Energy Regulation, Roll Call Votes and Regional Resources: Evidence from Russia

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Summary

This paper investigates the relative impact of regional energy production on the legislative choices of Russian Duma deputies on energy regulation between 1994 and 2003. We apply Poole's optimal classification method of roll call votes using an ordered probit model to explain energy law reform in the first decade of Russia's democratic transition. Our goal is to analyze the relative importance of home energy on deputies' behavior, controlling for other factors such as party affiliation, electoral mandate, committee membership and socio-demographic parameters. We observe that energy resource factors have a considerable effect on deputies' voting behavior. On the other hand, we concurrently find that regional economic preferences are constrained by the public policy priorities of the federal center that continue to set the tone in energy law reform in post-Soviet Russia.

Keywords: Energy Regulation, Energy Roll Law Reform, Energy Resources, Roll Call Votes, Legislative Politics, State Duma, Russia

JEL Classification: Q400, D720, K230, P270, P370, P310, R110

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I. Introduction

The formation of the State Duma was a crucial parameter of Russia's transition to democracy. It signaled a major shift in Russian political development and institutional structures, because it facilitated the emergence of new actors, seeking to set the rules of political play and, therefore, maximize their welfare. Market reform has been the outcome of presidential initiatives rather than proposals submitted by deputies (Mau 1998: 101-105). The State Duma is not an autonomous public policy player in Russian federal politics, because it is not able to enforce any policy measures without presidential approval; the reason for this is that the 1993 Constitution was designed by extra-constitutional actors with de facto executive authority. Still, the Duma is the most powerful internal constraint to presidential power both in pragmatic and constitutional terms.

Explaining the role of parliamentary institutions requires an analytical approach encompassing both individual strategies and collective interests. The economics of institutions proposes an equilibrium model, which defines institutional change in terms of objectives, the allocation of property rights and the reduction of transaction costs (Smith 2001: 10-15). This approach provides a conceptual framework for understanding the institutional dynamics leading to the creation of legislatures.

Why is it interesting to focus on Russia? The energy industry is the most important sector of the contemporary Russian economy. In 2002 it possessed one fourth of the GDP, one third of the commodity production in Russian industry, one half of federal budget returns and more than 56 percent of Russian exports (Russian Bureau of Economic Analysis 2004). The

management of energy resources has been a pillar of state economic policy and political competition in post-Soviet Russia. It has affected the comparative competitiveness of energy companies both at the domestic and the international level. For most of the energy companies, which were established in the privatization and post-privatization period, the transfer of public property was the result of a proper arrangement among pivotal centers of power: this was the case for Lukoil and Surgutneftegas. Thus, it is highly relevant to assess the legislative politics of energy regulation. We can expect that powerful interest groups may influence the bargaining strategies of both sides: the executive and the legislative. Particularly in the case of Gazprom, the fact that it constitutes the world's biggest natural gas monopoly and exporter indicates the strategic importance of its reform; the reform of Gazprom has to be in line with the projected increase in Russia's natural gas exports and, thus, its further support of the federal budget. Looking at the past 10 years, one could hypothesize that the State Duma preferred to pursue a pro-state and anti-reformist agenda as opposed to the market-oriented agenda of the Russian Government.

The purpose of this paper is to elaborate on the legislative dimensions of market reform in the Russian energy sector. It aims to help one understand the extrapolation of energy factors that have determined legislative choices on energy regulation and privatization controlling in a multivariate framework for several factors.

In addition, our paper provides several novel findings and a new framework not offered, to our knowledge, in previous research. First, we observe a lack of empirical evidence in the field of energy regulation that investigates the impact of regional conditions on deputies' voting behavior. Second, we work with a new data set that has not been explored so far. Our data set

allows investigating the First, Second and Third Duma, looking therefore at a relatively long and dynamic period. Each Duma provides a different setting due to a change in the profile of energy roll call votes. Investigating all three Dumas also provides the great advantage to investigate the impact of regional conditions in different environments. Moreover, our data set provides a relatively rich set of control variables covering aspects such as deputies' party affiliation, electoral mandate, committee membership, gender and regional origin. We are also able to control for party switches during a Duma. Third, we provide in a novel manner a way to investigate quantitatively deputies' behavior on a set of roll calls.

Our paper is organized as follows. In Section 2 the constitutional and political powers of the State Duma are presented and elaborated and the profile of major energy roll call votes between 1994 and 2003 is used as an explanatory pattern for understanding the parliamentary parameters of energy market reform in Russia. In Section 3, the literature review and the set of hypotheses are provided, while in Section 4 our hypotheses are operationalized by an econometric model and our methodology is clarified by the data evaluation process. Section 5 provides the empirical results and Section 6 finishes with some concluding remarks on the political and economic role of regional resources in energy regulation at the legislative level.

II. The Constitutional Role of the State Duma and the Profile of Energy Roll Call Votes on Key Issues

The State Duma is the main legislative body in Russia. All federal law bills must be submitted to the Duma and adopted with a majority vote before they are considered by the

Council of Federation, the Upper Chamber of the Federal Assembly, and the President. In addition, the State Duma has major non-legislative capacities; it can appoint and dismiss the Chairman of the Russian Central Bank, the Human Rights Commissioner, and the Chairman of the Office of Auditors and half of its members (article 103 of the Russian Constitution). The State Duma confirms the appointment of the prime minister, although it does not have the power to confirm Government ministers. The deregulation of the Russian oil sector in the mid-1990s and the ongoing reform of Gazprom and RAO UESR, which continued to maintain a natural monopoly status in their main areas of economic activity, were approved by the State Duma. The respective bills became sources of intense multilevel bargaining, transcending institutional, political, and ideological boundaries. The preservation of Gazprom's monopoly and vertically integrated structure combined with direct and detailed price regulation both served the Government's long-term interests and protected consumers from arbitrary monopoly prices. The division of the Russian electricity market into competitive and monopoly segments, as illustrated in the reform proposal adopted by the Duma in March 2003 enabled the state administration to grant the right of market entry and, thus, regulate market competition (Butyrkin 2003: 10-11). The State Duma passes a bill only when an absolute majority of the total number of its members votes for it in three consecutive readings. The energy roll calls of the First Duma entailed extensive negotiations on the ownership status and privatization of the oil and gas sector, handled issues of electricity tarification and supply, and sparked critical debates on the regulation of natural monopolies. The INDEM database (Satarov and Blagoveshenskii 2003) reports that for the 1994-1995 period the basic law drafts on energy policy were the following:i the bill on oil and gas, the bill on the regulation of natural

monopolies and the bill on electricity tariffs. In all cases, when the amendments proposed by an opposition or pro-governmental deputy were accepted and subsequently incorporated to the bill, the roll call procedure was used. Deputies were required to pass the amended bill in three consecutive readings before they forwarded it to the Federation Council. This may explain why the Federal Laws on Oil and Gas, Natural Monopolies and Electricity Tariffs constitute documents of great political value: not only do they reflect clashes of interests and ideological cleavages, which are strongly correlated with Russia's early transition to democracy, but they also signal the emergence of powerful oil oligarchs whose entrepreneurial activities were central to the post-Soviet variety of state-led capitalism. The energy law bills in the First Duma were conceived and designed by the presidential administration and the lack of logrolling strategies or critical bill amendments by the communist or centrist opposition indicates the full-fledged dominance of President Yeltsin's Party of Russian Unity.

