WORKING PAPER

POLITICS AND BANKING IN RUSSIA: THE RISE OF PUTIN

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Politics and Banking in Russia: The Rise of Putin[1]

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Abstract

We investigate whether lending by the dominant Russian state bank, Sberbank, contributed to Vladimir Putin's ascent to power during the presidential elections of March 2000. Our hypothesis is that Sberbank corporate loans were used as incentives for managers at private firms to mobilize employees to vote for Putin. In line with our proposed voter mobilization mechanism, we find that the growth of regional corporate Sberbank loans in the months before the presidential election is related to the regional increase in votes for Putin and to the regional increase in voter turnout between the Duma election of December 1999 and the presidential election of March 2000. The effect of Sberbank firm lending on Putin votes is most pronounced in regions where the governor is affiliated with the regime and in regions with extensive private employment. The effect is less apparent in regions with a large part of their population living in single-company towns, where voter intimidation is sufficient to get the required result. Additional robustness checks and placebo regressions confirm the main findings. Our results support the view that additional Sberbank corporate loans granted prior to the March 2000 presidential election facilitated Putin's early electoral success.

JEL Codes: G21, P34.
Keywords: bank, credit policy, politics, Russia.

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1. Introduction

State ownership of banks has been shown to influence economic outcomes in various ways, including bank lending activity (e.g. Bertay, Demirgüc-Kunt and Huizinga, 2014; Coleman and Feler, 2015), banking performance (Karas, Schoors and Weill, 2010), financial development and economic growth (La Porta, Lopez-de-Silanes and Shleifer, 2002).

State ownership of banks may also affect political outcomes. Sapienza (2004) distinguishes two broad views of how the behavior of state-owned banks can affect political outcomes. Under the *political view*, the incumbent government uses state-owned banks to pursue its own interests such as enhancing its chances of reelection or avoiding social and political unrest. This view arises from the idea that politicians manipulate economic instruments to influence voters and aligns well with the political business cycle literature pioneered by Nordhaus (1975) and extended by Rogoff and Sibert (1988). Under the *social view*, the government instructs its state-owned banking institutions to address collective action problems resulting from the inability of non-exclusive and non-rival projects to attract private funding, even though these projects are socially valuable.

Most of the evidence in the empirical literature backs the political view. La Porta, Lopez-de-Silanes and Shleifer (2002) find that higher state ownership of banks relates to lower financial development and weaker economic growth largely because it politicizes, and thereby diminishes, the efficiency of resource allocation. Dinc (2005) discusses a specific channel of politicization: lending of state-owned banks is shown to correlate with the electoral cycle as state-owned banks increase lending in election years relative to private banks, a finding that implies state-owned bank lending may be used to influence political outcomes. Berkowitz, Hoekstra and Schoors (2014) find that political connections play an important role in Russia's emergent banking system, and that under certain conditions banks with old political connections tend to support employment over growth by lending to zombie firms. Carvalho (2014) shows the influence of lending of state-owned banks on real decisions of firms in Brazil in line with electoral outcomes. He finds that state-owned bank lending is associated with employment growth by firms in politically attractive regions near elections. Englmaier and Stowasser (2017) provide

evidence that German savings banks, where local politicians are involved in their management, adjust lending policies in response to local electoral cycles. In all these studies the mechanisms through which increased banking lead to better electoral outcomes remain opaque. Most papers generally talk about increased economic growth and employment leading to higher electoral support for the incumbent. Berkowitz, Hoekstra and Schoors (2014) and Carvalho (2014) document more specifically a costly employment channel, although the former does not show the direct link with elections.

The 2000 presidential cycle in Russia provides a rich body of evidence for investigating the confluence of actions of state-owned banks and a political leader's ascent to power. President Boris Yeltsin appointed Vladimir Putin as prime minister on August 9, 1999 with the June 2000 presidential election looming. As the Russian constitution at that time prohibited Yeltsin from running for a third consecutive term, a successor had to be found. In the lower-house Duma elections of December 1999, the just-created Unity Party, which explicitly supported the new prime minister, did surprisingly well, though falling well short of a quarter of the national vote. Yeltsin's unexpected resignation on New Year's Eve elevated the relatively unknown Putin to the post of acting president. It also pushed up the date for the first round of the presidential election to March 26, 2000, which Putin won decisively. Putin's meteoric rise from obscure government official to president took less than a year. Putin's appointment as Yeltsin's successor occurred when Russia's state-owned bank Sberbank held the dominant market share of the banking industry throughout the country. This bank was, and still is, majority-owned by the Central Bank of the Russian Federation, which gives the government full control over its activities.

Our study asks whether Sberbank lending was used as a political instrument to influence the outcome of the Russian elections of March 2000. We analyze the relationship between the regional and time variations in corporate loans provided by Sberbank and regional variations in Putin's popularity. We test the hypothesis that Sberbank increased its lending to firms in the months preceding elections in an attempt to boost Putin's popularity. This hypothesis is related to Dinc (2005)'s findings and is based

on the idea that state banks may boost lending to get employers to exert pressure on voters to vote a certain way or support a certain candidate or party. Our argument is based on the finding of Frye, Reuter and Szakonyi (2014) that the workplace is, and has been, a key site of political mobilization in Russia. Employers in Russia can mobilize voters as they control multiple levers of influence, including rewards and threats (Frye, Reuter and Szakonyi, 2015, 2016). In this sense, bank loans may be seen as a means for incentivizing employers to influence the voting behavior of their employees. While state-owned firms can be influenced by specific subsidies to influence votes of employees, bank loans provide a more general incentive that affects private companies as well.

Our hypothesis does not require or imply that Putin was complicit in some grand plan to take power that directly involved Sberbank lending. Inner circles of power in Moscow or Sberbank managers and regional governors in regions may well have seen it in their own interest to favor a particular election outcome.

To investigate our hypothesis, we use data on monthly and regional variations in Sberbank's corporate lending in a relatively narrow window just before the presidential elections of March 2000. We then relate these pre-election regional changes in Sberbank lending to the regional change in Putin's popularity. After the announcement of the early presidential elections of March 2000, OVR, the party of former Prime Minister Yevgeny Primakov, then Moscow mayor Yuri Luzhkov, and a number of powerful regional players associated with them, pledged its allegiance to the presidential bid of Putin and urged its voters to vote for Putin.[5] The regional change in Putin's popularity between December 1999 and March 2000, our main dependent variable, is therefore measured by calculating the difference between the electoral performance of Putin in the March 2000 elections and the sum of the electoral performances of the Putin supporting parties in December 1999, i.e. Putin's Unity Party and OVR. In the robustness tests, we also use an alternative main dependent variable, namely the difference in the vote share between of Putin in the March 2000 elections and the vote share of Putin's Unity Party in December 1999, so disregarding the vote share of OVR.

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[5] Fatherland – All Russia (OVR) was formed in1998. It was disbanded in early 2002 after the merger with Putin's Unity party in December 2001.

In line with our proposed voter mobilization mechanism, we find that the growth of regional corporate Sberbank loans in the months before the presidential election is related to the regional increase in votes for Putin and to the regional increase in voter turnout between the Duma election of December 1999 and the presidential election of March 2000. The effect of Sberbank firm lending on Putin votes is most pronounced in regions where the governor is affiliated with the regime and in regions with extensive private employment. The effect is less apparent in regions with many single-company towns, where voter intimidation is sufficient to get the required result. The main results are robust to using the alternative dependent variable laid out in the previous paragraph.

The paper contributes to the literature on four fronts. First, we provide evidence on the influence of state-owned banks on political outcomes by benefiting from the Russian context of 1999–2000 as a natural experiment. The advantage of studying the Russian context is that we can base our analysis on within country variation of Putin's popularity expressed by voters within a very short three-month period and on the monthly and regional variation of lending of the major state-owned Sberbank. This allows us to exclude many of the confounding factors that create identification problems in cross-country studies or studies using annual data. By relating monthly variation in the regional distribution of Sberbank firm credits to regional variation in the increase of Putin's popularity, we can cleanly identify the effect of lending by state banks on political outcomes.

Second, we bridge the gap between two heretofore separated literatures of political business cycles in banking and voter work place mobilization by showing that, next to the well-documented indirect channels of employment and growth, work place mobilization is one of the more direct channels through which the increased lending by state banks right before elections may affect the election outcome in favor of the incumbent. Our work is in this way also related to an older literature on political machines in Russian regions (Hale, 2003), since it identifies one of the many channels through which regional political machines affect political outcomes.

Third our investigation contributes to our understanding of the sudden rise of Vladimir Putin from a largely unknown figure in mid-1999 to elected President of the Russian federation in March 2000. Part of Putin's rise in popularity is explained by successfully arousing patriotic sentiment after launching the second (this time victorious) Chechnya military campaign. Media control (Enikolopov, Petrova and Zhuravskaya, 2011) and electoral fraud (Klimek et al., 2012; Enikolopov et al., 2013) have been advanced as alternative explanations for Putin's early success. We add a fourth element to this list, namely the use of Sberbank corporate lending and voter work place mobilization as a tool to achieve political results.

Finally we contribute to the literature on political clientelism, that generally argues incumbent officials reward political entities and firms for good political outcomes with transfers, subsidies, and other financial flows after the elections. The basic mechanism in this literature is that incumbent officials credibly commit to regional/local political and economic bodies that future financial flows from the government will be conditional on political performance. There is plenty of evidence that the Putin regime used this ex post clientelist approach in later elections (see next section). Here we argue that this ex post mechanism was insufficiently credible in the March 2000 election, because the outcome of the election was sufficiently uncertain (Putin won with less than 53%) and because the regional governors and local authorities were sufficiently independent.[6] Since there were few readily available and generally applicable instruments for creating credible ex post incentives, the regime had to resort to the ex ante carrot of voter work place mobilization, financed by a surge of Sberbank credits[7].

