Politics and Banking in Russia: The Rise of Putin

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Abstract

This study examines how state ownership of banks can have contributed to the ascending to power of Vladimir Putin during the presidential elections of March 2000. We analyze how firm loans granted by the dominating state-owned bank Sberbank can have influenced the outcome of these elections. We study the relation at the regional level and analyze the variation in Sberbank firm loans and the increase of Putin's popularity between the Duma elections of December 1999 and the presidential elections of March 2000. We assume that Sberbank lending has been used to provide incentives to firm managers in order to mobilize voting of the employees in favor of their regime. We find evidence that Sberbank lending increased before the elections to favor Putin victory. We do not find that regions with the greater increase in Putin's popularity would have been rewarded with a stronger growth in Sberbank lending. Our results therefore support the view that Sberbank loans granted before the presidential elections can have supported the success of Vladimir Putin in the presidential elections of March 2000.

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1. Introduction

State ownership of banks can influence economic outcomes in various ways, for example by affecting the nature of bank lending activity (e.g., Fungacova, Herrala and Weill, 2013; Bertay, Demirgüc-Kunt and Huizinga, 2014), or more generally by influencing the performance of the banking industry (e.g., Karas, Schoors and Weill, 2010).

Next to economic outcomes, state ownership of banks may also exert an impact on political outcomes. Sapienza (2004) distinguishes two broad views on how the behavior of state-owned banks may impact political outcomes. According to the political view, the incumbent government uses state-owned banks to pursue its own interests, like enhancing its chances of reelection or avoiding social and political unrest. According to the social view, the government instructs its state-owned banking institutions to address collective action problems that follow from the failure of non-exclusive and non-rival projects to attract private funding, even though these projects are socially valuable. The empirical literature mainly provides evidence in favor of the political view. Dinc (2005) shows that lending of state-owned banks is correlated with the electoral cycle in a cross-country study: state-owned banks increase lending in election years relative to private banks, implying that the lending activity of state-owned banks may influence political outcomes. Berkowitz, Hoekstra and Schoors (2014) show that political connections play an important role in Russia's emergent banking system and that banks with old political connections tend, under certain conditions, to support employment rather than growth by lending to zombie firms.

Russia provides an event of prime interest to investigate the influence of state-owned banks on political outcomes with the ascending to power of Vladimir Putin. President Boris Yeltsin appointed Mr. Vladimir Putin as Prime Minister of Russia on the 9th of August 1999. Russia's presidential elections were scheduled to be held in June 2000 and a new president had to come, as the constitution of that moment did not allow Yeltsin to run for a third consecutive term of president. In December 1999 the Russian Federation held its Duma elections. A newly founded party that explicitly supported the new prime minister Vladimir Putin did surprisingly well, though falling well short of a

quarter of the national vote. On 31st December 1999, the unexpected New Year speech resignation of President Yeltsin led to the immediate ascension of relatively unknown Putin to the position of Acting President of Russia. This resignation was followed by early presidential elections on the 26th of March 2000. Putin managed to bring in a decisive victory in the first round, bringing his stellar rise to presidential power to a successful end.

During this time, the state-owned bank Sberbank had a dominating market share throughout the country. This bank was – and still is – majority-owned by the Central Bank of the Russian Federation, resulting in a full control of the government over its activities. The aim of our study is to investigate whether Sberbank lending has been used as a political instrument to influence the outcome of the Russian elections of March 2000. To investigate this question, we analyze the relation between the regional variation in loans provided by Sberbank and the regional variation in Putin's popularity. We test two hypotheses.

First, we examine if Sberbank lending increased in the months preceding elections in an attempt to boost Putin's popularity. This "carrot" argument is related to Dinc (2005)'s findings and is based on the hypothesis that lending is boosted to convince voters through the pressures of employers. The argument is based on the fact that the workplace in Russia is a key site of political mobilization in Russia, as stressed by Frye, Reuter and Szakonyi (2014). They observe that "threatening voters through the labor market can play a more important role in voter behavior than positive incentives largely described in academic literature on clientelism". Managers have several levers of influence on employees, combining 'carrots' like salary increases and 'sticks' like cuts of salaries or benefits. As a consequence, bank lending is a means to give incentives for employers, in particular private firms, to influence the voting behavior of employees. Whereas state-owned firms can be influenced by subsidies to influence votes of employees, bank lending provides a more general incentive which particularly affects private companies. However, as a period of three months is rather short to organize such a lending campaign, the political agents involved cannot reasonably expect a strong influence of any pre-election lending surge on the change in Putin's popularity. It is

therefore possible that the agents chose not to apply this instrument ex ante, or did apply the instrument unsuccessfully.