The implementation of radical economic reforms in 1994 and 1995 abruptly introduced the concepts of property rights and market organization. The reform of the oil sector was a key stage in the massive privatizations in post-Soviet Russia. The State Duma voted for private access to public resources and linked market forces to state regulation (Nureev 2003 Part II: 116-118). Nevertheless, the use of executive decrees under article 90 of the 1993 Constitution and the confirmatory, rather than substantive, role of the Duma in policy-making deprived energy reforms of a solid democratic foundation (Moser 2001: 169). Reformers in the executive perceived the reform of the oil sector as their own privilege. In addition, the increased number of party fractions in the First Duma may have slowed down the legislative process, but it did not give an opportunity to parliamentary minorities to manipulate energy roll call votes as veto

opportunities against the government (Doering 2004: 90). The Federal Laws on Natural Monopolies, State Regulation of Energy Tariffs, and Gas Supply voted on in 1995 were efforts to formulate an efficient regulatory framework for natural monopolies at the federal level (Tsapelik 2000: 5-6). However, most of the serious problems related to regulatory and reform strategies in the oil, gas and electricity sectors remained unresolved. In particular, the Federal Law on Natural Monopolies did not encourage further investment activity in the energy sector.

In its second term, the Russian Duma evolved as an independent player and undertook major legislative initiatives on energy policy issues. Tax obligations and the privatization of Gazprom, the privatization of Slavneft and Rosneft and the role of Anatolii Chubais in the nascent electricity reform constitute the political-economic axes of the State Duma reform agenda. Specifically, the Russian Lower Chamber voted for a bill that prevented the disintegration of Gazprom, in spite of the World Bank and International Monetary Fund. By approving this law bill, the State Duma signaled its intention of keeping gas prices low and protecting Gazprom's state monopoly (Satarov and Blagoveshenskii 2003).

The Third Duma which was elected in December 1999 continued to demonstrate its veto power over the key reform initiatives of the Russian Government. The preference of the Duma majority for the preservation of RAO UESR as a natural monopoly was evident. The State Duma also voted for the enforcement of a new tariff-setting system in the oil sector in order to make Russian oil companies, vertically integrated and structured as holdings, sell oil at the market price, and not at the lower domestic price. This practice resulted in lower tax revenues for the Russian Government (a loss of about 15 billion rubles), because this practice lowered the taxable revenues of Russian oil companies. The regulatory role of the Federal Energy

Commission was harshly criticized in the beginning of the most important month for Russian electricity reform, February 2003. Deputies underscored the fact that the Regional Energy Commissions had increased energy tariffs 14 percent over the legal limit and therefore violated article 1 of the respective law. They criticized Federal Energy Commission actions that ordered its regional counterparts to increase domestic energy prices and abandon cross subsidization. In their viewpoint, this decision exceeded the jurisdictional limits of the Federal Commission, because it was associated with deeply political implications. However, no law bill on energy policy in all 10 years of the Russian Duma was as contested as the law bill on electricity reform. Before its final approval on February 21, 2003, it received 70 amendments.ii Voting against electricity reform was regarded as anti-privatization and anti-monopoly act. The legislated amendments of the Russian Civil Code as well as of the Federal Law on Natural Monopolies constitute supplementary signals of the Duma's final agreement with the presidential reform; however, they do not diminish the political significance of the Duma's initial opposition to the project as well as its institutional role as the safeguard of Russian statehood. It can be inferred that the Russian legislature perceived energy reforms since 1996 as an effort of Russian and foreign corporate elites to consolidate their market power through the politicization of energy regulation (Shakhmalov 2003: 395-397).

In seeking to explain the regional resource dynamics of energy reform in post-Soviet Russia, one must bear in mind the difference between its institutional and political-economic dimension. The institutional dimension is connected with the formal actors involved in the decision-making process. The political-economic dimension of energy reform encompasses the regional component of energy regulation, but it also has a broader range. It must take into account the

multifaceted interactions of Russian deputies with influential business actors, not only at the local but also at the federal level; the latter usually intend to implement their own economic agenda by integrating their corporate strategies into larger political objectives.

III. Literature and Hypotheses

The role of interest groups in the formation of public policy decisions reached by legislative institutions has been extensively analyzed in the literature. As Nunez and Rosenthal (2004) indicate in their study on the impact of private interests and ideology on bankruptcy roll calls, the fear of retaliation in the form of campaign financial cuts motivated the legislators to support bankruptcy law bills, which boosted the financial interests of businessmen. Procreditor voting implies the strong presence of deputies financed by private interests that benefit from it. Nevertheless, given the agnostic character of our dependent variable, ideology is not taken for granted in our article. Similarly, the existence of high rates in oil, gas and electricity production implies strong interest groups, which do not necessarily have to have the form of corporate organization. Adams (1996) underscores that deputies elected in multi-member districts tend to be much more diverse in their legislative preferences than deputies elected in single-member districts, where the factors of party discipline and dependence are much stronger than regional economic interests. Adams's observation is in line with the expectation one may have about the Russian electoral system and its consequences on the composition of the State Duma. Because 225 deputies are elected with the PR system and 225 deputies with the SMD system, it is extremely interesting to map the conflict between local interest groups and party ideology in the

framework of Russia's turbulent parliamentary setting. Furthermore, the political importance of committee membership is usually associated with the nature of law bills to be approved; committees involved in public works, foreign affairs, energy, or financial law bills are usually composed by members, who want to reap benefits for their constituencies and therefore increase their probability of re-election (Adler and Lapinski 1997: 913-914). In a study on the economic policy preferences of the transitional Chilean legislature, Baldez and Carey (1999) find empirical support that bargaining between deputy groups supporting an increase in executive spending and those who oppose defines Chile's democratic transformation. They contend that this tendency is differentiated from what is usually observed in post-authoritarian societies, where the executive is successful in increasing its political and economic rents overcoming the obstacles of formal democratic procedures. Carey (2003) argues that collective action among legislators requires party discipline and sacrifice of individual over collective interests. In his view, the weakening of party discipline and the responsiveness of deputies to citizens' demands is entangled with democratization of legislative organization and procedure. This is an observation that holds for the post-communist legislature of Russia; nevertheless, if deputies become business rather than party agents-as they used to be before-, it is very unlikely that this new constellation of interests is going to improve transparency and quality of democratic governance for the benefit of people.

Covington and Bargen (2004) claim that in modern democracies majority parties are likely to control the legislative agenda in modern democracies and they try to make the point that the floor-median member is a factor less taken into account. This is in line with what Cox and Poole argue (2002); party discipline is a crucial predictor of voting behavior in all but one Congress

between 1877 and 1999. Nevertheless, their analyses do not make any difference between the policy areas discussed in committee and plenary sessions. In addition, logrolling mechanisms in consecutive law bill readings, both in committee and plenary sessions, may account for the impact of regional interests on the legislators' voting choices (Poole and Rosenthal 1997, Fleck and Kilby 2002). As Remington argues (2006), Russian political parties are not characterized by uniformity in discipline and ideological cohesion. Variation in discipline and ideological consistency across parties of the State Duma increases the political cost for the formation of pro-presidential coalitions, when critical law bills are considered. Electoral mandate can affect power distribution among legislators, regional businessmen and the executive; transfer of legislators' incentives from voters to local interest groups undermines their ability to check on the political appropriateness and legitimacy of acts held by the public administration, as shown in the case of the Argentinean legislature (Jones et al. 2002). The existence of ideological bias in parliamentary sessions and interest groups represented by deputies in those sessions is not clear and there is no indisputable empirical evidence in that direction (Kollman 1997). McFaul (2001) makes an interesting point when he says that either by liquidating the presidency and promoting a two-party system or by abandoning proportional representation and therefore creating a two-party system Russia could find a stable path in its own party development. It is understandable that this proposal is very unlikely to occur, because neither Russia's regional diversity nor its strong executive tradition can allow such a political and institutional outcome.

