobbying. In previous versions of the paper, we also looked at lobbying through regional legislatures or executive branch officials, but felt that this excluded other officials firms might lobby directly (regulatory officials), did not properly exclude the role of professional lobbyists (who constitute indirect lobbying channels in our framework), and complicated presentation. The results of this analysis largely comport with our findings about lobbying through business associations, however, and are available upon request.

²⁰ The ten elements include representativeness of elections (free and fair with few limitations on political rights), openness of political life (extent of transparency and public involvement in the political sphere), pluralism (participation of stable parties), economic liberalization, municipal governance, media freedom, elite recruitment and coordination, and "regional political structure". Unfortunately, disaggregated scores are not available for updated data as of this draft. Future drafts will focus more narrowly on indicators of competitiveness.

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regions. To produce the measure, we use electoral data from the regional elections closest to our 2010 survey and calculate the effective number of parties using the [Laakso and Taagepera, 1979] methodology. A higher score indicates greater political pluralism in a region and should imply greater political accountability. Third, we introduce a three point categorical measure of press freedom carried out by the Russian NGO Glasnost Defense Foundation, since accountability requires the free flow of information. This variable assigns regions to one of three categories, “somewhat free”, “somewhat not free”, and “not free”, based on expert assessments of press freedom in the regions.

Finally, we also introduce the margin of victory for United Russia in the most recent Duma election (2007) and in the most recent regional elections²², which are intended to capture the extent to which United Russia dominates regional politics. The more United Russia dominates elections, the more political power is concentrated. Given the hybrid nature of Russia’s electoral system, areas where United Russia wins in a landslide likely reflect the control of local politicians over political resources and an ability to manipulate elections ([Treisman, 2000], [Robertson, 2010], [Reuter and Robinson, 2009], [Reuter, 2010]). For these variables higher scores indicate more political concentration and less accountability.

In our main specifications, we choose to present relatively parsimonious models. Our firm-level control variables include the number of employees, a dummy equal to one if the firm exports products abroad, a second dummy indicating the firm belongs to a larger holding company or commercial group, controls for the type of locality the firm is located in (*e.g.*, regional capitals, where firms have more access to regional politicians and a dummy indicating whether the firm is located in Moscow or St. Petersburg), a vector of sector dummy variables, and a dummy variable equal to one if the firm lobbied through any non-business-association channel. At the regional level, we include additional controls for regional GRP per capita in 2009 and the log of the regions’ population in January of 2009.

Recall that our association survey allows us to test whether encompassing organizations are more likely to be consulted by regional politicians in more democratic settings, an observable implication of our *accountability hypothesis*. Consistent with this hypothesis, our dependent variable for tests using the association survey asks respondents, “Do you agree that state officials at the regional level are interested in associations’ participation in discussion and development of laws and regulations?” Respondents were allowed to answer yes or no.

²² These range from 2005 to 2009 depending on region specific electoral calendars.

We again make use of a MLH logit model. In addition to the rationale given above, the technique is particularly well-suited to analysis of our association survey, because it provides good, efficient estimates of regional level parameters even in cases, such as this one, in which there are only a few individuals nested in each region [Gelman and Hill, 2007]. Our equation takes the form:

$$Y_i = \alpha_0 + \gamma_1 Dem_j + \gamma_2 Z_j + \beta_1 Narrow_i + \beta_2 Narrow_i * Dem_j + \rho X_i + \chi_{1j} + \eta_j + \epsilon_i,$$

where Y_i is the indicator of officials' interest in cooperation with association i , based on the dependent variable mentioned above, Dem_j is one of our indices of political accountability in region j , $Narrow_i$ is a proxy measure for business association i indicating its degree of encompassing-ness, X_i is a vector of association specific control variables, and Z_j is a vector of regional control variables. As before η and ϵ are region and individual specific error terms, respectively. The new term χ , represents a random co-efficient of the *narrow* variable necessary for cross level interactions, but can be interpreted as an additional error term [Gelman and Hill, 2007].

Our measures of Dem_j and the components of Z_j are the same as those used in our firm survey (discussed above). Indicators of associations' encompassing-ness are survey based. First, we include a measure based on each association's self-estimation of its members' contribution to regional GRP²³. Recall that according to Olson, the smaller the slice of regional output an association represents, the less encompassing it is likely to be. We code this variable 0 if an association claims that its members' output makes up more than 25% of total regional output and 1 otherwise. We also use a dummy variable that equals 1 if association membership is composed of firms from a single sector and 0 if the association membership is multi-sector. Our theory predicts that politicians will see the policy advice of encompassing associations (whether measured by concentration of regional GRP or sectoral composition of membership) as a more valuable commodity as political competition and accountability improve. As a consequence, our main variable of interest is the interaction between our accountability measure and our measure of encompassing-ness.²⁴ As association-level control variables we include a measure of the percentage

²³ Respondents could select one of four available options: 10% or less, 10-25% of regional GRP, 25-50% of regional GRP and more than 50% of regional GRP. The distribution of responses is presented in Figure 2.