A second, and hitherto unstudied, mechanism by which politicians may use lending to improve the election outcome is to engage in an implicit contract with (former) state firm managers. The politician could credibly commit that regions where he does well in the election will be rewarded more credit after the election. Compared to ex ante rewards, this mechanism is incentive compatible. Firm managers that get their people to vote for the right candidate will only be rewarded if they indeed exert the effort and urge their workers to vote. The politician in this way steers away from the hold-up problem that would arise if lending already increases before the election and also avoids any risk of his opponents exposing the scheme before the election. On the other hand, firm managers know that the politician has strong incentives not to renege this contract once he has won, because the elections are a repeated game and reneging may endanger his chances in the next election. We can test the presence of such an implicit contract mechanism by investigating whether regions that succeeded in enhancing Putin's popularity between December 1999 and March 2000 also received more Sberbank loans in the post-election period.

To investigate this issue, we use monthly data on regional Sberbank lending activities. The "carrot hypothesis" is examined by considering the variation in Sberbank loans in the period of three months prior to the presidential elections of March 2000. The "reward" hypothesis is investigated by looking at the variation in Sberbank loans between March 2000 and December 2000. We relate these pre- and post-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 Primakov and then Moscow Mayor Luzhkov, pledged itself to support the presidential bid of Putin and urged its voters to vote for Putin. The regional change in Putin's popularity between December 1999 and March 2000 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, namely Putin's Unity party and OVR.

The paper contributes to the literature on three fronts. First, it provides evidence on the influence of state-owned banks on political outcomes by benefiting from the Russian context of 1999-2000 as an experiment. The advantage of studying the Russian context is that we can base our analysis on within country variation of Putin's popularity within a very short period of three months 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 that use 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, this is the first paper to propose and test a new and economically sound mechanism of politically inspired lending by government banks: politicians may after the election reward regions or managers that performed well in the election with loans from government banks. As a robustness test we verify whether governors whose regions see the score for Putin increase substantially between December 1999 and March 2000 are subsequently rewarded with longer tenure.

Lastly, our investigation contributes to the debate concerning the explanations of the rise of Vladimir Putin. His sudden transformation from a largely unknown figure in early 1999 to elected President of the Russian federation in March 2000 has raised questions. There is a relation between Putin's popularity and his success in raising patriotic feelings during the second, and this time successful, Chechnya military campaign, launched under his auspices as prime minister. Two additional factors have been advanced to explain his rise, namely media control and electoral fraud. Our contribution is to add, next to patriotic feelings, media control and electoral fraud, a fourth element to the list of factors that may explain Putin's success at the March 2000 elections, namely the use of Sberbank lending as a tool to achieve political results.

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. On the other hand, it is clear that the role of media control in Putin's popularity was weaker in 2000 than in subsequent

presidential elections. In 2000 two state television channels (RTR and ORT) were supporting the Kremlin, but the then independent NTV channel, owned by oligarch Gusinsky, was fiercely opposing Putin. NTV was only taken over by state-related interests in 2001, after a protracted power struggle. The two remaining mildly independent national TV channels were wound down within two years after NTV's acquisition. Therefore media control was far from complete in 2000 and cannot fully explain Putin's spectacular march to power.

Klimek et al. (2012) find clear indications that electoral fraud and specifically ballot stuffing were a substantial problem in Russia's 2011 parliamentary and 2012 presidential elections. Enikopolov et al. (2013) indeed estimate that Unity's score in the 2011 parliamentary would have been substantially lower without fraud, but also that fraud was a lot less pronounced in those polling stations were neutral observers were present. This implies that the impact of election fraud on the outcomes in the 1999-2000 elections should be a lot less important, because at that time, the communist party still had an influential candidate and a strong local organization capable of mobilizing local representative to guarantee a more or less objective election procedure.

The rest of the article is structured as follows. Section 2 presents data and methodology. Section 3 displays the results. Section 4 provides additional investigation to dig deeper the mechanisms underlying the results. Section 5 concludes.

2. Data and methodology

The aim of our investigation is to examine how lending provided by Sberbank to companies can have influenced Putin's victory in presidential elections in March 2000. We estimate the following specification (1):

$$(Vote_{\text{March 2000}} - Vote_{\text{Dec 1999}})_r = \alpha_1 \Delta(\textit{Sberbank firm loans}_{r, t})$$
$$+ \alpha_2 \Delta(\textit{Sberbank household loans}_{r, t})$$
$$+ \alpha_3 \Delta(\textit{credit of private domestic banks}_{r, t}) +$$
$$X'_r + \varepsilon_r$$

where *r* stands for the region, *t* indicating the month, *Sberbank firm loans* indicating Sberbank firm ruble credits, *Sberbank household loans* indicating Sberbank household ruble credits, *credit of private domestic banks* indicating private domestic 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 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, namely Putin's Unity party and OVR.

Our argument for the relation between Sberbank credits (to mainly privatized firms) and Putin success in the presidential election is based on workplace mobilization motivated by 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.

Prior studies have indeed shown how in Russia elections can be won by inducing employers to mobilize their employees to vote for the regime. Frye, Reuter and Szakonyi (2014) have investigated this issue with surveys of employers and workers around the 2011 Duma elections in Russia. They find that one quarter of employers engaged in political mobilization, and that financial dependence of the firms' influences the likelihood of managers to be a supporter of the regime.