The rest of the article is structured as follows. Section 2 presents the research background. Section 3 develops data and methodology. Section 4 displays the results. Section 5 investigates the possible mechanisms. Section 6 provides robustness checks. Section 7 concludes.

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[6] In 2000 all governors were freely elected and were protected from central pressure until the constitutional change that became effective in 2004.

[7] Note however that Yeltsin also used the loans for shares proceeds to massively reduce wage arrears in privatized firms months before his reelection in 1996, suggesting this ex ante mechanism was not entirely new to the regime.

2. Research background and related literature

Before developing testable hypotheses as to how lending provided by Sberbank to companies may have influenced Putin's victory in presidential elections in March 2000, we first provide a brief overview of the alternative explanations of the rise of Vladimir Putin.

Beyond the widely documented whipping up of patriotic sentiment, the literature investigates two potential factors in the rise in Putin's popularity: media control and electoral fraud. Enikolopov, Petrova and Zhuravskaya (2011) provide evidence on the influence of media control and on the presence of independent TV channel during the 1999 Duma elections. They show that the access to NTV significantly decreased the vote for the government party in the December 1999 elections. However, it is also clear that the role of media control in Putin's popularity was considerably weaker in 2000 than in subsequent presidential elections. In 2000 two state television channels (RTR and ORT) supported the Kremlin, while the then-independent NTV channel, owned by oligarch Vladimir Gusinsky, fiercely opposed Putin. It was only in 2001, after a protracted power struggle, that NTV was taken over by state-related interests. The two remaining mildly independent national TV channels were wound down within two years after NTV's acquisition. In 2000, however, media control had not yet been consolidated and thus provides no obvious explanation of Putin's spectacular march to power.

Klimek et al. (2012) find clear indications that electoral fraud (specifically, ballot-box stuffing) plays a substantial role in Russia's 2011 legislative and 2012 presidential elections. Enikopolov et al. (2013) estimate that United Russia's performance in the 2011 legislative election would have been 11 percentage points weaker without fraud. They further note that fraud was far less pronounced at those polling stations where neutral observers were present. In other words, they show evidence that fraud was sufficient to affect the electoral outcome and that the presence of neutral observers enhanced the integrity of the elections.

At first glance, one might infer that election fraud on the outcomes of the 1999 and 2000 elections was far less important. The Communist party still had an influential candidate and a strong local organization capable of mobilizing local representatives to monitor the process and assure a semblance of objective election procedure. Indeed, Kobak et al. (2016) find that in all Russian elections since 2004 the number of polling stations reporting turnout and/or leader's result expressed by an integer percentage (as opposed to a fractional value) was much higher than expected by pure chance. They conclude the concentration of this phenomenon in a subset of Russian regions strongly suggests orchestrated ballot-box stuffing, but find no similar evidence for the 2000 presidential election or the December 2003 Duma elections, which were apparently relatively free of ballot stuffing.

To complement these explanations, we hypothesize that the government provided extra Sberbank loans to incentivize private firm managers for the mobilization of their employees to vote for Putin. Two key elements required for the admissibility of this hypothesis are the long Russian history in both bank lending for non-economic reasons and voter work place mobilization.

As regards the use of bank lending for political purposes, Sberbank is one of the few surviving direct successors of Soviet Gosbank system that functioned mainly as an instrument of monitoring and control of the central plan, rather than making true decisions on the allocation of resources (Johnson, 2000). By the mid nineties, many Russian former state banks, and especially Sberbank, were still instruments to channel financial support to now privatized large industrial firms on which ordinary Russian people continued to depend not only for jobs, but also for a broad range of social services (Hough, 2001), rendering these banks an almost ideal instrument to mobilize voters that depended on these jobs and social services. This habit of former Russian state banks to continue "zombie"-lending to large privatized firms in support of employment rather than growth was still firmly in place in the period 2000-2007 (Berkowitz, Hoekstra and Schoors, 2014), which covers our period of study.

Sberbank turned out to be susceptible to the negative effects of sovereign default and devaluation in August 1998. With over half of its assets invested in Russian government securities just before the August 1998 default (Lane and Lavrientieva, 2002), Sberbank was heavily exposed to default risk on the Russian government and turned insolvent overnight. As it turned out, Russian statutes provided Sberbank deposits with a double layer of protection. The then governing law "On Banks and Banking" stipulated explicitly that Sberbank deposits were fully guaranteed by the Russian state. In parallel, Article 840.1 of the Civil Code specified that the state had subsidiary liability for the retail deposits of any bank in which the Russian Federation or its subjects held a majority stake—a provision that applied to Sberbank[8] (Tompson, 2004). Despite these guarantees, Sberbank suffered substantial net deposit withdrawals across all Russian regions in August-October 1998. The CBR stood up to its legal responsibility and supported Sberbank with liquidity injections and by repeatedly and publicly confirming the state's guarantee of its deposits. These measures ensured that, though temporarily insolvent, Sberbank never turned illiquid (Pyle et al., 2012), but also recentralized Sberbank and rendered its branches financially more dependent on the federal government, in this way making it ready for use as a political tool by the second half of 1999.

The other key element for our hypothesis, namely that the workplace is a key site of political mobilization in Russia, is highlighted by Frye, Reuter and Szakonyi (2014).[9] After explaining how the workplace can be used to mobilize voters in authoritarian regimes, they investigate the issue in Russia by looking at surveys of employers and workers around the 2011 Duma election. Strikingly, 24 percent of firms report engagement in political activity at the workplace, while 25 percent of employees mention that their employers tried to influence how they voted. Threatening voters through the labor market is possible as managers command a range of "carrots" such as salary

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[8] Sberbank was (and still is) majority-owned by the Central Bank of Russia (CBR), which in turn is fully owned by the Russian Federation. The CBR was founded on the basis of the Moscow Department of the Soviet Gosbank system, of which Sberbank was a part.

[9] Workplace political mobilization is not unique to Russia since the beginning of the transition. Recent works have shown that the same mechanism for mobilizing voters has been observed in e.g. Chile (Baland and Robinson, 2008), Bulgaria and Romania (Mares, Muntean and Petrova, 2016), and the US (Hertel-Fernandez, 2016).

increases and "sticks" such as pay cuts or reduced benefits. Thus, politically motivated Sberbank bank loan offers a means of giving employers, and managers of private firms in particular, incentives to influence the voting behavior of their employees. Firm managers are found to be more inclined to support the regime if their firm is dependent on bank financing.

Frye, Reuter and Szakonyi (2014) also mention that media reports provide anecdotal instances of such practices during the 2011 parliamentary election, including one where the workers at the Kola Mining and Steel Company in Murmansk oblast were forced under threat of dismissal to vote by absentee ballot in their workplace. White and Feklyunina (2012) provide additional evidence on pressures on employees at the workplace for the elections taking place in December 2007 and March 2008. They survey a sample of Russian employees to assess whether the electoral process was free and fair. The responses include cases of employees receiving instructions to vote for Medvedev and United Russia. They report several examples of factory directors who have "made very clear to all their subordinates how they would be expected to vote" (White and Feklyunina, 2012, p. 55), i.e. for Medvedev and United Russia. Several other media reports comment explicitly on workplace mobilization in Russian elections.[10]

The existence of employer pressures does not necessarily translate into a substantial impact on the electoral outcome. Frye, Reuter and Szakonyi (2015) investigate the effectiveness of employer pressures on voting behavior. They perform a framing experiment placed in a survey on Russia in October 2014. They find that Russians respond more to employer appeals to mobilize than similar appeals from party activists or local officials, and conclude that employers are effective vote brokers in Russia. Employers both possess levers of influence over their employees and are in a position to monitor their voting behavior. Negative inducements such as threats and sanctions are found to be more effective than positive inducements such as rewards.

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[10] For example, the November 30, 2007 issue of the *Guardian* reports such behavior in the days just before the December 2, 2007 legislative election. A spokeswoman of an independent organization monitoring the elections comments that "voters are forced to get absentee ballots under threat of being sacked or being denied bonuses" and that "people are then instructed to vote at their workplace where everything is tightly controlled."

Frye, Reuter and Szakonyi (2015) offer three explanations as to why Russian employers are more effective in influencing elections than other clientelist brokers. First, as mentioned, employers control a range of levers of influence, including sanctions like dismissal, pay cuts, or increased workload. Second, the sanctions are credible as employers interact regularly with their employees. Third, employers are often able to monitor voting behavior, further increasing the credibility of applying sanctions in the event of undesired voting behavior.

Frye, Reuter and Szakonyi (2016) examine whether electoral intimidation can be used to mobilize voters. They use survey experiments and electoral violation reports from elections in 2011 and 2012 in Russia, and provide evidence that negative incentives such as threats or sanctions were used. In particular, they show that the threat of dismissal is a major means to guarantee compliance even without directly monitoring voter behavior. Consequently, this work confirms the view that employers are reliable vote brokers in Russia.

A natural question emerges regarding why the Kremlin in March 2000 did not just provide incentives to regional governors to use their political machines in favor of the Kremlin's preferred candidate, instead of using ex ante surges in Sberbank lending to incentivize employers to mobilize their workers. There is clear evidence that the dominant party supporting the Kremlin exhibits a better electoral performance in regions where regional governors had firm control over the local political machine. Hale (2001) extensively describes the details of this clientelist strategy for the late nineties. Reuter (2013) supports this view with data on regional legislative elections from 2003 to 2011. Reuter and Robertson (2012) and Reisinger and Moraski (2013) show that what matters for a governor's prolonged tenure in post-2000 elections is the capacity to deliver sufficiently high election results for the president and the ruling party.

Rochlitz (2016) recently confirms this view with evidence that the Kremlin has provided incentives to regional governors who use their political machines to favor the electoral performance of the ruling party during 2005–2012.