²⁴ We worry slightly that these variables may be subject to endogeneity concerns. On the one hand, then officials should seek out associations which represent large shares of regional GRP or multi-sector membership. On the other hand, it could be the case that firms form such associations in order to attract politicians notice through bargaining power. In either case, however, notice that politicians with more to lose due to accountability will have fewer tools to resist having to deal with these groups, thus influencing the lobbying strategies of business. As a consequence, the endogeneity problem is not one core to our theory and stems from incentives under political competition, which is the core of our *accountability* story.

share of associations' budget funded by member donations and a dummy variable equal to 1 if an association is a regional branch of a larger, national association. Regional level controls are the same as those used in our tests using the firm survey (see above).

4 Results

Table 1 presents the results of our main specification. With respect to individual level characteristics, firms are more likely to lobby through business associations if they engage in export operations or are members of business associations. Firms also appear to regularly engage in lobbying through multiple channels simultaneously, with firms who report lobbying government officials directly also being more likely to make use of business associations to lobby. Other individual level controls failed to reach significance at conventional levels.

Turning to the institutional variables of interest, there is some evidence that institutional context influences the lobbying strategy of firms. The effective number of parties (ENP) is a positive, significant predictor of the use of business associations as a lobbying strategy at the 95% confidence level. Since accountability should rise along with ENP, this implies that in regions where competition is greater and political accountability stronger, firms are more likely to employ business associations when lobbying. Similarly, both United Russia's margin of victory in the national Duma elections and its margin of victory in the most recent regional elections were negative and significant at conventional levels. As political accountability falls as United Russia's margins of victory increase and it solidifies its status as a hegemonic party, this implies that business associations are a more popular strategy where political accountability is greater. Although not significant at conventional levels, the signs for our alternative measures, the Moscow Carnegie Center and Press Freedom indexes are both positive, which is consistent with the notion that business associations see more use in regions with greater accountability. Overall, then, Table 1 provides strong support for the *accountability hypothesis*.

While the full sample results are illustrative, we worry that the effects of interest are being drowned out by the large number of firms that do not lobby at all. Table 1 may be underestimating the effect of political accountability on lobbying strategy.²⁵ In order to check this, in Table 2 we limit our sample to firms who report having lobbied at the regional level, excluding firms that do

²⁵We address the opposite problem, that selection effects may be causing us to overstate the effect, in the following section, where we introduce a set of robustness checks.

not lobby at all. Using a restricted sample strengthens our results somewhat. The Moscow Carnegie Index is now a positive, significant predictor of the use of business associations for lobbying at the 95% confidence level. Our measure of ENP is also a positive significant predictor, although at a lower confidence level than in Table 1. Finally, United Russia's margin of victory in both Duma and regional elections are negative and significant predictors. For these variables, confidence levels are on par with those from Table 1, although the magnitude of the effect appears to have grown. Again, results are consistent with the *accountability hypothesis*: political competition and accountability are positively correlated with firms' use of business associations as a lobbying mechanism.

Taken together, these firm level tests provide some evidence for the *accountability hypothesis*. Unfortunately, these tests tell us relatively little about the mechanisms governing firms' choices. Is lobbying strategy a function of the "demand" side – cost-benefit calculations by individual firms – or the "supply" side – based on the incentives politicians have to be receptive to different types of lobbying strategies. In order to resolve this ambiguity in the results, we turn to tests using our survey of business associations. Recall that here the dependent variable of interest is whether or not business associations are called on by politicians to participate in the development of laws and regulations. The results of these tests are presented in Tables 3 and 4, which provides some support for the proposition that the authorities in more democratic regions are more likely to solicit the opinions of more encompassing business associations.

Table 3 introduces our first measure of encompassing-ness, which uses associations' self-assessment of members' contribution to regional GRP. The relationship which is of greatest interest here is the interaction between the political environment indicators and our measure of association members' contribution to regional GRP. Recall that under the *accountability hypothesis*, politicians in regions with a high degree of accountability have incentives to favor encompassing organizations over non-encompassing ones. Consistent with this story, the interaction terms between members' concentration of regional GRP and ENP and Press Freedom are negative and significant in Table 3 (Models 2 and 3). Conditional on associations representing a small concentration of regional GRP, they are more likely to feel that politicians solicit their opinions in regions with a lower effective number of parties and less Press Freedom. Similarly, Models 4 and 5 show that United Russia's margins of victory in Duma and regional elections, respectively, are a significant, negative predictor. As United Russia's hegemony over the legislature increases, less encompassing associations are more likely to report that the authorities are interested in consulting them on policy

matters. Finally, Model 1 indicates that the interaction between the Moscow Carnegie Center Index and encompassing-ness is negative (as predicted by our accountability mechanism), however it does not reach conventional level of significance.

