From Competition to Dominance: Political Determinants of Federal Transfers in the Russian Federation[1]

Israel Marques[2], Eugenia Nazrullaeva[3], Andrei Yakovlev[4]

Draft: 10/05/2012

Abstract : The recent uprisings in the Middle East have cast doubt on the degree to which existing theories of autocracy can correctly identify which groups threaten the autocrats rule at any given time. As a result, these theories are unable to predict fundamental upheavals in established autocracies. Who is the biggest threat to the autocrat, though, the elite or the populations as a whole? How do perceptions of these threats change as economic conditions change? In this paper, we evaluate both these questions. We advance the argument that regime maintenance strategies vary depending on economic conditions at the subnational level. In areas where economic growth is fast, the autocrat's core supporters will support her regardless, freeing the autocrat to target transfers towards swing groups. Where growth is slower, however, the autocrat must target transfers to preserve support amongst her core. We also argue that elites with autonomous power resources – economic assets, connections to regional elite networks, etc. – are also perceived as threats and receive transfers. This threat is mitigated in areas of high economic growth, where autocrats can gain support from the populace without elite intermediaries. We assume autocrats put their money where their mouths are and test our argument using the combination of data on federal-regional transfers in the Russian federation between 2001 and 2008 and a novel dataset of regional executive level characteristics. We find support for our arguments, showing that transfers tend to be awarded towards powerful elites, swing voters in fast growing regions, and core voters in slow growing ones.

Key words: competitive autocracy, dominant party systems, regional elites, elite cooptation, swing voters, core voters, federal transfers, Russia,

JEL codes: D72, H77, R50

Recent uprisings in Tunisia, Egypt, and other seemingly stable autocracies across the world exposed many previously hidden tensions in these dominant party systems. Recent scholarship on dominant party systems in political science have primarily focused attention on the elite nature of the system – highlighting elite solidarity as the key problem of regime maintenance (Haber et al. 2003; Brownlee 2007; Haber 2007; Robertson 2010).[5] In these models, elites can be paid off to insure that they do not stage coups and help the regime to control the population. In several of the Arab Spring uprisings, however, elite defections and the erosion of elite power were not the cause but the consequence of popular challenges. Only once popular protest became firmly entrenched did established elites begin affiliating with, or defecting to, the side of the

[1] This paper is based on results of a research project carried out in HSE International Center for Studies of Institutions and Development (ICSID) with support of HSE Basic Research Program. The authors are grateful to Natalia Zubarevich, Natalia Golovanova, Vladimir Gimpelson, Vladimir Nazarov, Scott Gehlbach, David Szakonyi, and John Reuter for valuable comments, as well as to Sergei Rozhkov for his support in data collection.
[2] Research fellow of ICSID, PhD student at Columbia University, im2219@columbia.edu
[3] Research fellow of ICSID, senior lecturer at the HSE Faculty of economics, enazrullaeva@hse.ru
[4] Director of HSE Institute for Industrial and Market Studies, ayakovlev@hse.ru
[5] Although for important exceptions see Acemoglu and Robinson 2005 and Gandhi 2008.

populace.[6] The relative surprise of these events, despite predictions of medium term stability for major Arab Spring countries such as Egypt, implies that existing, elite-focused accounts may have thought of the problem of regime maintenance too narrowly (Blaydes 2010). Conversely, however, many papers focusing on the role of the populace are also incomplete. Many works treat the populace as a homogenous whole, ignoring real cleavages between regime supporters and opponents (Acemoglu and Robinson 2005; Ghandhi 2008) or produce contradictory predictions about which elements of the populace are co-opted (Magaloni 2006; Diaz-Cayeros et al. 2010). Moreover, all downplay the role of elites in their models and empirical tests.

Consequently, we are left with many questions about the nature of regime maintenance. In this paper, we ere on the side of caution, arguing that autocrats need to take both elite groups and the population seriously when deciding who to co-opt. Which groups get transfers – supporters or potential opponents – and under what conditions do they do so? Must dominant parties only rely on direct co-optation or are other strategies available to them? In this paper, we assume regime leaders put their money where their mouths are, and explore how they direct transfers to mitigate these threats.

Contrary to models that tie the nature of threats to dominant party systems to the degree of consolidation or the age of regimes, we argue that the nature of threats to dominant parties are determined by structural conditions. (Geddes 1999; Smith 2005; Blaydes 2010).[7] We argue that autocrats can generate support through alternative, non-transfer channels, and that their ability to do so crucially informs which groups regime leaders must co-opt in order to retain power. Like traditional parties in fully democratic settings, recent work indicates that dominant parties can rely on economic conditions and ideological affinity amongst certain groups to help them maintain support (Colton and Hale 2009a, 2009b; Reuter 2012). In this paper, we follow recent work which identifies economic growth as potentially important alternate source of support for dominant parties and explore how it alters perceptions of the level of threat possed by elite and popular groups. Economic growth is widely understood to be a key variable in the long-term survival of autocracies and dominant party regimes (Bratton and van de Walle 1992; Gasiorowski 2003; Reuter and Gandhi 2011). Good growth outcomes allow autocrats to increase the size of the economic pie available for redistribution to elites at the same time that it generates

[6] Cite

[7] In this paper, we focus our attention on "hybrid" regimes, an important category of autocracies where rulers hold multi-party elections but rule through a dominant party. One could also call these regimes Competitive authoritarian (Leveitsy and Way 2010) or Hybrid regimes (Diamond 2002).

support on the part of the populace.[8] To what extent does this alter the structure and magnitude of transfers to these groups?

We also contribute to the growing literature on regime maintenance. We build on recent work, which emphasizes elite actors as the primary threat to autocratic regimes, by considering simultaneous popular threats (Smith 2005; Lust-Okar 2005, 2006; Magaloni 2006). In these models, the populace is often a sufficient condition for revolution due to collective action costs. Elites are necessary conditions for popular action, whether by directly organizing popular groups or signaling, via defection, regime weakness.[9] We argue that while autocrats may underestimate the populace's ability to solve collective action problems without elites, they are accutely aware of the possibilities and of the difficulty in predicting such events (Kuran 1991). As a consequence, even in elite-centric systems, rational autocrats should always expend resources to insure that their populations are quiescent: whether in the form of public goods such as growth, transfers, or outright repression (Bellin 2002). In this paper, we explore how these considerations inform the structure of transfers in dominant party regimes.

To construct our case, we primarily draw evidence from Russia from 2001 to 2008, during the period of initial formation and institutionalization of the Putin regime. We motivate our theory with a qualitative discussion of the Putin administration's strategy vis-à-vis the populace and elites during this period. Assuming that autocrats face a tradeoff in channeling money towards their personal rents or using it to co-opt other actors, we assume that autocrats put their money where their mouths are when it comes to transfers. Consequently we test our argument statistically using data on Russian Federal-Regional transfers from 2001 to 2008 and a novel data set of Russian Regional Executives.

We select Russia, because it is important to control for country and regime specific factors in regime maintenance strategies. Russia allows us to do this, but also provides a federal structure, which provides us meaningful variation on our variables of interest. In addition, Russia is a representative example of a particular category of electoral, competitive, or dominant party authoritarianism (depending on the study consulted) that is increasingly common worldwide and is one of the frontiers in the study of authoritarianism (Magaloni 2008; Cheibub et al. 2009; Levitsky and Way 2010). Because this category is so common, yet less well studied than traditional categories of authoritarian regimes such as military dictatorships, monarchies, or legislature-less single party systems, it an especially important category for study.

---

[8] For more on the implicit contract entailed in this, *see* the excellent discussion of growth and legitimation in di Palma 1991.

[9] Although for an important exception in this trend, *see* Magaloni 2006. She argues that while elite defection is critical for the collapse of dominant parties, elite splits occur because of signals sent by the populace during elections that the dominant party is not nearly as hegemonic as it appears. Also notable are Acemoglu and Robinson 2006 and Gandhi 2008, whose models focus instead on the populace itself with a small role for mediating elites.

We begin by outlying the hypotheses we test briefly in the following section. In the third section of this paper, we illustrate our theory and provide some context for our empirics using a discussion Russian history in the 2000's. In the fourth section, we provide a modest empirical test of our theory using data on fiscal transfers from Russia's federal center to the regions from 2001-2008 and a novel data set of the characteristics of Russian Regional executives during that time period. The fifth section concludes.

Regime Maintenance, Tradeoffs, and Authoritarian Rule

Faced with the need to retain office and preserve limited resources, we argue that autocrats must be simultaneously wary of both elites and the populace. Information problems vis-à-vis one's subjects – both elites and the populace – are perhaps the most critical constraints on autocrats: even seemingly well-behaved subjects may hide their true preferences out of fear of reprisal and may revolt at any time (Wintrobe 1990; 1998). To date, however, existing work on autocratic regime maintenance has tended to make simplifying assumptions in order to guide model construction and empirical testing. As a consequence, there has been a deep divide between studies that focus on threats from elite sources and popular threats. In this section, we briefly review expectations from the existing literature on the nature of threats and autocratic strategies to mitigate them. We then advance our theory of the relationship between threat perceptions, transfers, and economic growth.

Popular Threats

The literature on popular threats to the regime, while acknowledging the potential collective action problems to popular revolution, argues that two situations make it more likely that the population will pose a significant threat to the autocrat. In the first, the country suffers an exogenous shock that increases the payoffs of successful revolt, provides better information about elite capabilities, or that lowers the costs of collective action (Haggard and Kauffman 1997; Acemoglu and Robinson 2005; Tucker 2007; Bunce and Wolchik 2011). In the second, the population is a threat, because it can serve as a signaling mechanism to co-opted elites of the (lack of) power of the regime through mechanisms such as elections. Where elites participate in autocratic institutions out of a lack of viable (or equally profitable) alternatives, such signals can cause elites to reevaluate their perceptions of the regime's hegemony and of the costs of defection. In such systems, massive demonstrations or disastrous election results for the autocrat's party are enough to encourage elite defection and seriously threaten the system (Magaloni 2006; Robertson 2010). Notice, however, that despite the importance of elites in this second story, the actual first movers are the population. As a consequence, a rational autocrat would want to placate or repress the population sufficiently to ensure that it is never willing to risk the autocrat's displeasure and send signals to elites to defect. Finally, the populace can also

pose a threat to the autocrat if its cooperation is necessary for the generation of autocratic rents or if autocratic coercive capacity is too weak to significantly increase the costs to the population of engaging in collective action (Gandhi and Przeworski 2006; Gandhi 2008).

How to target transfers to placate the populace is, however, somewhat tricky. Building on the literature on voting, one perspective emphasizes the need for politicians to target transfers towards swing groups, those that will alter their votes cheaply based on rewards (Lindbeck and Weibull 1978). In these model, voters' utility functions are composed of a valence term, representing idiosyncratic, ideological preferences, and a consumption term, representing utility gained from co-optation transfers. Parties have fixed ideological positions, but can "persuade" voters to vote for them through the use of co-optation (Cox 2010). In these models, core voters are those whose valence terms are so strongly biased in favor of a particular party that attempts to influence their votes via transfers are prohibitively costly, whereas swing voters utility is primarily motivated by transfers. Given this set up, rational actors will only target transfers towards swing voter groups (Dixit and Londregan 1996; Stokes 2005; Magaloni 2006).

In contrast, core voter models predict that parties make transfers precisely to those groups whose valence dimensions are biased in their favor. In the classic Cox and McCubbins framework (1986), parties differ in the extent to which they can efficiently target voters with transfers. Parties are better connected to their core supporters, thus making it easier for them to select transfer mechanisms that this group is responsive to. Because of this "leaky bucket", transfers to swing voters are risky bets, since politicians may end up wasting large amounts of resources on voters who don't actually want the benefits being delivered to them. Consequently, parties should focus on their core supporters in order to maximize vote shares. A variant on this model, developed by Diaz-Cayeros et al. (2010), achieves a similar result by endogenizing the identity of core and swing voters. Those groups who support a particular party at time t-1 are unlikely to continue to do so at time *t* if they perceive that they receive nothing, while others are deriving benefits. In this "conditional party loyalty" model, core voters receive transfers today because transfers to them are efficient and because of the risk that if they receive nothing they will become swing voters tomorrow, making it more expensive to co-opt them.

It is difficult to make predictions based on these models, however, because the decision to transfer to swing or core voters is treated as a binary one, despite the potential for sub-national variation in conditions that make voters more (or less) receptive to transfers and influence valence. As a consequence, resolution of the debate on core versus swing voting is likely to hinge on identifying conditions which influence the allocation decisions of rational actors. Certainly, the empirical record would support such an approach, since it has provided mixed evidence in favor of both models both cross-nationally (c.f. Dahlberg and Johansson 2002,

Stokes 2005; Hiskey 2003; Herron and Theodos 2004; Murillo and Calvo 2004) and in studies conducted in the same country (Magaloni 2006; Diaz-Cayero et al. 2012).

Assuming that politicians seek to retain office, first and foremost, and that once this condition is met, they desire rents, part of the reason for the mixed empirical evidence may be that politicians target different voters under different circumstances. If politicians can rely on sources of support other than direct transfers to gain or maintain support amongst certain sectors of the population, for example, then it would be irrational to target transfers at such groups. Here we focus on robust economic growth as just such a tool. The link between economic growth and public support for incumbent governments has been well-documented and theorized in a variety of institutional settings – both democratic and autocratic (di Palma 1991; Lewis-Beck 1988, 2002; Lewis-beck and Stegmaier 2000; Duch and Stevenson 2006; Treisman 2011). Similarly, numerous scholars have connected economic decline to the advent of serious anti-regime behavior in autocracies (Gasiorowski 2003; Magaloni 2006; Reuter and Gandhi 2011). Regimes who provide good economic growth should therefore have less need to make transfers, whereas those who do not face rapidly eroding support and require additional measures to retain power.

Adapting the basic framework of existing models of voting behavior, we argue that under situations of slow economic growth, politicians are more likely to target spending towards their core voters.[10] To see this, imagine that, as in Diaz-Cayeros et al.'s model (2010), failure to provide sufficient consumption, C, at time t-1 results in a shock, ε, of equal magnitude to each voters' valence term, X. As a consequence of this shock, voters are biased against the incumbent in time t and will likely vote against her absent additional action by the incumbent.[11] Knowing insufficient consumption will lead voters to support the opposition, the rational incumbent would therefore use alternative benefits in order to ensure that they retain sufficient support amongst dissatisfied voters to retain office. Who should receive these benefits – swing or core voters? We argue that because core voters are already predisposed ideologically to the incumbent, the value of alternative benefits needed to retain their support is lower than the level of benefits that would be required to retain the support of swing voters. Conversely, when economic growth is relatively fast, politicians need not fear losing the support of core voters, as they receive benefits from incumbent rule, and swing voters are already receiving some benefits of incumbent rule. As a consequence, the former require few incentives to vote for the incumbent and the support of the later is more easily purchased via transfers.

[10] In this section we advance a highly informal model of transfer dynamics. In the next version of the paper we will develop this model more formally.
[11] In this section we adopt the notation of Dixit and Londregan (1996) to simplify exposition.