During the 1999–2000, the focus of this study, the incentives of regional governors, was quite different. Rochlitz (2016, p. 6) observes:

"Since the mid-1990s until the end of 2004, these governors have been publicly elected in their region. (...) The fact of being publicly elected, as well as the pivotal position governors occupied as arbiters between regional and federal interests made them into powerful players in Russian politics during the 1990s."

We may conclude the clientelist reward/punishment channel for regional governors existed already in the late nineties and regained its predominance in 2004, when Putin started to nominate governors for election by the local parliament after changing the constitutions. But we may also conclude that this clientelist strategy was probably at its weakest in the period of Putin's ascent to power in early 2000. Therefore the regime had to rely on incentivizing regional political machines in a different way. Since time was really short (8 months from Prime Minister to President) a traditional political business cycle of lending would have been ineffective, but the regime could rely on the historical habit of voter work place mobilization, incentivized by Sberbank corporate lending. It follows that the impact of this ex ante channel may have been much stronger in regions whose governors were in some way connected to Putin, since only they were willing and able to provide the much needed coordination for this mechanism.

Finally one wonder why our hypothesized Sberbank lending channel to voter work place mobilization was not used earlier in favor of Yeltsin in the July 1996 Presidential elections or by Putin in the December 1999 Duma elections. The answer is twofold. Certainly, the Yeltsin 1996 election was heavily influenced by bank lending. At that time, a few oligarch-dominated banks bankrolled Yeltsin's campaign in exchange for majority stakes in several of Russia's most valuable state-owned companies. This gave rise to the infamous loans-for-shares auctions and a massive wealth transfer to these oligarchs in the aftermath of Yeltsin's reelection (Hoffman, 2002). Yeltsin used to funds among other things to finance a massive reduction of wage arrears both for state employees and

workers in privatized firms a few months ahead of the election, in this was also relying on ex ante incentives for his reelection.

As regards using Sberbank lending ahead of the December 1999 elections in a standard political business cycle attempt to pump up support through fueling growth and employment, one need keep in mind that Russia was only just recovering from the August 1998 collapse[11], which completely clogged the payments system. Getting the payments system fully operational again took until well into 1999. With four prime ministers (Kiriyinko, Primakov, Stepashin, and finally Putin) in less than one year and a dysfunctional president Yeltsin, the political outlook was anything but stable. The December 1999 Duma elections were characterized by real political competition from OVR, a powerful bloc of strong regional leaders described above, and a fully operational Communist Party, whose political machines still wielded significant power over regional government-owned institutions. Therefore, neither Unity nor OVR or the Communist Party could have used the Sberbank instrument to their exclusive benefit for the December 1999 election.

3. Data and methodology

To examine how lending provided by Sberbank to companies may have influenced Putin's victory in presidential elections in March 2000, we estimate the following specification (1):

$$(Vote_{March\ 2000} - Vote_{Dec\ 1999})_r = \alpha_1\ \Delta(\ln(Sberbank\ corporate\ loans_{r,\ t}))$$
$$+ \alpha_2\ \Delta(\ln(Sberbank\ household\ loans_{r,\ t}))$$
$$+ \alpha_3\ \Delta(\ln(credit\ of\ domestic\ private\ banks_{r,\ t}))$$
$$+ X'_r + \varepsilon_r,$$

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[11] The crisis entailed a severe collapse of the ruble exchange rate, a default on internal and external government debt, a moratorium on foreign payments and a deep banking crisis.

where *r* stands for the region, *t* indicating the month, *Sberbank corporate loans* indicating Sberbank firm ruble credits, *Sberbank household loans* indicating Sberbank household ruble credits, *credit of domestic private banks* indicating domestic private firm ruble credits, Δ is the change over two months, X'_r a vector of regional control variables and ε_r the random error term. The explained variable, the regional percentage point change in Putin's popularity between December 1999 and March 2000, is measured by calculating the difference between the electoral performance of Putin in the March 2000 elections and the sum of the electoral performances of the Putin supporting parties in December 1999, i.e. Putin's Unity party and OVR.

Our argument for the relation between Sberbank loans to private firms (largely privatized firms) and Putin's success in the presidential election is based on workplace mobilization encouraged by positive financial incentives. We test the hypothesis that the government provided incentives to firm managers to mobilize their employees to vote for the regime through Sberbank loans to private firms.[12] Rather than total regional lending growth, our explanatory variable of primary concern is therefore the relative growth of regional corporate Sberbank lending over a period of two months. We are able to consider the credit growth over two months thanks to a rich Sberbank dataset that provides monthly data and allows us to track precisely the evolution of Sberbank lending around the dates of elections. Indeed, a longer period would reduce the quality of the identification of the influence of Sberbank lending on elections, while a one-month period would lead to numerous outliers[13].

The granular quality of our data is crucial for identification. Lending a few months before the election would not be very effective in terms of the classical political business cycle in the literature, since the credits only resort an effect on employment, growth, and

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[12] During our observation period, most of Sberbank's corporate lending by its regional branches went to private or privatized firms. These privatized firms often enjoyed Soviet-era connections with Sberbank (see Berkowitz et al., 2014). The remaining large government-owned firms were served mainly by Sberbank's Moscow branch or directly from Sberbank headquarters by a unit created for strategically important projects across Russia. The Moscow branch and project lending unit are excluded from our sample because they cannot be traced back to regional variation.

[13] Monthly loan growth variation is very volatile due to obvious technical or practical reasons, for example the precise timing of a large loan at the end of a month or the first days of the next month..

ultimately support for the incumbent over a period of at least half a year. Turning a loan into an investment and extra jobs just takes time. This is why most of the literature is satisfied with analyzing annual lending patterns. Our mechanism of voter workplace mobilization is more agile. Once the firm managers can use the money of their loan, which could take up to a month in Russia by end 1999, they can take fast action by mobilizing their workers through clear internal communication about the desired voting behavior. The fact that many polling stations were located inside large privatized firms rendered it easy for firm managers to monitor turnout of their workers. Therefore, if our results show that the regional surge in Putin's popularity in the March 2000 election is well explained by a surge Sberbank lending a few months before that election, but not by earlier Sberbank lending surges, this rules out the classical political business cycle and supports our work place mobilization channel instead. Furthermore, if we would find the regional surge in Putin's popularity in the March 2000 election to be unrelated to later post-election surges of Sberbank lending, this would indicate that the usual ex post clientelist reward system was not the driving factor in the March 2000 elections and would again lend support to our proposed ex ante work place mobilization channel.

We include two additional explanatory variables concerning bank lending. First, we consider changes in the regional variation of Sberbank household loans. As explained above, the identification of our proposed mechanism depends on loans granted to private or privatized firms. Therefore, by controlling for the bimonthly growth of Sberbank loans to households, we are able to identify specifically the impact of corporate loans provided by Sberbank and make sure our results are not driven by any time-specific regional variation in Sberbank's general lending policy. Second, we include the bimonthly regional growth in credit to the economy provided by domestic private banks. This variable allows us to control for regional shocks in bank lending such as regional credit demand shocks or region-specific business cycle effects. We cannot split the regional credit growth from domestic private banks in corporate and household credit, because the regional monthly household credit is too sparse in the period under study. Household credit takes off on a nationwide scale only a few years later.

Sberbank officials provided data on the monthly and regional variation of Sberbank corporate and household loans at the occasion of an interview in November 2002. A major advantage of these data is that the regional location of all loans is based on the location of the borrower. Therefore, cross-regional loans (from Sberbank in region A to a borrower in region B) are not erroneously associated with a region. The Moscow region is omitted from the sample because the regional Sberbank data for Moscow does not distinguish Moscow regional lending from federal loans granted for federal projects. There are, therefore, no Sberbank lending data for Moscow or the Moscow region separately. Bimonthly regional growth of credit to the economy from domestic private banks is calculated from the lending data of individual banks using the Mobile database. Since this calculation is based on the location of the bank, the numbers are not reliable for Moscow and the Moscow region. Close to all banks that provided lending outside their region in 1999–2000 were located in Moscow or the Moscow region, giving us further cause to omit Moscow and the Moscow region from our regressions. So by restricting ourselves to the inclusion of bimonthly growth of regional credit issued by regional banks, we control for regional credit demand shocks or region-specific business cycle effects. If, for example, some regions anticipate faster growth once Putin is elected, then these regions should also exhibit higher growth of lending by private banks. Therefore, the inclusion of this variable ensures our results are unbiased by this type of region-specific business cycle effects.

We include six additional control variables to account for regional differences that could potentially affect our dependent variable independently from our hypothesized mechanism. We include the *urban population* share in 1989 (source: Goskomstat, 1991, pp. 88-109) because it may be related to economic perspectives. Acemoglu, Hasan and Robinson (2011, p. 910) suggest the size of the *educated middle class* in the Russian regions during the end of the Soviet Union is an important predictor of good political institutions and good economic outcomes in the Russian regions after the demise of the USSR. Similarly, we measure the middle class in 1989 as the share of the educated middle class in 1989 (source: Goskomstat, 1991, pp. 88-109). *Ethno-linguistic fractionalization* is related to levels of trust, corruption and financial depth and may be a

potential determinant of future growth (Alesina et al., 2003). Russian regions with large ethnic minorities (often republics) also had special opportunities and particular incentives to mobilize strong political machines in favor of the expected winner of the election (Hale, 2001). We use data from the All Union Census of 1989 (source: Goskomstat, 1990) to calculate ELF where higher values represent more fragmented, and hence more ethnic, regions. We also include two direct measures of government involvement in the economy in respectively the late Soviet era and during the mid-1990s. Our Soviet measure is the number of *employees in the defense sector* per 1000 employees in 1985 (source: Gaddy, 1996). Our early nineties measure is the share of *agriculture subsidies in the regional budget* in 1995 (source: Remington, 2011). In these heavily subsidized agricultural regions, that often possess large numbers of agricultural villages, one can expect governors with strong political machines that are able to manipulate votes in the direction they desire, independently of our channel (Hale, 2001). Finally, since Moscow is the economic, financial and, most importantly, the political capital of Russia, we also account for *distance from Moscow (in 1000 kilometer)*. Data restrictions lead to a sample of 61 Russian regions. Summary statistics are shown in Table 1. We measure all these structural controls in late Soviet times or early transition, as to avoid any issues of endogeneity or reverse causality.