Table 4 presents the results using our alternative measure of encompassing-ness, a dummy for those associations which are sector-specific. In this case the results appear to be a bit weaker than those from Table 3: only two of five political environment indicators – the Moscow Carnegie Center Index and Press Freedom Index – are significant and in the directions expected. The main (unconditional) effect of the remaining measures of political competition – Effective Number of Parties and Margins of Victory for United Russia – are significant at conventional levels and have a sign indicating that associations, in general, are more likely to feel they are consulted in regions with weaker political competition. On the one hand, given our emphasis on political competition increasing the attractiveness of encompassing associations, this result is somewhat unexpected. On the other hand, this result is anomalous, contradicting results from Table 3 and our tests of the firm survey. We leave further exploration and explanation for subsequent drafts of this paper. Nonetheless, on the whole, Table 4 provides some additional support for the *accountability* hypothesis.

4.1 Robustness Checks

In order to verify the robustness of our firm survey results, we run a number of additional tests. First, in order to control for possible selection bias in which firms lobby due to unobserved variables correlated with the quality of political institutions, we check whether lobbying behavior is correlated with regime type. It could be that the relationship observed in Table 1 stems from firms' willingness to lobby in politically competitive settings, which would also imply that they are more likely to use business associations as a lobbying mechanism in these settings. Table 4 presents the results of this robustness check in specifications using the same control variables as those from our main tests and which uses a dummy variable equal to 1 if the firm reports lobbying at the regional level through any method. Signs are mixed in Table 5 and none of the variables achieve statistical significance at conventional levels. Firms choose to lobby regardless of the nature of political institutions.

Table 5 checks whether the results observed in the main tests are due to variation in business association membership, which is in turn correlated with political institutions. If firms are more

likely to be association members in regions that are more competitive, for example, then the explanation for variation in the use of business associations as a mechanism for lobbying rests not in accountability, but in cross-regional variation in association membership. Although all signs are positive, the institutional variables fail to reach conventional levels of significance in Table 5. Firms are just as likely to be members of business associations in regions with poor political competitiveness as they are to join associations in regions with high degrees of political competitiveness.

Finally, in order to reassure ourselves as to the validity of our main results, we ran additional sets of unreported regressions using additional individual and regional level variables. We tried specifications that included controls for the characteristics of managers (age and education), whether firms are oriented towards the regional or federal markets, self-reported productivity, ownership structure, holding company status, and foreign ownership, whether the firm is managed by its owner, and whether firm owners know regional officials. At the regional level, we also included additional controls for share of profit tax in total revenue (as a measure of market development) and the number of bureaucrats (healthcare workers and education workers) in the region. Results remained roughly the same in all of these various permutations and actually become more robust, statistically, as we include more individual level control variables.²⁶

Conclusion

In the modern era, scholarly interest in the institutional sources of long-run economic performance is often traced to Olson's *The Rise and Decline of Nations* [1982] which drew attention to the socially damaging impact of rent-seeking special interests, including business lobbies. Much of the subsequent work on the political economy of business lobbying, both theoretical and empirical, has tended to underscore this fundamental point. But what has often gone overlooked in Olson's work is a caveat that not all lobbies are created equal. In our analysis here, we extrapolate on his point that business lobbying through more encompassing channels is apt to produce "better" policy. Specifically, we hypothesize that more encompassing channels are likely to exercise relatively greater influence in more politically competitive environments in which officials face a greater degree of popular accountability.

²⁶ Results of all of these specifications are available upon request.

We employ two unique datasets to put this basic proposition to the test. First, we show that enterprise managers consider lobbying through multi-member associations, in comparison to a more direct and individual strategy, more appealing in Russian regions that are less autocratic. This relationship derives neither from a greater propensity to join business associations nor an increased tendency to lobby in these regions. Second, we demonstrate that the influence of the least encompassing lobby groups, those that represent firms that contribute less to total regional output or firms from a single sector, is greatest in the most un-democratic regions. Compared to that of more encompassing associations, these narrow lobbies see their influence on public officials wane in more politically competitive settings.

Though they need to be tested in other contexts, our findings are suggestive of a positive feedback loop between “better” political institutions and the popularity of “better” approaches to influencing policy. More competitive and democratic politics, that is, encourage greater use of lobbying channels that will filter out negative-externality-generating policies. Better policies, presumably, would in turn strengthen democratic institutions. It would be premature to push this conclusion too far at this point. But we hope, at a minimum, that our analysis here encourages greater appreciation for the diversity of lobbying channels and how the relative importance of those channels may be sensitive to the broader political environment.