Our approach is consistent with that of Poole and Rosenthal (1996), when they argue that the legislators' voting behavior cannot be interpreted with the median voter theorem; on the contrary, opportunistic party coalitions on specific roll call votes or general ideological

constraints can be the most efficient patterns for explaining legislative behavior in a multi-dimensional space. In parallel, the separation of purposes presented by Samuels and Shugart (2003) may fit in the Russian parliamentary system. Despite the strong centralization of regional and local powers toward the federal center and the perception of energy regulation as the main determinant of Russia's foreign economic policy, we observe the creation of two different forms of accountability for the executive and the legislative branches of power. Policy switches occur, when the president intends to impose a law bill that comes in major conflict with regional interests represented in the Duma or the political career objectives of fractional leaders. The neutralization of legislative opposition and the fragmentation of the party specter in the third term of the State Duma as argued by Smyth (2002) cannot imply any lack of political contestation in the Russian parliament; in key energy roll call votes where the presidential administration intended to impose its own regulatory preferences in energy policy, there was a consistent opposition by both pro-presidential and anti-presidential parties, that demanded and succeeded the partial modification of the initial law bill through informal negotiations. In addition, energy law reform is directly not captured by policy-making priorities at the federal level, but it is mainly entangled with major developmental considerations at the regional level.

Talbert and Potoski (2002) are correct in finding the pre-legislative negotiations entail a much higher dimensionality than floor discussion and readings of the law bills. We treat our dependent variable as a single-dimensional axis, whose extremes are pro- and anti-reform voting behavior. Thus, given the literature described above, we come up with the following set of hypotheses:

Deputies from energy-rich constituencies are more likely to vote against energy law reform than deputies from energy-poor constituencies.

Regions with larger oil, gas and electricity production are more likely to have business leaders, who pursue intensive lobbying activities vis-à-vis the local political authorities. Given the widespread entanglement of business with formal political leadership-both executive and legislative-at the regional level, it is expected that SMD deputies are less inclined to support any form of reform in the ownership status of Russia's energy industries; their political and economic rents would then be substantially reduced, because involvement of foreign investors, transfer of decision-making processes from the regions to the federal center and promotion of transparency in regulatory practices certainly undermine the control of their regional patrons over regional energy resources.

Deputies from oil-rich constituencies tend to make opposite legislative choices on energy policy bills from deputies elected in gas-rich constituencies.

The profiles of the oil and gas industries in Russia are crucially different. The oil industry was fully privatized during Duma's first term, while Gazprom is up to this point a state monopoly. Thus, we contend that SMD deputies supported by oil industry interests would prefer the reduction of state ownership in the energy sector, because this could facilitate the participation of Russian and foreign oil companies operating within Russia in gas and electricity production. On the other hand, SMD deputies originating from regions where increased gas production implies a strong corporate involvement of Gazprom into regional politics are less inclined to support legislative initiatives advancing private sector development in Russian energy markets.

Deputies who are members of the energy legislative committee are more likely to oppose energy law reform than those who are not.

Energy committee membership is entangled with the discussion, design and preliminary approval of energy law bills at the committee level. Given that the overall majority of energy law bills have been connected with the partial or full-scale opening of oil, gas and electricity markets, committee members who drafted these bills by majority voting are very likely to have been negative toward energy market reform during the time continuum between 1994 and 2003. Since there is no information on internal committee decision-making processes, it is not possible to run the OC method to rank committee members based on their voting choices during the various energy committee sessions.

IV. Research Design

The Model

To test whether regional conditions affect deputies voting behavior, we propose the following baseline equation:

$$VB_i = \beta_0 + \beta_1 \cdot REG_i + \beta_2 \cdot COM_i + \beta_3 \cdot VR_i + \beta_4 \cdot PA_i + \beta_5 \cdot PS_i + \beta_6 \cdot DEM_i + \varepsilon_i \quad (1)$$

where i indexes the deputies in the sample. VBi measures deputies' voting behavior. As each Duma provides a different setting influenced by the profile of energy roll call votes, we need to clarify the interpretation the dependent variable for all three Dumas. In the First Duma, a higher

value can be interpreted as a stronger pro-reformist behavior. The same also holds for the Third Duma. On the other hand, a higher value in the Second Duma is correlated with a stronger anti-reform tendency. REGi denotes the regional conditions of a deputy. We measure the energy significance at the regional level taking the ratios of the oil, gas and electricity production in every region over the aggregate quantity of oil, gas and electricity productions in Russian Federation. COMi is a dummy variable that distinguishes between those deputies who are members of Duma's energy policy committee and those who are not (Table A2 for a list of the different committees).

The regression also contains several control variables. The first set distinguishes the deputies according to their electoral mandate-either proportional representation or single-member district (VRi), the second set makes the distinction according to their party affiliation (PAi). Because the creation of ten dummy variables would be neither practical nor efficient, we divide the Russian political parties into three categories based on their official political platforms: Center, Left and Right (see Appendix Table A1). We also create a fourth category for independent deputies who keep a non-party affiliated stance throughout the term. Party coherence is a very powerful tool in understanding general voting dynamics at the legislative level (PS). Energy law bills, because of their crucial political weight, have been in the epicenter of fierce inter- and intraparty contestations and therefore the cause of party dissolutions; the floating ideological character of the Russian party system can account for these developments. The governmental efforts to dismantle Gazprom during the second term of the Russian Duma combined with the restructuring of RAO UESR, which caused a serious clash within the pro-presidential party coalition, redefined the party map of the Russian Duma. Controlling for the impact of these

radical changes is certainly enlightening the regional economic dimensions of energy regulation, since it indicates the extensions of regional economic constraints in Russia's federal parliamentary politics. The demographic variables (DEMi, age and gender) may also have policy implications on the way age and gender differences react ceteris paribus to energy bills promoting liberalization and investment in Russia's energy markets. It also helps to measure the heterogeneity of the deputies. Finally, εi denotes the error term.

Data Evaluation Process

This paper examines the voting behavior of Duma members on roll call votes dealing with energy in the Russian Duma between 1994 and 2003. Our research would not have been possible without the roll call database of INDEM Foundation in Moscow (see Satarov and Blagoveshenskii 2003). Roll calls covered the three first post-communist terms of the Russian Duma (1994-1995, 1996-1999 and 2000-2003). Three respective roll call matrices were created including the binary choices of each deputy. The first roll call matrix included 51, the second 196 and the third 202 votes. Following Poole's methodology (Poole 2005), we set 0.5 percent as the minimum proportion on the minority side of a roll call. Furthermore, we define 10 as the minimum number of roll calls in which a deputy has to be vote in order to be included in the scaling.iii The data assigns a unique number to every deputy and provides information on his party affiliation, the electoral system he was elected on and his regional origin, if he was elected on the SMD system. The Russian Constitution mentions explicitly that the State Duma must have 450 members. For each of the three terms the database contains more than 450 deputies, because some deputies were obliged by natural or legal reasons to abdicate their parliamentary membership. The majority of them resigned to take another public office which by the 1993

Constitution is incompatible with a legislator's seat. In sum, 465 people served as deputies of Russia's first democratic Duma, 491 people in the Second Duma, and 479 in the Third Duma.

