

Frye, Timothy; Borisova, Ekaterina

**Working Paper**

## Elections, protest and trust in government: A natural experiment from Russia

BOFIT Discussion Papers, No. 9/2016

**Provided in Cooperation with:**

Bank of Finland, Helsinki

*Suggested Citation:* Frye, Timothy; Borisova, Ekaterina (2016) : Elections, protest and trust in government: A natural experiment from Russia, BOFIT Discussion Papers, No. 9/2016, ISBN 978-952-323-122-1, Bank of Finland, Institute for Economics in Transition (BOFIT), Helsinki, <https://nbn-resolving.org/urn:nbn:fi:bof-201608221384>

This Version is available at:

<https://hdl.handle.net/10419/212852>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

BOFIT Discussion Papers  
9 • 2016

Timothy Frye and Ekaterina Borisova

Elections, protest and trust  
in government:  
A natural experiment from Russia



Bank of Finland, BOFIT  
Institute for Economies in Transition

BOFIT Discussion Papers  
Editor-in-Chief Zuzana Fungáčová

BOFIT Discussion Papers 9/2016  
18.8.2016

Timothy Frye and Ekaterina Borisova: Elections, protest and trust in government:  
A natural experiment from Russia

ISBN 978-952-323-122-1, online  
ISSN 1456-5889, online

This paper can be downloaded without charge from <http://www.bof.fi/bofit>.

Suomen Pankki  
Helsinki 2016

# Contents

Abstract .....	4
1 Introduction .....	5
2 Theoretical discussion and hypotheses.....	7
Elections as information .....	7
Elections as outcomes.....	9
Protest .....	9
3 Background on the Russian case .....	10
The protest of December 10 .....	12
4 Identification and estimation strategy .....	14
5 Results .....	16
6 Extending the analysis.....	20
7 Mechanisms.....	22
8 Caveats and challenges.....	29
9 Conclusion.....	31
References .....	33
Appendices .....	38
Appendix I Balance tests .....	38
Appendix II Distribution of districts by periods, periods 1 and 2 versus period 3 .....	39
Appendix III Difference in partisanship across periods .....	40
Appendix IV Non-responses.....	41

---

Timothy Frye and Ekaterina Borisova

## Elections, protest and trust in government: A natural experiment from Russia

### Abstract

How do flawed elections and post-election protest shape political attitudes? Taking advantage of the largely exogenous variation in the timing of a survey conducted in Moscow, we examine the short-term impact of the parliamentary election of December 4<sup>th</sup>, and the large protest of December 10<sup>th</sup> on trust in the Russian government. The fraud-marred parliamentary election had little effect on attitudes toward government, perhaps because allegations of vote improprieties were not new information. In contrast, the large protest of December 10<sup>th</sup> increased trust in government. Heightened trust arises largely from non-supporters of the ruling party updating their beliefs rather than from social desirability bias, a perceived improvement in government performance, or a “halo” effect. This finding is consistent with the view that autocrats can increase trust in government by unexpectedly allowing protest without repression. It also suggests that when evaluating trust in government citizens may cue not off the content of the protest, but off the holding of the protest itself.

JEL Classification: P26, D72.

Keywords: trust in government, protest, elections, partisanship.

---

**Timothy Frye**, [orcid.org/0000-0001-8633-2046](https://orcid.org/0000-0001-8633-2046). Columbia University, Department of Political Science, 714 IAB Columbia University, 420 W. 118th Street, New York, New York 10027. International Center for the Study of Institutions and Development National Research University Higher School of Economics, Russian Federation. Email: [tmf2@columbia.edu](mailto:tmf2@columbia.edu).

**Ekaterina Borisova**, [orcid.org/0000-0002-0961-8021](https://orcid.org/0000-0002-0961-8021). International Center for the Study of Institutions and Development National Research University Higher School of Economics, Russian Federation, 101000, Myasnitskaya, 20, Moscow, Russia. Email: [eborisova@hse.ru](mailto:eborisova@hse.ru).

The article was prepared within the framework of the Basic Research Program at the National Research University Higher School of Economics (HSE) and supported within the framework of a subsidy by the Russian Academic Excellence Project '5-100'. We thank participants in seminars at the International Center for the Study of Institutions and Development, Duke University, Science Po, the Institute of Political Economy and Governance in Barcelona, and the Graduate School at CUNY.

# 1 Introduction

Scholars have conducted increasingly sophisticated analyses of how and why autocrats hold elections (c.f. Magaloni 2006; Svoboda 2012; Simpson 2013; Little 2012; Gehlbach et al. 2015). They have also examined the links between electoral fraud and protest (Tucker 2007; Svoboda 2012; Hollyer et al. 2015; Little et al. 2015). Yet we know far less about how election fraud and political protest shape political attitudes. Understanding these relationships is particularly important in competitive autocracies where rulers rely less on procedural mechanisms to gain legitimacy than on direct relations with citizens (Dimitrov 2009; Treisman 2011). Moreover, because political liberalizations are more likely in election years than in non-election years in competitive autocracies, the dynamics introduced by electoral fraud and protest often have profound consequences (Pop-Eleches and Robertson 2016). More generally, we know far less about the dynamics of political trust in autocracies than in democracies (Miller 1974, but see Yakovlev and Gilson 2015).