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Appendix

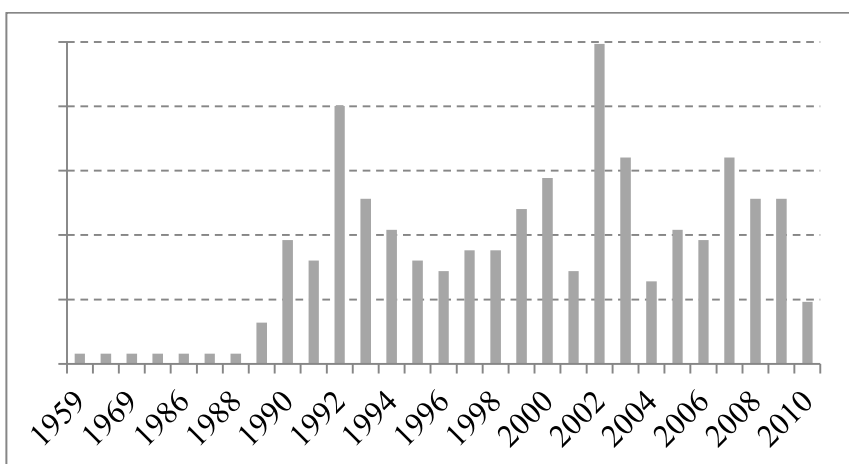


Fig. 1: Association survey. When surveyed associations were founded

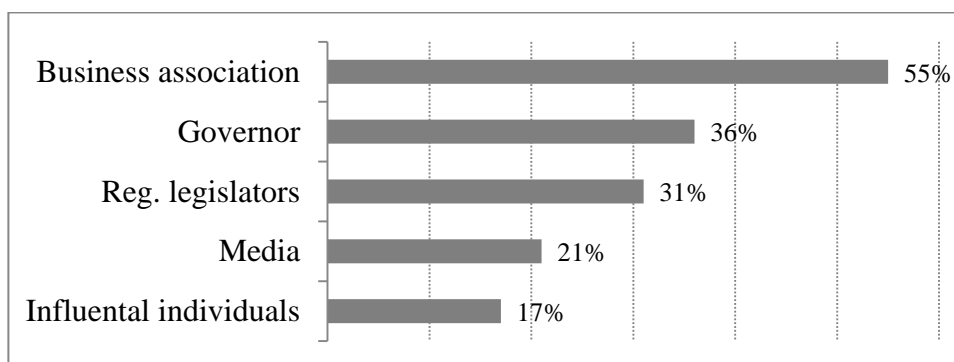


Fig. 2: Firm survey. Channels of lobbying used by firms.²⁷

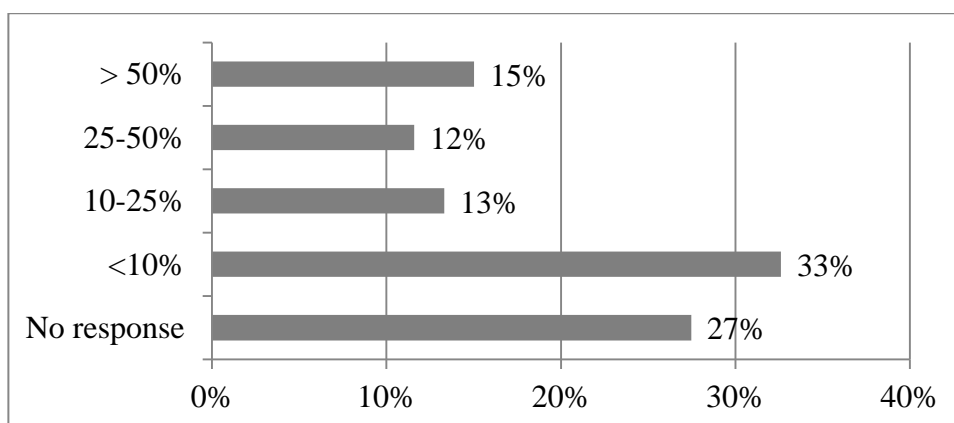


Fig. 3: Association survey. Members' contribution to GRP.

²⁷ The numbers in the figure present how many firms that lobbied at regional level used these channels. Different options are not mutually exclusive.