We examine the impact of the bimonthly growth of regional corporate Sberbank lending on increased votes for Putin in the four months before the March 2000 presidential election. Our hypothesis is that the Russian government may have used its control over Sberbank to influence Putin's performance in the upcoming presidential election through voter work place mobilization. Since Putin was informed only in November 1999 that Yeltsin would abdicate, we focus on the period November 1999 - January 2000. As the presidential election took place in early March 2000, loans granted in February or March 2000 would have likely come too late to influence the political outcome, especially given the slow process of financial settlement in this period and the time required to coordinate on successful voter work place mobilization. Consequently, evidence in favor of our hypothesis is observed if the bimonthly growth in Sberbank lending to firms in the preceding periods (November-December 1999 and December

1999-January 2000) positively influenced Putin's performance in the March 2000 election.

4. Main Results

This section presents our results for the relation between the growth of regional corporate Sberbank lending and the change in Putin's popularity between December 1999 and March 2000. We start with the main estimations and then investigate possible mechanisms underlying the results.

Table 2 reports the main estimations of equation (1). We test several specifications of the two-month variation for the three bank loans variables with a monthly rolling window. Each column corresponds to a change in the independent variables during the two months indicated in the column heading.

The key finding is the positive and significant coefficient of the growth of regional corporate Sberbank lending for two windows: we cannot reject $\alpha_1 > 0$ for the periods November-December 1999 and December 1999-January 2000, while we cannot reject $\alpha_1 = 0$ for any preceding time windows or for January-February 2000 (too close to the election for the mechanism to work). Therefore, our main conclusion is that the surge (fall) of regional corporate Sberbank lending in the months preceding the March 2000 elections is positively associated with Putin's gain (loss) in popularity between December 1999 and March 2000. It supports the main hypothesis that a relative increase in regional corporate Sberbank lending results in more success for Putin at the regional ballot box. The significance of the November-December period indicates that the Sberbank-bankrolled campaign to make employers mobilize their employees' votes for Putin may have started before Yeltsin's surprise New Year's Eve resignation, and possibly even before the results for Unity's performance in the December 1999 Duma election were known.

In any case, Figure 1 shows that the largest bimonthly surge in Sberbank corporate lending occurred in the period November-December 1999, with considerable smaller changes in the preceding or following bimonthly periods. The smallest increase observed is precisely in the period immediately preceding the March 2000 election. Clearly, most of the increase in Sberbank lending took place in December 1999, which in itself already is a peculiar observation.[14] Our monthly data do not allow us to disentangle which part of the regional corporate Sberbank lending growth surge occurred before and after the December 1999 Duma election.

We observe that most control variables are not significant in our estimations. Two notable exceptions are the positive coefficient of share of the educated middle class and the negative coefficient of the distance from Moscow. Both are only significant in the same time windows where the growth of regional corporate Sberbank lending turns significant. This does not mean that our main results are due to multicollinearity, however. If we exclude distance or the share of the educated middle class in the estimation of (1) our main result remains very robust. A better interpretation is that the regional distribution of Sberbank lending to firms changes abruptly in the period right before the election, inducing a different correlation with the share of the educated middle class and leading to its significance in the estimation. After accounting for the sudden change in the regional allocation of ruble credit to firms, we find that regions with a larger educated middle class and proximity to Moscow saw greater increases in Putin's popularity in the three-month period before the March 2000 election.

The fact that we cannot reject $\alpha_1 = 0$ in the periods immediately after the election (the two last columns in Table 2) illustrates clearly that there is no reverse causality running from favorable election outcomes to increased regional corporate Sberbank lending in line with a clientelist reward channel. We can reject that our results would be driven by the fact that electorally well performing regions would be rewarded after the

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[14] While using monthly figures is theoretically preferable, the figures in practice give rise to so many outliers that reliable estimation is not possible. A large loan issued on the last week (days) of the month, rather than the first week (days) of the next month leads to large variations in the monthly regional changes. These variations are smoothed away by looking at the bimonthly changes.

election by increased corporate Sberbank lending. This lends further support to our pre-election Sberbank loans-for-votes hypothesis.

5. Mechanisms

We now consider possible mechanisms in detail. The surge in regional corporate Sberbank lending to certain regions may have been especially politically effective under circumstances in line with the private firm voter mobilization mechanism and less so under different circumstances.

5.1 Rallying turnout

We start by investigating the effect of Sberbank lending on rallying voters to cast a ballot. In the mechanism we propose, firm managers receive extra Sberbank credit a few months before the election that incentivizes them to rally their workers to come out to vote for the chosen candidate. As discussed, ballot-stuffing was likely not a big issue in this election.

Previous studies have argued that regional voter participation in the 1989 Soviet election was a good measure of the regional variation in powerful elites inherited from the former Soviet Union (Berezkin et al., 1989; Berkowitz and DeJong, 2011; Berkowitz, Hoekstra and Schoors, 2014). In the first relatively open election in Soviet history, citizens were allowed to vote for representatives to the Soviet Congress and opposition candidates were permitted for the first time to compete for power against the Communists on the ballot. In regions where the Communist Party remained strong and well organized, the Communists used their traditional administrative structures to mobilize voter turnout from traditional bases of support including state farms and state-owned enterprises.

This illustrates that political activism at the level of state farms and state firms was still a crucial part of political life in the final decade of the Soviet Union. Our period of

study occurs only ten years after the 1989 election. Although most farms and firms had been privatized, we assert that the tradition of political activism and rallying employees to turn up at elections by firm managers remained a fact of Russian political life in 1999 and early 2000. Indeed, it may in fact have mattered more in 1999 than in 1989 because of the bitter disappointment of Russian voters with their democratic experiment and the tendency of some part of the electorate to turn away from politics altogether.

We test this hypothesis by regressing the increase in voter turnout between the December 1999 Duma elections and the March 2000 presidential elections on our three lending variables, controlling for the same regional variables as in specification (1). If our hypothesis that the surge in Sberbank lending just before the elections gave managers an incentive to be politically active and rally their workers to vote for their chosen candidate is correct, we should observe that a surge in Sberbank lending in the months predating the elections predicts an increase in turnout, while the increase in Sberbank lending in other periods remains unrelated to the increase in turnout. Thus, we proceed by estimating specification (2):

$$
\begin{aligned}
(Turnout_{\text{March 2000}} - Turnout_{\text{Dec 1999}})_r = {} & \alpha_1 \, \Delta(ln(Sberbank\ corporate\ loans_{r,\ t})) \\
& + \alpha_2 \, \Delta(ln(Sberbank\ household\ loans_{r,\ t})) \\
& + \alpha_3 \, \Delta(ln(credit\ of\ domestic\ private\ banks_{r,\ t})) \\
& + X'_r + \varepsilon_r
\end{aligned}
$$

where the dependent variable is the change in regional voter turnout between the Duma elections of December 1999 and the presidential elections of March 2000. We classify voters that opposed all presidential candidates in 2000 as not turning up, because there was no such option in the 1999 Duma. Voters opposing all parties in the December 1999 elections therefore only had the option of abstaining from the vote, implying that including these votes in the turnout in March 2000 could severely bias our results. Our results are however robust to including these voters "Against All" in the 2000 turnout numbers. We perform the regression for all periods t in the dataset and our hypothesis is

that $\alpha_1 > 0$ if t captures the months predating the elections and $\alpha_1 = 0$ in any other period t. All other variables are the same as before.

We lay out our results in Table 3. We observe that we now find $\alpha_1 > 0$ precisely in months before the election where we found our main results in Table 2, while this hypothesis is rejected in any other period: controlling for other regional factors, regions that receive more Sberbank lending a few months before the elections also exhibit a higher increase in voter turnout between December 1999 and March 2000. This lends additional support to our channel, whereby increased regional Sberbank lending to firms gives firm managers incentives to rally or even press their workers to show up and vote for Putin, in this way also increasing turnout numbers. We have repeated these regressions by pooling two periods in one regression and clustering standard errors by region. This doubles our estimation sample to allow for mild differences across regions in the timing of the increased Sberbank lending across regions. The results of Table 3 are robust and available on request.

The interpretation that a Sberbank firm lending shock incentivized managers to rally their workers to turn up and vote for Putin is also strongly supported by a highly significant correlation of 0.3407 between the regional three-month increase in voter turnout and the regional three-month increase in voting for Putin: in an environment where voter turnout was not contaminated by wide-scale, organized ballot-stuffing (Kobak, Shpilkin and Pshenichnikov, 2016) a surge in voter turnout, in turn driven by a change in the regional patterns of Sberbank corporate lending, apparently swayed the popular vote in favor of Putin at the March 2000 ballot box.

5.2 Connected regional leaders

In sections 4 and 5.1 we estimated the average effect of the growth of regional corporate Sberbank lending on the change in Putin's popularity and voter turnout. This average effect may cover the underlying truth that nothing of the sort happened in some regions, while a much stronger relation existed in other regions. In particular, we expect these effects to be strongly present in regions where the regional leader was willing and able to coordinate the efforts needed for work place voter mobilization, while the effects will be absent in regions where this willingness and ability for political coordination was lacking.