They also mentioned that media reports provide several examples of such practices during the 2011 parliamentary elections with notably the fact that staff of the Kola Mining and Steel Company in Murmansk Oblast was 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 perform a survey of Russians to question whether the electoral process was free and fair and cite examples of employees receiving instructions to vote for Medvedev

and United Russia.[1] Additionally, we have media reports showing explicitly workplace mobilization in various Russian elections.[2]

Our hypothesis is based on the fact that loans granted by Sberbank to firms may be associated with the result of presidential elections in Russia. The explanatory variable of primary concern is therefore the variation in Sberbank firm loans, rather than the variation in total loans. We are able to consider the evolution over 2 months thanks to our rich Sberbank dataset that provides monthly data and allows us to track precisely the evolution of Sberbank loans around the dates of elections. A longer period would reduce the quality of the identification of the influence of Sberbank lending on elections. On the other hand, a 1-month period would lead to the presence of numerous outliers because monthly variation does not allow smoothing out lending variations due to technical or practical reasons.

We include two additional explanatory variables concerning bank lending. First, we consider changes in the regional variation of Sberbank household loans. As explained before, the identification of the mechanism we have in mind depends on loans granted to (privatized) firms. Therefore, by controlling for loans granted to households by Sberbank, we are able to identify specifically the impact of firm loans provided by Sberbank and make sure our results are not driven by any time-specific general variation in Sberbank regional lending policy. Second, we include the variation in credit to the economy provided by domestic private banks. This variable allows us to control for regional shocks in bank lending like regional credit demand shocks or for region-specific business cycle effects.

Sberbank officials provided data on the monthly and regional variation of Sberbank loans at the occasion of an interview in 2002. A major asset of this data is the fact 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 skipped from the sample because the

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[1] White and Feklyunina (2012, p.55) report several examples of directors of factory who have "made very clear to all their subordinates how they would be expected to vote", which is always in favor of Medvedev and United Russia.

[2] The Guardian on November 30, 2007, provides evidence on such behavior for 2007 elections by citing the spokeswoman of an independent organization monitoring the elections who said "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."

regional Sberbank data for Moscow does not distinguish Moscow region loans from Federal loans to special federal projects. There are, therefore, no Sberbank lending data for Moscow or the Moscow region separately. Monthly data on credit to the economy from private domestic banks are 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. Indeed, virtually all banks that provide lending outside their region are located here, giving us additional data reason to leave Moscow out of the regressions.

We include six control variables to take into account regional differences that may exert an impact on our dependent variable. We include the urban population share in 1989 (source: Goskomstat, 1991, pp.88-109) because it may be related to economic perspectives. Acemoglu et al. (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. Like them, we measure the middle class in 1989 as the share of the regional population classified as white collar workers and 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). We use data from the All Union Census of 1989 (source: Goskomstat, 1990) to calculate ELF where higher values represent more fragmented 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). Finally, since Moscow is the economic, financial and most importantly political capital of Russia, we also take into account distance to Moscow. Data restrictions lead to a sample of 61 Russian regions. Summary statistics are shown in Table 1.

We test two hypotheses. The "carrot hypothesis" is examined by testing the impact of the variation in Sberbank firm loans before the presidential elections of March 2000. We assume that once the Duma elections were won, the Russian government may have

used its control over Sberbank to influence Putin's performance in the forthcoming presidential elections. Therefore we focus on the time of Duma elections (December 1999). As presidential elections took place in early March 2000, loans granted in February and especially in March 2000 would have been provided too late to influence the political outcome. Consequently, evidence in favor of the "carrot hypothesis" is observed if the change in Sberbank firms loans in the preceding periods (November to end December 1999 and December 1999 to end January 2000) positively influenced Putin performance in the March 2000 elections.

In addition, we investigate the "reward" hypothesis by looking at the relation between the variation in Sberbank firm loans and the change in Putin popularity after the presidential elections of March 2000. This hypothesis is based on the workplace mobilization motivated by financial incentives. Managers have incentives to mobilize employees for the elections to enhance their likelihood of getting new loans after the elections. Rewards could be granted to regions with the greater gain for Putin popularity between December 1999 and March 2000 by increasing Sberbank firm loans after the election. The "reward" hypothesis is tested in a similar way as the "carrot hypothesis".

We perform the same estimations as before but now focus for the main independent variables on the months following the presidential elections of March 2000 in equation. Hence the dependent variable is the same but the three independent variables related to loans are considered for 2-month variation after the elections.

A positive association between the variation in Sberbank firm loans and the change in Putin's popularity would support the "reward" hypothesis, as it would indicate a positive relation between Putin gain and changes in Sberbank corporate lending policy. One alternative interpretation of these results is that the very last time windows can be considered as placebo regressions. By looking at the same dependent variable, but the change in Sberbank firm credits precisely one year later, we can make sure that our results are really driven by political motivations and not by some unknown monthly region and time specific cyclicality in Sberbank firm loans.

3. Results

This section presents our results for the relation between the variation in Sberbank firm loans and change in Putin's popularity between December 1999 and March 2000. We start with the main estimations and afterwards provide additional estimations.