Tab. 1. Business Association Lobbying and Institutional Context – All Firms

	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	-5.47 [3.92]	-8.40* [3.98]	-5.52 [3.88]	-7.23* [3.81]	-8.37** [3.92]
In Employees 2010	0.19 [0.13]	0.18 [0.13]	0.20 [0.13]	0.19 [0.13]	0.19 [0.13]
Export Firm indicator	0.79*** [0.29]	0.73** [0.29]	0.76*** [0.29]	0.77*** [0.29]	0.76*** [0.29]
Commercial group Member	-0.38 [0.30]	-0.39 [0.30]	-0.38 [0.30]	-0.34 [0.30]	-0.36 [0.30]
Major owner: Manager	-0.09 [0.27]	-0.11 [0.27]	-0.11 [0.27]	-0.07 [0.27]	-0.10 [0.27]
Major owner: Foreigner	-0.03 [0.65]	-0.02 [0.65]	-0.02 [0.65]	-0.12 [0.65]	-0.09 [0.65]
Regional BA Member	1.48*** [0.26]	1.53*** [0.26]	1.52*** [0.26]	1.52*** [0.26]	1.53*** [0.26]
Location: Regional Center	0.58* [0.33]	0.59* [0.33]	0.54* [0.33]	0.59* [0.33]	0.63* [0.33]
Location: Moscow or Petersburg	0.60 [0.95]	0.46 [0.93]	0.28 [0.98]	0.06 [0.94]	0.15 [0.93]
non BA lobbying	2.44*** [0.29]	2.45*** [0.29]	2.43*** [0.29]	2.49*** [0.29]	2.49*** [0.29]
GRP per Capita 2009	0.00 [0.01]	0.00 [0.01]	0.01 [0.01]	0.00 [0.01]	0.01 [0.01]
In Regional population 2009	0.04 [0.28]	0.24 [0.28]	0.03 [0.27]	0.16 [0.27]	0.22 [0.27]
Carnegie Democracy Index 2009	0.04 [0.03]				
ENP 2009		0.19** [0.10]			
Press Freedom Index 2009			0.43 [0.27]		
Margin 2009 - Federal Elections				-4.31** [1.93]	
Margin 2009 - Regional Elections					-2.36** [1.02]
Sector dummy variables	Yes	Yes	Yes	Yes	Yes
AIC	585.61	583.35	584.87	582.04	581.84
BIC	696.97	694.71	696.22	693.4	693.2
Log Likelihood	-269.80	-268.67	-269.43	-268.02	-267.92
Deviance	539.61	537.35	538.87	536.04	535.84
Num. obs.	936	936	936	936	936
Num. groups: Region	59	59	59	59	59
Variance: Region.(Intercept)	0.42	0.37	0.41	0.34	0.35
Variance: Residual					

*** p < 0.01, ** p < 0.05, * p < 0.1

Tab. 2. Business Association Lobbying and Institutional Context – Lobbying Firms Only.

	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	-0.29 [4.63]	-3.07 [4.72]	-0.73 [4.60]	-1.42 [4.54]	-3.68 [4.84]
ln Employees 2010	0.15 [0.21]	0.14 [0.21]	0.18 [0.21]	0.12 [0.21]	0.11 [0.21]
Export Firm indicator	1.26** [0.51]	1.07** [0.50]	1.24** [0.51]	1.23** [0.51]	1.21** [0.51]
Commercial group Member	-0.72 [0.45]	-0.75 [0.45]	-0.72 [0.45]	-0.68 [0.45]	-0.72 [0.46]
Major owner: Manager	-0.49 [0.43]	-0.48 [0.44]	-0.51 [0.43]	-0.41 [0.44]	-0.34 [0.44]
Major owner: Foreigner	-0.47 [0.80]	-0.45 [0.80]	-0.52 [0.79]	-0.62 [0.81]	-0.50 [0.83]
Regional BA Member	1.08*** [0.42]	1.25*** [0.42]	1.24*** [0.41]	1.25*** [0.42]	1.23*** [0.42]
Location: Regional Center	0.34 [0.51]	0.28 [0.50]	0.17 [0.49]	0.33 [0.51]	0.47 [0.52]
Location: Moscow or Petersburg	-0.65 [1.05]	-0.44 [1.02]	-0.79 [1.07]	-0.84 [1.06]	-0.89 [1.07]
non BA lobbying	-0.60 [0.46]	-0.56 [0.45]	-0.55 [0.46]	-0.52 [0.46]	-0.56 [0.46]
GRP per Capita 2009	0.01 [0.01]	0.01 [0.01]	0.01 [0.01]	0.01 [0.01]	0.01 [0.01]
ln Regional population 2009	-0.02 [0.32]	0.17 [0.32]	-0.01 [0.32]	0.07 [0.31]	0.21 [0.33]
Carnegie Democracy Index 2009	0.07* [0.04]				
ENP 2009		0.21* [0.12]			
Press Freedom Index 2009			0.55 [0.34]		
Margin 2009 - Federal Elections				-5.23** [2.37]	
Margin 2009 - Regional Elections					-3.10** [1.26]
Sector dummy variables	Yes	Yes	Yes	Yes	Yes
AIC	224.81	224.78	225.56	222.4	221.56
BIC	295.11	295.08	295.86	292.69	291.85
Log Likelihood	-89.41	-89.39	-89.78	-88.20	-87.78
Deviance	178.81	178.78	179.56	176.4	175.56
Num. obs.	157	157	157	157	157
Num. groups: Region	50	50	50	50	50
Variance: Region.(Intercept)	0.00	0.00	0.00	0.00	0.00
Variance: Residual					