We attempt to measure this willingness and ability to coordinate by investigating the background of the regional governors. A governor could conceivably use his or her powers to coordinate the work place voter mobilization efforts in firms that benefited from the regional surge in Sberbank corporate loans, thereby exerting the desired influence on Putin's popularity. As noted before however, regional governors were largely independent of the Kremlin at the time of Putin's rise to power (Rochlitz, 2016), so the Kremlin lacked credible sanctions to influence their behavior. However, other Kremlin connections could still have shaped their decisions.

Drawing on the work of Shurchkov (2012), we consider two variables to account for factors on the governor's background that may be related to their willingness and ability to coordinate on the loans-for-votes scheme. The dummy variable *Elite* equals one if the governor is not a member of the old Communist elite, and zero otherwise. The dummy variable *FSB or military governor* equals one if the governor has been a member of the *siloviki*, i.e. power institutions, including the security services (FSB) and armed forces, and zero otherwise. Those variables consider two different forms of affiliation of the governor.

On the one hand, governors that are not a member of the old Communist elite can be interpreted as having a relation with former president Yeltsin, who held office from

1992 to the end of 1999 and made deals with many of these new governors in exchange for political support. A governor who is not a member of the old Communist elite is generally expected to have greater chances of making connections with the incoming elite after the end of the Communist regime, i.e. Yeltsin's people. Since Putin was the appointed heir of Yeltsin through his decision to abdicate, governors linked to Yeltsin can be expected to be more willing to provide the coordination needed to convert the surge in Sberbank corporate ruble loans into the appropriate political mobilization effort in support for Putin.

To have been a member of the siloviki, on the other hand, suggests not only close connections with Vladimir Putin, but also access to a large and powerful organization with a lingering presence in many privatized firms. A large number of studies have explained the links between Putin and siloviki veterans and their emergence as the backbone of Putin's administration (Treisman, 2007; Kryshtanovskaya and White, 2015).[15] Former siloviki, that is, may not only have the willingness, but also the political machines, to provide the coordination needed to turn extra corporate credits into extra votes through work place voter mobilization. In addition, one cannot rule that the siloviki saw the installation of Putin as president as aligned with their personal interests and therefore coordinated their political response to help him get elected even in the absence of any explicit demands from the political center.

To assess the importance of connections of regional leaders, we repeat our main estimations based on the equation (1) and add alternatively our two measures of governor background and the interactions between this governor background dummy and the growth of regional corporate Sberbank lending. These estimations are performed for the two windows (November 1999-December 1999, December 1999-January 2000) for which we found evidence of a significant and positive effect of the growth of regional corporate Sberbank lending on the regional change in Putin's popularity. This amounts to the following specification (3):

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[15] See also reports of FSB influence on Putin's rise (e.g. *Los Angeles Times*, January 12, 2000, http://articles.latimes.com/2000/jan/12/news/mn-53274)

(Vote $_{March\ 2000}$ -Vote $_{Dec\ 1999}$)$_r$ =

   $α_1$ $Δ(ln(Sberbank\ corporate\ loans_{r,\ t}))$

   $+ α_2$ *(Connected governor)*

   $+ α_3$ $Δ(ln(Sberbank\ corporate\ loans_{r,\ t})) × $ *(Connected governor)*

   $+ α_4$ $Δ(ln(Sberbank\ household\ loans_{r,\ t}))$

   $+ α_5$ $Δ(ln(credit\ of\ domestic\ private\ banks_{r,\ t}))$

   $+ X'_r + ε_r$

Elite and *FSB or Military Governor* are alternatively substituted for *Connected governor*. If we cannot reject a positive coefficient for the interaction term ($α_3 > 3$), it is implied that we cannot reject that the beneficial impact of a surge in Sberbank corporate lending on the change in Putin's popularity is stronger in regions with a governor affiliated with the regime. We lay out the results in Table 4.

We find that the interaction term is positive with *Elite*, but only significant for the November-December 1999 window, while it is positive and significant with *FSB or Military Governor* for both time windows. These findings support the view that regions with a connected governor were characterized by a higher willingness or ability to provide the coordination needed to convert the surge in Sberbank corporate ruble loans into the appropriate political mobilization effort in support for Putin, and especially so if these connected governors not only had the willingness (*Elite*), but also the ability (*FSB of Military Governor*) to perform this coordination. This finding provides additional support for our main hypothesis that the March 2000 presidential election was characterized by workplace mobilization through Sberbank loans, by demonstrating that the effect is stronger in those regions with governors whose political machines were willing to provide the necessary coordination.

In addition, we observe that the direct effect of *Elite* and *FSB or Military Governor* is negative and significant in three of four specifications. This finding is explained by the fact that if a governor is affiliated to the regime, the electoral performance of Putin's

supporting party was already high in December 1999 relative to other regions, so the incremental change of Putin's popularity was expected to be lower in the absence of additional incentives in the form of Sberbank loans granted to firms in the region. Also we observe that we cannot reject $\alpha_1 = 0$ in all specifications of Table 4, indicating that the main effect of additional corporate Sberbank loans on additional votes for Putin is completely absorbed by the interaction effects. This is in line with the hypothesis that our Sberbank loans-for-votes mechanism is only successfully at work in regions with connected governors.

5.3 Single-company towns

We examine how the share of the population living in monogorods influences our findings. Monogorods are towns or small cities whose economy is dominated by a single company as a consequence of the Soviet industrial location policy. Hale (2001) already suggests that in regions with a large share of their population living in multiple company towns, firms face a major collective action problem in opposing a governor and are therefore more susceptible to pressure and intimidation from the governor, ensuring that our ex ante channel may not be required to achieve the desired result in these regions. Frye, Reuter and Szakonyi (2015) support this view by arguing that voter intimidation by regional elites has been especially widespread "in Russia's many single-company towns where employers have considerable leverage over employees." Rochlitz (2016) goes so far as to suggest that today many inefficient companies in monogorods are kept alive through state subsidies precisely because they provide easily accessible reservoirs of voters for incumbents.

In any case, we expect the channel of Sberbank lending to be weaker in monogorods as the regime can easily intimidate voters and avoid the need for expensive and possibly less effective carrots such as Sberbank loans. To investigate this argument, we look at the regional share of the population living in monogorods (*Monogorod population*). We include this variable in addition to its interaction with the variation of Sberbank corporate loans. The results are displayed in Table 5.

If our hypothesis about ex ante voter work place mobilization is correct, we should observe that the impact from Sberbank lending on the change in Putin's popularity is lower in regions with a greater share of the population living in monogorods, essentially because the carrot of ex ante Sberbank loans is unlikely to carry much potency over and above the arguably crushing effectiveness of voter intimidation in monogorods.

We find (see Table 5) the hypothesized negative and significant coefficient for the interaction term between monogorod population and the growth of regional corporate Sberbank lending in both tested periods (November-December 1999, December 1999-January 2000). The finding that our proposed Sberbank mechanism was less important precisely in those regions where the possibility of voter intimidation provided a cheaper and readily available alternative for achieving the desired political result provides additional credibility to our main hypothesis that Putin's electoral performance was boosted by a calculated surge of Sberbank lending to firms.

5.4 Employment by privatized firms

Finally, we consider the importance of state employment. Our hypothesis is based on how well Sberbank lending incentivizes firm managers to mobilize their workers. We expect this impact to be strongest in private (privatized) companies. State-owned enterprises have always enjoyed access to Sberbank lending, not to mention direct subsidies from the state. In other words, they likely suffer less from financial constraints than private companies. Moreover, appointed managers of state-owned companies are likely to be more supportive to the appointed successor of Yeltsin, regardless of Sberbank's corporate lending decisions, because they face the credible threat of dismissal if they fail to deliver the desired political outcome. This implies the carrot of additional Sberbank lending is expected to play less of a role in regions with high state employment.

We therefore investigate if the influence of the growth of regional corporate Sberbank lending on the change in Putin's popularity decreases with the importance of employees of state-owned companies in total employment of the region. We test this

hypothesis with two variables measuring employment in state-owned companies. We first use the share of employees in state-owned and municipal companies relative to total employment (*State firm employment*) in the start of the year 2000 (Rosstat). We also use a dummy variable, which equals one if the share exceeds the median for all regions, and zero otherwise (*High state firm employment*).

We perform the estimations by adding each variable for state firm employment alternatively and its interaction term with the growth of regional corporate Sberbank lending. Our hypothesis suggests that a negative and significant coefficient for the interaction term indicates that the growth of regional corporate Sberbank lending has a lower effect on the change in Putin's popularity in regions with higher state firm employment. We estimate this according to equation (4):

$$(Vote_{\text{March 2000}} - Vote_{\text{Dec 1999}})_r =$$

$$\alpha_1 \, \Delta(ln(Sberbank \ corporate \ loans_{r,\,t}))$$

$$+ \, \alpha_2 \, (state \ employment)$$

$$+ \, \alpha_3 \, \Delta(ln(Sberbank \ corporate \ loans_{r,\,t})) \times (state \ employment)$$

$$+ \, \alpha_4 \, \Delta(ln(Sberbank \ household \ loans_{r,\,t}))$$

$$+ \, \alpha_5 \, \Delta(ln(credit \ of \ domestic \ private \ banks_{r,\,t}))$$

$$+ \, X'_r \, + \, \varepsilon_r$$

We present our estimates of (4) in Table 6. We find evidence in line with our hypothesis. The interaction term is negative and significant ($\alpha_3 < 0$) in three of the four tested estimations (negative and insignificant in the last). Hence, if state employment is higher in one region, the impact of changes in regional corporate Sberbank lending on changes in regional election results is smaller. This accords with the thesis that this Sberbank loans-for-votes mechanism takes place mainly in private-(ized) firms. Therefore, all our estimations show that the impact of Sberbank lending has been higher in regions with greater share of private firms. They consequently provide support for our hypothesis that the incentivizing impact of Sberbank lending mainly occurs through lending to private companies.