3.1 Main estimations

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

Insert Table 2 around here

The key finding is the positive and significant coefficient of the variation in Sberbank firm loans 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, nor for January-February 2000 (which can be too close to the election for the mechanism to work). Therefore, our main conclusion is that the variation in Sberbank firm loans in the months preceding the March 2000 elections is positively associated with Putin's gain in popularity between December 1999 and March 2000. It supports the "carrot" hypothesis, according to which more Sberbank firm loans result in greater Putin gain.

In other words, lending from the major state-owned bank has influenced the outcome of the presidential elections in March 2000 in Russia. These elections led to the ascending of power of Putin. Our findings therefore support the political view proposed by Sapienza (2004) according to which the incumbent government utilizes state-owned banks to support its interests. This also accords with the results obtained by Dinc (2005) that the lending activity of state-owned banks exerts an impact on political outcomes.

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, which are both significant only for the same time windows in which the variation in Sberbank firm loans turns significant. This does not mean that our main results are due to multicollinearity. Indeed, if we exclude distance or the share of the educated middle class in the estimation of (1) our main result stands very robust. Rather it means that the regional distribution of Sberbank firm credit 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. We find that, after taking into account the sudden change in the distribution of ruble credits, regions with a larger educated middle class and close to Moscow see Putin's popularity rise more in the three month period before the March 2000 election.

3.2 The reward hypothesis and placebo regressions

Our main estimations indicate that variation in Sberbank firm loans in the period surrounding Duma elections has a positive influence on the change in Putin's popularity, which supports the "carrot hypothesis". Table 3 reports our estimates of equation (1) after the elections and indicates that there is no evidence for the reward hypothesis. We readily observe we cannot reject $\alpha_1 = 0$ for any of time window after the election, indicating there is no relation between the regional increase in popularity in the election and the post-election changes in regional ruble credits. This allows us to reject the simple reward hypothesis. It can however not be excluded there was a reward in a different form, for example by prolonged political tenure of 'successful' governors.

This mechanism is out of the scope of this research dealing with the link between bank lending and political outcome, so we do not examine it. Nonetheless we can stress that two studies (Reuter and Robertson, 2012; Reisinger and Moraski, 2013) have shown that what counts for a governor to keep his job is his capacity to deliver sufficiently high election results for the President and the ruling party in the elections taking place after the 2000 elections.

Insert Table 3 around here

The last time window acts as a placebo regression. If our earlier result would be driven by some unknown monthly region and time specific cyclicality in Sberbank firms loans, we should not be able to reject $\alpha_1 > 0$ in the period November 2000-December 2000 just like we could not for November 1999-December 1999 period. The results however clearly show we can, indicating that our results are driven by choice and not by unknown existing patterns.

4. Mechanisms

We further investigate our results by considering the possible mechanisms in more detail. It might be that the increase in the Sberbank lending to certain regions was especially politically effective under certain circumstances that supported our channel.

4.1 Rallying voters to turn up at the elections

We start by investigating the effect of Sberbank lending on rallying voters. In the mechanism we propose, firm managers receive extra Sberbank credits 1 to 2 months before the election and are incentivized to rally their workers to come out to vote for the right candidate. Previous studies have argued that regional voter participation in the 1989 Soviet election is 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 elections in Soviet history, citizens were allowed to vote for representatives to the Soviet Congress and for the first time opposition candidates could compete with Communists for power. 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 political activism at the level of state farms and state farms were a crucial part of political life in the later Soviet Union. Our period of study occurs only 10

years after these 1989 elections and we argue, that although most farms and firms had in the meanwhile been privatized, the tradition of political activism and rallying by managers at the firm level was still very much a fact of Russian political life in 1999 and early 2000. 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, controlling for all the other variables we have been controlling before. If our assumption that the increase in Sberbank lending just before the elections has given managers incentives to be politically active and rally their workers to vote for the right candidate is right, we should see that the increase in Sberbank lending predicts the increase in turnout in the months predating the elections, but not in any other months under consideration. So we proceed by estimating the specification (2):

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

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 consider the voters that opposed all presidential candidates in 2000 as not turning up, because there was no such option in the 1999 duma elections and hence voters opposing all parties in the December 1999 elections had no other option than not participating. Our results are however robust to including these voters in the 2000 turnout. 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.

Insert Table 4 around here

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We lay out our results in Table 4. 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 additional Sberbank firm credits give firm managers incentives to rally their workers to the vote compared to the turnout just three months before. We have repeated these regressions by pooling two periods in one regression and clustering standard errors by region, hence doubling our estimation sample, to allow for the fact that the precise timing of the additional Sberbank credits may differ mildly across regions. The results of Table 4 are robust. Results are available on request.

The interpretation that a Sberbank firm lending shock incentivized managers to rally their workers not only to turn up at the elections but also to vote for Putin is 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 (rho = 0.3407).