Our goal is to analyze the relative importance of regional factors on deputies' behavior, controlling for other factors such as party affiliation, electoral mandates, committee membership and socio-demographic factors. The objective of this section is to study the role of energy resources as determinants of energy regulation. The INDEM database provides information on the regional origin of SMD deputies, because regional affiliation is not deemed to be politically important for deputies elected on a PR basis. The method used to evaluate the energy significance of Russian regions takes the ratios of the oil, gas and electricity production in every region over the aggregate quantity of oil, gas and electricity productions in Russian Federation.iv In parallel, the role of party labels in regional energy politics is explained in terms of political development and state organization at the local level. Given that the consistent and active participation of Communists in local elections and the differing principles between gubernatorial and regional legislative elections (Hutcheson 2003: 35-37), it might be helpful to model the multifaceted interactions between political actors and energy entrepreneurs in energy-rich and energy-poor Russian regions. Fluid boundaries between business and government and endemic phenomena of political corruption synthesize a challenging matrix of interest equilibriums and institutional players, both at the federal and the regional level of economic policy decision-making.

To do this we consider an empirical approach based on the optimal classification method elaborated by Poole (1997). This method allows us to introduce a probabilistic spatial model for the analysis of roll call votes on oil, gas and electricity regulation. Given that the optimal

classification model is a non-parametric method, there is no metric information on the legislators' ideal points produced (Rosenthal and Voeten 2004: 622). Poole and Rosenthal's model of Nominate Scores is the conceptual foundation for explaining the optimal classification method, since it constitutes its parametric alternative. The hypothesis that roll call voting can be captured both by a single and a two-dimensional analysis is valid for both models of deputies (Poole 1997: 70-85). Nevertheless, Poole's non-parametric approach is less influenced by single classification errors in the legislators' ideal points. His concern is to stress the ideological underpinnings of legislative behavior based on a metrically unbiased method that does not consider the strategic calculus of party coalitions to be in the core of parliamentary politics. The roll call votes focus exclusively on oil, gas and electricity regulation. The optimal classification method has the objective of locating ideal points for legislators and separating hyperplanes for roll calls such that the number of classification errors is minimized. A classification error for a legislator on a roll call occurs when the legislator's ideal point is such that his or her vote is not in line with the separating hyperplane for the roll call. The robustness of this procedure is remarkable with regard to the stochastic nature of the data. In addition, the optimal classification method counts equally all classification errors (Rosenthal and Voeten 2004: 622). Its single-dimensional ranking is divided into four distinct orders (from 1 to 4) and is regressed on of several control variables.

In addition, because it can be argued that including our aggregated regional variables will produce downwardly biased standard errors, we address the problem of heteroscedasticity by presenting standard errors adjusted for clustering on Russian regions and administrative districts (see Figures 1 and 2, and Table A2 and A3). The advantage of this class of estimators is

that they do not require a precise modeling of the heteroscedasticity source. Therefore, they are robust to heteroscedasticity of arbitrary form. In general, cluster estimators tend to increase the reported standard errors by a relatively large amount, which reduces the levels of statistical significance for the estimated coefficients without affecting the marginal effects and the size of the coefficients.

The calculation of marginal effects is pivotal for the success of our analysis. Ordered probit models analyze the ranking information of the scaled dependent variable. The equation of a (ordered) probit estimation has a non-linear form; only the sign of the coefficient can be directly interpreted and not its size. Calculating the marginal effects is therefore a method to find the quantitative effect a variable has on the dependent variable.

It is interesting that there is no Duma representative for the republic of Chechnya; this is why we count one state less than the official number of the Russian federal subjects. On the contrary, there are deputies representing all seven Russian administrative districts. We have to stress here that PR deputies have been coded as 0 in the regional factor variables; as their election is dependent on the party's percentage on an all-Russian electoral basis, it is not methodologically consistent to assume their connection with energy interest groups in certain regions with higher or lower rates of oil, gas or electricity production.

Moreover, to better evaluate the importance of energy resources we will conduct for every estimation a Wald-test for coefficient restrictions testing for joint significance to be able to conclude whether energy resources as a group play a significant role in the determination of Poole's ranking.

V. Empirical Results

We present the empirical results focusing independently on the First Duma (Table 1), Second Duma (Table 2) and Third Duma (Table 3). In every table we report estimations with standard errors adjusted for clustering on Russian regions or administrative districts.[1]

a) First Duma

The parameter estimates for oil and gas production in Table 1 shows substantial statistical significance. The significant role of energy resources is supported looking at the chi2-statistics showing that the null hypothesis is rejected at the 1% significance levels, which means that energy resources have a significant effect on deputies' behavior in the First Duma. The marginal effects are also quite substantial. The different signs of oil and gas provide a perfectly clear signal about the policy priorities of the Russia's deputies; to dismantle the oil industry and preserve the state character of the gas sector. This decision falls exactly in the scope of Russia's first transitional government and the creation of a new privileged economic class both at the regional and the federal level.

The high statistical significance of the Committee variable combined with the high marginal effects indicate that members of the energy parliamentary committee of the First Duma are more likely to vote pro-reform bills as opposed to the others. The appointment of the energy committee members should certainly not be deemed to be incidental and the outcome of oil industry privatization in early 1990s is the clearest indication for that.

[1] Please see Tables A3, Parts I and II, in the appendix below.

b) Second Duma

The results in Table 2 underscores that the origin from an energy-rich or energy-poor Russian region did play a less important role in the voting choices of deputies; the coefficients of Oil, Gas and Electricity Production are statistically insignificant and the Wald-test indicates that the null hypothesis is only rejected in the estimations using standard error adjusted for clustering on Russian administrative districts. The clash between the centrist Prime Minister Viktor Chernomyrdin and the parties of Left, which constitutes the main political issue in the field of energy policy, becomes evident in the ordered probit analysis; however, it is less related with vested regional interests of deputies, but it is rather connected with the President's federal agenda and the political reactions to it. It is interesting to notice that regional economic preferences seemed to be constrained by the public policy priorities of the federal center that continue to set the tone in energy law reform in post-Soviet Russia.

The Committee membership determinant is not statistically significant. It seems that in the Second Duma the debate over Gazprom's dismantling cannot not be captured on the basis of this parameter; on the contrary, it should be seen as an issue covering multiple areas of political and economic contestation at all levels of legislative bargaining. It is likely that the composition of the energy committee was uniform either toward the pro-or the anti-reform direction and therefore it cannot be a significant explanatory pattern for analyzing gas regulation and the center-left clash over it in the second term of the Duma.

c) Third Duma

In the Third Duma (see Table 3), regions are not only evaluated based on the ratio of local oil, gas and electricity production over the quantity of national oil, gas and electricity

production but also on the trade balance (exports minus imports) observed in these three energy markets at the regional level.