We extend our analysis of the private-company channel at the regional level by repeating our estimations with an alternative key independent variable – the ruble change in Sberbank corporate loans per employee in the private sector. Estimations are reported in the two last columns of Table 6. The obtained results are similar in interpretation to the previous ones. The coefficient for the ruble change in Sberbank corporate loans per employee in the private sector is positive and significant for both tested windows, lending further support to the idea that firm managers used the extra Sberbank money to mobilize private firm employees: a higher Sberbank loan increase in rubles per employee in the private sector is related to a higher increase of votes for Putin, which provides very direct support for our channel.

6. Robustness checks

We perform a battery of alternative estimations to examine the robustness of our findings.

First, we test an alternative dependent variable in the estimations. In the main estimations, we measure Putin's popularity in December 1999 as the aggregation of Unity Party and OVR, which supported Putin in the March 2000 presidential elections and ultimately merged with Unity. Here, we verify whether our results stand if we employ the performance of Unity, the prime party supporting Putin, as a measure of Putin's popularity in December 1999 instead. In this vein, we repeat our main estimations in Table 7 with the difference between the electoral performance of Putin in the March 2000 elections and the electoral performance of only Putin's Unity Party in December 1999 as the dependent variable. We observe again a positive and significant coefficient of the growth of regional corporate Sberbank lending for the period December 1999-January 2000. Hence, even if we restrict ourselves to a narrower definition of the evolution of Putin's popularity, we obtain evidence supporting the hypothesis that the increased Sberbank corporate lending ahead of the election enhanced Putin's success on the ballot.

Second, we check to determine that our results are not driven by shocks in regional Sberbank funding rather than regional Sberbank lending. Regional Sberbank lending to firms may have increased simply because of greater regional Sberbank deposit collection in the aftermath of the 1998 crisis, with deposits of several bankrupt banks ultimately being transferred to Sberbank in 1999. If this has driven the results, our proposed voter mobilization mechanism would be invalidated. To this end, we repeat our estimations and include the bimonthly increase in Sberbank ruble deposits from both households and firms (*Δ Sberbank deposits*) as extra control. The estimations are reported in Table 8. The results are similar to those in the main estimations. Although the coefficient for the increase in Sberbank deposits is positive in our observation months (and even significantly positive in November-December 1999), the coefficient for the bimonthly growth of regional corporate Sberbank lending remains significantly positive only for the windows November-December 1999 and December 1999-January 2000. Its magnitude hardly budges. We thus conclude that the observed relation between growth in regional corporate Sberbank lending and changes in votes for Putin was not driven by a third factor driving regional deposit flows to Sberbank, but in fact by the change in Sberbank's regional allocation of corporate loans.

Third, we consider a straightforward set of placebo regressions. Our main finding may be driven by some unknown monthly region and time specific cyclicality in Sberbank's corporate lending policy. If this seasonality occurs typically at the end of every year because of climatic, technical or economic reasons that generate time- and region-specific end of year credit needs, we should also observe a relation between the one-year ahead growth of regional corporate Sberbank lending (November-December 2000) and both the change in electoral performance of Putin and the change in voter turnout over the period December 1999-March 2000. These specific placebo results are reported in Table 9. Since our dataset on Sberbank loans ends in December 2000, we can only consider the period November-December 2000 and cannot include the period December 2000-January 2001 in the placebo regressions. We consider the impact of the change of Sberbank's corporate loan allocation on the change in electoral performance of Putin in the first column, and on the change in voter turnout in the second column. Unlike

in the period November-December 1999, the growth of regional corporate Sberbank lending for the period November-December 2000 appears to have no significant impact on the change in electoral performance of Putin or the change in voter turnout. In other words, our results show that our main findings are not driven by an unobserved region-specific seasonal pattern arising at the end of the year.

Our robustness checks confirm the existence of a positive relation between the change in the regional allocation of Sberbank corporate loans prior to the March 2000 presidential elections and the increase of Putin's popularity between the Duma election of December 1999 and the presidential election of March 2000.

7. Conclusions

This paper discussed possible channels through which state ownership of banks might influence political outcomes. Taking the case of Russia during the 1999–2000 period, which saw the rise of Vladimir Putin to the office of president, we investigate how the dominant state-owned Sberbank influenced the election outcomes through granting corporate loans. To this aim, we study the relation between the regional increase in Sberbank corporate loans prior to the March 2000 presidential election and the regional increase of Putin's popularity between the Duma elections of December 1999 and the March 2000 presidential election. We find evidence that the regional pattern in increased Sberbank lending prior to the election was related to Putin's electoral success in March 2000. The timing of this finding rules out a traditional political business cycle, with increased lending working on votes through increased economic growth, and also rejects the interpretation of a system of clientelist Sberbank lending that would reward/punish ex post good/bad political outcomes after the elections. It seems that the March 2000 election was exceptional in this regard.

With respect to the mechanism behind this effect, we test the hypothesis that increased Sberbank lending was used to provide managers at private firms with

incentives to mobilize the votes of their employees in favor of the regime, a pattern not unlike the Soviet-era tradition when firms were owned by the state. We show that the growth of regional corporate Sberbank lending had a positive influence on voter turnout in line with our hypothesis that firm managers are incentivized to rally workers to turn out and vote for the designated candidate. This increase in voter turnout is correlated to the increase in votes for Putin in a period when ballot stuffing was limited, suggesting that the increased turnout generated by a surge Sberbank lending mainly went to extra votes for Putin.

We also find that the growth of regional corporate Sberbank lending had a greater beneficial impact on Putin's popularity in regions with a governor affiliated with the regime, a finding that accords with our main hypothesis. Moreover, our Sberbank loans-for-votes mechanism is found to be less prevalent in regions with a greater share of population living in single-company towns, consistent with the view that voter mobilization is less needed in such regions to achieve to desired political result because of the readily available and cheaper alternative of voter intimidation. Finally, the impact was strongest in regions with a low degree of employment by state firms and highest in regions with a high Sberbank lending per employee to the private sector. This fits well with the view that the incentive mechanism of Sberbank lending works largely through private and privatized companies, while no such carrot was needed in state-owned organizations. Our identification strategy and robustness checks insured that these results are unlikely to be driven by other regional factors or by other otherwise unobserved time- and region-specific variations in Sberbank lending or Sberbank funding.

This paper contributes to the debate on the explanations of the success of Vladimir Putin in the March 2000 presidential election. Our results support the view that Sberbank loans granted before the presidential elections may have supported this success through a process of voter mobilization in private(ised) firms. This conclusion should not be interpreted too broadly, however. First, we claim that Sberbank corporate lending was only one (albeit previously unstudied) among many tools employed to influence this particular election outcome. Second, we find no evidence or claim that Vladimir Putin personally led the organization of a centralized Sberbank-bankrolled campaign of voter

mobilization, but rather that a confluence of similar interests drove this result. For example, connected regional governors or Sberbank managers may have risen to the occasion to have a member of their social group elected as president and successfully tried to reach the desired result without orders from the top.

The question naturally emerges as to whether Sberbank corporate lending, lending by state-owned banks more generally or lending by privatized Soviet state banks (Berkowitz, Hoekstra and Schoors, 2014) was used before or after the 2000 election to influence political outcomes. We do not have the data needed to answer this question, but our study definitely raises questions and opens avenues for further research on the links between politics and banking in Russia.

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Figure 1. Growth of Sberbank corporate loans averaged over all available Russian regions, by bimonthly period.
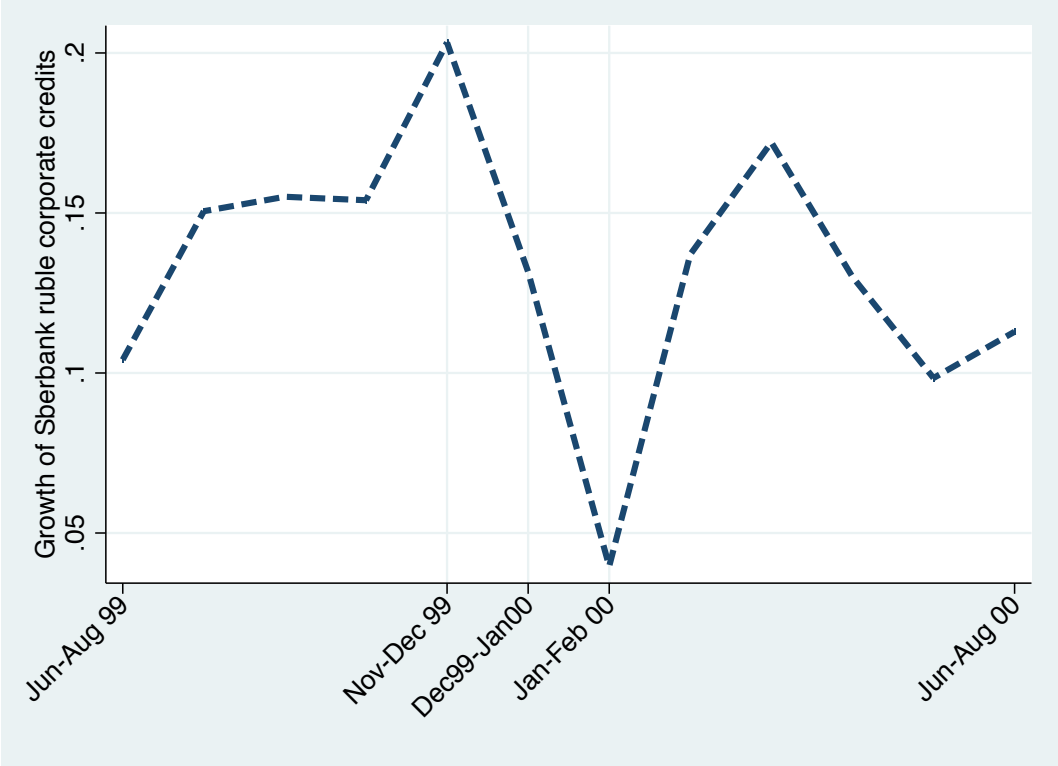
The three periods specified in the middle are the last three bimonthly periods that are stil fully preceding the March 2000 elections

Table 1.
Descriptive statistics

This table presents the means and standard deviations of the variables used in the estimations.