4.2 Connected regional leaders

We proceed further by investigating the background of the governor of the region. The governor may have used his powers to influence the extent to which Sberbank corporate lending could influence Putin's popularity. We consider two variables to take into account the background of the governor. We first use the dummy variable *Appointed governor* equal to one if the governor was appointed by Yeltsin (Putin's predecessor and political father) and zero otherwise. We further consider the dummy variable *FSB or military governor* equal to one if the governor was formerly a member of the "Siloviki", i.e. the security services (FSB) or armed forces, and zero otherwise. Both variables consider two different forms of affiliation of the governor. To be appointed means a relation with the former president Yeltsin, as he was in place from 1992 until the 31st of

December 1999. To have been a member of the "Siloviki" suggests a closer relation with Vladimir Putin. A large bunch of studies have explained the links between Putin and the Siloviki veterans and their emergence as the backbone of Putin's administration (Treisman, 2007; Kryshtanovskaya and White, 2015). In both cases the underlying idea is affiliated governors will be more loyal and make sure that firm managers in their region react to the surge in Sberbank ruble credits by an appropriate amount of political mobilization. Note however that a different interpretation is also possible. We cannot rule out that the Siloviki looked upon Putin as a president friendly to their interests and coordinated their political response to help him get elected, even in the absence of any central demand from the side of the Putin himself.

We repeat our main estimations based on the equation (1) but add alternatively our two measures of governor background and the interactions between this governor background dummy and the variation in Sberbank firm loans. These estimations are only performed for two windows (November 1999-December 1999, December 1999-January 2000) for which we found evidence of a significant and positive coefficient for the variation in Sberbank firm loans. This amounts to the following specification (3):

$$
\begin{aligned}
(Vote_{\ March\ 2000} - Vote_{\ Dec\ 1999})_r =\ &\alpha_1 \Delta(Sberbank\ firm\ loans_{r,\ t}) +\ \alpha_2\,(affiliated\ governor) \\
&+\alpha_3 \Delta(Sberbank\ firm\ loans_{r,\ t}) \times (affiliated\ governor) \\
&+ \alpha_4 \Delta(Sberbank\ household\ loans_{r,\ t}) \\
&+ \alpha_5 \Delta(credit\ of\ private\ domestic\ banks_{r,\ t}) \\
&+ X'_r + \varepsilon_r
\end{aligned}
$$

If we can not reject a positive coefficient for the interaction term ($\alpha_3 > 3$) it is implied that we cannot reject that the beneficial impact of the variation in Sberbank firm loans 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 5.

Insert table 5 around here

We find that the interaction term is not significant with *Appointed Governor* but it is positive and significant with *FSB or Military Governor*. These findings support the view that regions with an appointed governor were not characterized by stronger positive relation between change in Sberbank firm loans and change in Putin's popularity, but the regions with a governor being a member of the "Siloviki" exhibit such stronger positive relation.

This latter finding tends to provide additional support for the "carrot hypothesis". As explained before, we expect closer relation with Putin for the former members of the "Siloviki" than for the appointed governors. Therefore, it is not surprising that the interaction term is only significant and positive for the first type of governors. Then, the fact that regions with a governor formerly in the military or security forces have a stronger positive relation between the variation in Sberbank firm loans and the change in Putin's popularity is fully in line with the hypothesis that the regime has used workplace mobilization through Sberbank loans.

4.3 State employment or employment by privatized firms

Finally, we consider the importance of state employment. Our hypotheses are based on the incentive-impact of Sberbank lending on managers. This impact should be stronger for private (privatized) companies. On the one hand, state-owned companies have always benefited from lending from Sberbank and also from direct subsidies from the State. In other words, they are expected to suffer less from financial constraints than private companies. On the other hand, appointed managers of state-owned companies are likely to be more supportive to the appointed successor of Yeltsin.

We therefore aim to investigate if the influence of the variation in Sberbank firm loans on 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 the size of employment in state-owned companies. We first use the share of employees in state-owned and municipal companies in total employment

(*State firms employment*) in 2000. We consider the average share for the whole year 2000 from Rosstat. Additionally we use a dummy variable equal to one if this share is greater than the median for all regions and to zero otherwise (*High state firms employment*).

We perform the estimations by adding each variable for state firm employment alternatively and its interaction term with the variation in Sberbank firm loans. According to the "carrot hypothesis", a negative and significant coefficient for the interaction term would indicate that the variation in Sberbank firm loans has a lower effect on the change in Putin's popularity in regions with higher state firm employment. This amounts to estimating the following equation (4):

$$
\begin{aligned}
(Vote_{\,March\,2000} - Vote_{\,Dec\,1999})_r = {}& \alpha_1 \Delta(Sberbank\ firm\ loans_{r,\,t}) + \alpha_2\,(state\ employment) \\
& + \alpha_3 \Delta(Sberbank\ firm\ loans_{r,\,t}) \times (state\ employment) \\
& + \alpha_4 \Delta(Sberbank\ household\ loans_{r,\,t}) \\
& + \alpha_5 \Delta(credit\ of\ private\ domestic\ banks_{r,\,t}) \\
& + X'_r + \varepsilon_r
\end{aligned}
$$

Insert table 6 around here

We present our estimates of (4) in Table 6. We find evidence in line with this hypothesis. The interaction term is negative and significant ($\alpha_3 < 3$) in three of the four tested estimations, being still negative in the latter one. Hence if state employment is higher in one region, the channel of Sberbank corporate loans to influence election results is lower, which accords with the fact that this mechanism takes place mainly in private(ized) firms. Therefore, the additional estimations provide support for the "carrot hypothesis", corroborating the findings of our main estimations.