*** p < 0.01, ** p < 0.05, * p < 0.1

Tab. 3. Contribution to GRP and Requests for Policy Input

	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	-8.25*	-3.74	-7.62*	-5.64	-3.65
	[4.27]	[4.41]	[4.51]	[4.27]	[4.46]
Funded by Members (%)	-0.01*	-0.01*	-0.01*	-0.01	-0.01
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Funded by Members (no response)	-0.94	-0.94	-0.96	-0.92	-0.99
	[0.58]	[0.59]	[0.59]	[0.60]	[0.61]
GRP per Capita 2009	0.00	0.00	0.00	0.00	0.00
	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]
In Regional population 2009	0.64**	0.34	0.63*	0.46	0.32
	[0.31]	[0.32]	[0.33]	[0.31]	[0.32]
Branch of Federal BA	0.56	0.50	0.50	0.51	0.52
	[0.35]	[0.35]	[0.34]	[0.35]	[0.35]
Sector-specific BA	0.05	-0.05	-0.01	-0.04	-0.10
	[0.37]	[0.37]	[0.37]	[0.37]	[0.38]
Contribution to GRP -not high	-1.05***	-1.05***	-1.22***	-1.07***	-1.00***
	[0.37]	[0.37]	[0.40]	[0.38]	[0.38]
Carnegie Democracy Index 2009	-0.02				
	[0.07]				
Carnegie Democracy Index 2009*	-0.05				
Contribution to GRP -not high	[0.07]				
ENP2009		0.04			
		[0.19]			
ENP2009*		-0.38*			
Contribution to GRP -not high		[0.21]			
Press Freedom Index 2010			0.93		
			[0.64]		
Press Freedom Index 2009*			-1.29*		
Contribution to GRP -not high			[0.66]		
Margin 2009 (Federal Elections)				-2.02	
				[3.41]	
Margin 2009 (Federal Elections)*				7.04*	
Contribution to GRP -not high				[3.64]	
Margin 2009 (Regional Elections)					-1.02
					[1.83]
Margin 2009 (Regional Elections)*					5.17***
Contribution to GRP -not high					[2.01]
AIC	305.88	302.4	306.04	302.09	295.27
BIC	350.12	346.63	350.28	346.32	339.51
Log Likelihood	-139.94	-138.2	-140.02	-138.04	-134.64
Deviance	279.88	276.4	280.04	276.09	269.27
Num. obs.	222	222	222	222	222
Num. groups: reg id ch	58	58	58	58	58
Variance: reg id ch.(Intercept)	0.83	0.8	1.06	1.02	0.94
Variance: reg id ch.concgrpreg not high	0.13	0.07	0.11	0.18	0.14
Variance: Residual	1	1	1	1	1

*** p < 0.01, ** p < 0.05, * p < 0.1

Tab. 4. Sector Specialization and Requests for Policy Input

	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	-7.25*	-3.20	-6.28	-5.22	-3.42
	[4.24]	[4.35]	[4.40]	[4.05]	[4.20]
Funded by Members (%)	-0.01*	-0.01*	-0.01*	-0.01*	-0.01*
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Funded by Members (no response)	-0.98*	-1.01*	-0.98*	-0.95	-1.04*
	[0.59]	[0.59]	[0.59]	[0.59]	[0.60]
GRP per Capita 2009	0.00	0.00	0.00	0.00	0.00
	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]
In Regional population 2009	0.57*	0.30	0.51	0.43	0.33
	[0.31]	[0.31]	[0.32]	[0.29]	[0.30]
Branch of Federal BA	0.60*	0.54	0.55	0.53	0.50
	[0.35]	[0.34]	[0.34]	[0.34]	[0.34]
Sector-specific BA	3.66**	-0.18	2.07*	-0.08	0.53
	[1.81]	[0.79]	[1.08]	[1.58]	[0.69]
Contribution to GRP -not high	-0.99***	-1.13***	-1.00***	-1.07***	-1.18***
	[0.37]	[0.37]	[0.36]	[0.36]	[0.37]
Carnegie Democracy Index 2009	-0.01				
	[0.04]				
Carnegie Democracy Index 2009* Sector-specific BA	-0.11**				
	[0.05]				
ENP2009		-0.26*			
		[0.13]			
ENP2009* Sector-specific BA		0.04			
		[0.19]			
Press Freedom Index 2009			0.29		
			[0.36]		
Press Freedom Index 2009* Sector-specific BA			-0.99**		
			[0.48]		
Margin 2009 - Federal Elections				3.67*	
				[2.23]	
Margin 2009 - Federal Elections* Sector-specific BA				0.14	
				[3.13]	
Margin 2009 - Regional Elections					3.73***
					[1.37]
Margin 2009 - Regional Elections* Sector-specific BA					-1.74
					[1.79]
AIC	301.23	305.68	305.89	305.63	301.17
BIC	345.47	349.92	350.13	349.87	345.4
Log Likelihood	-137.62	-139.84	-139.95	-139.82	-137.58
Deviance	275.23	279.68	279.89	279.63	275.17
Num. obs.	222	222	222	222	222
Num. groups: reg id ch	58	58	58	58	58
Variance: reg id ch.(Intercept)	0.68	0.77	0.71	0.55	0.55
Variance: reg id ch.Sector-specific	0.29	0.42	0.08	0.36	0.33
Variance: Residual	1	1	1	1	1