Variable	Mean	Std. Dev.
Putin gain between December 1999 and March 2000	0.167	0.076
Δ Sberbank corporate loans	0.203	0.190
Δ Sberbank household loans	0.138	0.116
Δ Credit from domestic private banks	0.033	0.151
Urban population	0.400	0.214
Educated middle class	0.307	0.051
Defense employment	2.308	1.312
Distance from Moscow in 1000 km	2.105	2.580
Ethno-linguistic fractionalization	0.295	0.200
Agriculture subsidies	9.492	5.634
Elite	0,384	0.490
FSB or military governor	0.178	0.385
Share state firm employment / total employment	0.395	0.069
Δ Sberbank corporate loans in rubles / Employees in the private sector	0.251	0.420

Table 2.
Main estimations

OLS estimations are performed. The dependent variable is the change in Putin popularity between December 1999 and March 2000. Δ stands for two-month change in the specified variable. Standard errors appear in parentheses below estimated coefficients. *, **, *** denote an estimate significantly different from 0 at the 10%, 5% or 1% level.

	Jul-Aug 1999	Aug-Sep 1999	Sep-Oct 1999	Oct-Nov 1999	Nov-Dec 1999	Dec 1999- Jan 2000	Jan-Feb 2000	Feb-Mar 2000	Mar-Apr 2000	Apr-May 2000
Δ Sberbank corporate loans	-0.03 (0.055)	0.04 (0.051)	0.00 (0.056)	0.07 (0.061)	0.13** (0.053)	0.13** (0.051)	-0.04 (0.069)	-0.07 (0.060)	-0.09 (0.056)	-0.01 (0.058)
Δ Sberbank household loans	0.03 (0.085)	0.04 (0.076)	0.05 (0.089)	-0.06 (0.087)	-0.06 (0.083)	0.04 (0.110)	-0.03 (0.096)	-0.03 (0.083)	0.07 (0.099)	-0.04 (0.094)
Δ Credit from domestic private banks	-0.02 (0.079)	0.11 (0.077)	0.04 (0.071)	-0.03 (0.102)	0.01 (0.056)	-0.05 (0.070)	0.07 (0.099)	0.14* (0.077)	0.09 (0.075)	0.02 (0.071)
Urban population	-0.02 (0.046)	-0.03 (0.046)	0.05 (0.055)	0.03 (0.050)	0.02 (0.047)	-0.01 (0.044)	0.00 (0.049)	0.01 (0.048)	0.03 (0.047)	0.01 (0.049)
Educated middle class	0.13 (0.187)	0.14 (0.189)	-0.19 (0.229)	0.03 (0.193)	0.45** (0.219)	0.50** (0.221)	0.09 (0.192)	0.09 (0.199)	0.06 (0.184)	0.08 (0.190)
Defense employment	-0.01 (0.007)	-0.01 (0.007)	-0.01 (0.007)	-0.00 (0.007)	-0.01 (0.007)	-0.01 (0.007)	-0.00 (0.007)	-0.00 (0.007)	-0.00 (0.007)	-0.00 (0.007)
Distance from Moscow In 1000 km	-0.01 (0.005)	-0.00 (0.004)	-0.01 (0.004)	-0.01 (0.004)	-0.01** (0.004)	-0.01** (0.004)	-0.01 (0.005)	-0.00 (0.004)	-0.01 (0.004)	-0.01* (0.004)
Ethno-linguistic fractionalization	0.06 (0.048)	0.07 (0.048)	0.08* (0.047)	0.07 (0.046)	0.06 (0.048)	0.08 (0.048)	0.04 (0.050)	0.04 (0.049)	0.07 (0.046)	0.07 (0.049)
Agriculture subsidies	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)
Observations	58	57	53	59	56	58	61	60	60	61
Adjusted R-squared	0.084	0.120	0.142	0.133	0.220	0.205	0.081	0.144	0.165	0.096

Table 3.
Understanding the mechanism: increasing voter turnout

OLS estimations are performed. The dependent variable is the change in regional voter turnout between the Duma elections of December 1999 and the presidential elections of March 2000. We consider the voters that opposed all presidential candidates as not turning up (they do not have that option in the Duma elections), but results are robust to including these voters in the 2000 turnout. Δ stands for two-month change in the specified variable. Standard errors appear in parentheses below estimated coefficients. *, **, *** denote an estimate significantly different from 0 at the 10%, 5% or 1% level.

	Jul-Aug 1999	Aug-Sep 1999	Sep-Oct 1999	Oct-Nov 1999	Nov-Dec 1999	Dec-Jan 2000	Jan-Feb 2000	Feb-March 2000
Δ Sberbank corporate loans	-0.04	0.02	0.01	0.05	0.06	0.09*	-0.04	-0.06
	(0.049)	(0.044)	(0.049)	(0.052)	(0.046)	(0.045)	(0.055)	(0.050)
Δ Sberbank household loans	0.06	-0.04	-0.05	-0.07	-0.09	-0.00	0.01	-0.10
	(0.069)	(0.065)	(0.079)	(0.075)	(0.070)	(0.092)	(0.073)	(0.068)
Δ Credit from domestic private banks	0.04	0.15**	0.07	-0.00	0.06	0.07	-0.12	-0.02
	(0.070)	(0.067)	(0.063)	(0.086)	(0.050)	(0.063)	(0.077)	(0.063)
Urban population	0.00	0.01	0.06	0.03	0.02	-0.01	0.00	0.00
	(0.041)	(0.040)	(0.048)	(0.043)	(0.041)	(0.039)	(0.039)	(0.040)
Educated middle class	0.19	0.06	-0.18	0.07	0.19	0.20	0.15	0.05
	(0.166)	(0.163)	(0.201)	(0.164)	(0.193)	(0.198)	(0.151)	(0.165)
Defense employment	-0.01	-0.01**	-0.01*	-0.01*	-0.01*	-0.01**	-0.01**	-0.01*
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Distance from Moscow In 1000 km	-0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	0.00
	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
Ethno-linguistic fractionalization	-0.03	-0.04	-0.02	-0.02	-0.01	-0.02	-0.02	-0.04
	(0.043)	(0.042)	(0.041)	(0.039)	(0.043)	(0.043)	(0.040)	(0.040)
Agriculture subsidies	0.00	-0.00	0.00	0.00	-0.00	-0.00	0.00	-0.00
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Observations	59	58	54	60	57	59	62	61
Adjusted R-squared	0.145	0.203	0.178	0.146	0.176	0.196	0.150	0.143

Table 4.
Influence of governor's affiliation

OLS estimations are performed. The dependent variable is the change in Putin popularity between December 1999 and March 2000. Δ stands for two-month change in the specified variable. Standard errors appear in parentheses below estimated coefficients. *, **, *** denote an estimate significantly different from 0 at the 10%, 5% or 1% level.

	Nov -Dec 1999	Dec 1999- Jan 2000	Nov –Dec 1999	Dec 1999- Jan 2000
Δ Sberbank corporate loans	-0.01	0.08	0.04	0.05
	0.070	0.079	(0.056)	(0.054)
Elite	-0.06**	-0.02		
	(0.029)	(0.025)		
Δ Sberbank corporate loans × Elite	0.27***	0.11		
	(0.098)	(0.109)		
FSB or military governor			-0.08**	-0.07**
			(0.029)	(0.028)
Δ Sberbank corporate loans × FSB or military governor			0.32***	0.37***
			(0.105)	(0.118)
Δ Sberbank household loans	-0.01	0.08	-0.01	0.12
	(0.083)	(0.119)	(0.079)	(0.103)
Δ Credit from domestic private banks	0.05	-0.05	0.02	-0.07
	(0.055)	(0.071)	(0.052)	(0.065)
Urban population	0.03	-0.01	0.01	-0.01
	(0.044)	(0.045)	(0.043)	(0.040)
Educated middle class	0.54**	0.53**	0.55***	0.57***
	(0.221)	(0.238)	(0.203)	(0.203)
Defense employment	-0.00	-0.01	-0.00	-0.01
	(0.007)	(0.007)	(0.006)	(0.006)
Distance from Moscow In 1000 km	-0.01***	-0.01**	-0.01**	-0.01**
	(0.004)	(0.004)	(0.004)	(0.004)
Ethno-linguistic fractionalization	0.05	0.06	0.03	0.03
	(0.046)	(0.051)	(0.045)	(0.046)
Agriculture subsidies	0.00	0.00	0.00	0.00
	(0.002)	(0.002)	(0.002)	(0.002)
Observations	56	58	56	58
R-squared	0.334	0.222	0.369	0.364

Table 5
The influence of the population in single-company towns (monogorods)

OLS estimations are performed. The dependent variable is the change in Putin popularity between December 1999 and March 2000. Δ stands for two-month change in the specified variable. Standard errors appear in parentheses below estimated coefficients. *, **, *** denote an estimate significantly different from 0 at the 10%, 5% or 1% level.