5. Conclusion

In this paper, we provide a contribution to explaining the channels through which state ownership of banks can influence political outcomes. We do so by examining the case of Russia during the key period 1999-2000 of the rise of Vladimir Putin to power. We investigate how the dominating and state-owned Sberbank influenced the election outcomes through granting corporate loans. To this aim, we employ regional data to study the relation between the variation in Sberbank firm loans and the increase of Putin's popularity between the Duma elections of December 1999 and the presidential elections of March 2000. We assume that Sberbank lending has been used to give incentives to firm managers to favor vote mobilization of their employees in favor of their regime.

We find evidence in favor of the "carrot hypothesis" according to which Sberbank lending would have increased before the elections to support Putin victory. We show that the variation in Sberbank firm loans has also a positive influence on voter turnout in line with our hypothesis that firm managers are incentivized to rally workers to come out and vote for the right candidate. We observe that the variation in Sberbank firm loans had a greater beneficial impact on Putin's popularity in regions with a governor formerly member of the Siloviki which accords with our main hypothesis. Additionally, the impact was stronger in regions with lower state firm employment, which fits the view that the incentive mechanism of Sberbank lending goes through private companies that are more financially constrained. Our identification strategy insures that these results are not likely to be driven by other regional factors or by other otherwise unobserved time and region specific variations in Sberbank lending.

We do not find empirical support for the "reward hypothesis" which assumes that regions with the greater increase in Putin's popularity would have been rewarded with a stronger improvement in Sberbank lending, but stress that other, more political, reward mechanisms may be in place. These are subject of further research.

We contribute to the debate on the explanations of the large success of Vladimir Putin in the presidential elections in March 2000. Our results support the view that Sberbank loans granted before the presidential elections can have supported this success.

This conclusion should however not be interpreted erroneously. First, it does not mean that media control or ballot stuffing did not play any role in this rise. Instead, we stress that the instrumentation of Sberbank lending was one of the tools to influence the political outcomes. Second, we do not claim that Vladimir Putin took the lead of this influence of Sberbank lending. Regional governors or Sberbank managers may have tried to reach the desired results without having orders from the top.

A natural question which emerges is whether Sberbank corporate loans were only used to influence the election outcome in 2000. Our study therefore opens avenues for further research on the links between politics and banking in Russia.

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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 firm loans	0.203	0.190
Δ Sberbank household loans	0.138	0.116
Δ credit of private domestic 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	2105.086	2580.802
Ethno linguistic fractionalization	0.295	0.200
Agriculture subsidies	9.492	5.634

Table 2
Main estimations: Before the presidential elections

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-Jan 2000	Jan-Feb 2000
Δ Sberbank firm loans	-0.03	0.04	0.00	0.07	0.13**	0.13**	-0.04
	(0.055)	(0.051)	(0.056)	(0.061)	(0.053)	(0.051)	(0.069)
Δ Sberbank household loans	0.03	0.04	0.05	-0.06	-0.06	0.04	-0.03
	(0.085)	(0.076)	(0.089)	(0.087)	(0.083)	(0.110)	(0.096)
Δ credit of private domestic banks	-0.02	0.11	0.04	-0.03	0.01	-0.05	0.07
	(0.079)	(0.077)	(0.071)	(0.102)	(0.056)	(0.070)	(0.099)
Urban population	-0.02	-0.03	0.05	0.03	0.02	-0.01	0.00
	(0.046)	(0.046)	(0.055)	(0.050)	(0.047)	(0.044)	(0.049)
Educated middle class	0.13	0.14	-0.19	0.03	0.45**	0.50**	0.09
	(0.187)	(0.189)	(0.229)	(0.193)	(0.219)	(0.221)	(0.192)
Defense employment	-0.01	-0.01	-0.01	-0.00	-0.01	-0.01	-0.00
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Distance from Moscow	-0.00	-0.00	-0.00	-0.00	-0.00**	-0.00**	-0.00
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ethno-linguistic fractionalization	0.06	0.07	0.08*	0.07	0.06	0.08	0.04
	(0.048)	(0.048)	(0.047)	(0.046)	(0.048)	(0.048)	(0.050)
Agriculture subsidies	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Observations	58	57	53	59	56	58	61
Adjusted R-squared	0.084	0.120	0.142	0.133	0.220	0.205	0.081

Table 3
Main estimations: After the presidential elections

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.