*** p < 0.01, ** p < 0.05, * p < 0.1

Tab. 5. Lobbying and Institutional Context

	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	-4.99*** [1.01]	-4.96*** [0.98]	-4.92*** [0.98]	-4.93*** [0.98]	-4.94*** [0.98]
ln Employees 2010	0.35*** [0.11]	0.35*** [0.11]	0.35*** [0.11]	0.35*** [0.11]	0.35*** [0.11]
Commercial group Member	-0.08 [0.23]	-0.09 [0.23]	-0.09 [0.23]	-0.09 [0.23]	-0.09 [0.23]
Export Firm indicator	0.10 [0.24]	0.09 [0.24]	0.10 [0.24]	0.10 [0.24]	0.10 [0.24]
Major owner: Foreigner	1.05** [0.45]	1.06** [0.45]	1.07** [0.45]	1.05** [0.45]	1.05** [0.45]
Major owner: Manager	-0.01 [0.22]	-0.01 [0.22]	-0.02 [0.22]	-0.01 [0.23]	-0.01 [0.22]
Ln. Firmage	0.41*** [0.12]	0.41*** [0.12]	0.41*** [0.12]	0.41*** [0.12]	0.41*** [0.12]
Location: Regional Center	0.38 [0.26]	0.38 [0.26]	0.38 [0.25]	0.38 [0.26]	0.38 [0.26]
Location: Moscow or Petersburg	0.39 [0.86]	0.31 [0.85]	0.21 [0.88]	0.36 [0.89]	0.36 [0.88]
GRP per Capita 2009	0.00 [0.01]	0.00 [0.01]	0.00 [0.01]	0.00 [0.01]	0.00 [0.01]
Profit tax Share in Regional budget 2009	-0.66 [2.44]	-0.99 [2.26]	-1.07 [2.27]	-0.91 [2.31]	-0.92 [2.30]
Carnegie Democracy Index 2009	-0.01 [0.03]				
ENP 2009		0.06 [0.08]			
Press Freedom Index 2009			0.16 [0.22]		
Margin 2009 - Federal Elections				-0.13 [1.51]	
Margin 2009 - Regional Elections					-0.09 [0.80]
Sector dummy variables	Yes	Yes	Yes	Yes	Yes
AIC	779.1	778.51	778.66	779.15	779.14
BIC	884.92	884.34	884.48	884.97	884.97
Log Likelihood	-367.55	-367.26	-367.33	-367.57	-367.57
Deviance	735.1	734.51	734.66	735.15	735.14
Num. obs.	907	907	907	907	907
Num. groups: Region	59	59	59	59	59
Variance: Region.(Intercept)	0.36	0.35	0.35	0.37	0.37
Variance: Residual					