The political contestation over electricity reform in the Third Duma and the divided stance of Russian centrist parties can substantially explain the high statistical significance of the Trade Balance variable. The Trade Balance variable refers to the difference between exports and imports in the oil and gas sectors and its marginal effects have a positive sign in the higher orders. This means that deputies originating from regions with profitable commercial activity in the oil and gas industries are more likely to support the RAO UESR reform. The expected liberalization of energy prices and the subsequent increase of electricity prices would perfectly optimize their economic benefits.

In line with First Duma, the energy resource factors seemed to affect deputies voting behavior (even in a stronger manner). The coefficients Oil, Gas and Electricity are in most of the cases statistically significant. The Wald-test also shows the joint significance of the energy resource variables. However, compared to the First Duma, the coefficients show the reversed signs. Hence, deputies originating from oil-and electricity-rich regions are less inclined to vote for the Chubais reform, while deputies originating from gas-rich regions support the restructuring of the energy sector. It is self-evident that the subsequent increase in electricity prices that this reform would entail is beneficial, both politically and economically, for deputies, who have vested interested in the regional gas industry; on the contrary it is extremely harmful for those deputies, whose political clientele is located in regions with major electricity production rates. A substantial increase in electricity prices would critically undermine their regional political profile.

The Committee factor is statistically significant at the 10 percent level, but still less strong than in the First Duma. A possible explanation may be Luzhkov's opposition to Anatolii Chubais's restructuring plan of RAO UESR and subsequently to President Putin. This means that the energy committee members were representing all the specter of political and economic interests related to RAO UESR's restructuring. Lesser representation in membership or inconsistent voting attitudes may well account for the statistical significance at the 10 percent.

d) Control Variables

Taking a look at the ideology and coherence as attributes of energy law reforms, we can conclude that the results in the First Duma indicate that there are statistically significant differences between Leftist and Rightist deputies. Left oriented deputies seemed to have stronger anti-reformist preferences than the right oriented ones. As a consequence, it may be concluded that right deputies in 1994 and 1995 are more likely to support the presidential agenda and vote for rather than against regulatory and ownership reform in the energy sector. The Second Duma shows a multidimensional character of the deputies' legislative choices. Interestingly, the Party Change variable is now highly statistical significant. The results in the Third Duma reveal the contentious politics of corporate reform in the electricity sector and at the same time account for the previously noted inconsistency of roll call voting in three out of four ideological groups.

It seems that in the First Duma SMD deputies are less likely to maintain a higher position in Poole's single dimensional ranking. However, the coefficient is not statistically significant. In the Second Duma SMD deputies are more likely than PR deputies to vote for energy bills introducing ownership liberalization and privatization in the energy sector. On the

other hand, the negative coefficient of SMD in the Third Duma indicates an anti-reform tendency. SMD deputies are less inclined to advocate the restructuring of RAO UESR than PR deputies, because the proposed reform lessens the power of Regional Energy Commissions and, therefore, their political impact on electricity tariff-setting.

Taking a look at the socio-demographic factors we can conclude that gender differences are not observable. Contrary to the First Duma, age is correlated in the Second Duma with a pro-reformist behavior. The elderly Russian elites are inclined to support the executive's legislative initiatives for changing the ownership structure of Gazprom. Given that most of them were bureaucrats and public managers in the Soviet period, they perceive the privatization of Gazprom as a unique opportunity to maximize their economic benefits as they did in the oil industry. Contrary to the First Duma, we clearly observe a linear relationship between age and ranking position and therefore we report only the estimations with the single factor Age. In the Third Duma, we also find a linear relationship between age and the ranking class.

e) Case Studies

In this last part of our empirical analysis we intend to check the validity of our aggregate estimations by running a similar estimation structure as previously using probit models for individual roll votes. This method enables us not only to understand the underpinnings of our previous results at the micro-legislative level, but also to test whether the individual estimations for crucial roll votes in each of the three first terms of Russia's democratic transition confirm or contradict the broader findings located in previous parts of the article. What we do is to analyze the two most crucial roll call votes during these ten years: roll call vote No. 46300[v] on the

ownership status of Gazprom and roll call vote No. 129940 on the restructuring of RAO UESR. Table 4 presents the results of both roll call votes.

The results of the roll call vote No. 46300 indicate that deputies coming from oil-rich regions are less inclined to support gas reform as opposed to deputies coming from gas-rich regions. It seems that regional politics are certainly crucial at the individual level, which is less the case at the aggregated level. The breakup of Gazprom and the opening of Russian energy markets to foreign investors provoked a tremendous conflict of interests among deputies from fractions and regions with often contradictory interests. The fact that the State Duma finally supported the state character of Gazprom is an ample indicator that despite the presidential initiative and vested regional interests, the collective legislative choice of the deputies was aligned with a firm notion of statehood, which is apparent throughout Russian economic history.

Moreover, it not a surprise to observe that deputies coming from electricity-rich regions would be more likely to vote against this law bill, since the policy impact of the RAO UESR reform was going to affect analogously the regulatory power of their local energy commission. On the other hand, we cannot observe that committee membership matters. Thus, it is evident that the composition of the committee that prepared both law bills was biased; anti-reform in the first instance and pro-reform in the second.

VI. Conclusions

Our goal was to analyze the relative importance of energy factors on deputies' behavior, controlling for other factors such as party affiliation, electoral mandates, committee membership

and socio-demographic factors. We have therefore intensively investigated empirically the role of energy resources as determinants of energy regulation using a new data set that has not been explored so far in the literature covering none less than three Dumas covering also a rich set of control variables. This allows to investigate the impact of regional conditions in a dynamic environment. Moreover, we provide a novel approach to investigate quantitatively deputies' behavior based on a rich set of roll calls.

We observe that energy resource factors seemed to affect deputies voting behavior. On the other hand, we also find that regional economic preferences are constrained by the public policy priorities of the federal center that continue to set the tone in energy law reform in post-Soviet Russia. In general, it seems that deputies are likely to establish bonds of interdependence with regional monopolists and other entrepreneurs, given that the latter can financially support their electoral campaigns. The maintenance of this institutional dualism may lead to fragmentation of party ideology, because regional economic interests rather than party ideology tend to exert a higher influence on deputies. At that point, the question whether State Duma can act as a real representative of people's interests becomes profound. The argument that Russia under Yeltsin and Putin administrations has evolved to an electoral monarchy (Shevtsova 2000) does not hold in the light of the quantitative analysis presented above. Besides, lobbying per se does not mean the end of constitutional democracy. On the contrary, the existence of pressure groups restores the link of deputies with society, impels private actors to control *ex post* legislative decisions, and raises the informational level of legislators (Zherebkin 2002: 61-62). In transitional societies such as Russia business-government relations can have this added dimension under the prism of evolving state and market institutions. The State Duma may be

regarded as an institution with a two-fold orientation: it is both a state organ and, in parallel, a political actor maintaining strong institutional ties with energy business. Corporate developments in the Russian oil sector combined with the ongoing reform planning for Gazprom and RAO UESR necessitated interparty and interregional coalitions, if not for the promotion of a common energy agenda, at least for the prevention of reform projects, which would be unfavorable to regional energy monopolies and cause popular disapprobation. Collective strategies cover a larger set of objectives and have an increased probability of success.