The discussion above is largely motivated by models of individual voting behavior, however can autocrats target so narrowly? We argue that the autocrat faces two related problems when deciding how to target transfers to core and swing voters. First, where the secret ballot formally applies, it may be difficult and costly to obtain micro-level information about the actual votes cast by any given individual. Secondly, even where the autocrat able to identify core and swing voters precisely, the technology of transfers in most countries tends to be rather coarse: targeting geographic areas is often the best autocrats can do. The result is an odd situation in which the individual level model discussed above is applied, in practice, at the sub-national level using aggregated data (Stokes 2005; Cox 2010). We argue that the logic identified in the model above holds, however. Given constraints on the technology of transfers, we argue that autocrats observe election at a level of aggregation – municipalities, regions, provinces, etc. – which matches the technology they use for transfers. Consequently, they must make inferences about the relative populations of core and swing voters in those regions. Units where the autocrat tends to win sub-national units by substantial margins are likely to be populated by core voters and to receive transfers accordingly, whereas areas where autocrats win or lose by narrow margins are likely to be populated by swing voters. We therefore predict:

> *H_1: Core regions, where the authorities win by large margins, (Swing regions, where authorities win by small margins) receive transfers when economic growth is slow (fast).*

In the following section we provide a limited illustration of some of the mechanics discussed by drawing on the case of Russia from 2001 to 2008. We use the case to discuss relative perceptions of threat by Russia's president, Vladimir Putin, as well as how strategic decisions caused shifts in the overall pattern of transfers. In the section after that, we provide some preliminary tests of our predictions relating to the targeting of transfers, as well as of how growth alters this calculus.

Elite Threats

Empirically, elites have tended to be more of a problem for autocrats than the masses. Of all autocratic leaders that ruled for at least one day between 1945 and 2002, Svolik (2009) finds that 67% were removed from office via internal coup. Existing work argues that elites serve as threats through one of two channels: their integral position in and control of the regime's resources, which enables them to stage coups (Svolik 2009), and their role as key intermediaries and mobilizers of the population (Lust-Okar 2005, 2006; Robertson 2010). The later explanation for the degree of threat posed by elites implicitly acknowledges the power of the population to overthrow regimes, but argues that the collective action problems faced by the population render it unable to mobilize on its own. As a consequence, in these models some action on the part of

the elite – internal splits that degrade coercive capacity or outright defection – are required for revolutionary moments. The elites that most threaten the dictator are those with access to autonomous power resources – independent regional clientelist or economic networks, administrative resources, independent coercive capacity, or difficult-to-tax assets – which can help stage internal coups or to to mobilize mass groups against the autocrat (haber et al. 2003; Haber 2007; Reuter 2010; Sjoberg 2011). Consequently, all else equal, the literature would lead us to predict:

> *H_2: Elites with autonomous power resources are regarded as threats to the regime and receive transfers.*

Like the populace, however, economic growth in regions should also influence the degree to which elites are perceived as threats and, consequently, transfer allocations. In areas with faster economic growth, powerful elites should get fewer transfers than otherwise. To see why, recall that the masses support autocrats who can generate high rates of economic growth, making it less likely that the populace will oppose the regime. As support for the regime rises, however, the ability of regional elites to leverage their power resources to mobilize the population against the regime declines. Consequently, even powerful elites quickly lose the main source of the threat that they pose to the autocrat. Moreover, to the extent that rapidly growing regions are more likely to become wealthier over time, the ability of elites to use their power resources directly, through the use of clientalism, patronage, or control of economic opportunity, are also likely to diminish (Magaloni 2006; Diaz-Cayeros et al. 2012). Both of these factors imply that the degree of threat that regional elites pose diminishes over time. As the degree of threat posed by regional elites decreases, rational autocrats should also decrease the magnitude of transfers awarded to them. We therefore expect:

> *H_3: Powerful Elites in regions with high levels of economic growth receive fewer transfers*

Autocratic Strategies: Evidence from the Russia Case

Russian in the 1990's was beset by a deep economic crisis brought on by its transition to a market economy. In combination with the general lack of state capacity in this period, declines in the population's living standards reduced public support for Boris Eltsin's government. Both of these factors led to the opportunity for powerful regional elites to emerge and to contest the central government for power. The consequence of this competition was an intense period of bargaining and a series of compromises between the federal center and the regions. The former bargained to keep the latter formally within the federation and to retain some degree of cross-regional uniformity in federal laws and services, whereas the latter simply sought to extract rents and benefits (Fillipov et al. 2004). An important element of this bargaining relationship from the very beginning was the system of federal transfers, which gave the center a tool with which to

elicit cooperation from the electoral machines of powerful governors. The broad autonomy granted to regions allowed those regions with politically strong local elites, especially the national republics, to set their own effective tax rates and to extract relatively generous transfers from the federal center (Treisman 1996, 1998). In this period, although transfers were correlated with support for Eltsin at the ballot box, in reality, Eltsin received votes because he was able to co-opt regional elites with transfers, who then mobilized their machines to support him (Popov 2004; Robertson 2010).

This bargaining situation changed significantly after the August 1998 financial crisis. The devaluation of the ruble coupled with the pragmatic economic policy of the new left-wing government, provided conditions for a quick economic recovery between 1999 and 2000. This growth, coupled with deft handling of domestic events, led to soaring popularity for the newly elected President, Vladimir Putin, allowing him to build direct connections with the populace. For the first time, leveraging this popularity, Putin was able to field a loyal, pro-Kremlin party that could win elections against local political machines. Indeed, Putin's Edinstvo (Unity) party, created shortly before the Duma elections in 1999, won resounding victories against OVR, a coalition party constructed by many of the most popular and powerful regional governors.

During this period, the elite remained the primary threat to the regime; however Putin's popularity mitigated that threat somewhat by disrupting the ability of regional elites to mobilize voters directly (Robertson 2010). Given this imbalance, our hypotheses would suggest that transfers to elites would diminish in magnitude, since elites should have lost access to some of their autonomous power resources. If we look at the structure of transfers, this is indeed what happened. On the one hand, while transfers continued to be disproportionately targeted at those regions with politically strong governors (Jarocińska 2010), the structure of transfers began to shift. Table 1, which shows the total amount of FFSR (a federal equalization grant) in total transfers, illustrates one of the consequences of this. Unlike grants, subsidies, and subventions, which can be used for any purpose and assigned discretionally, FFSR grants are earmarked for specific social expenditures and are given out according to need based criteria. Those regions which are relatively poorer, controlling for tax capacity and local price differences, should receive more transfers according to official formula. Consequently, we argue that by moving to a large share of FFSR in total transfers, Putin pursued a long-term strategy of limiting the discretion of regional elites to spend monies in ways that provided them with rents or shored up their support (see also Figure 1). In doing so, he further consolidated the regime and hastened the disruption of the regional elites' independent power bases. On the other hand, as we show below in our regression results, the presence of powerful elites remained a good predictor of both total transfers and the non-FFSR portion of transfers. Although one might expect a swing voter logic,

our results below instead demonstrate that the regions with more pro-United Russia and Putin voters got more resources. We speculate more on this dynamic below.

In addition to attacking the fiscal autonomy of strong regional elites, the federal government also moved to increase its power relative to other groups in society by attacking economic elites (the so called 'oligarchs'). Putin specifically targeted natural resource rents for nationalization, which would eliminate a key potential resource pool for the elites and provide the federal center with much needed funds to maintain social stability and continue co-opting the population (Yakovlev, 2006). In 2003-2004, this struggle culminated in the Yukos affair, where a clear "selective application" of the law was applied to Yukos' owner, Mikhail Khodorkovsky, depriving him of his business and subordinating Yukos directly to the central government. The direct consequences of the Yukos Affair were to wrest control of resource rents away from private hands, providing the center with much needed revenue. It's indirect consequence, however, was to firmly establish the limits of political participation and meddling on the part of businesses in Russia, thus subordinating the business community to Putin's federal center. In doing so, not only did Putin eliminate a key source of opposition, but also eliminated an important potential ally to regional elites in their struggles with the center.

Perhaps just as importantly, however, the central government's solution to the Yukos conflict also helped cement the strong popular support that Putin and his allies already enjoyed, insuring a particularly strong showing in the subsequent parliamentary elections of December 2003 and the presidential elections in March 2004.[12] Combined with strong economic growth, the Yukos affair further degraded the ability of regional elites to use one of their most potent tools against the central government: the mobilization of the masses. Not only did the Center's newfound ability to intervene between regional elites and their popular bases give the federal government more leverage in negotiations, but it played a key role in helping to convince regional elites of the futility of opposing the federal center (Robertson 2011). As a result of this and the resources and support gained from his subordination of business, Putin was able to establish a new delineation of responsibilities between the federal center and the regions. This reform, carried out by the Kozak commission, resulted in withdrawal of residual rights to a substantial fraction of revenues from regional and local authorities, along with imposition of the majority of previous liabilities on them. Although carried out in the name of reform, this action was effectively a successful, repressive attack on major sources of fiscal autonomy for regional elites.

[12] This public support for repressions against Khodorkovsky and populist anti-oligarch rhetoric can be explained by broad dissatisfaction with the results of privatization, which were considered by most in Russian society to be unfair.

Although Putin severely weakened regional authorities, it would be a mistake to think that centralization proceeded only through the use of sticks and transfers. On the one hand, a pure repression strategy against regional elites would have been costly. On the other hand, a strategy of pure transfer oriented co-optation would not have been credible, since centralization would have alienated elites from their power bases and left them vulnerable to reneging on the part of Putin's government. What was needed was a way to co-opt elites into the political system and expand their time horizons. Putin's decision to develop an encompassing single party, which could help to overcome the center's commitment problems, was therefore a key element to the removal of regional elites as a direct threat to the regime and to further centralization of power (Reuter and Remington 2009).

Formed by co-opting the OVR party, a vehicle used by powerful regional officials in the 1999 election to oppose Putin, and incorporating it into Putin's Unity party, United Russia allowed the regime to co-opt regional elites and remove them as threats through two mechanisms. First, it allowed Putin to credibly commit that regional elites would continue to reap benefits and transfers from allegiance to the federal center, even if the system became more centralized. Second, in combination with elements of the Kozak reforms which thoroughly subordinated municipal officials to regional ones, it allowed Putin to credibly commit to respecting and abetting regional monopolies of power held by regional elites (Reuter 2010).[13]

Regardless of methods, if we can consider 2000-2004 as a time of strong competition between elites – federal, regional and business – then it is clear that by the end of this period the federal elite (represented by "Siloviki" and liberal technocrats) had won a clear-cut victory over business "oligarchs" and regional elites. Starting from 2005, a different system of interactions between the federal center and regional elites in Russia came into being; one characterized by the federal government's dominance over regional elites, instead of competition between these two groups. This was made possible by the gains of the federal center and the reforms instituted in the previous period.

This newfound predominance freed the government to pursue slightly different goals with transfers, since the elimination of regional elites as a threat meant that transfers no longer had to be paid to independently powerful regional elites. Under these new conditions, the federal government declared a "modernization leap" policy and began building a developmental state in Russia (mostly drawing upon South Korea experience of the 1960s and 1980s).[14] This process was exemplified by the establishment of a Development bank, special economic zones, state

[13] For more on the specific mechanisms by which dominant parties are able to co-opt and unify elites, as well as on how they establish credible commitment, *see* Gehlbach and Keefer 2011 and Magaloni 2006, 2008

[14] David Lane described this process as a turn from the "chaotic" capitalism of 1990s to the "state-led" capitalism of the 2000's (Lane, 2008).

corporations and other development institutions, along with the drafting and adoption of development strategies for several key industries and the launching of infrastructure development projects using the Federal Investment Fund (including preparation for APEC Summit in Vladivostok in 2012 and 2014 Winter Olympic Games in Sochi).

The implementation of all of these measures was strongly affected by the nature of the ruling coalition's interaction with different elite groups – including regional elites, however. First, the federal center started to use its newfound powers to appoint new governors loyal to the Kremlin. Some strong governors remained, but they agreed to further losses of power by having their offices converted into appointed positions. Powerful regional officials consented to the changes, because of the Kremlin's success in curtailing their power and in disrupting their roles as traditional intermediaries to the masses in their regions. At the same time, the change was attractive, because it allowed them to extend their terms beyond statutory limits and, in conjunction with the party mechanism discussed above, guaranteed that they could retain regional power (Reuter and Robertson 2011). Moreover, we find some weak evidence below that transfers continued to be targeted towards particularly strong governors in certain types of regions.

Second, a governor performance measurement system based on a longer list of formal indicators was introduced by the Kremlin in order to govern the appointment process. Since providing growth is a cheaper way to insure that the population continues to support the authorities than attempting to provide targeted transfers to voters, elites may have been rewarded for generating good economic outcomes, which in turn reinforced support for the central government among voters (Magaloni 2006; Treisman 2011). Third, the renewal of the gubernatorial corps was accompanied by a marked increase in federal transfers to regions and especially in the non-formalized part of these transfers. We can assume that originally, authorities developed FFSR in order to deprive regional officials of discretion over the use of funds and a potential source of rents. Once control over these elites had been established, however, authorities realized that incentives were needed to insure elites would continue to work to provide good economic outcomes and to insure loyalty. Since discretionary transfers were an excellent means by which regional elites could generate rents (and therefore be encouraged to work hard to accomplish the regime's agenda), federal authorities began decreasing the relative share of FFSR in regional transfer over time, allowing for more discretionary transfers. Figure 1 shows that the relative relationship between total transfers and share of FFSR grants to the regions, in nominal prices vs. 2000 prices (deflated by CPI) is negative. The relative share of total transfers began climbing relative to FFSR after 2004. Table 1 also illustrates this dynamic, showing that the share of FFSR in total transfers decreased during the 2004-2008 period.

While this qualitative discussion is helpful in understanding the Russian context, it is difficult to systematically test predictions about the nature of transfers to elites and the population using it. We now turn to our statistical analysis.

Data and methodology

In this paper, we assume that autocrats desire rents. Transfers should only be awarded based on political criteria – e.g. to the populace or elites – to the extent that these group are perceived as threats. In order to empirically examine how the degree of threat posed by voters and elites influences transfers, we employ high-quality data on transfers from the federal center to 78 regions in the Russian Federation between 2001 and 2008.[15] We select this time period for two reasons. First, we wish to capture both the period of initial autocratic regime formation and a period of relative consolidation in our analysis. The 2001 to 2008 period allows us to do this, while also allowing us to understand how changing conditions alter the balance between elite and popular targeting of spending. Second, our argument has so far steered clear of the effects of exogenous shocks on the relative balance between elite and populace targeted spending, aside from noting that exogenous shocks tend to bias spending towards the population. Should we include data after 2008 into the sample, we would be capturing the effects of the financial crisis in our analysis. While the effect of crisis on the targeting of transfers is an interesting question, here we prefer to focus on "normal times" to produce more generalizable inferences.[16]

We use two main dependent variables in this paper, which we collected from the Russian Federal Treasury and the Center for Fiscal Policy in partnership with Moscow State University. The first dependent variable is a measure of total per capita transfers between the federal center and the regions in thousands of rubles (2000 prices).[17] Although somewhat coarse, once one controls for demographic and economic considerations – shares of pensioners, GDP per capita, etc. – this dependent variable is a useful measure of co-optation, because it incorporates both transfers to elites and to the populace. As a consequence, one can compare how indicators of the threat posed by both elites and the populace influence overall distribution. More importantly, the

[15] As is common for studies of Russia's regions, we omit Chechnya and Ingushentia from our panels. In our case, the decision is even more justified, because data collection in these regions was patchy during the period of the Second Chechen War, leaving large amounts of missing data for the early period. We also had to drop Nenets Autonomous Okrug, Yamalo-Nenets Autonomous Okrug, and Khanty-Mansi Autonomous Okrug, because of data availability problems. In addition, because the number of Oblasts changed over time due to the merger or creation of new regions, we had to make some assumptions in order to insure a roughly balanced panel. We assume that Chita Oblast is equivalent to Zabaikalskiy Krai, Perm Oblast – to Perm Krai, and Kamchatka Oblast to Kamchatka Krai. We also consider Irkutsk Oblast and Kransoyarsk Krai as each being one comparable region for the entire period, even though they merge with their Autonomous Okrugss.