	Nov –Dec 1999	Dec 1999- Jan 2000
Δ Sberbank corporate loans	0.28***	0.20***
	(0.069)	(0.061)
Monogorod population	0.06**	0.04*
	(0.025)	(0.022)
Δ Sberbank corporate loans ×	-0.29***	-0.19*
Monogorod population	(0.090)	(0.097)
Δ Sberbank household loans	-0.08	0.05
	(0.077)	(0.108)
Δ Credit from domestic	0.01	-0.05
private banks	(0.052)	(0.069)
Urban population	0.01	-0.03
	(0.044)	(0.044)
Educated middle class	0.50**	0.53**
	(0.202)	(0.219)
Defense employment	-0.00	-0.00
	(0.006)	(0.007)
Distance from Moscow	-0.01***	-0.01**
In 1000 km	(0.004)	(0.004)
Ethno-linguistic fractionalization	0.06	0.07
	(0.045)	(0.047)
Agriculture subsidies	0.00	0.00
	(0.002)	(0.002)
Observations	56	58
R-squared	0.372	0.272

Table 6.
The influence of employment in the private industry

OLS estimations are performed. The dependent variable is the change in Putin popularity between December 1999 and March 2000. Δ stands for two-month change in the specified variable. Standard errors appear in parentheses below estimated coefficients. *, **, *** denote an estimate significantly different from 0 at the 10%, 5% or 1% level.

	Nov-Dec 1999	Dec 1999-Jan 2000	Nov-Dec 1999	Dec 1999-Jan 2000	Nov-Dec 1999	Dec 1999-Jan 2000
Δ Sberbank corporate loans	0.61**	0.60**	0.24***	0.24***		
	(0.257)	(0.292)	(0.070)	(0.073)		
Δ Sberbank corporate loans per employee in the private industry					0.04*	0.07**
					(0.023)	(0.028)
State firm employment	0.34	0.22				
	(0.237)	(0.204)				
Δ Sberbank corporate loans × State firm employment	-1.24*	-1.18				
	(0.626)	(0.716)				
High state employment share			0.03	0.02		
			(0.026)	(0.022)		
Δ Sberbank corporate loans × High state employment share			-0.23**	-0.21**		
			(0.094)	(0.102)		
Δ Sberbank household loans	-0.07	0.04	-0.08	0.03	0.00	0.07
	(0.082)	(0.112)	(0.080)	(0.109)	(0.081)	(0.111)
Δ Credit from domestic private banks	0.01	-0.06	0.02	-0.08	0.02	-0.04
	(0.055)	(0.070)	(0.055)	(0.070)	(0.056)	(0.071)
Urban population	0.03	0.00	0.03	0.00	-0.01	-0.01
	(0.046)	(0.044)	(0.045)	(0.043)	(0.046)	(0.045)
Educated middle class	0.44*	0.50**	0.45**	0.54**	0.38*	0.40*
	(0.220)	(0.224)	(0.213)	(0.220)	(0.218)	(0.220)
Defense employment	-0.01	-0.01	-0.00	-0.00	-0.00	-0.01
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Distance from Moscow	-0.01***	-0.01**	-0.01**	-0.01**	-0.01**	-0.01**

Ethno-linguistic fractionalization	0.07	0.09*	0.08*	0.10**	0.05	0.05
	(0.047)	(0.049)	(0.048)	(0.050)	(0.049)	(0.048)
Agriculture subsidies	0.00	0.00	0.00	0.00	0.00	0.00
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Observations	56	58	56	58	57	57
R-squared	0.289	0.255	0.312	0.273	0.179	0.196

Table 7.
Robustness check: Alternative dependent variable for change in Putin popularity

OLS estimations are performed. The dependent variable is the change in Putin popularity between December 1999 and March 2000 defined as the difference between the electoral performance of Putin in the March 2000 elections and the performance of Unity Party in December 1999. Δ stands for two-month change in the specified variable. Standard errors appear in parentheses below estimated coefficients. *, **, *** denote an estimate significantly different from 0 at the 10%, 5% or 1% level.

	Jul-Aug 1999	Aug-Sep 1999	Sep-Oct 1999	Oct-Nov 1999	Nov-Dec 1999	Dec 1999-Jan 2000	Jan-Feb 2000	Feb-March 2000
Δ Sberbank corporate loans	-0.01	-0.03	0.06	0.01	0.06	0.13*	-0.03	-0.05
	(0.078)	(0.070)	(0.082)	(0.085)	(0.076)	(0.074)	(0.092)	(0.083)
Δ Sberbank household loans	-0.01	-0.04	-0.09	-0.11	0.00	-0.06	-0.12	-0.09
	(0.111)	(0.103)	(0.131)	(0.120)	(0.117)	(0.149)	(0.123)	(0.114)
Δ Credit from domestic private banks	0.09	0.23**	0.06	-0.03	0.06	-0.02	0.04	-0.02
	(0.112)	(0.100)	(0.103)	(0.140)	(0.083)	(0.102)	(0.129)	(0.105)
Urban population	-0.03	-0.04	-0.01	0.01	-0.02	-0.01	-0.02	-0.00
	(0.065)	(0.063)	(0.081)	(0.070)	(0.069)	(0.064)	(0.065)	(0.066)
Educated middle class	0.60**	0.57**	0.52	0.53*	0.80**	0.90***	0.58**	0.50*
	(0.267)	(0.257)	(0.335)	(0.268)	(0.325)	(0.323)	(0.254)	(0.274)
Defense employment	0.01	0.00	0.00	0.01	-0.00	-0.00	0.01	0.01
	(0.010)	(0.010)	(0.010)	(0.009)	(0.010)	(0.009)	(0.009)	(0.009)
Distance from Moscow in 1000 km	-0.02***	-0.02***	-0.02***	-0.02***	-0.02***	-0.02***	-0.02***	-0.02***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Ethno-linguistic fractionalization	0.27***	0.26***	0.28***	0.26***	0.24***	0.29***	0.24***	0.23***
	(0.069)	(0.066)	(0.068)	(0.063)	(0.072)	(0.069)	(0.066)	(0.066)
Agriculture subsidies	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Observations	60	59	55	61	58	60	63	62
Adjusted R-squared	0.378	0.440	0.366	0.384	0.336	0.378	0.365	0.361

Table 8.
Robustness check: Controlling for deposits

OLS estimations are performed. The dependent variable is the change in Putin popularity between December 1999 and March 2000. Δ stands for two month change in the specified variable. Standard errors appear in parentheses below estimated coefficients. *, **, *** denote an estimate significantly different from 0 at the 10%, 5% or 1% level.

	Jul-Aug 1999	Aug-Sep 1999	Sep-Oct 1999	Oct-Nov 1999	Nov-Dec 1999	Dec 1999-Jan 2000	Jan-Feb 2000	Feb-March 2000
Δ Sberbank corporate loans	-0.03 (0.056)	0.04 (0.050)	-0.01 (0.057)	0.08 (0.061)	0.11** (0.052)	0.14** (0.052)	-0.04 (0.068)	-0.07 (0.060)
Δ Sberbank household loans	0.03 (0.085)	0.02 (0.075)	0.06 (0.089)	-0.04 (0.088)	-0.07 (0.080)	0.03 (0.113)	-0.03 (0.095)	-0.03 (0.083)
Δ Credit from domestic private banks	-0.02 (0.079)	0.10 (0.076)	0.03 (0.071)	-0.02 (0.102)	0.02 (0.055)	-0.05 (0.071)	0.10 (0.101)	0.14* (0.077)
Δ Sberbank deposits	0.18 (0.201)	-0.41* (0.238)	-0.28 (0.219)	0.24 (0.232)	0.33** (0.161)	0.09 (0.267)	-0.36 (0.262)	0.31 (0.267)
Urban population	-0.02 (0.046)	-0.00 (0.047)	0.07 (0.056)	0.03 (0.050)	0.02 (0.045)	-0.01 (0.044)	0.02 (0.050)	-0.01 (0.049)
Educated middle class	0.11 (0.189)	0.07 (0.189)	-0.19 (0.228)	0.00 (0.196)	0.52** (0.214)	0.52** (0.230)	0.06 (0.192)	0.14 (0.202)
Defense employment	-0.01 (0.007)	-0.00 (0.007)	-0.01 (0.007)	-0.00 (0.007)	-0.00 (0.007)	-0.01 (0.007)	0.00 (0.007)	-0.00 (0.007)
Distance from Moscow In 1000 km	-0.01 (0.005)	-0.00 (0.004)	-0.01 (0.004)	-0.01* (0.004)	-0.01*** (0.004)	-0.01** (0.004)	-0.01 (0.005)	-0.00 (0.004)
Ethno-linguistic fractionalization	0.05 (0.049)	0.08* (0.047)	0.09* (0.047)	0.07 (0.045)	0.06 (0.047)	0.07 (0.050)	0.05 (0.051)	0.04 (0.048)
Agriculture subsidies	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)	0.00 (0.002)
Observations	58	57	53	59	56	58	61	60
Adjusted R-squared	0.100	0.173	0.173	0.151	0.288	0.207	0.114	0.167

Table 9.
Robustness check: Placebo regressions

OLS estimations are performed. The dependent variable is defined at the top of the column. Δ stands for two-month change in the specified variable. Standard errors appear in parentheses below estimated coefficients. *, **, *** denote an estimate significantly different from 0 at the 10%, 5% or 1% level.

	Change in Putin popularity	Change in voter turnout
	Nov-Dec 2000	Nov-Dec 2000
Δ Sberbank corporate loans	-0.01	-0.04
	(0.055)	(0.043)
Δ Sberbank household loans	0.13	0.07
	(0.103)	(0.081)
Δ Credit from domestic private banks	-0.10	0.06
	(0.062)	(0.049)
Urban population	0.02	0.00
	(0.046)	(0.036)
Educated middle class	0.11	0.08
	(0.184)	(0.145)
Defense employment	-0.01	-0.01*
	(0.007)	(0.005)
Distance from Moscow	-0.01**	-0.01*
	(0.004)	(0.005)
Ethno-linguistic fractionalization	0.05	-0.04
	(0.048)	(0.038)
Agriculture subsidies	0.00	0.00
	(0.002)	(0.001)
Observations	60	61
R-squared	0.138	0.169