	Feb-Mar 2000	Mar-Apr 2000	Apr-May 2000	May-Jun 2000	Sep-Oct 2000	Oct-Nov 2000	Nov-Dec 2000
Δ Sberbank firm loans	**-0.07**	**-0.09**	**-0.01**	**-0.05**	**-0.01**	**-0.01**	**-0.01**
	(0.060)	(0.056)	(0.058)	(0.062)	(0.081)	(0.065)	(0.055)
Δ Sberbank household loans	-0.03	0.07	-0.04	-0.13	0.06	0.11	0.13
	(0.083)	(0.099)	(0.094)	(0.091)	(0.101)	(0.099)	(0.103)
Δ credit of private domestic banks	0.14*	0.09	0.02	0.06	-0.11	0.01	-0.10
	(0.077)	(0.075)	(0.071)	(0.074)	(0.085)	(0.098)	(0.062)
Urban population	0.01	0.03	0.01	0.01	-0.01	-0.01	0.02
	(0.048)	(0.047)	(0.049)	(0.047)	(0.048)	(0.048)	(0.046)
Educated middle class	0.09	0.06	0.08	0.01	0.07	0.12	0.11
	(0.199)	(0.184)	(0.190)	(0.189)	(0.189)	(0.187)	(0.184)
Defense employment	-0.00	-0.00	-0.00	-0.01	-0.00	-0.00	-0.01
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Distance from Moscow	-0.00	-0.00	-0.00*	-0.00**	-0.00**	-0.00**	-0.00**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ethno-linguistic fractionalization	0.04	0.07	0.07	0.05	0.06	0.04	0.05
	(0.049)	(0.046)	(0.049)	(0.049)	(0.048)	(0.052)	(0.048)
Agriculture subsidies	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Observations	60	60	61	59	59	58	60
Adjusted R-squared	0.144	0.165	0.096	0.157	0.136	0.113	0.138

Table 4
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. The table is continued on the next page.

	1999 Apr-May	1999 May-Jun	1999 Jun-Jul	1999 Jul-Sep	1999 Sep-Oct	1999 Oct-Nov	1999 Nov-Dec	1999 Dec-Jan	2000 Jan-Feb	2000 Feb-Mar
Δ Sberbank firm loans	0.16	1.63	-4.75	2.30	0.88	5.28	7.44	**10.20****	-5.48	-6.45
	(5.182)	(5.158)	(4.921)	(4.428)	(4.910)	(5.212)	(4.558)	(4.520)	(5.484)	(5.029)
Δ Sberbank household loans	4.21	0.50	5.74	-5.41	-5.28	-7.28	-9.43	-0.67	1.59	-9.22
	(10.010)	(6.287)	(6.942)	(6.535)	(7.848)	(7.485)	(6.984)	(9.130)	(7.327)	(6.871)
Δ credit of private domestic banks	-13.37**	-7.06	3.35	14.24**	7.13	-0.56	4.75	6.32	-11.68	-1.01
	(5.671)	(6.306)	(7.006)	(6.681)	(6.265)	(8.646)	(4.975)	(6.264)	(7.735)	(6.354)
Urban population	0.99	1.26	-0.29	0.18	5.95	2.43	2.34	-0.95	0.09	-0.18
	(4.021)	(4.057)	(4.082)	(3.976)	(4.827)	(4.286)	(4.099)	(3.904)	(3.879)	(3.969)
Educated middle class	0.35	0.90	10.45	-2.88	-26.61	-1.39	11.51	12.46	6.76	-3.43
	(16.476)	(16.233)	(16.670)	(16.301)	(20.096)	(16.513)	(19.342)	(19.743)	(15.160)	(16.522)
Defense employment	-0.91	-1.15*	-0.98	-1.30**	-1.23*	-1.09*	-1.12*	-1.23**	-1.10*	-0.91
	(0.606)	(0.611)	(0.650)	(0.634)	(0.646)	(0.590)	(0.594)	(0.588)	(0.582)	(0.574)
Distance from Moscow	0.00	0.00	-0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ethno-linguistic fractionalization	-1.71	-3.04	-2.39	-3.21	-1.50	-1.74	-0.55	-1.36	-1.85	-3.28
	(4.502)	(4.178)	(4.327)	(4.170)	(4.104)	(3.905)	(4.272)	(4.268)	(3.965)	(4.041)
Agriculture subsidies	-0.12	-0.05	0.03	-0.11	0.07	-0.01	-0.05	-0.04	0.04	-0.04
	(0.159)	(0.155)	(0.159)	(0.162)	(0.167)	(0.170)	(0.153)	(0.149)	(0.139)	(0.145)
Observations	58	61	59	58	54	60	57	59	62	61
Adjusted R-squared	0.198	0.127	0.111	0.175	0.165	0.119	0.164	**0.190**	0.130	0.119