[16] Nonetheless, this is a fruitful avenue of research, which we intend to explore in subsequent papers.

[17] We deflate using an official Consumer Price Index. In two cases, Moscow City (20001-2004, 2007), and St. Petersburg (2004), we observe negative total transfers in the raw data. This would seem to violate both the accounting standards of the Ministry of Finance according to interviews conducted with Russian Budgetary experts. We dealt with this by replacing initial values with zeros where negative transfers are observed.

use of total transfers as the dependent variable insures comparability over time. Because the Russian budgetary system has undergone numerous changes to the names and reporting categories of programs over the time period, it would be almost impossible to construct comparable spending data without rather heroic assumptions about the classification of spending and the purposes of programs. Even choosing a shorter time frame, 2004 to 2008, for example, would not resolve this difficulty. We argue that although coarse, using this data should bias our study against finding any political indicators of transfers, since programs created to provide transfers to elites or the masses would be lumped in with each other and programs with more objective, economic purposes.

As an alternative, supplemental dependent variable, we use a measure of discretionary transfers per capita, which we calculate as total transfers minus FFSR. Because only FFSR grants follow a specific, economically determined, grant formula, the discretionary nature of the remaining portion of transfers means that the federal center can target these funds almost at will. As a consequence, we believe that this sum of money encapsulates the component of transfers that is channeled for political purposes. While more fine-grained than the total transfers measure, we argue that this data is more favorable for our argument; therefore, we use this variable only as a supplement and robustness check.

Because transfers are likely to be highly endogenous to the political variables of interest in this paper, we estimate our model using a panel-adapted two-step generalized method of moments technique with cluster-robust estimators for the standard errors [Baum and Schaffer 2007; Baum, Schaffer, Stillman 2010]. [18] This technique allows us to use both internal (lagged values of our regressors) and standard external instruments in our specification, allowing us to mitigate the serious endogeneity concerns in our research design. We formulate the following model for the dynamics of total transfers:

$$\Delta y_{it} = \alpha z_{it-1} + \gamma z_{it-1}\omega_{it-1} + x'_{it-1}\beta + c_i + \theta_t + \varepsilon_{it} \quad (1)$$

Where Δy_{it} is the first difference of our dependent variables, z_{it-1} represents the main independent measures of interest, ω_{it-1} is the growth rate in gross regional product (GRP), *gdpgrowth,* measured using a GRP index of physical volume, and x'_{it-1} is a vector of regional level controls. Because we wish to test the trade-off between the provision of a key type of public good, economic growth, and measures of elite strength and voter opinion, we also include the interaction term $z_{it-1}\omega_{it-1}$. In addition, ε_{it} represents a heteroskedastic, idiosyncratic error

[18] Stock and Watson (2006) show that for panel data models with fixed effects, small finite T and first-order serial correlation the cluster-robust variance-covariance matrix estimator gives better results than HAC estimators, in terms of asymptotic unbiasedness.

term correlated serially and across regions, c_i is a vector of region fixed effected, and θ_t is a vector of time fixed effects. We discuss our independent variables in the following subsections.

In our analysis, we use first differences of the dependent variable for two reasons. First, empirically, the Russian budgetary process takes the level of transfers to each region in the previous year as the base from which to set the current years transfers. In general, budget funds always increase from the previous year's level, all the variation in the degree of budget growth varies across regions. As a consequence of this, a comparison of the degree of budget growth in transfers per capita in the regions is the most useful way to understand how regime maintenance considerations influence overall transfers.[19] Statistically, the use of a differenced dependent variable allows us to resolve stationarity problems in the data, which would violate some of the core assumptions for the Arellano-Bond (1991) framework for dynamic panels (and alternative method). Due to our use of this first difference, our results describe the relative year-on-year growth in transfers given to regions, not overall transfers. Our hypothesis should still apply as written.

Measuring Elite Strength and Popular Opposition

Because the total size of transfers for a given year is set in the previous year, we take the lag of all of our independent variables. We argue that this somewhat mitigates the risk of endogeneity among some of our independent variables, although we also rely on a set of internal and external instruments. In order to measure the degree of threat posed by voters, we follow previous literature in using vote shares for the party of power in the most recent election as a measure of the degree of popular support for the incumbent (Treisman 1996, 1998; Popov 2004; Magaloni 2006; Blaydes 2010).[20] We use both data on the vote share for the party in power (*urvote*) and share of votes for Vladimir Putin (*wpshare*) in the most recent election.[21] In addition, we also include the vote share of the most prominent opposition party, the Communist Party of the Russian Federation (KPRF). Because simple vote shares can be misleading in highly fragmented systems, we also check the margin of victory for the party of power over the runner up in the election (*margind*). As many analysts consider most Russian parties to be captured by

[19] This discussion is based on feedback from the experts at the Center for Fiscal policy, a seminar held at the International Center for the Study of Institutions and Democracy in September 2011, and personal contacts between the authors and Ministries of Finance and Economic Development.

[20] We recognize that vote shares in a hegemonic party system such as Russia's are subject to manipulation and may, in fact, be a proxy for governor's political machines. Nonetheless, we argue that even if there is some degree of manipulation, these vote shares roughly reflect reality. Moreover, for other reasons previously discussed, we have already removed the cases of Chechnya and Ingushentia, which are the two regions known for the most egregious vote manipulation. Unfortuantely, we do not have enough observed elections to calculate better measures of the risk of using elections, which would be more appropriate here (Diaz-Cayeros 2008)

[21] Here we define the party of power as votes for United Russia after the party formed in 2003. As mentioned earlier, United Russia formed out of two existing parties, Unity and Fatherland All-Russia (OVR) in 2001. Consequently, we assume that the vote total for United Russia prior to its formation would have been the combined vote total of these two parties.

United Russia, the simple margin of victory may not be informative, as the second place party may be in United Russia's pocket. Consequently, we also include the margin of victory of United Russia over the KPRF (*opdom_duma)*. We recognize the serious problem of endogeneity with using this data, so we instrument for vote shares using a measure of the percentage of agricultural employees in total regional employment, an instrument which has been found to be highly correlated with vote shares (especially those for the KPRF, *kdshare*) in previous research (Hale 2003; Reuter 2012).

In order to measure the strength of the elite, we make use of a novel dataset of biographical data on all Russian governors, Vice-governors, and prominent ministers from 1991 -2011, which was constructed by the International Center for the Study of Institutions and Development. As noted in the previous section, we mostly on governors in the version of the paper, because most accounts of Russian politics focus on them as the major regional threats to the center (Treisman 1996, 1998; Jarocińska 2010; Robertson 2010). [22] As mentioned in section two of this paper, we expect that the elites that pose a threat to the regime are those who have autonomous power resources – independent economic assets, established connections to their regions and the population there, or strong political machines. In order to test these hypotheses, we use three distinct measures from the dataset.

The first is a measure of the Governor's popularity in the region (*share_bad*) constructed from public surveys conducted by the Georating Agency in 65 regions, which we believe proxies for the general level of public support for regional elites.[23] We expect high unfavorable ratings to be an indication of the governor's lack of connections to the populace and general weakness. Our second measure is a proxy for the general connections of governors to their regions and to economic actors – the number of years each governor worked in their region prior to appointment.[24] We construct this variable using the work history of individual governors and determining whether their places of employment – both private and public sector – are located in the region in which they serve. Our expectation is that governors who worked for long periods of time in their regions will have deeper connections to regional elites and to the population as a whole. Finally, we use a measure that captures whether governors had experience serving in their region's executive branch. We argue that past connections to the regional executive imply that

[22] In subsequent versions of this paper, we will test vice-governor characteristics, as they are much more accurate measures of regional elite characteristics. Unfortunately, this data was unavailable in time for inclusion in this draft.
[23] This variable is constructed using the question: "How do you rate the work of the governor of your region?" with four response categories: good, bad, don't know, no response. We use the share of respondents who answered "bad" for each region to construct the variable.
[24] We are currently gathering data on the companies governor's worked for/owned. In the next draft of this paper, we hope to use map this data to data on Gross Regional Product contributions and tax contributions by discrete sectors to regional totals. We think that this data will be a better measure of whether the governor has autonomous power resources. For now, however, we use the simple measures.

the individual is well integrated and connected to the region's political elite and can likely count on its cooperation in confrontations – elite solidarity is an important autonomous power resource. In addition, these individuals are likely more apt at manipulating levers of power in order to obtain what they desire from the populace. This variable is a dummy variable coded 1 if the governor has worked for the regional executive at any time prior to becoming governor.

In addition to these variables, we test our theory of transfers under varying economic conditions by including a measure of economic growth and an interaction term between growth and our other main independent variables (UR vote share, years worked in region, etc.). This variable is calculated using the GRP index of physical volume. We recognize that both this variable and one of our controls, level of economic development, are endogenous to transfers. To deal with this, we construct a matrix of instruments which uses growth in transfers at time *t*-2, average temperature per capita in January (Mikhailova 2005), a standardized coefficient of working age male mortality, and, for the specifications with interaction terms, the interaction between the growth rate of the dependent variable at time *t*-2 and the variable of interest. These variables are relatively well correlated with both economic growth and level of economic development and clearly satisfy the exclusion restriction on instruments.[25]

We use the Angrist-Pischke cluster-robust first stage F statistic to test the relevance of every single endogenous regressor. These first-stage statistics seem to be lower than 10, indicating weak instruments (Stock, Staiger 1997). According to the Anderson-Rubin test (an LM test) for weak instruments robust inference, however, the instruments we are using are appropriate. The Stock-Wright test (a GMM distance test), in turn, suggests that our instruments are relevant at the 5 to 10% confidence level. The Hansen test for over-identifying restrictions says that additional moment conditions are correctly specified, especially in the specifications with the interaction term (Baum, Schaffer, Stillman 2010). Overall, we believe that while the Angrist-Pischke F-statistic indicates problems with our instrument, the other two tests provide reasonable evidence that the instruments are valid.

We also control for level of economic development (deflated regional GRP per capita, *reg_grpcapdefl*), the percentage of pensioners (*reg_sharepens*) and children under the age of 18 (*reg_sharebef18)*, the degree of urbanization (*urbaniz)*, percentage of education and health workers in total employment (*reg_heductoempd)*[26]. These controls should account for the portion of central government transfers made due to economic and social considerations. In addition, we

[25] The level of growth in transfers per capita in time t-2 meets the exclusion restriction because we control for autocorrelation in ε_{it} .

[26] We exclude percentage of education and health workers in total employment to avoid multicollinearity (see Appendix 1 for the correlation matrix)

also control for the share of people working in the bureaucratic structure per 1000 square kilometers of regional territory (*bureaucrats*). We include this variable, because we want to control for the lobbying power of regions in the analysis but have no direct measures. We argue that larger bureaucracies are more likely to be able to produce the written reports and petitions critical to lobbying the federal government.

Results and Discussion

We begin by examining the influence of vote shares on year-on-year growth in transfers. Recall from the second section of this paper that we wish to test whether Russia exhibits core or swing voter dynamics, as well as whether these effects depend on the degree of economic growth. Table 2 presents the results of our analysis. Interestingly, the signs on the main effects of our political variables – United Russia vote share, United Russia's margin of victory, candidate Putin's vote share, and United Russia's margin ov victory over the KPRF vote share were all negative, indicating a swing voting dynamic. Conversely, the variable for KPRF vote share is positive, indicating the same. In these specifications, however, the variables are all insignificant at conventional levels (Columns 1,3,5,7,9). In general we would expect that economic growth would have a negative effect on overall growth in transfers. This prediction is born out, although growth is insignificant at conventional levels in these specifications. In general, most of the control variables behave as expected in these specifications, although only number of bureaucrats per sq. 1000 kilometer is significant at conventional levels.

Moving to specifications with an interaction between the political variable of interest and growth, however, alters the findings substantially.[27] In these specifications (columns 2,4,6,8, and 10) the political variables of interest are now positive and significant in all specifications, which is consistent with a general core voting effect. Conversely, KPRF's vote share is now negative. Growth is again significant and positive, although the net effect is negative overall when we take into account the interaction term. The interaction term itself between growth and the political variables (again except KPRF, which has the opposite sign) is significant and negative.

Because of the interaction term between these variables and growth, however, the overall effect of the political variablesis a linear combination of the terms for the political variable and the interaction term and depends on the levels of its component variables. Interpreting variables in this way can be difficult, so we present Figures 2-5, which show the marginal effect of a 1 percentage point change in the vote share variable on overall growth in transfers for different levels of growth. In all of the Figures, a 1 percent increase in the vote share variables leads to a

[27]We believe that the drastic difference between these specifications stems from the fact that although the political variables matter, there are non-linearities in the effect which depend on the level of growth in a given region. These are obscured in the model without interactions.

higher growth rate in transfers for the next year at growth rates below 5%, which corresponds to roughly half of our sample. When growth rates are higher than 10% (about 10% of the sample) the effect of a 1% change in vote shares is negative. These results support our main hypothesis on voting dynamics. In regions where growth is slow, we observe the expected core-voting effect. In regions where growth is relatively fast, however, additional votes for United Russia, higher Margins of victory, etc. not only result in slower growth in transfers, but actually produce negative rates! Conversely, regions associated with with smaller margins of victory for United Russia, margins of victory, etc., classic swing regions, actually experience larger growth in transfers.

As expected, the above results prove to be robust when we use the discretionary portion of transfers as the dependent variable (Table 4), as well as when we test KPRF vote share. In the latter, we would expect the signs and slope of the marginal effects to be opposite of what they were for the other voting variables, since the KPRF is the main opposition party. Columns 10 of Tables 2 and 4 bear this out, as does the slope of the marginal effect in Figure 5.