If personal interests are more important than parties, it is worthwhile to figure out what the role of the former in the evolutionary course of party institutions. This is a pivotal parameter for understanding the intensity and perspectives of legislative intervention in business-government relations of post-Soviet Russia. Another problem is that defining the notion of workable competition in Russian energy markets has not been an easy case. In the Russian context the establishment of competitive market structures is not connected only with the issue of potential market entry as opposed to narrower standards used in the past for classifying market concentration (Ellig and Kalt 1996: 117-118). It refers to concrete private players whose market entry is the outcome of a privileged relationship with state officials. This is the point, where State Duma intervenes with the purpose to safeguard state interests, given its own state and constitutional nature. What Duma tries to do is to achieve an institutional compromise between the colliding forces of the Russian political system: the government and the incumbent on the one side and the challengers on the other. It is correct that no regulatory regime can remove all inefficiencies: however, its performance can be improved uniquely, if corporate and

public actors are given incentives to reduce public and private costs in the energy industry and thus boost people's welfare. Thus, the Russian Duma acts as a de facto regulator by contributing to the implementation of a transparent tariff-setting system and the promotion of energy reform under conditions of democratic representation and political competition.

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Table 1

Determinants of Energy Reform in the First Duma

Dependent Var.: Single Dimensional Ranking with the Optimal Classification Method												
Clustering on Russian Regions							Clustering on Russian Administrative Districts					
Factors	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)
Oil	4.048***	2.86	-1.271	-0.343	0.416	1.199	4.048**	2.28	-1.271	-0.343	0.416	1.199
Gas	-2.608***	-2.94	0.819	0.221	-0.268	-0.772	-2.608**	-2.25	0.819	0.221	-0.268	-0.772
Electricity	-1.491	-0.38	0.468	0.127	-0.153	-0.442	-1.491	-0.39	0.468	0.127	-0.153	-0.442
Committee	0.625***	4.33	-0.157	-0.081	0.021	0.217	0.625***	5.83	-0.157	-0.081	0.021	0.217
SMD	-0.027	-0.31	0.009	0.002	-0.003	-0.008	-0.027	-0.30	0.009	0.002	-0.003	-0.008
Center	-0.042	-0.22	0.013	0.004	-0.004	-0.012	-0.042	-0.20	0.013	0.004	-0.004	-0.012
Independent	-0.301	-0.97	0.103	0.015	-0.039	-0.079	-0.301	-0.79	0.103	0.015	-0.039	-0.079
Right	-0.594***	-4.94	0.195	0.038	-0.068	-0.164	-0.594***	-5.77	0.195	0.038	-0.068	-0.164
Woman	0.112	0.89	-0.034	-0.011	0.010	0.034	0.112	0.72	-0.034	-0.011	0.010	0.034
Age	0.002	0.40	-0.001	0.000	0.000	0.001	0.002	0.51	-0.001	0.000	0.000	0.001
Party Change	-0.137	-0.98	0.044	0.011	-0.015	-0.039	-0.137	-0.90	0.044	0.011	-0.015	-0.039
chi2-stat energy resources	8.84**						5.42					
Number of obs	400						400					
Prob>chi2	0.000						0.000					
Pseudo R2	0.036						0.036					

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Zero party switches for Independent. Reference groups: PR; Left, Man, Not changed the party, Not a members of Duma's energy policy committee. According to the Optimal Classification output, the algorithm converges to 0.03959 (4%) in error proportion, to 0.96041 (96%) in correct classification, to 0.66202 (66.2%) in APRE, and the Spearman correlation between the current legislator estimates and the previous iteration estimates converges to 0.99989.

Table 2

Determinants of Energy Reform in the Second Duma

Dependent Var.: Single Dimensional Ranking with the Optimal Classification Method												
Clustering on Russian Regions							Clustering on Russian Administrative Districts					
Factors	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)
Oil	0.701	0.86	-0.137	-0.142	0.161	0.119	0.701	1.55	-0.137	-0.142	0.161	0.119
Gas	0.195	0.32	-0.038	-0.040	0.045	0.033	0.195	1.13	-0.038	-0.040	0.045	0.033
Electricity	4.137	0.85	-0.810	-0.840	0.950	0.701	4.137	0.75	-0.810	-0.840	0.950	0.701
Committee	-0.219	-0.61	0.048	0.039	-0.054	-0.033	-0.219	-0.55	0.048	0.039	-0.054	-0.033
SMD	-0.299**	-2.31	0.058	0.060	-0.068	-0.051	-0.299**	-2.02	0.058	0.060	-0.068	-0.051
Center	-2.589***	-6.58	0.619	0.174	-0.393	-0.400	-2.589***	-5.97	0.619	0.174	-0.393	-0.400
Independent	-2.725***	-5.15	0.826	-0.281	-0.429	-0.117	-2.725***	-5.80	0.826	-0.281	-0.429	-0.117
Right	-1.415***	-6.41	0.443	0.012	-0.340	-0.115	-1.415***	-6.02	0.443	0.012	-0.340	-0.115
Woman	0.085	0.59	-0.016	-0.018	0.019	0.015	0.085	0.50	-0.016	-0.018	0.019	0.015
Age	-0.010**	-2.17	0.002	0.002	-0.002	-0.002	-0.010*	-1.88	0.002	0.002	-0.002	-0.002
Party Change	0.693***	6.40	-0.106	-0.160	0.114	0.152	0.693***	6.66	-0.106	-0.160	0.114	0.152
chi2-stat energy resources	4.89						11.14**					
Number of obs	466						466					
Prob>chi2	0.000						0.000					
Pseudo R2	0.287						0.287					

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Reference groups: PR; Left, Man, Not changed the party, Not a members of Duma's energy policy committee. According to the Optimal Classification output, the algorithm converges to 0.04288 (4.3%) in error proportion, to 0.95712 (95.7%) in correct classification, to 0.53441 (53.44%) in APRE, and the Spearman correlation between the current legislator estimates and the previous iteration estimates converges to 0.99828.

Table 3
Determinants of Energy Reform in the Third Duma

Dependent Var.: Single Dimensional Ranking with the Optimal Classification Method												
Clustering on Russian Regions							Clustering on Russian Administrative Districts					
Factors	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)	Coeff.	z-Stat.	1-100 Marg. Eff. (1)	101-200 Marg. Eff. (2)	201-300 Marg. Eff. (3)	301-400 Marg. Eff. (4)
Oil	-1.733*	-1.90	0.312	0.283	-0.415	-0.179	-1.733***	-3.38	0.312	0.283	-0.415	-0.179
Gas	0.795*	1.70	-0.143	-0.130	0.191	0.082	0.795***	3.04	-0.143	-0.130	0.191	0.082
Electricity	-8.686*	-1.72	1.562	1.419	-2.082	-0.900	-8.686*	-1.82	1.562	1.419	-2.082	-0.900
Trade Balance	3E-05***	3.38	-6E-06	-5E-06	8E-06	3E-06	3E-05***	3.15	-6E-06	-5E-06	8E-06	3E-06
Committee	0.435*	1.70	-0.062	-0.099	0.101	0.060	0.435*	1.88	-0.062	-0.099	0.101	0.060
SMD	-0.723***	-4.71	0.132	0.113	-0.167	-0.078	-0.723***	-4.50	0.132	0.113	-0.167	-0.078
Center	3.353***	8.67	-0.759	-0.031	0.396	0.394	3.353***	8.32	-0.759	-0.031	0.396	0.394
Independent	2.722***	5.55	-0.108	-0.593	-0.106	0.807	2.722***	6.89	-0.108	-0.593	-0.106	0.807
Right	3.202***	11.66	-0.183	-0.624	-0.056	0.863	3.202***	12.04	-0.183	-0.624	-0.056	0.863
Woman	0.383	1.49	-0.056	-0.086	0.090	0.052	0.383	1.41	-0.056	-0.086	0.090	0.052
Age	-0.014***	-3.09	0.002	0.002	-0.003	-0.001	-0.014***	-4.90	0.002	0.002	-0.003	-0.001
Party Change	0.255**	2.08	-0.041	-0.051	0.061	0.031	0.255**	2.40	-0.041	-0.051	0.061	0.031
chi2-stat energy resources	9.41**						25.16***					
Number of obs	466						466					
Prob>chi2	0.000						0.000					
Pseudo R2	0.364						0.364					