Table 4 continued
Understanding the mechanism: increasing voter turnout

	2000 Mar-Apr	2000 Apr-May	2000 May-Jun	2000 Jun-Jul	2000 Jul-Aug	2000 Aug´-Sep	2000 Sep-Oct	2000 Oct-Nov	2000 Nov-Dec
Δ Sberbank firm loans	-2.45	-3.17	-0.60	1.08	-2.59	4.91	-0.02	-2.05	-3.72
	(4.638)	(4.805)	(5.231)	(5.284)	(4.800)	(5.500)	(6.609)	(5.079)	(4.381)
Δ Sberbank household loans	-6.18	0.92	3.23	-1.55	-3.48	-4.92	2.66	3.49	6.06
	(8.467)	(7.723)	(7.742)	(6.037)	(6.355)	(6.963)	(8.305)	(7.718)	(8.206)
Δ credit of private domestic banks	-0.33	-0.71	-1.24	-5.23	-6.21	-9.06	0.19	9.26	4.46
	(6.332)	(5.876)	(6.226)	(6.426)	(6.471)	(8.431)	(6.923)	(7.668)	(4.943)
Urban population	0.64	0.63	1.41	0.30	-0.53	1.08	0.32	-0.83	-0.03
	(3.987)	(4.028)	(4.048)	(3.979)	(3.943)	(3.946)	(4.001)	(3.778)	(3.627)
Educated middle class	2.88	5.26	7.58	4.95	4.89	6.31	10.23	6.78	-0.09
	(15.760)	(15.625)	(16.010)	(15.583)	(15.773)	(15.892)	(15.544)	(14.629)	(14.628)
Defense employment	-0.98*	-0.95*	-1.01*	-1.08*	-0.94	-1.18**	-1.03*	-1.00*	-0.90*
	(0.571)	(0.558)	(0.591)	(0.597)	(0.597)	(0.578)	(0.579)	(0.546)	(0.523)
Distance from Moscow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ethno-linguistic fractionalization	-2.83	-1.65	-0.46	-2.78	-3.19	-0.83	-1.78	-2.07	-3.02
	(3.928)	(4.043)	(4.143)	(3.818)	(3.889)	(4.013)	(3.938)	(4.028)	(3.806)
Agriculture subsidies	0.02	0.02	0.04	-0.02	0.03	0.03	0.03	0.03	0.01
	(0.148)	(0.148)	(0.145)	(0.144)	(0.144)	(0.145)	(0.146)	(0.138)	(0.129)
Observations	61	62	60	63	62	59	60	59	61
Adjusted R-squared	0.113	0.103	0.102	0.112	0.114	0.149	0.113	0.112	0.133

Table 5
Additional estimations: The influence of the affiliation of the governor

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 99-Dec 99	Dec 99-Jan 00	Nov 99-Dec 99	Dec 99-Jan 00
Δ Sberbank firm loans	0.12**	0.12**	0.04	0.05
	(0.056)	(0.056)	(0.056)	(0.054)
Appointed governor	0.05	0.05		
	(0.069)	(0.069)		
Δ Sberbank firm loans × Appointed governor	0.00	0.00		
	(0.000)	(0.000)		
FSB or military governor			-0.08**	-0.07**
			(0.029)	(0.028)
Δ Sberbank firm loans × FSB or military governor			0.32***	0.37***
			(0.105)	(0.118)
Δ Sberbank household loans	-0.04	0.05	-0.01	0.12
	(0.088)	(0.112)	(0.079)	(0.103)
Δ credit of private domestic banks	0.01	-0.05	0.02	-0.07
	(0.057)	(0.070)	(0.052)	(0.065)
Urban population	0.02	-0.01	0.01	-0.01
	(0.047)	(0.044)	(0.043)	(0.040)
Educated middle class	0.44*	0.47**	0.55***	0.57***
	(0.220)	(0.224)	(0.203)	(0.203)
Defense employment	-0.01	-0.01	-0.00	-0.01
	(0.007)	(0.007)	(0.006)	(0.006)
Distance from Moscow	-0.00**	-0.00**	-0.00**	-0.00**
	(0.000)	(0.000)	(0.000)	(0.000)
Ethno-linguistic fractionalization	0.05	0.06	0.03	0.03
	(0.050)	(0.050)	(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	0.229	0.215	0.369	0.364

Table 6
Additional estimations: 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 99-Dec 99	Dec 99-Jan 00	Nov 99 Dec 99	Dec 99-Jan 00
Δ Sberbank firm loans	0.61**	0.60**	0.24***	0.24***
	(0.257)	(0.292)	(0.070)	(0.073)
State firms employment	0.34	0.22		
	(0.237)	(0.204)		
Δ Sberbank firm loans × State firms employment	-1.24*	-1.18		
	(0.626)	(0.716)		
High state employment share			0.03	0.02
			(0.026)	(0.022)
Δ Sberbank firm 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
	(0.082)	(0.112)	(0.080)	(0.109)
Δ credit of private domestic banks	0.01	-0.06	0.02	-0.08
	(0.055)	(0.070)	(0.055)	(0.070)
Urban population	0.03	0.00	0.03	0.00
	(0.046)	(0.044)	(0.045)	(0.043)
Educated middle class	0.44*	0.50**	0.45**	0.54**
	(0.220)	(0.224)	(0.213)	(0.220)
Defense employment	-0.01	-0.01	-0.00	-0.00
	(0.007)	(0.007)	(0.007)	(0.007)
Distance from Moscow	-0.00***	-0.00**	-0.00**	-0.00**
	(0.000)	(0.000)	(0.000)	(0.000)
Ethno-linguistic fractionalization	0.07	0.09*	0.08*	0.10**
	(0.047)	(0.049)	(0.048)	(0.050)
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	0.289	0.255	0.312	0.273