Turning to our measures of elite power (Table 3), we find that the measure of governor unfavorability is significant and negative, as one would predict, in specifications without the cross term (Column 1). Unpopular governors have a harder time securing additional growth in transfers from the center. Oddly, however, the specification with the cross-term is insignificant (Column 2). We suspect that this may be due to a selection effect in the sample, for which Georating (the source of our data) provided no clearly articulated rationale. We were unable to verify this, unfortunately. As with the measures of vote share, both of our other measures of elite strength, years that the governor worked in the region and regional executive experience, were insignificant in specifications without cross-terms. In specifications with the interaction between the elite strength variables and growth, both the main effects of the elite strength variables were negative and significant, indicating that on the whole strong elites got smaller year-on-year increases in transfers than their counterparts. The cross terms for these variables where positive, significant, and of a larger magnitude than the main effects, however, indicating that at least some powerful governors did in fact receive faster transfer growth than their peers. The main effect of growth, by contrast, was negative, significant, and larger in magnitude than the cross-term.

Figures 7 and 8 allow us to gauge which subset of powerful governors benefited from larger transfer growth. The effect of a one year increase in the number of years a governor served in a region resulted in negative transfer growth for regions that grow below about 5% (about half the sample), while powerful governors who achieved a growth rate greater than about 10% (only 90% of the sample) get larger increases in their yearly transfers. In general, this contradicts our

hypothesis, as we would have expected a trade-off between growth and the strength of the governor. Recall, in section two we argue that powerful governors in fast-growing regions will receive fewer transfers, because the threat posed by the elites is offset by increased popular support stemming from growth. In fact, the opposite occurred: the marginal effect of power was larger in the fastest growing regions than in the slowest ones. It is unclear why this would be the case from a theoretical standpoint. We speculate that perhaps powerful governors in fast-growing regions are able to capture some of the growth as rents for themselves and their economic networks. These rents could then be used to develope additional power resources. Alternatively, it could be the case that powerful governors are better Unfortunately, we are unable to test this bit of speculation in the current version of this paper, although we hope to do so in subsequent drafts.

Robustness Checks

We run several tests in order to check the robustness of our results. We tried controlling for a electoral variables in our tests of elite strength and vice versa to make sure that the mechanisms we attribute to powerful elites are not byproducts of these elites' ability to deliver votes or that electoral variables were simply correlated with strong governors. Our results for the voting variables proved robust. Interestingly when we control for the vote share of United Russia our measure of governor's regional executive experience becomes insignificant, indicating that regional experience effects growth in transfers only through its effect on vote shares. Unlike the variable for regional executive experience, however, the number of years a governor worked in the region remains robust to controling for electoral variables. We also controlled for the share of regional tax revenue relative to total income, and the results remained the same. In additional robustness checks we also tried excluding regions which may be considered outliers (e.g. Moscow city and St. Petersburg). Our results remain robust to all of these permutations.

We also speculated in Section 3 of this paper that there may be variation in the strategic calculus of Putin's government prior to the 2003 Kozack reforms. We recognize that doing so imperils our results, since the resulting time period of analysis is quite short. When we dropped the years prior to 2003 from the sample in order to test whether our results were robust to the exclusion of the pre-Kozacks reform time periods, we find that some results lose significance. We find robust results for the UR vote share in terms of total transfers only (see Appendix 2, Table 11). The vote margin, opposition dominance, and elites strength indicators are insignificant, however. Using our measure of discretionary transfers our results for years of work remain robust if we drop years prior to 2003, however (see Appendx 2, Table 14).[28]

[28] This later result is consistent with the growing role of FFSR in the total budget as a means of curtailing the power of the elite, even as discretionary transfers continued in a diminished state. Since the Kozack reforms took place in

Conclusions

In this paper, we have argued that the threats posed to autocrats by the population and by elites are both important in understanding the strategies that elites use in order to maintain their regimes and advance two main lines of arguments. First, while the populace also receives transfers, which groups are targeted for transfers changes due to the dominant parties calculations of the effect of economic conditions on support. Specifically, dominant parties transfer to their core, regions that overwhelmingly support them at the ballot box, when economic growth is slow and it fears the erosion of support. When economic growth is relatively fast, dominant parties instead target swing regions, where margins of victory are slim, since they can rely on good growth outcomes to maintain their support amongst core voters. Second, elites with autonomous power resources, here measured as deep connections to their regions, should receive transfers to co-opt them and prevent coups. As economic growth increases in a given area, however, these elites should see their overall transfers decrease, since the regime can rely on direct support from the populace. Overall, our statistical tests largely confirm our theory. All else equal, transfers grow faster in regions that vote more heavily in favor of United Russia if they are among the bottom 50% of Russian regions in terms of economic growth and fewer transfers if they are among the top 10%. We also show that regions headed by powerful governors also receive faster transfers growth than those whose governors are less well connected. The only portion of our theory unsupported was our assumption that transfers to powerful elites would be mitigated by negative transfers.

Our findings have several important implications for the broader literature. First, our findings imply that much of the existing work on regime maintenance strategies, while valuable, has been incomplete. Not only do regimes craft strategies to simultaneously deal with threats stemming from both popular and elite, but the very nature of those strategies is conditional on expectations about support which are related to macro-economic conditions at the sub-national level. Consequently, our findings raise major questions about the extent to which regime maintenance strategies vary at the sub-national level. Are regime maintenance strategies one size fits all, as many studies have assumed, or does the logic of autocratic regime maintenance depend on conditions on the ground. More work is necessary to verify whether this lack of

---

2003, these findings are also consistent with the notion that repression of one group (in this case elites) decreases the importance of that group in decisions to allocate future transfers. We speculate that the Kozack reforms and the repression of elite capabilities taken during and after them may have altered the strategic calculus of the center (as discussed in section 3 of the paper). If this is the case, then the co-efficients from before and after the reforms may differ, as may which indicators are significant predictors of growth in transfers. We are cautious about these results, however, due to the short time period analyzed. We hope to acquire pre-2000's data that will allow us to split our sample into appropriate sub-samples in order to analyze whether there is some period specific effect (probably related to the Kozacks reform) or simply the result of loss of consistency from too few year observations.

uniform strategy implied by our findings is normal or a consequence of the unconsolidated nature of Russia's dominant party system during our period of study.

Second, by showing how the logic of transfers changes based on economic conditions, we offer a potential solution to the theoretical and empirical controversy surrounding the core verus swing debate. While it is certainly the case that the dominant party system we study here is not perfectly representative of democracy in the countries of the OECD, we argue that our general results are still informative to the literature on voting in low and middle income countries. Russian voters are little different from Western voters in terms of the issues dimensions that inform their party choices and how they evaluate incumbents (Colton and Hale 2009a, 2009b, Treisman 2011). As a consequence, the sorts of transfer strategies that can elicit support from them are also likely to be effective in settings with similar macro-economic characteristics but more competition.

Much work remains to be done, however, as our project leaves open several unanswered questions. First, to what extent are the findings we generate here the result of an unconsolidated dominant party system? United Russia was formed in 2003, part way through the period we test. As a consequence, it is unclear if our results would travel to more fully autocratic regimes, where the dominant party has had time to consolidate control over the populace and eliminate competition. One simple but valuable extension of our work would test whether the autocratic regime maintenance strategies we have identified here vary over time using a case of a long-lasting, dominant pary, such as Mexico's PRI. Second, to what extent do the core and swing voter dynamics we have identified in this paper depend on the dominant party setting. As we note above, we believe the results are more generalizable. Nonetheless, a valuable extension of this work would employ our theoretical framework to test transfer strategies in other low to middle income, federal settings. A final open question is what sub-national conditions – structural or institutional – might also effect the decisions of politicians to target transfers to swing versus core voters. Although in this paper we have focused on the role of economic growth, sub-national units vary widely over a number of other conditions which might alter the pay-offs to core versus swing voting strategies. More work needs to be done to identify these conditions and better integrate core and swing voter models of voting.

Bibliography

Acemoglu, D., & Robinson, J. A. (2005). *Economic Origins of Dictatorship and democracy.* New York: Cambridge University Press.

Arellano M., and S. Bond. 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. Review of Economic Studies 58: 277–97. 23:44

Baum, C.F., Schaffer, M.E., & Stillman, S. (2010). ivreg2: Stata module forextended instrumental variables/2SLS, GMM and AC/HAC, LIML and k-class regression. http://ideas.repec.org/c/boc/bocode/s425401.html

Baum, C.F., Schaffer, M.E. (2007). Enhanced routines for instrumental variables/GMM estimation and testing. *Boston College Economics Working Paper* No. 667.

Bellin 2002

Boix, C., & Svolik, M. (2009). *The Foundations of Limited Authoritarian Government: Institutions and Power-Sharing In Dictatorships*. Retrieved from Social Science Research Network: http://ssrn.com/abstract=1352065

Blaydes. L. (2010). *Elections and Distributive Politics in Mubarak's Egypt*. Cambridge, Cambridge University Press.

Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. Journal of Econometrics 87: 11–143.

Boix, C. & Stokes, S.C. (2003). Endogenous Democratization. *World Politics*, 55 (4), 517-549.

Bratton, M. & Van de Walle, N. (1992). Popular Protest and Political Reform in Africa. *Comparative Politics*, 24 (4), 419-442

Brownlee, J. (2007). *Authoritarianism in an Age of Democracy.* New York: Cambridge University Press.

Bueno de Mesquita, B., Smith, A., Siverson, R. M., & Morrow, J. D. (2003). *The Logic of Political Survival.* Cambridge: MIT Press.

Bunce, V. & Wolchik, S.L. (2011). *Defeating Authoritarian Leaders in Postcommunist Countries*. Cambridge: Cambridge University Press.

Cheibub, J., Gandhi, J., & Vreeland, J. (2009). Democracy and Dictatorship Revisited. *Public Choice*. 143, 67-101.

Colton, T.J. and Hale, H.E. (2009a). The Putin Vote: Presidential Electorates in a Hybrid Regime. *Slavic Review*, 68 (3), 473-503

Colton, T.J. and Hale, H.E. (2009b). Russians and the Putin-Medvedev "Tandemocracy" A Survey-Based Portrait of the 2007-2008 Election Season. *Problems of Post-Communism*, 57 (2), 3-20.

Cox G. & McCubbins M.. (1986). Electoral Politics in a Redistributive Game. *Journal of Politics*, 48, 370-89.

Cox, G.W. (2010). "Swing voters, core voters, and distributive politics". in I. Shapiro, S. C. Stokes , E. J. Wood, & A. S. Kirshner *(Eds.),* Political representation (pp. 342-357). Cambridge, England: Cambridge University Press.

Davenport, C. (2007). State Repression and the Tyrannical Peace. *Journal of Peace Research*, 44 (4), 485-504.

Desai, R. M., Ologsgard, A., & Yousef, T. (2009). The Logic of Authoritarian Bargains. *Economics and Politics, 21*(1), 93-125.

Di Palma. G. (1991) Legitimation from the Top to Civil Society: Politico-Cultural Change in Eastern Europe. World Politics, 44 (1), 49-80.

Dixit, A. & Londregan, J. (1996). The Determinants of Success of Special Interests in Redistributive Politics. *Journal of Politics*, 58, 1132-55.

Diamond, L. (2002) Thinking about hybrid regimes. *Journal of Democracy,* 13**,** 21-35.

Diaz-Cayeros, A., F. Estevez, and B. Magaloni (2010). *From Clientalism to Entitlements: The Politics of Social Transfers in Mexico, 1989-2006*. Mimeo. Available at: www.stanford.edu/~albertod/buyingvotes/buyingvotes.html

Diaz-Cayeros, A. (2008). Electoral Risk and Redistributive Politics in Mexico and the United States. *Studies in Comparative International Development*, 43, 129-150

Duch, R. and Stevenson, R. (2006) Assessing the Magnitude of the Economic Vote over time

and Across Nationas. *Electoral Studies*, 25, 528-47.
Filippov, M., Ordeshook, P. C., & Shvetsova, O. (2004). *Designing Federalism: A Theory of Self-Sustainable Federal Institutions.* Cambridge: Cambridge University Press.
Gandhi, J. (2008). *Political Institutions Under Dictatorship.* New York: Cambridge University Press.
Gandhi, J., & Przeworski, A. (2006). Cooperation, Cooptation, and Rebellion under Dictatorships. *Economics and Politics*, 18, 1-26.
Gasiorowski.M. (1995). Economic Crisis and Political Regime Change: An Event History Analysis. *American Political Science Review*, 89, 882-97.
Geddess, B. (1999). What do we Know about Democratization After Twenty Years?. *Annual Review of Political Science*, 2, 115-144.
Gehlbach, S. & Keefer, P. (2011) Investment without Democracy: Ruling-party Institutionalization and Credible Commitment in Autocracies. *Journal of Comparative Econoimcs* 39, 123-139.
Haber, S. H. (2007). Authoritarian Regimes. In B. R. Weingast, & D. Wittman (Eds.), *The Oxford Handbook of Political Economy* (pp. 693-707). New York: Oxford University Press.
Haber, S., Maurer, N., & Razo, A. (2003). *The Politics of Property Rights: Political Instability, Credible commitments, and Economic Growth in Mexico, 1876-1929.* Cambridge: Cambridge University Press.
Haggard, S. & Kaufman, R.R. (1997). The Political Economy of Democratic Transitions. *Comparative Politics* 29 (3): 263-283.
Jarocinska, E. (2010). Intergovernmental Grants in Russia: Vote-buying or Bargaining Power of Regions. *Economics of Transition , 18* (2), 405-427.
Kuran, T. (1991). Now out of Never: The Element of Surprise in the East European Revolution of 1989. *World Politics*, 44 (1), 7-48.
Lane, D. (2008). From chaotic to state-led capitalism. *New Political Economy*, 13 (2), 177-184.
Levitsky, S., & Way, L. (2010). *Competitive Authoritarianism: Hybrid Regimes After the Cold War.* New York: Cambridge University Press.
Lewis-Beck, M. (1988). *Economics and Elections: The Major Western Democracies*. Ann Arbor: University of Michigan Press.
Lewis-beck, M. & Stegmaier, M. (2000). "Economic Determinants of Electoral Outcomes". *Annual Review of Political Science*. 3: 183-219.
Lust-Okar, E. (2006). Elections Under Authoritarianism: Preliminary Lessons from Jordan. *Democratization , 13* (3), 456-471.
Lust-Okar, E. (2005). *Structuring Conflict in the Arab World: Incumbents, Opponents, and Institutions.* New York: Cambridge University Press.
Magaloni, B. (2006). *Voting for Autocracy: Hegemonic Party Survival and its Demis in Mexico.* New York: Cambridge University Press.
Magaloni, B. (2008). Credible Power-Sharing and the Longevity of Authoritarian Rule. *Comparative Political Studies*, 41 (4-5), 715-741.
Mikhailova, T. (2005). The Legacy of Soviet Location Policy in Russian Energy Consumption, Productivity, and Growth. *Mimeo.* Cambridge, MA: Davis Center for Russian and Eurasian Studies.
Popov, V. (2004). Fiscal Federalism in Russia: Rules Versus Electoral Politics. Comparative Economic Studies , 44 (4), 515-541.
Reuter, O. J. (2010). "The Politics of Dominant Party Formation: United Russia and Russia's Governors". *Europe-Asia Studies*, 62 (2), 293-327.
Reuter, O.J. & Gandhi, J. (2011). Economic Performance and Elite Defection from Hegemonic Parties. *British Journal of Political Science*, 41 (1), 83-110.
Reuter, O.J. & G. B. Robertson. (2011). Sub-national Appointments in Authoritarian Regimes: Evidence from Russian Gubernatorial Appointments. *Mimeo*.