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Reference groups: PR; Left, Man, Not changed the party, Not a members of Duma's energy policy committee. According to the Optimal Classification output, the algorithm converges to 0.02905 (3%) in error proportion, to 0.97095 (97%) in correct classification, to 0.87064 (66.2%) in APRE, and the Spearman correlation between the current legislator estimates and the previous iteration estimates converges to 0.99987.

Table 4
Probit Analysis of Roll Call Votes

Second Duma – Parameter Estimates with Probit Roll Call Vote No. 46300						**Third Duma – Parameter Estimates with Probit Roll Call Vote No. 129940**				
Clustering on Russian Regions				Clustering on Russian Districts		Clustering on Russian Regions			Clustering on Russian Districts	
Factors	Coeff.	z-Stat.	Marg. Effect	Coeff.	z-Stat.	Coeff.	z-Stat.	Marg. Effect	Coeff.	z-Stat.
Oil	408.299**	1.96	0.016	408.299**	2.44	5.705	0.54	2.275	5.705**	2.08
Gas	-283.014**	-2.10	-0.011	-283.014***	-2.64	0.007	0.01	0.003	0.007	0.02
Electricity	-11.495	-0.89	-5E-05	-11.495	-0.89	16.767*	1.90	6.687	16.767**	2.40
Trade Balance						-1E-06	-0.090	-6E-07	-1E-06	-0.140
Committee	0.031	0.08	1E-06	0.031	0.08	0.180	0.47	0.072	0.180	0.45
SMD	0.700	1.41	4E-05	0.700	1.37	-0.504**	-2.58	-0.199	-0.504***	-2.56
Center	-2.694****	-15.98	-0.004	-2.694***	-15.50	3.050***	16.25	0.828	3.050***	19.95
Independent	-2.835***	-5.03	-0.067	-2.835***	-5.56	2.581***	3.79	0.514	2.581***	6.05
Woman	-0.838**	-2.33	-2E-04	-0.838***	-3.46	0.105	0.37	0.042	0.105	0.34
Age	-0.061	-1.47	-2E-06	-0.061***	-2.81	0.079	1.03	0.032	0.079	0.99
Age^2	0.001**	2.24	4E-08	0.001***	3.88	-0.001	-0.92	-3E-04	-0.001	-0.87
Party Change	1.839***	5.06	5E-05	1.839***	4.26	0.787***	2.85	0.296	0.787***	3.31
chi2-stat energy resources	10.34**			21.80***		8.26**			9.34**	
Number of obs	303			303		366			366	
Prob>chi2	0.000			0.000		0.000			0.000	
Pseudo R2	0.557			0.557		0.547			0.547	

Notes: Robust standard errors. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Reference groups: PR; Left, Man, Not changed the party, Not a members of Duma's energy policy committee. Right dropped (predicts success perfectly).

APPENDIX

Table A1

Political Parties in the State Duma of Russia between 1994 and 2003

First Duma	
Political Parties	**Proclaimed Ideology**
Choice of Russia	Right
Women of Russia	Center
Agrarian Party of Russia	Left
Block “Yavlinskii-Boldyrev-Lukin”	Center
Democratic Party of Russia	Right
Deputy Group "Russia"	Center
Deputy Group "Stability"	Center
Communist Party of Russia	Left
Liberal-Democratic Party of Russia	Right
New Regional Policy -Duma 96	Center
Party of Russian Unity and Agreement	Right
Not affiliated with a fraction or grouping	Independent
Second Duma	
Political Parties	**Proclaimed Ideology**
Communist Party of Russia	Left
Liberal-Democratic Party of Russia	Right
Our Home-Russia	Center
Yabloko	Center
Agrarian Deputy Group	Left
Deputy Group "People's Power"	Left
Deputy Group "Russian Regions"	Center
Not affiliated with a fraction or grouping	Independent
Third Duma	
Political Parties	**Proclaimed Ideology**
Communist Party of Russia	Left
Liberal-Democratic Party of Russia	Right
Fatherland-All Russia	Center
Union of Right Forces	Right
Yabloko	Center
Agrarian-Industrial Deputy Group	Left
Deputy Group "People's Deputy"	Center
Deputy Group "Russian Regions"	Center
Interregional Movement "Unity"	Center
Not affiliated with a fraction or grouping	Independent

Table A2
Parliamentary Committees in the State Duma of Russia between 1994 and 2003

First Duma	**Second Duma**
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Table A3
Administrative Structure of Russian Federation: Districts, Republics, Krais and Oblasts (Part I)