*** p < 0.01, ** p < 0.05, * p < 0.1,

Tab. 6. Business Association Membership and Institutional Context

	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	-3.58*** [0.80]	-3.88*** [0.80]	-3.87** [0.79]	-3.85*** [0.79]	-3.87*** [0.80]
ln Employees 2010	0.17* [0.10]	0.18* [0.10]	0.18* [0.10]	0.18* [0.10]	0.18* [0.10]
Commercial group Member	-0.61*** [0.23]	-0.60*** [0.23]	-0.60*** [0.23]	-0.61*** [0.23]	-0.60*** [0.23]
Export Firm indicator	0.75*** [0.21]	0.72*** [0.21]	0.72*** [0.21]	0.72*** [0.21]	0.72*** [0.21]
Major owner: Foreigner	0.64 [0.46]	0.60 [0.46]	0.58 [0.46]	0.59 [0.46]	0.59 [0.46]
Major owner: Manager	0.25 [0.20]	0.25 [0.20]	0.25 [0.20]	0.25 [0.20]	0.25 [0.20]
ln Firm age	0.25** [0.10]	0.25** [0.10]	0.25** [0.10]	0.25** [0.10]	0.25** [0.10]
Location: Regional Center	0.04 [0.22]	0.04 [0.22]	0.03 [0.22]	0.03 [0.22]	0.04 [0.22]
Location: Moscow or Petersburg	0.07 [0.48]	0.20 [0.52]	0.32 [0.54]	0.13 [0.54]	0.18 [0.53]
GRP per Capita 2009	-0.01 [0.01]	-0.01** [0.01]	-0.01** [0.01]	-0.01** [0.00]	-0.01** [0.01]
Profit tax Share in Regional budget 2009	1.73 [1.79]	2.83* [1.70]	2.95* [1.70]	2.74 [1.70]	2.78 [1.71]
Carnegie Democracy Index 2009	0.03 [0.02]				
ENP 2009		0.02 [0.06]			
Press Freedom Index 2009			-0.08 [0.16]		
Margin 2009 - Federal Elections				-0.62 [1.20]	
Margin 2009 - Regional Elections					-0.20 [0.61]
Sector dummy variables	Yes	Yes	Yes	Yes	Yes
AIC	866.76	869.06	868.98	868.94	869.1
BIC	972.97	975.27	975.19	975.15	975.31
Log Likelihood	-411.38	-412.53	-412.49	-412.47	-412.55
Deviance	822.76	825.06	824.98	824.94	825.1
Num. obs.	923	923	923	923	923
Num. groups: Region	59	59	59	59	59
Variance: Region.(Intercept)	0.03	0.06	0.05	0.05	0.06
Variance: Residual					

*** p < 0.001, ** p < 0.01, * p < 0.05, · p < 0.1

Tab. A1. Summary Statistics. Firm Sample.

Variable	Obs	Mean	Std. Dev.	Min	Max
Carnegie Democracy Index 2009	1013	0.00	5.98	-13.33	10.67
ENP 2009	1013	0.00	1.57	-2.44	6.42
Press Freedom Index 2009	1000	0.00	0.62	-1.18	0.82
Margin 2009 - Federal Elections	1013	0.00	0.09	-0.12	0.43
Margin 2009 - Regional Elections	1013	0.00	0.17	-0.26	0.52
In Employees 2010	1011	4.89	1.50	2.08	9.68
Export Firm indicator	986	0.28	0.45	0.00	1.00
Commercial group Member	993	0.23	0.42	0.00	1.00
Major owner: Manager	1013	0.29	0.46	0.00	1.00
Major owner: Foreigner	1013	0.03	0.17	0.00	1.00
Regional BA Member	1013	0.20	0.40	0.00	1.00
In Firm age	979	2.97	1.12	0.00	5.68
not BA lobbying	991	0.12	0.32	0.00	1.00
GRP per Capita 2009	1000	77.44	56.71	26.20	239.18
In Regional population 2009	1000	14.65	0.81	11.99	16.17
Location: Regional Center	1013	0.54	0.50	0.00	1.00
Location: Moscow or Petersburg	1013	0.19	0.39	0.00	1.00
Profit tax Share in Regional budget 2009	1000	0.43	0.12	0.21	0.72

Tab. A2. Summary Statistics. Association Sample.

Variable	Obs	Mean	Std. Dev.	Min	Max
Carnegie Democracy Index 2009	225	0.00	6.05	-12.98	11.52
ENP 2009	233	0.00	1.67	-2.58	6.28
Press Freedom Index 2009	222	0.00	0.64	-1.08	0.92
Margin 2009 - Federal Elections	223	0.00	0.11	-0.15	0.40
Margin 2009 - Regional Elections	223	0.00	0.19	-0.27	0.51
Members' contribution to GRP	233	1.54	1.39	0	4
Funded by Members(%)	233	64.51	42.83	0	100
Funded by Members (no response)	233	0.10	0.30	0	1
GRP per Capita 2009	222	57.75	24.00	26.20	239.18
In Regional population 2009	222	14.39	0.65	11.99	16.17

Table A3: Sample Characteristics. Firm Sample.

	Number of firms	Median size of firms (employees)	Lobbied at regional level
Machinery	135	420	26%
Metallurgy	34	307	15%
Chemical industry	59	390	29%
Woodworking industry	59	220	22%
Light industry	87	252	18%
Food industry	123	300	23%
IT	119	21	8%
Transportation of goods	120	35	8%
Tourism	131	18	17%
Retail	124	133	12%

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