Reuter, O.J. & Remington, T.F. (2009). Dominant Party Regimes and the Commitment Problem: the Case of United Russia. *Comparative Political Studies*, 42 (4), 501-526.

Robertson, G. (2010). *The Politics of Protest in Hybrid Regimes: Managing Dissent in Post-Communist Russia.* New York: Cambridge University Press.

Rodman D. (2006) How to Do xtabond2: An Introduction to "Difference" and "System" GMM in Stata. WP No 103. Center for Global Development.

Sjoberg, F. (2012). *Competitive Elections in Authoritarian States: Weak States, Strong Elites, and Fractional Societies in Central Asia and Beyond.* Ph.D Dissertation, Uppsala University

Skocpol, T. (1979). *States and Social Revolutions: A Comparative Analysis of France, Russia, and China.* New York: Cambridge University Press.

Smith, B. (2005). Life of the Party: The Origins of Regime Breakdown and Persistence under Single-Party Rule. *World Politics* 57 (3), 421-451.

Stock, J.H., Watson, M.W. (2006). Heteroskedasticity-Robust Standard Errors for Fixed Effects Panel Data Regression. *NBER Technical Working Papers* 0323.

Svolik, M. (2009). *Power-Sharing and Leadership Dynamics in Authoritarian Regimes*. *American Journal of Political Science*. 53 (2), 477-494.

Treisman, D. (2011). "Presidential Popularity in a Hybrid Regime: Russia Under Yeltsin and Putin". *American Journal of Political Science*. 55 (3), 590-609.

Treisman, D. (1998). Fiscal Redistribution in a Fragile Federation: Moscow and the Regions in 1994. *British Journal of Political Science , 28*, 185-222.

Treisman, D. (1996). The Politics of Intergovernmental Transfers in Post-Soviet Russia. *British Journal of Political Science , 26*, 299-335.

Tucker, J. (2007). Enough! Electoral Fraud, Collective Action Problems, and Post-Communist Colored Revolutions. *Perspectives on Politics , 5* (3), 535-551.

Weingast, B. R. (1997). The Political Foundation of Democracy and the Rule of Law. *The American Political Science Review*, 91 (2), 245-263

Wintrobe, R. (1990). The Tinpot and the Totalitarian: An Economic Theory of Dictatorship. *American Political Science Review, 84*(3), 849-872.

Wintrobe, R. (1998). *The Political Economy of Dictatorship*. New York: Cambridge University Press.

Yakovlev, A, (2006). The evolution of business – state interaction in Russia: From state capture to business capture? *Europe-Asia Studies 58*, 7, pp. 1033–1056.

Table 1: Descriptive statistics for the dynamics of the FFSR grants in total transfers

Share of the FFSR grants in total transfers	2000-2004	2005-2008	2009
Mean	0.489	0.346	0.262
Min	0	0	0
Max	0.993	0.817	0.760
Std. dev. Overall	0.285	0.230	0.203
Std. dev. Between	0.257	0.219	0.203
Std. dev. Within	0.126	0.0731	0

Table 2: Estimation results for total transfers, 2003-2008, electoral variables

Dependent variable = D.transfpercapita Right-hand side variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
L.gdpgrowth	-42.20	218.1***	-42.04	67.54*	-43.26	66.23**	-47.53*	231.1***	-34.97	-162.7***
	(41.93)	(62.71)	(39.11)	(38.58)	(39.90)	(33.20)	(27.24)	(30.13)	(39.48)	(46.74)
L.reg_grpcapdefl	-0.632***	-0.104	-0.637***	-0.160	-0.638***	-0.108	-0.995***	0.0418	-0.668***	-0.0307
	(0.232)	(0.111)	(0.205)	(0.148)	(0.213)	(0.153)	(0.276)	(0.0608)	(0.221)	(0.111)
L.cross_term		-768.1***		-615.8***		-513.8***		-384.5***		1,042***
		(149.9)		(140.6)		(98.49)		(46.95)		(297.3)
L.urvote	-2.994	59.56***								
	(7.003)	(13.04)								
L.urbaniz	19.76	23.61	17.22	40.66	24.00	36.53	33.05	4.042	18.44	74.44
	(33.02)	(34.97)	(31.79)	(39.70)	(32.36)	(34.45)	(33.22)	(10.72)	(30.63)	(56.90)
L.reg_empbudgsect	-1.022	-1.557**	-1.057	-1.875**	-1.082	-1.463**	-1.037	-0.185	-0.778	-0.888
	(1.232)	(0.684)	(1.204)	(0.810)	(1.207)	(0.732)	(1.209)	(0.298)	(1.269)	(0.793)
L.reg_sharebef18	1.508	-0.254	1.388	-0.300	1.419	-0.371	0.779	-0.0225	1.044	-0.597
	(1.006)	(0.572)	(0.991)	(0.663)	(0.991)	(0.675)	(1.136)	(0.325)	(1.121)	(1.002)
L.reg_sharepens	4.418	1.221	4.377	1.979	4.487	1.590	5.583	-0.108	3.684	1.416
	(3.185)	(1.927)	(3.040)	(2.190)	(3.060)	(2.050)	(3.648)	(0.841)	(3.123)	(1.372)
L.bureaucrats	0.00197**	6.64e-05	0.00194**	0.000540	0.00197**	0.000179	0.00331***	-0.000194	0.00208**	-0.000150
	(0.000851)	(0.000440)	(0.000754)	(0.000476)	(0.000788)	(0.000523)	(0.000972)	(0.000220)	(0.000814)	(0.000389)
d2004	5.363**	-1.302	6.453***	-1.523	6.404**	-2.455	5.803**	-1.495***	8.026**	-3.093*
	(2.496)	(1.256)	(2.391)	(1.533)	(2.544)	(1.555)	(2.539)	(0.570)	(3.281)	(1.849)
d2005	10.42**	0.772	11.53***	0.535	11.49***	-0.651	15.26***	-0.810	12.97***	-2.316
	(4.144)	(1.784)	(3.843)	(2.170)	(4.007)	(2.185)	(5.537)	(1.128)	(4.768)	(2.454)
d2006	10.88***	-0.468	12.05***	-0.357	11.97***	-1.764	16.12***	-1.959	13.49***	-3.185
	(4.099)	(1.934)	(3.776)	(2.553)	(3.930)	(2.566)	(5.781)	(1.251)	(4.735)	(2.761)
d2007	16.46***	1.725	17.55***	2.020	17.51***	0.0862	23.54***	-0.741	19.12***	-2.500
	(5.712)	(2.575)	(5.216)	(3.228)	(5.424)	(3.279)	(7.481)	(1.595)	(6.249)	(3.506)
d2008	20.26**	4.883*	23.64***	5.012	22.62***	1.757	27.85***	-0.664	22.75***	-3.027
	(7.870)	(2.867)	(7.725)	(3.839)	(7.813)	(3.825)	(9.122)	(1.795)	(8.131)	(3.963)

Dependent variable = D.transfpercapita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Right-hand side variables:										
L.margind			-10.22	46.18***						
			(6.875)	(12.92)						
L.opdom_duma					-7.551	40.98***				
					(6.635)	(9.532)				
L.wpshare							-17.59	26.81***		
							(14.59)	(5.568)		
L.kdshare									29.71*	-73.89***
									(16.05)	(22.35)
Observations	544	539	544	539	544	539	546	541	544	539
Number of clusters	78	78	78	78	78	78	78	78	78	78
Hansen J OverID	7.010	2.505	7.133	2.121	7.196	2.229	5.339	1.417	5.792	0.763
Hansen p-value	0.00811	0.113	0.00757	0.145	0.00731	0.135	0.0209	0.234	0.0161	0.382
Anderson-Rubin Chi2 test	181.7	188.6	184.2	192.6	180.1	187.6	187.4	189.4	182.4	188.6
A-R Chi2 p-value	0	0	0	0	0	0	0	0	0	0
Stock-Wright LM S stat	5.510	10.24	5.619	9.010	5.530	11.94	4.136	5.411	5.563	8.042
LM S p-value	0.138	0.0366	0.132	0.0609	0.137	0.0178	0.247	0.248	0.135	0.0901

Cluster-robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. D denotes the first difference, L denotes the first lag. "e" means "*10".

Table 3: Estimation results for total transfers, 2003-2008, governors' variables (with robustness check for the UR votes share)

Dependent variable = D.transfpercapita Right-hand side variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
L.gdpgrowth	-12.75	-6.227	-15.23	-5.550	-32.75***	-131.7***	-50.77	-185.0***	-28.58**	-69.33***	-48.95	-50.97
	(12.43)	(29.31)	(12.86)	(30.13)	(12.41)	(25.42)	(38.75)	(42.19)	(12.28)	(17.21)	(42.98)	(39.60)
L.reg_grpcapdefl	-0.319***	0.00777	-0.329***	0.0105	-0.633***	-0.0335	-0.664***	-0.0792	-0.602***	-0.155	-0.691**	-0.0144
	(0.119)	(0.0160)	(0.123)	(0.0129)	(0.147)	(0.113)	(0.221)	(0.138)	(0.140)	(0.217)	(0.270)	(0.248)
L.cross_term		53.64		50.99		14.39***		18.28***		201.7***		583.2
		(72.46)		(74.23)		(2.259)		(4.362)		(42.83)		(428.6)
L.share_bad	-2.851**	-2.927	-2.653**	-2.615								
	(1.330)	(4.128)	(1.266)	(4.192)								
L.urbaniz	30.33***	7.279	30.11***	7.007	23.52	-16.80	16.86	-31.81	26.12	-16.94	23.59	17.81
	(9.324)	(6.197)	(9.284)	(5.960)	(21.68)	(22.61)	(31.85)	(40.87)	(21.79)	(16.38)	(35.21)	(59.47)
L.reg_empbudgsect	-0.595**	-0.0385	-0.602**	-0.0213	-1.184	-1.013**	-1.085	-1.476**	-1.346*	-0.203	-1.291	1.296
	(0.289)	(0.106)	(0.289)	(0.104)	(0.832)	(0.454)	(1.240)	(0.693)	(0.765)	(0.572)	(1.364)	(1.684)
L.reg_sharebef18	0.196	0.0650	0.237	0.0963	0.637	-0.336	1.601*	-0.233	0.348	-0.0561	1.584	-1.546
	(0.184)	(0.107)	(0.172)	(0.0986)	(0.756)	(0.791)	(0.967)	(1.101)	(0.733)	(0.463)	(1.072)	(1.791)
L.reg_sharepens	3.945***	0.295	4.062***	0.266	5.151**	1.938*	4.785	2.831*	5.226**	2.885*	4.134	3.515
	(1.477)	(0.278)	(1.531)	(0.247)	(2.150)	(1.095)	(3.127)	(1.636)	(2.108)	(1.678)	(3.633)	(2.501)
L.bureaucrats	0.000836**	-0.000121***	0.000862**	-0.000133***	0.00197***	0.000123	0.00209**	0.000326	0.00182***	0.000370	0.00218**	-0.000690
	(0.000356)	(4.54e-05)	(0.000364)	(4.29e-05)	(0.000597)	(0.000453)	(0.000826)	(0.000558)	(0.000567)	(0.000778)	(0.000959)	(0.00134)
d2004	2.035**	-0.526**	1.863*	-0.661***	4.054***	-1.776	5.935***	-1.592	3.592**	1.183	5.687**	-0.608
	(1.019)	(0.221)	(0.972)	(0.185)	(1.400)	(1.196)	(2.296)	(2.058)	(1.404)	(1.364)	(2.731)	(2.855)
d2005	4.767***	0.103	4.709***	-0.0253	8.838***	-0.278	11.31***	0.420	8.027***	3.032	11.06**	-1.480
	(1.820)	(0.290)	(1.800)	(0.244)	(2.291)	(1.849)	(3.828)	(2.660)	(2.281)	(2.357)	(4.596)	(5.078)
d2006	5.116***	0.121	5.067***	0.000256	9.636***	-0.615	11.72***	-0.0281	8.780***	2.716	11.51**	-0.762
	(1.907)	(0.332)	(1.892)	(0.270)	(2.343)	(2.333)	(3.787)	(3.143)	(2.352)	(2.635)	(4.626)	(4.932)
d2007	7.220***	0.207	7.282***	0.0926	13.84***	-1.492	17.62***	-0.464	12.58***	4.327	17.72***	-2.483
	(2.722)	(0.466)	(2.732)	(0.393)	(3.568)	(3.189)	(5.311)	(4.264)	(3.503)	(3.937)	(6.363)	(7.543)
d2008	8.237**	-0.00325	7.610**	-0.479	16.61***	-2.599	21.78***	-2.403	15.01***	4.806	21.86**	-1.716
	(3.220)	(0.527)	(3.091)	(0.434)	(4.670)	(3.788)	(7.461)	(5.842)	(4.528)	(4.728)	(8.593)	(8.653)

Dependent variable = D.transfpercapita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Right-hand side variables:												
L.urvote			2.999*	1.435**			-3.434	2.673			-2.282	-10.54
			(1.675)	(0.687)			(6.963)	(5.584)			(6.776)	(12.20)
L.reg_yrswork					0.00274	-0.907***	0.0581	-1.166***				
					(0.0707)	(0.186)	(0.0960)	(0.307)				
L.reg_executive_expimmprior									-1.933	-14.27***	0.916	-38.19
									(1.568)	(3.203)	(2.666)	(28.16)
Observations	443	438	443	438	546	541	544	539	546	541	544	539
Number of clusters	65	65	65	65	78	78	78	78	78	78	78	78
Hansen J OverID	2.152	2.897	2.357	3.021	4.595	1.716	7.161	1.015	3.662	0.613	7.272	0.0865
Hansen p-value	0.142	0.0887	0.125	0.0822	0.0321	0.190	0.00745	0.314	0.0557	0.434	0.00700	0.769
Kleibergen-Paap UnderID	0.577	3.591	0.545	3.342	2.622	2.946	3.570	8.814	2.365	1.343	3.574	2.860
UnderID p-value	0.749	0.166	0.761	0.188	0.269	0.229	0.168	0.0122	0.306	0.511	0.167	0.239
Weak ID test	0.195	1.091	0.183	1.006	1.870	0.839	4.082	1.652	1.742	0.533	4.084	0.414
Anderson-Rubin Chi2 test	38.46	39.34	36.66	38.84	213.9	214.9	173.6	177.3	220.6	220.0	181.4	182.8
A-R Chi2 p-value	2.26e-08	5.93e-08	5.43e-08	7.51e-08	0	0	0	0	0	0	0	0
Stock-Wright LM S stat	11.95	14.67	11.65	14.85	6.057	6.618	5.611	6.365	5.508	5.424	5.452	5.532
LM S p-value	0.00756	0.00544	0.00867	0.00502	0.109	0.157	0.132	0.173	0.138	0.246	0.142	0.237

Cluster-robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. D denotes the first difference, L denotes the first lag. "e" means "*10".