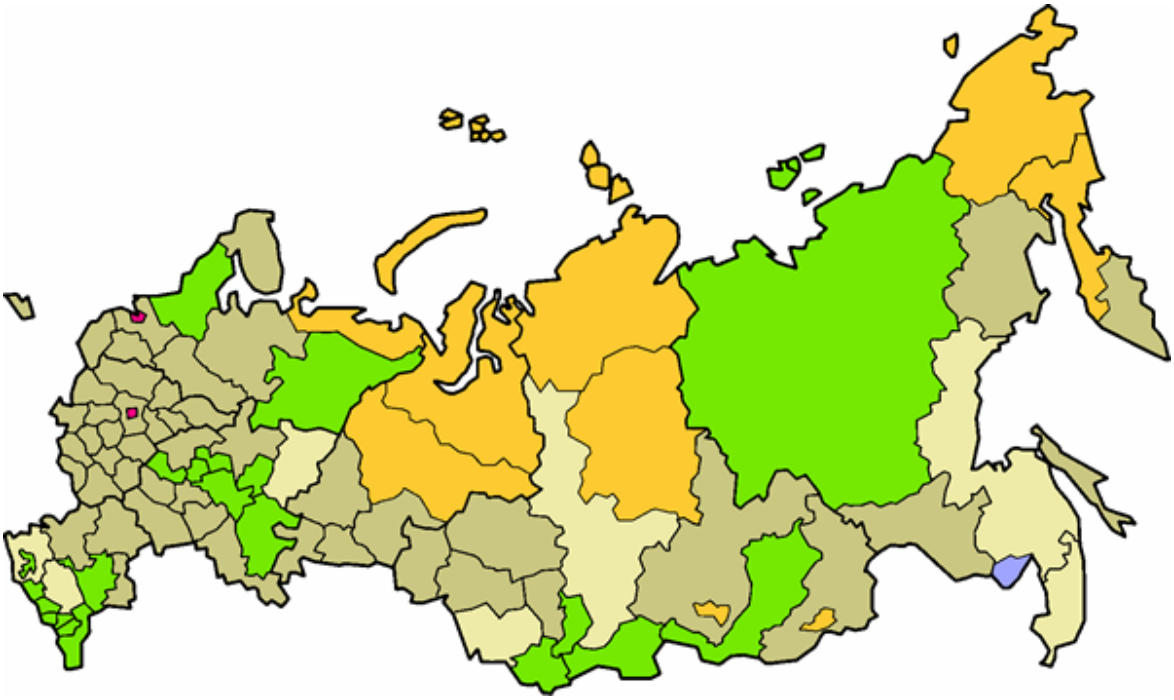
Northwestern District	***Central District***	***Volga District***	***Southern District***
Arkhangel'skaya oblast'	Belgorodskaya oblast'	Republic Bashkortostan	Republic Adygeya
Vologodskaya oblast'	Bryanskaya oblast'	Kirovskaya oblast'	Astrakhanskaya oblast'
Kaliningradskaya oblast'	Vladimirskaya oblast'	Komi-Permyatskii AO	Volgogradskaya oblast'
Republic Karelia	Voronezhskaya oblast'	Nizhegorodskaya oblast'	Republic Dagestan
Republic Komi	Ivanovskaya oblast'	Orenburgskaya oblast'	Republic Ingushetiya
Leningradskaya oblast'	Kaluzhskaya oblast'	Penzenskaya oblast'	Kabardino-Balkarskaya Republic
Murmanskaya oblast'	Kostromskaya oblast'	Permskaya oblast'	Republic Kalmykiya
Nenetskii AO	Kurskaya oblast'	Republic Marii El	Karachaevo-Cherkesskaya Republic
Novgorodskaya oblast'	Lipetskaya oblast'	Republic Mordoviya	Krasnodarskii Krai
Pskovskaya oblast'	Moskovskaya oblast'	Samarskaya oblast'	Rostovskaya oblast'
City of St. Petersburg	Orlovskaya oblast'	Saratovskaya oblast'	Republic Severnaya Ossetiya
	Ryazanskaya oblast'	Republic Tatarstan	Stavropol'skii Krai
	Smolenskaya oblast'	Udmurtskaya Republic	Chechenskaya Republic
	Tambovskaya oblast'	Ul'yanovskaya oblast'	
	Tverskaya oblast'	Chuvashskaya Republic	
	Tul'skaya oblast'		
	Yaroslavskaya oblast'		
	City of Moscow		

Table A4
Administrative Structure of Russian Federation: Districts, Republics, Krais and Oblasts (Part II)

Ural District	***Siberian District***	***Far Eastern District***
Kurganskaya oblast'	Aginskii Buryatskii AO	Amurskaya oblast'
Sverdlovskaya oblast'	Republic Altai	Evreiskaya AR
Tyumenskaya oblast'	Altaiskii Krai	Kamchatskaya oblast'
Chelyabinskaya oblast'	Republic Buryatiya	Koryakskii AO

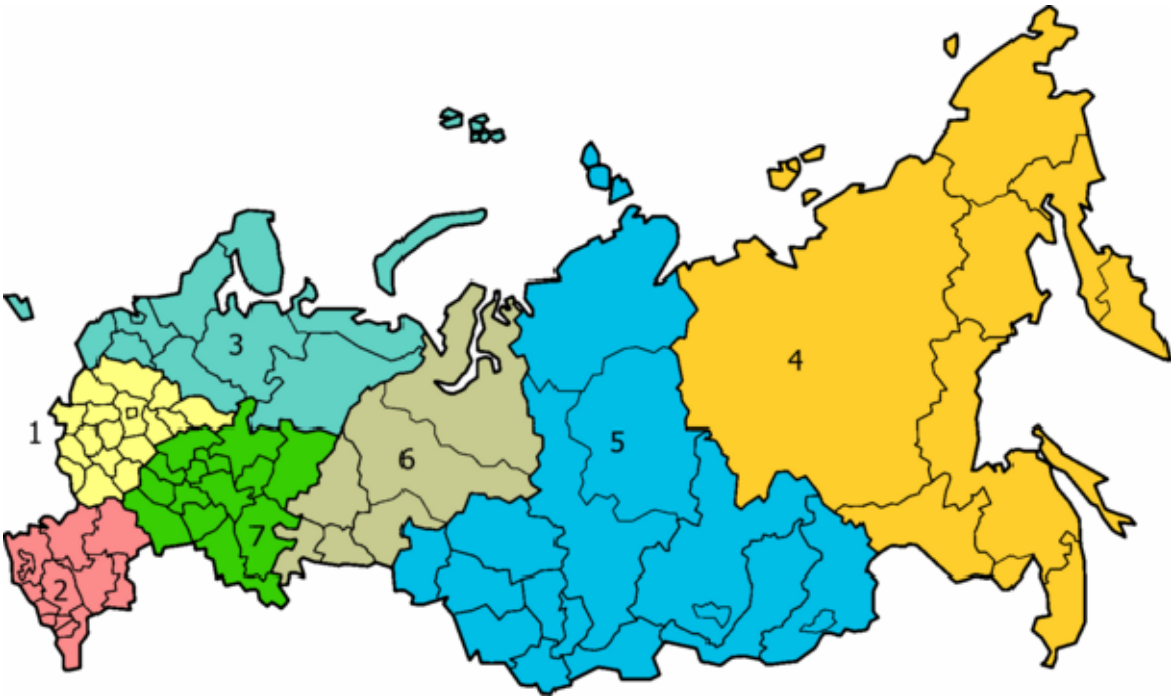
Khanty-Mansiiskii AO Yamalo-Nenetskii AO	Irkutskaya oblast' Kemerovskaya oblast' Krasnoyarskii Krai Novosibirskaya oblast' Omskaya oblast' Taimyrskii AO Tomskaya oblast' Republic Tyva Ust'-Ordynskii AO Republic Khakasiya Chitinskaya oblast' Evenkiiskii AO	Koryakskii AO Magadanskaya oblast' Chukotskii AO Primorskii Krai Sakhalinskaya oblast' Khabarovskii Krai Republic Sakha (Yakutiya)

Figure A1
Political Map of Russian Federation: Federal Subjects (Russian Regions)



Source: www.novayagazeta.ru

Figure A2
Political Map of Russian Federation: Federal Administrative Districts



Source: http://wgeo.ru/russia/fedokr.shtml

Notes

[i] The information on energy roll calls between 1994 and 2003 relies on INDEM database materials and personal research in the archives of central Russian newspapers and journals. INDEM (Informatics for Democracy) is a non-profit organization of applied political research located in Moscow and its database includes all roll call votes held in the State Duma since its constitutional establishment in December 1993.

[ii] For more details see www.duma.gov.ru.

[iii] Besides this restriction we have some missing values for one of the independent variable (age) in the second (19 observations) and Third Duma (5 observations). The obtained results remain robust when omitting the age variable in the estimations.

[iv] The quantitative information on regional energy production comes from the Federal Service of Statistics, known as Goskomstat. This is the official state provider of statistical information in Russian Federation. In this paper we use the 2003 edition of the statistical package on Russian Regions.

[v] We slightly changed the structure of the specification due to the non-linear relationship between age and ranking.

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