Table 4: Estimation results for discretionary non-FFSR transfers, 2003-2008, electoral variables

Dependent variable = D.restpercapita Right-hand side variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
L.gdpgrowth	-43.78***	94.37***	-43.35***	30.71	-43.44***	35.83*	-27.22**	151.0***	-40.09***	-108.1***
	(8.893)	(31.65)	(9.349)	(19.79)	(9.111)	(19.98)	(12.38)	(16.59)	(9.785)	(14.22)
L.reg_grpcapdefl	-0.531**	-0.0513	-0.523**	-0.0849	-0.525**	-0.0584	-0.713***	0.0225	-0.460**	0.0114
	(0.207)	(0.0405)	(0.212)	(0.0534)	(0.211)	(0.0496)	(0.199)	(0.0151)	(0.205)	(0.0445)
L.cross_term		-301.6***		-228.0***		-215.9***		-239.0***		722.7***
		(58.48)		(48.40)		(43.42)		(20.78)		(180.0)
L.urvote	1.544	24.49***								
	(5.316)	(5.005)								
L.urbaniz	14.20	12.85	15.26	16.65	17.25	18.34	32.30	5.871	9.947	50.97
	(23.71)	(15.02)	(25.09)	(15.83)	(24.35)	(14.78)	(24.81)	(8.313)	(23.10)	(31.20)
L.reg_empbudgsect	-1.683*	-0.749***	-1.757*	-0.907***	-1.723*	-0.770**	-1.828	-0.234*	-1.390	-0.644*
	(0.884)	(0.290)	(0.931)	(0.318)	(0.924)	(0.310)	(1.153)	(0.141)	(0.947)	(0.339)
L.reg_sharebef18	0.845	-0.0503	0.860	-0.0322	0.849	-0.119	0.152	0.0590	0.697	-0.436
	(0.610)	(0.280)	(0.624)	(0.300)	(0.619)	(0.295)	(0.879)	(0.247)	(0.678)	(0.495)
L.reg_sharepens	4.912*	0.645	4.879*	1.006	4.849*	0.780	5.867	-0.234	3.698	0.313
	(2.730)	(0.867)	(2.748)	(0.916)	(2.739)	(0.842)	(3.720)	(0.357)	(2.522)	(0.555)
L.bureaucrats	0.00158**	7.32e-06	0.00152**	0.000260	0.00155**	8.04e-05	0.00220***	-0.000143	0.00134**	-0.000207
	(0.000687)	(0.000182)	(0.000701)	(0.000200)	(0.000699)	(0.000197)	(0.000600)	(0.000116)	(0.000662)	(0.000212)
d2004	4.218***	-0.789	4.756***	-0.721	4.685***	-1.304	4.265***	-0.960***	6.007***	-2.600*
	(1.070)	(0.793)	(1.168)	(0.884)	(1.202)	(0.938)	(1.617)	(0.285)	(2.047)	(1.367)
d2005	8.596***	0.391	9.098***	0.598	9.023***	-0.176	10.23***	-0.731	9.862***	-2.212
	(1.940)	(1.119)	(2.071)	(1.317)	(2.056)	(1.351)	(3.382)	(0.730)	(2.930)	(1.810)
d2006	8.918***	0.00787	9.425***	0.327	9.327***	-0.574	11.18***	-1.399**	9.928***	-3.018*
	(2.604)	(0.990)	(2.726)	(1.241)	(2.699)	(1.269)	(3.734)	(0.628)	(3.633)	(1.730)
d2007	13.20***	0.987	13.65***	1.520	13.58***	0.420	15.74***	-0.302	13.99***	-2.264
	(3.040)	(1.451)	(3.224)	(1.767)	(3.186)	(1.760)	(4.270)	(0.736)	(4.054)	(2.280)
d2008	15.02***	1.847	16.61***	2.316	16.28***	0.731	18.14***	-0.557	16.35***	-3.038
	(3.690)	(1.536)	(4.395)	(1.963)	(4.210)	(1.960)	(4.782)	(0.873)	(5.095)	(2.599)

Dependent variable = D.restpercapita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Right-hand side variables:										
L.margind			-2.523	17.89***						
			(5.175)	(4.457)						
L.opdom_duma					-1.765	17.95***				
					(4.808)	(4.113)				
L.wpshare							-6.964	18.60***		
							(9.175)	(4.606)		
L.kdshare									19.20*	-52.25***
									(11.67)	(14.76)
Observations	544	539	544	539	544	539	546	541	544	539
Number of clusters	78	78	78	78	78	78	78	78	78	78
Hansen J OverID	2.764	2.657	3.179	2.151	3.069	1.902	1.603	0.938	3.211	0.379
Hansen p-value	0.0964	0.103	0.0746	0.142	0.0798	0.168	0.205	0.333	0.0732	0.538
Anderson-Rubin Chi2 test	715.4	715.1	749.2	748.2	727.9	694.6	317.8	348.8	784.4	802.2
A-R Chi2 p-value	0	0	0	0	0	0	0	0	0	0
Stock-Wright LM S stat	5.154	5.172	5.316	8.111	5.191	8.093	3.212	3.092	5.365	5.370
LM S p-value	0.161	0.270	0.150	0.0876	0.158	0.0882	0.360	0.542	0.147	0.251

Cluster-robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. D denotes the first difference, L denotes the first lag. "e" means "*10".

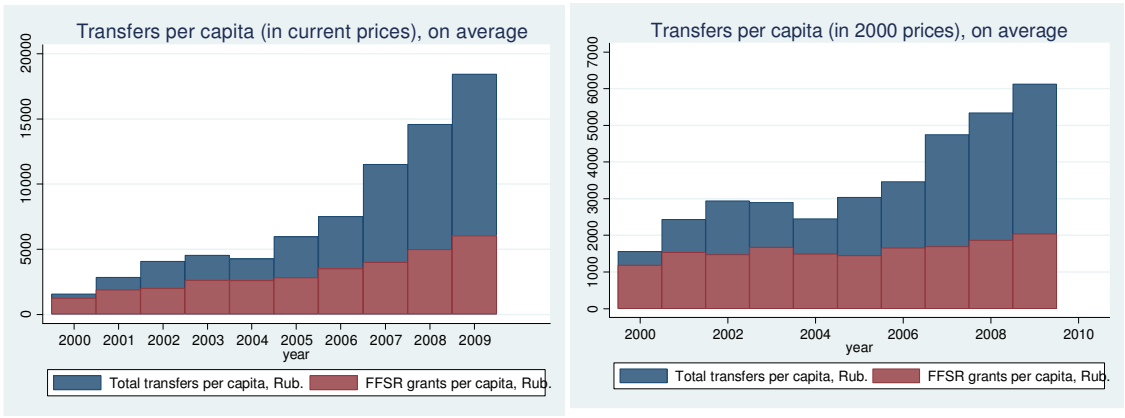
Table 5: Estimation results for discretionary non-FFSR transfers, 2003-2008, governors' variables (with robustness check for the UR votes share)

Dependent variable = D.restpercapita Right-hand side variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
L.gdpgrowth	-24.48	29.04	-28.15	28.56	-14.39*	-107.0***	-42.20***	-107.8***	-10.84	-46.93***	-39.37***	-53.99*
	(21.75)	(28.43)	(18.53)	(26.12)	(8.432)	(22.41)	(8.358)	(11.74)	(9.682)	(9.353)	(8.755)	(31.07)
L.reg_grpcapdefl	-0.396**	-0.00792	-0.409***	-0.00797	-0.557***	0.0499	-0.523**	0.0356	-0.546***	0.00810	-0.543***	0.183
	(0.177)	(0.0180)	(0.155)	(0.0159)	(0.115)	(0.0537)	(0.210)	(0.0566)	(0.103)	(0.0299)	(0.172)	(0.143)
L.cross_term		-54.38		-53.89		12.61***		11.11***		128.1***		505.6
		(77.06)		(68.23)		(1.528)		(2.916)		(16.04)		(317.4)
L.share_bad	-4.526*	3.056	-4.352**	3.071								
	(2.429)	(4.166)	(2.046)	(3.671)								
L.urbaniz	35.43**	3.307	35.26***	3.165	29.48	-15.62	14.77	-22.86	30.53	-18.92*	19.02	-3.760
	(14.56)	(4.374)	(12.41)	(4.831)	(20.66)	(22.55)	(24.24)	(20.23)	(20.68)	(10.94)	(23.79)	(54.10)
L.reg_empbudgsect	-0.608	0.0417	-0.607*	0.0427	-1.480	-0.785**	-1.618*	-0.794**	-1.516*	-0.0832	-1.821**	1.448
	(0.414)	(0.0697)	(0.340)	(0.0712)	(0.914)	(0.397)	(0.931)	(0.370)	(0.855)	(0.249)	(0.787)	(1.335)
L.reg_sharebef18	-0.0657	0.112	-0.0266	0.121	0.124	-0.346	0.820	-0.159	0.00264	0.171	0.611	-1.010
	(0.270)	(0.107)	(0.210)	(0.0973)	(0.729)	(0.627)	(0.614)	(0.525)	(0.749)	(0.377)	(0.650)	(1.376)
L.reg_sharepens	4.688**	0.415	4.794**	0.428*	4.725*	0.609	4.605	0.677	4.808*	0.499	5.013*	0.398
	(2.337)	(0.263)	(2.017)	(0.245)	(2.651)	(0.786)	(2.813)	(0.713)	(2.801)	(0.480)	(2.596)	(2.196)
L.bureaucrats	0.00107**	-1.79e-05	0.00111**	-2.01e-05	0.00168***	-0.000159	0.00156**	-8.36e-05	0.00161***	-0.000105	0.00158***	-0.00111
	(0.000518)	(7.37e-05)	(0.000454)	(6.80e-05)	(0.000367)	(0.000314)	(0.000690)	(0.000302)	(0.000319)	(0.000183)	(0.000583)	(0.00116)
d2004	2.555*	-0.319*	2.390**	-0.345*	3.147***	-2.115***	4.078***	-1.670	2.939***	0.355	3.915***	-1.251
	(1.449)	(0.166)	(1.185)	(0.179)	(1.041)	(0.748)	(1.017)	(1.227)	(1.117)	(0.601)	(0.907)	(2.560)
d2005	5.779**	0.500	5.754**	0.483	6.955***	-1.476	8.356***	-0.738	6.609***	1.294	8.193***	-2.668
	(2.714)	(0.370)	(2.292)	(0.350)	(1.654)	(1.084)	(1.873)	(1.634)	(1.760)	(0.827)	(1.486)	(4.167)
d2006	5.969**	0.326	5.933**	0.304	7.811***	-1.908	8.630***	-1.352	7.471***	0.588	8.621***	-2.971
	(2.712)	(0.354)	(2.314)	(0.338)	(1.877)	(1.443)	(2.563)	(1.579)	(1.952)	(0.932)	(2.043)	(4.156)
d2007	8.598**	0.609	8.720***	0.603	11.27***	-2.798	12.89***	-1.653	10.77***	2.032	12.74***	-4.275
	(3.885)	(0.460)	(3.330)	(0.428)	(2.238)	(1.823)	(2.978)	(2.454)	(2.269)	(1.240)	(2.187)	(5.728)
d2008	9.522**	0.373	8.943**	0.242	13.01***	-4.327**	14.80***	-3.352	12.30***	1.612	14.40***	-3.901
	(4.576)	(0.532)	(3.813)	(0.588)	(2.787)	(1.985)	(3.644)	(3.461)	(2.699)	(1.378)	(2.931)	(6.503)

L.urvote			3.129	0.471			1.204	1.991			1.771	-9.728
			(2.046)	(0.656)			(5.371)	(2.963)			(4.516)	(10.64)
L.reg_yrswork					-0.0343	-0.788***	-0.0192	-0.698***				
					(0.0777)	(0.138)	(0.0754)	(0.183)				
L.reg_executive_expimmprior									-2.796	-8.756***	-2.165	-32.13
									(2.301)	(1.371)	(2.261)	(20.86)
Observations	443	438	443	438	546	541	544	539	546	541	544	539
Number of clusters	65	65	65	65	78	78	78	78	78	78	78	78
Hansen J OverID	0.467	3.035	0.883	3.160	1.647	1.280	2.782	0.983	1.382	0.0105	2.384	0.0654
Hansen p-value	0.495	0.0815	0.347	0.0755	0.199	0.258	0.0953	0.322	0.240	0.918	0.123	0.798
Anderson-Rubin Chi2 test	12.36	16.29	12.34	14.83	618.8	619.6	714.3	721.5	528.8	525.4	709.8	731.2
A-R Chi2 p-value	0.00626	0.00266	0.00632	0.00507	0	0	0	0	0	0	0	0
Stock-Wright LM S stat	8.007	7.964	8.027	7.952	4.520	4.390	5.116	5.468	4.274	5.093	5.268	6.111
LM S p-value	0.0459	0.0929	0.0454	0.0933	0.210	0.356	0.164	0.243	0.233	0.278	0.153	0.191

Cluster-robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. D denotes the first difference, L denotes the first lag. "e" means "*10".

Figure 1. FFSR as a share of Total Transfers Per Capita in 2000–2009 (current prices vs. fixed 2000 prices, CPI deflated). Source: Roskazna, Rosstat.



Marginal effects for Tables 2-3 (see below)

Figure 2. Marginal effect for the 1 percentage point change in United Russia votes share (urvote) in Duma elections

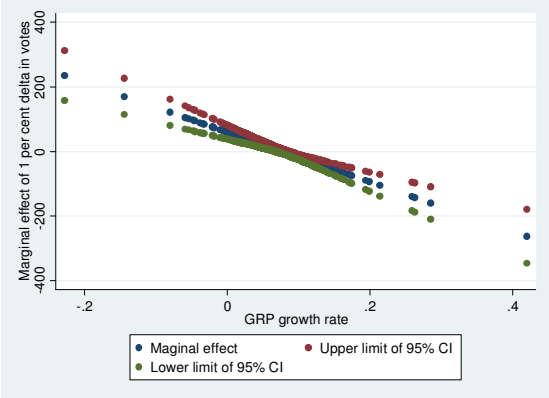


Figure 3. Marginal effect for the 1 percentage point change in Votes Margin (margind) in Duma elections

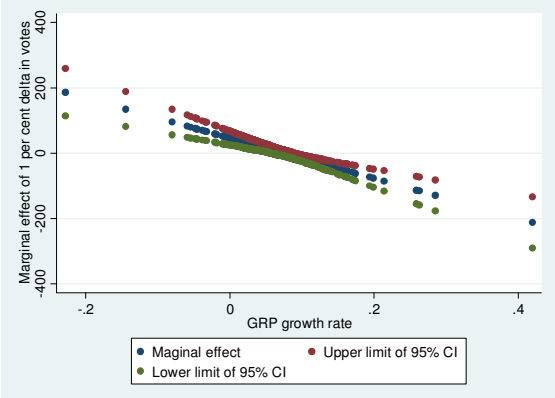


Figure 4. Marginal effect for the 1 percentage point change in Opposition Dominance (opdom_duma) in Duma elections

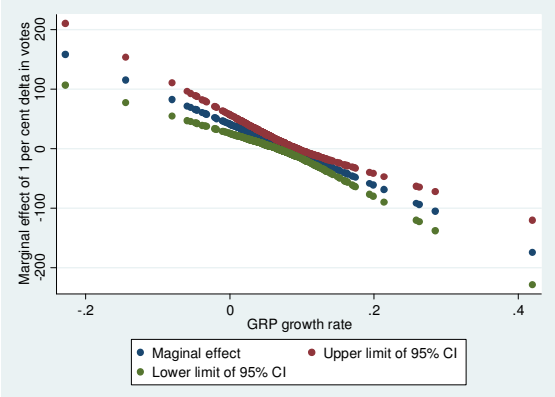


Figure 5. Marginal effect for the 1 percentage point change in Votes for the President (wpshare) in Presidential elections

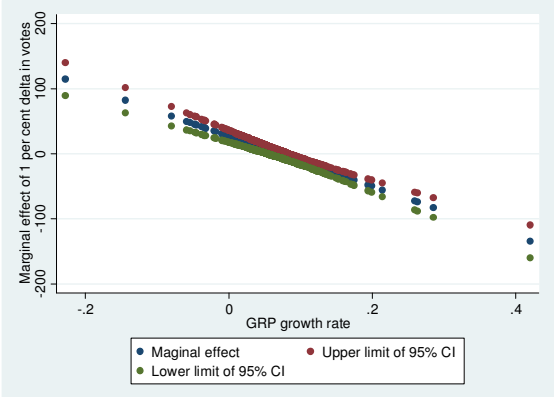


Figure 6. Marginal effect for the 1 percentage point change in KPRF votes share (kdshare) in Duma elections

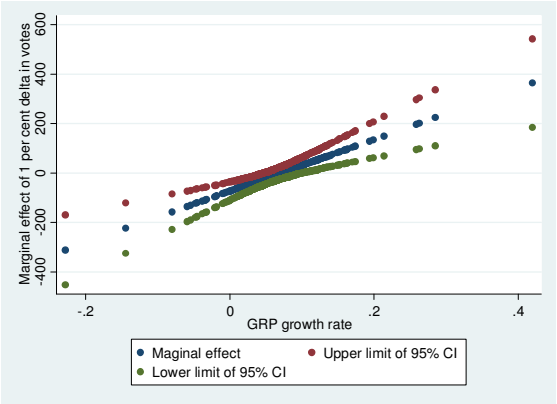


Figure 7. Marginal effects for the 1 year change in the number of years a governor worked in a region (reg_yrswork)

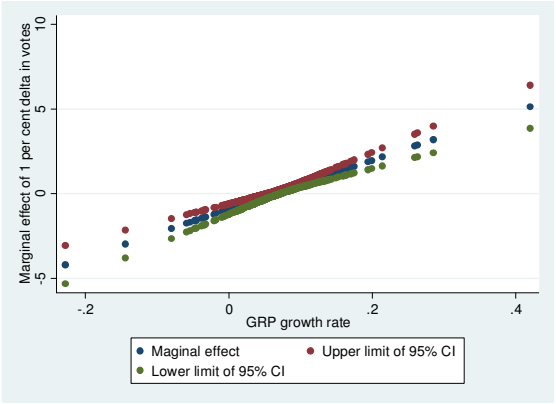
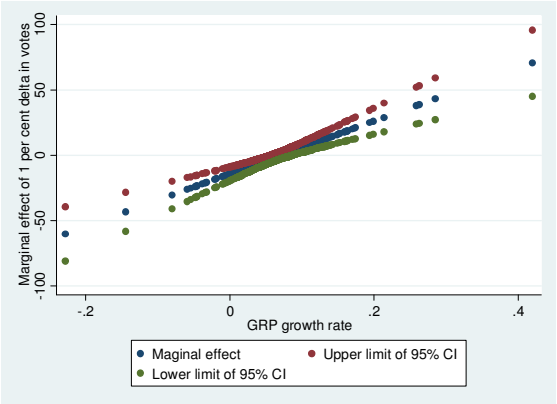


Figure 8. Marginal effects for the dummy variable = 1 if a governor has a prior executive experience in a region (reg_executive_expimmprior)



Appendix 1

Table 6: Summary statistics, 2003-2008, transfers.

	mean	min	max	sd
transfpercapita	3.355635	0	85.33772	6.198232
restpercapita	1.845758	-0.1013048*	69.93105	4.357949
N	780			

* FFSR transfers exceed total transfers for Moscow Oblast (2003-2004) and for Belgorod Oblast (2004).

Table 7: Summary statistics, 2002-2007 (lagged by 1 period), electoral variables.

	n	mean	min	max	sd
urvote		.407851	.0695	.96	.1526672
margind		.2470801	0	.944	.1817312
opdom_duma		.267255	0	.9428	.1825684
wpshare		.6514058	.399	.9649	.1163458
kdshare		.147552	.0172	.4213	.0662496
N	467				

Table 8: Summary statistics, 2002-2007 (lagged by 1 period), governors' variables.

	sum	mean	min	max	sd
share_bad		0.3588231	.030303	.84	.1586185
newgov_hse	27	0.0706806	0	1	.2566267
reg_yrswork		12.38482	0	33	8.272021
reg_execut~r	63	0.1649215	0	1	.3715964
N	382				

Table 9: Summary statistics, 2003-2008 (lagged by 1 period), the GRP growth rate and control variables.

	mean	min	max	sd
gdpgrowth	0.0681523	-0.228	0.42	0.0501069
urbaniz	0.3054006	0	1	0.206799
reg_empbud~t	17.2086	10.9	34.9	3.218925
reg_heduct~d	22.32801	13.7	48.5	4.828375
reg_share~18	17.37666	12.3	34.9	3.646832
reg_sharep~s	19.54472	6.6	26.9	4.532479
bureaucrats	1162.232	2.250365	67455.45	6625.641
N	407			

Table 10: Correlation matrix for the right-hand side variables in equation 1, 2002-2007 (lagged by 1 period)

	urbaniz	reg_em~t	reg_he~d	reg_s~18	reg_sh~s	bureau~s	urvote
urbaniz	1.0000						
reg_empbud~t	-0.3279*	1.0000					
reg_heduct~d	0.3749*	-0.1188*	1.0000				
reg_share~18	-0.3193*	0.6432*	-0.1487*	1.0000			
reg_sharep~s	0.3185*	-0.5055*	0.0148	-0.8075*	1.0000		
bureaucrats	0.4783*	-0.2201*	0.6097*	-0.2045*	0.1127*	1.0000	
urvote	-0.1428*	0.2372*	0.1641*	0.0523	-0.0972*	-0.0532	1.0000
margind	-0.0879*	0.2266*	0.2000*	0.0273	-0.1004*	-0.0041	0.9510*
opdom_duma	-0.1265*	0.2323*	0.1871*	0.0097	-0.1205*	-0.0061	0.9690*
wpshare	-0.0820*	0.1890*	0.1703*	-0.0378	-0.0600	0.0110	0.5579*
kdshare	0.0263	-0.0990*	-0.1290*	0.1236*	0.1444*	-0.1113*	-0.5079*
reg_yrswork	0.2119*	-0.0348	-0.0106	-0.0783*	0.0977*	0.0192	-0.0723

	margind	opdom_~a	wpshare	kdshare	reg_yr~k
margind	1.0000				
opdom_duma	0.9628*	1.0000			
wpshare	0.5900*	0.6210*	1.0000		
kdshare	-0.5973*	-0.6767*	-0.5515*	1.0000	
reg_yrswork	-0.0631	-0.0788*	-0.0429	0.0509	1.0000

** p<0.1.

Appendix 2

Table 11: Estimation results for total transfers, 2004-2008, electoral variables. Robustness checks.

Dependent variable = D.transfpercapita Right-hand side variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
L.gdpgrowth	-58.92***	149.4	-59.23***	58.40	-58.82***	49.32	-63.73***	190.3**	-63.98***	-117.4***
	(19.58)	(117.6)	(19.58)	(83.29)	(19.10)	(84.90)	(20.06)	(82.18)	(20.24)	(31.46)
L.reg_grpcapdefl	-0.499***	-0.437***	-0.499***	-0.436***	-0.494***	-0.398***	-0.512***	-0.597***	-0.487***	-0.358***
	(0.102)	(0.137)	(0.102)	(0.129)	(0.104)	(0.128)	(0.115)	(0.146)	(0.109)	(0.111)
L.cross_term		-392.3**		-280.7*		-245.8*		-301.5***		833.3
		(177.1)		(145.7)		(133.2)		(96.71)		(660.4)
L.urvote	3.358	41.00*								
	(11.52)	(24.64)								
L.urbaniz	6.750	20.96	6.949	23.32	6.719	16.15	5.404	25.07	-2.799	16.20
	(35.60)	(37.71)	(35.80)	(38.55)	(35.27)	(36.76)	(35.65)	(38.03)	(33.15)	(42.76)
L.reg_empbudgsect	-1.570**	-1.655**	-1.609**	-1.659**	-1.630**	-1.505**	-1.548**	-1.956**	-1.608**	-0.744
	(0.697)	(0.750)	(0.720)	(0.733)	(0.735)	(0.695)	(0.719)	(0.795)	(0.770)	(0.750)
L.reg_sharebef18	0.141	0.493	0.145	0.428	0.0689	0.308	-0.0567	2.173	-0.682	0.222
	(1.129)	(1.368)	(1.100)	(1.318)	(1.135)	(1.374)	(1.180)	(1.470)	(1.042)	(1.579)
L.reg_sharepens	7.237***	6.472**	7.226***	6.378**	7.054***	5.715**	7.123***	8.351**	6.633***	5.263***
	(2.678)	(3.069)	(2.699)	(3.004)	(2.654)	(2.681)	(2.672)	(3.268)	(2.569)	(1.795)
L.bureaucrats	0.00136***	0.000415	0.00136***	0.000357	0.00133***	0.000320	0.00142***	0.000469	0.00129***	9.08e-05
	(0.000438)	(0.000405)	(0.000435)	(0.000392)	(0.000444)	(0.000376)	(0.000494)	(0.000447)	(0.000471)	(0.000313)
d2004	-7.666*	-5.527	-8.447**	-6.849	-9.683**	-7.780*	-9.329**	-12.03***	-8.197**	-6.594**
	(4.572)	(5.301)	(4.249)	(4.816)	(3.812)	(4.041)	(3.806)	(4.469)	(3.260)	(3.040)
d2005	-3.536	-2.117	-4.310	-3.475	-5.618*	-4.571	-4.497*	-7.093**	-4.581*	-3.823
	(4.245)	(4.929)	(3.911)	(4.400)	(3.372)	(3.589)	(2.608)	(3.131)	(2.627)	(2.483)
d2006	-3.615	-0.749	-4.391	-2.036	-5.732*	-3.590	-4.713**	-5.020**	-5.157**	-2.783
	(4.000)	(5.050)	(3.638)	(4.419)	(3.061)	(3.515)	(2.104)	(2.331)	(2.090)	(2.341)
d2007	-0.302	1.337	-1.068	0.0552	-2.435	-1.558	-1.235	-0.850	-1.996*	-0.954
	(3.282)	(4.097)	(2.917)	(3.512)	(2.235)	(2.618)	(1.117)	(1.424)	(1.192)	(1.392)
L.margind			0.364	25.76						

Dependent variable = D.transfpercapita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Right-hand side variables:										
			(8.809)	(19.08)						
L.opdom_duma					-4.662	17.56				
					(6.390)	(15.75)				
L.wpshare							-4.453	22.47		
							(11.47)	(18.34)		
L.kdshare									53.92**	-22.40
									(24.10)	(60.41)
Observations	390	386	390	386	390	386	390	386	390	386
Number of clusters	78	78	78	78	78	78	78	78	78	78
Hansen J OverID	1.509	1.230	1.499	1.434	1.463	2.056	1.589	0.515	1.608	2.407
Hansen p-value	0.219	0.267	0.221	0.231	0.226	0.152	0.208	0.473	0.205	0.121
Anderson-Rubin Chi2 test	599.6	730.3	588.4	752.6	599.3	756.4	580.6	674.7	578.5	636.6
A-R Chi2 p-value	0	0	0	0	0	0	0	0	0	0
Stock-Wright LM S stat	4.723	13.46	4.724	12.79	4.655	14.06	7.508	14.30	4.048	8.940
LM S p-value	0.193	0.00921	0.193	0.0123	0.199	0.00712	0.0573	0.00640	0.256	0.0626

Cluster-robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. D denotes the first difference, L denotes the first lag. "e" means "*10".

Table 12: Estimation results for total transfers, 2004-2008, governors' variables. Robustness checks.

Dependent variable = D.transfpercapita Right-hand side variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
L.gdpgrowth	-43.92	-190.9	-40.29	-397.0	-58.46***	-66.81***	-59.02***	-67.78***	-57.66***	-1.606	-58.20***	-6.778
	(57.22)	(1,948)	(45.14)	(6,533)	(19.11)	(23.90)	(19.41)	(24.41)	(19.58)	(263.5)	(19.95)	(242.9)
L.reg_grpcapdefl	-0.313	2.590	-0.313	4.087	-0.496***	-0.443***	-0.498***	-0.442***	-0.498***	-0.669	-0.500***	-0.685
	(0.391)	(23.05)	(0.322)	(63.66)	(0.104)	(0.112)	(0.103)	(0.111)	(0.106)	(0.572)	(0.104)	(0.549)
L.cross_term		1,289		2,170		-0.454		-0.418		4,699		4,692
		(11,777)		(34,215)		(5.905)		(5.948)		(10,368)		(9,773)
L.share_bad	-0.584	-85.67	-0.221	-149.0								
	(1.062)	(786.7)	(0.741)	(2,355)								
L.urbaniz	35.51	-517.3	36.77	-855.6	6.606	-3.712	6.155	-4.566	7.146	260.5	6.816	254.6
	(51.88)	(4,623)	(44.37)	(13,342)	(34.09)	(34.82)	(34.12)	(34.73)	(35.60)	(581.9)	(35.69)	(544.6)
L.reg_empbudgsect	-1.296	9.145	-1.227	13.52	-1.607**	-1.625***	-1.571**	-1.584***	-1.563**	-0.315	-1.535**	-0.0168
	(1.616)	(80.85)	(1.265)	(209.7)	(0.782)	(0.580)	(0.712)	(0.542)	(0.758)	(4.716)	(0.696)	(4.855)
L.reg_sharebef18	0.0241	0.0641	0.0832	-0.743	0.168	-0.196	0.155	-0.217	0.248	-15.90	0.234	-16.05
	(0.368)	(4.989)	(0.329)	(17.62)	(1.075)	(1.570)	(1.092)	(1.562)	(1.116)	(33.65)	(1.116)	(31.88)
L.reg_sharepens	4.601	-42.03	4.731	-67.90	7.216***	6.954***	7.245***	6.964***	7.224***	-4.607	7.250***	-3.835
	(5.630)	(371.0)	(4.720)	(1,053)	(2.622)	(2.245)	(2.679)	(2.258)	(2.640)	(32.02)	(2.693)	(28.55)
L.bureaucrats	0.000830	-0.00210	0.000830	-0.00330	0.00134***	0.000399	0.00136***	0.000416	0.00135***	0.00214	0.00137***	0.00226
	(0.00109)	(0.0185)	(0.000908)	(0.0510)	(0.000454)	(0.000343)	(0.000439)	(0.000335)	(0.000457)	(0.00343)	(0.000442)	(0.00352)
d2004	-5.788	36.14	-4.423	38.68	-8.525***	-7.533**	-7.659	-6.508	-8.667***	21.79	-7.917*	32.48
	(5.888)	(333.7)	(3.533)	(622.7)	(3.151)	(3.026)	(4.716)	(3.963)	(3.085)	(63.07)	(4.505)	(85.65)
d2005	-2.836	18.80	-1.435	10.53	-4.398*	-3.853	-3.524	-2.834	-4.488*	8.417	-3.731	19.10
	(3.154)	(172.5)	(1.495)	(173.0)	(2.556)	(2.515)	(4.341)	(3.728)	(2.520)	(25.64)	(4.200)	(53.68)
d2006	-3.182	14.72	-1.659	2.666	-4.463**	-4.223*	-3.602	-3.228	-4.492**	25.84	-3.749	36.40
	(3.320)	(135.9)	(1.594)	(53.94)	(2.052)	(2.454)	(4.064)	(4.033)	(2.037)	(63.84)	(3.981)	(86.88)
d2007	-0.814	4.292	0.615	-12.65	-1.165	-1.268	-0.288	-0.282	-1.176	5.344	-0.419	15.96
	(0.936)	(39.79)	(1.194)	(197.3)	(1.094)	(1.196)	(3.309)	(2.929)	(1.093)	(9.978)	(3.284)	(40.02)
L.urvote			5.386	-73.83			3.427	3.857			2.960	40.62
			(6.496)	(1,157)			(11.55)	(8.917)			(11.62)	(132.3)
L.reg_yrswork					0.00317	0.00827	0.00421	0.00709				

Dependent variable = D.transfpercapita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Right-hand side variables:												
					(0.0694)	(0.430)	(0.0715)	(0.434)				
L.reg_executive_expimmprior									0.848	-410.6	0.821	-410.7
									(1.248)	(911.1)	(1.235)	(859.8)
Observations	321	317	321	317	390	386	390	386	390	386	390	386
Number of clusters	65	65	65	65	78	78	78	78	78	78	78	78
Hansen J OverID	3.671	0.00534	3.731	0.00427	1.490	2.123	1.517	2.179	1.487	0.118	1.512	0.175
Hansen p-value	0.0554	0.942	0.0534	0.948	0.222	0.145	0.218	0.140	0.223	0.732	0.219	0.676
Anderson-Rubin Chi2 test	18.94	21.00	19.46	21.57	608.1	731.5	617.9	748.2	587.5	620.8	602.7	642.1
A-R Chi2 p-value	0.000281	0.000316	0.000220	0.000244	0	0	0	0	0	0	0	0
Stock-Wright LM S stat	7.643	11.71	7.689	11.77	4.799	10.95	4.800	10.92	4.675	5.210	4.679	5.201
LM S p-value	0.0540	0.0197	0.0529	0.0191	0.187	0.0271	0.187	0.0274	0.197	0.266	0.197	0.267

Cluster-robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. D denotes the first difference, L denotes the first lag. "e" means "*10".

Table 13: Estimation results for discretionary non-FFSR transfers, 2004-2008, electoral variables. Robustness checks.

Dependent variable = D.restpercapita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Right-hand side variables:										
L.gdpgrowth	-41.38***	23.72	-41.04***	3.264	-42.34***	6.900	-50.68***	17.08	-46.40***	-83.47***
	(11.26)	(34.37)	(11.13)	(24.08)	(10.98)	(25.30)	(11.74)	(49.93)	(10.35)	(11.17)
L.reg_grpcapdefl	-0.198***	-0.156***	-0.198***	-0.154***	-0.196***	-0.143***	-0.192***	-0.192***	-0.186***	-0.134***
	(0.0451)	(0.0462)	(0.0453)	(0.0448)	(0.0451)	(0.0435)	(0.0449)	(0.0464)	(0.0461)	(0.0394)
L.cross_term		-128.5**		-111.0***		-110.6***		-80.95		602.5***
		(52.48)		(41.58)		(41.78)		(51.98)		(170.8)
L.urvote	-0.481	12.09								
	(5.112)	(8.565)								
L.urbaniz	-2.484	1.222	-2.607	2.341	-2.934	2.640	-5.343	-1.265	-7.410	12.34
	(14.78)	(12.96)	(14.96)	(12.90)	(14.68)	(12.34)	(14.74)	(14.29)	(13.33)	(10.50)
L.reg_empbudgsect	-0.763**	-0.720**	-0.786**	-0.710**	-0.776**	-0.657**	-0.711**	-0.843***	-0.756**	-0.223
	(0.312)	(0.290)	(0.319)	(0.285)	(0.325)	(0.272)	(0.307)	(0.311)	(0.334)	(0.227)
L.reg_sharebef18	-0.0248	-0.278	0.0163	-0.224	-0.102	-0.210	-0.378	0.0526	-0.498	-0.130
	(0.622)	(0.557)	(0.603)	(0.538)	(0.627)	(0.530)	(0.666)	(0.763)	(0.601)	(0.493)
L.reg_sharepens	2.732**	2.392**	2.754**	2.402**	2.589**	2.293***	2.414**	2.915***	2.178**	1.976***
	(1.188)	(1.020)	(1.195)	(0.973)	(1.173)	(0.880)	(1.123)	(1.079)	(1.082)	(0.602)
L.bureaucrats	0.000537***	0.000209	0.000531***	0.000173	0.000529***	0.000150	0.000559***	0.000222	0.000499***	4.09e-05
	(0.000169)	(0.000158)	(0.000169)	(0.000148)	(0.000170)	(0.000143)	(0.000178)	(0.000171)	(0.000179)	(0.000121)
d2004	-4.143**	-2.443	-4.399***	-3.072	-4.809***	-3.373**	-4.707***	-4.059***	-3.717***	-2.364**
	(1.763)	(2.130)	(1.688)	(1.923)	(1.463)	(1.477)	(1.234)	(1.369)	(1.330)	(1.002)
d2005	-2.199	-0.823	-2.431	-1.473	-2.907**	-1.823	-1.785*	-1.801	-2.091**	-1.027
	(1.612)	(2.035)	(1.543)	(1.828)	(1.241)	(1.357)	(1.018)	(1.159)	(0.986)	(0.829)
d2006	-2.738	-1.369	-2.940*	-1.824	-3.506***	-2.202	-2.812***	-2.448***	-3.019***	-1.097
	(1.672)	(2.046)	(1.562)	(1.791)	(1.256)	(1.386)	(0.805)	(0.842)	(0.817)	(0.840)
d2007	-0.604	0.373	-0.815	-0.282	-1.345	-0.759	-0.277	0.00792	-0.753	0.395
	(1.378)	(1.759)	(1.281)	(1.536)	(0.916)	(1.056)	(0.523)	(0.560)	(0.510)	(0.503)
L.margind			-1.070	8.384						
			(4.056)	(6.282)						
L.opdom_duma					-3.139	6.504				

Dependent variable = D.restpercapita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Right-hand side variables:										
					(2.981)	(5.384)				
L.wpshare							-7.112	4.251		
							(5.539)	(9.653)		
L.kdshare									22.75**	-29.00
									(11.29)	(19.72)
Observations	390	386	390	386	390	386	390	386	390	386
Number of clusters	78	78	78	78	78	78	78	78	78	78
Hansen J OverID	3.189	0.217	3.254	0.584	3.191	0.663	2.414	0.127	3.398	0.0300
Hansen p-value	0.0741	0.641	0.0712	0.445	0.0740	0.416	0.120	0.722	0.0653	0.862
Anderson-Rubin Chi2 test	1448	1476	1421	1420	1467	1467	1385	1420	1451	1489
A-R Chi2 p-value	0	0	0	0	0	0	0	0	0	0
Stock-Wright LM S stat	4.328	11.23	4.329	11.59	4.349	12.66	4.655	6.229	4.128	5.710
LM S p-value	0.228	0.0241	0.228	0.0206	0.226	0.0131	0.199	0.183	0.248	0.222

Table 14: Estimation results for discretionary non-FFSR transfers, 2004-2008, governors' variables. Robustness checks.

Dependent variable = D.restpercapita Right-hand side variables:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
L.gdpgrowth	7.962	-667.6	8.153	-478.2	-41.52***	-68.43***	-41.42***	-68.73***	-40.70***	-21.00	-40.63***	-19.91
	(7.555)	(1,722)	(7.889)	(1,040)	(11.06)	(12.59)	(11.26)	(12.62)	(11.12)	(224.6)	(11.34)	(233.1)
L.reg_grpcapdefl	-0.0114	0.305	-0.0123	0.248	-0.197***	-0.136**	-0.198***	-0.135**	-0.197***	-0.213	-0.197***	-0.218
	(0.0276)	(0.866)	(0.0272)	(0.542)	(0.0454)	(0.0538)	(0.0451)	(0.0537)	(0.0458)	(0.451)	(0.0456)	(0.474)
L.cross_term		1,855		1,369		5.574*		5.646*		1,661		1,672
		(4,690)		(2,887)		(3.163)		(3.167)		(9,362)		(9,469)
L.share_bad	0.760	-126.3	0.785	-91.91								
	(0.476)	(320.8)	(0.489)	(195.2)								
L.urbaniz	5.439	-355.2	5.671	-257.0	-3.326	-24.15	-3.322	-24.46	-2.472	82.18	-2.448	82.24
	(8.018)	(907.8)	(7.990)	(551.9)	(14.68)	(16.92)	(14.66)	(16.83)	(14.68)	(536.2)	(14.67)	(539.6)
L.reg_empbudgsect	-0.0296	-0.925	-0.0289	-0.347	-0.750**	-0.507	-0.755**	-0.492	-0.728**	-0.266	-0.736**	-0.155
	(0.122)	(3.854)	(0.126)	(2.074)	(0.342)	(0.320)	(0.317)	(0.310)	(0.338)	(3.261)	(0.315)	(3.775)
L.reg_sharebef18	0.187	1.891	0.194	1.586	0.00400	0.204	0.00598	0.213	0.0547	-5.845	0.0585	-5.897
	(0.193)	(5.228)	(0.195)	(3.682)	(0.604)	(0.618)	(0.615)	(0.619)	(0.607)	(29.32)	(0.611)	(29.71)
L.reg_sharepens	0.560	-5.170	0.592	-3.572	2.719**	2.269**	2.736**	2.275**	2.773**	-1.950	2.783**	-1.791
	(0.448)	(16.51)	(0.439)	(9.842)	(1.164)	(0.921)	(1.190)	(0.927)	(1.159)	(26.50)	(1.186)	(25.60)
L.bureaucrats	-2.29e-05	-0.000262	-2.12e-05	-0.000223	0.000536***	0.000316**	0.000536***	0.000320**	0.000537***	0.000765	0.000536***	0.000801
	(8.12e-05)	(0.000703)	(8.17e-05)	(0.000444)	(0.000173)	(0.000159)	(0.000169)	(0.000158)	(0.000171)	(0.00261)	(0.000167)	(0.00286)
d2004	-0.930*	-1.140	-0.831	5.224	-4.094***	-2.707*	-4.205**	-2.404	-4.110***	7.490	-4.279**	11.04
	(0.483)	(8.871)	(0.520)	(10.60)	(1.310)	(1.457)	(1.828)	(1.805)	(1.243)	(55.59)	(1.748)	(80.19)
d2005	-0.0521	-2.175	0.0554	4.534	-2.126**	-0.727	-2.237	-0.425	-2.127**	3.062	-2.295	6.571
	(0.304)	(8.306)	(0.397)	(8.386)	(0.977)	(1.219)	(1.653)	(1.632)	(0.936)	(21.48)	(1.620)	(47.97)
d2006	-0.159	-3.106	-0.0396	4.092	-2.652***	-1.026	-2.760	-0.719	-2.605***	8.266	-2.771	11.84
	(0.384)	(9.552)	(0.548)	(8.097)	(0.820)	(1.151)	(1.696)	(1.638)	(0.799)	(58.24)	(1.700)	(83.07)
d2007	0.201	-0.385	0.317	5.751	-0.500	0.560	-0.610	0.854	-0.504	2.066	-0.670	5.536
	(0.181)	(2.641)	(0.382)	(11.57)	(0.467)	(0.761)	(1.386)	(1.403)	(0.457)	(9.206)	(1.407)	(35.99)
L.urvote			0.433	22.75			-0.474	1.114			-0.682	13.35
			(1.170)	(48.67)			(5.123)	(4.072)			(5.267)	(112.0)
L.reg_yrswork					0.0123	-0.372*	0.0126	-0.376*				

Dependent variable = D.restpercapita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Right-hand side variables:												
					(0.0269)	(0.225)	(0.0280)	(0.226)				
L.reg_executive_expimmprior									0.736	-144.9	0.749	-146.1
									(0.517)	(825.8)	(0.533)	(836.7)
Observations	321	317	321	317	390	386	390	386	390	386	390	386
Number of clusters	65	65	65	65	78	78	78	78	78	78	78	78
Hansen J OverID	3.600	0.0181	3.642	0.131	3.237	3.284	3.211	3.317	3.250	0.00351	3.226	0.00388
Hansen p-value	0.0578	0.893	0.0563	0.717	0.0720	0.0699	0.0731	0.0686	0.0714	0.953	0.0725	0.950
Anderson-Rubin Chi2 test	8.294	8.986	8.175	8.901	1426	1489	1417	1484	1473	1497	1463	1495
A-R Chi2 p-value	0.0403	0.0615	0.0425	0.0636	0	0	0	0	0	0	0	0
Stock-Wright LM S stat	5.060	9.769	5.031	9.726	4.379	6.689	4.318	6.584	4.415	5.791	4.354	5.799
LM S p-value	0.167	0.0445	0.170	0.0453	0.223	0.153	0.229	0.160	0.220	0.215	0.226	0.215

Appendix 3: List of indicators, definitions, data description

Table 15: Indicators and Data Description

Variable: status coded	Indicator
transfpercapita	Total transfers per capita, thds rub
restpercapita	The (Total – FFSR) transfers per capita[29], thds rub
share_bad	Share of people which consider regional administration working not well
urvote	Votes for United Russia, per cent
margind	Margin of Victory – Federal Duma elections, per cent
opdom_duma	Opposition dominance, per cent
kdshare	Votes for KPRF, per cent
wpshare	Votes for the winner in Presidential elections, per cent
bureaucrats	Size of regional bureaucracy
urbaniz	Urbanization measures
reg_empbudgsect	Public sector employees
reg_heductoempd	Percentage of workers with higher education
reg_sharebef18 reg_sharepens	Percentage of young per 1000 people of working age and Percentage of retired per 1000 people of working age (in some models we use the sum of these indicators
reg_grpcapdefl	GRP per capita, in 2000 prices, thds rub
reg_yrswork	Years worked in the region (from the positions we collected in the governors database).
reg_executive_expimmprior	= 1 if the governor has experience previously in an executive government post after the Soviet collapse, or if he had such experience before the Soviet collapse, 0 otherwise.

[29] *Federal Fund* for Support of Regions