We examine the short-term impact of a fraud-marred election and a political protest on self-reported trust in government by taking advantage of exogenous variation in the timing of interviews of Muscovites. By exploring the attitudes of respondents interviewed just before and just after the election of December 4, 2011 and just before and just after the large protest of December 10, 2011, we identify how these events shaped political attitudes. Because selection into these groups is uncorrelated with many covariates associated with political trust, we can identify the sources of attitudes toward government (Dunning 2012).

We find that the suspect parliamentary election of December 4<sup>th</sup> had little effect on trust in government. The failure of the flawed election to shape attitudes is likely because allegations of vote fraud were not new information for most Russians. This is in line with arguments that only novel information alters political attitudes (c.f., Zaller 1992).

In contrast, respondents interviewed just after the large and unexpected protest of December 10<sup>th</sup> expressed strikingly higher levels of trust in many state institutions, including the federal government, the municipal government, the police, the army, the courts, and the security services (but not the Duma, the Procuracy, or the United Nations). To account for the increase in trust in government following an anti-government protest, we examine four possible mechanisms. We find that post-protest increases in political trust are largely driven by non-United Russia supporters updating their beliefs about the government rather than due to social desirability bias, improved perceptions of performance of state bodies, or a halo effect (Greene and Gerber 1999; Bartels 2002).

Our results have several implications. For scholars of autocratic politics, they illuminate why electoral fraud on its own may not change political attitudes (Kuran 1991; Tucker 2007; Hyde and Marinov 2014). The results also indicate that autocratic governments may generate trust among political opponents by allowing protest. A well-run protest that is not met with repression can persuade non-government supporters that the government is more trustworthy than previously believed. Rather than taking their cue from the information content of the protest, citizens may update their beliefs based on the government's decision to allow protest.

The results speak to debates about political trust. We can say little about the longer-term impact of protest on trust in government, but we can identify sharp changes in trust in government in response to the protest. Structural determinants of political trust, such as culture or political institutions have been much studied, but we demonstrate that political shocks may shift trust in government rather quickly (Mishler and Rose 2001), suggesting individuals keep a “running tally” on trust in government (Fiorina 1981).

Our findings also contribute to debates about the influence of partisanship on political attitudes. Partisanship influences levels of trust in government as United Russia supporters expressed higher levels of trust in government than non-United Russia supporters, but we also see some convergence in the views of United Russia supporters and non-United Russia supporters following the protest of December 10<sup>th</sup>. This suggests that partisanship shapes perceptions of trust in government even in Russia's weakly institutionalized political system, but also that partisans update their evaluations of political trust in line with new information (Greene and Gerber 1999; Bartels 2002).

Finally, our results contribute to debates about causal identification. Many studies of political trust rely on observational data which raises concerns about identification (Kramer 1983; Gerber and Green 2012).<sup>1</sup> In addition, political shocks by definition are unexpected which makes it difficult to design studies *ex ante* that measure the impact of political shocks *ex post*. In our case, the timing of exposure to the election and the protest was plausibly exogenous to most predictors of trust in government which helps us identify causal effects.

This methodological approach is related to studies that exploit exogenous variation in exposure to political events (c.f., Fisman 2001; Sharkey 2010; Frye and Yakovlev 2016). Most relevant are Garcia-Ponce and Pasquale (2015), Sagnier and Zylberg (2015) and Young (2016) who exploit the timing of exposure to pre-election violence to predict political behavior in Africa.

---

<sup>1</sup> But see, among others, Bowler and Karp (2004) and Vivyan et al. (2012) who examine the heterogeneous effects of scandal on political trust across electoral districts.

Garcia-Ponce and Pasquale (2015:22) observe: “A next step for this research agenda is to systematically observe how citizens respond to other political shocks – such as opposition protests, rallies, and demonstrations. In this way we can theorize more fully the conditions under which citizens will demonstrate publicly or hide in response to the behavior of state and non-state actors.” We begin this task in the next section.

## 2 Theoretical discussion and hypotheses

Recent work on competitive autocracies – those regimes that allow limited political competition and limited free speech – has emphasized the importance of information flows between citizens and rulers (c.f., Gehlbach et al. 2016; Guriev and Treisman 2016). Rulers in competitive autocracies face a dilemma (Levitsky and Way 2010; Malesky and Schuler 2010). They may allow the free flow of information – via an uncensored press, clean elections, or public protests – which gives them accurate information about their own popularity, the relative strength of the opposition, and the performance of bureaucrats, but doing so also leaves them more vulnerable to a loss at the polls, a revolt among elites, or heightened popular protest. Much work has explored the conditions under which autocrats make these tradeoffs (Magaloni 2006; Egorov et al. 2009; Svolik 2012; Simpser 2013; Gehlbach and Simpser 2015). In the broadest strokes, these works argue that autocrats allow somewhat freer elections, a less censored press, and limited protest when they are popular, when they have less uncertainty about power relations, and when the need to monitor bureaucrats is especially great. While scholars have devoted much attention to the determinants of electoral fraud and protest in competitive autocracies, they have paid less attention to the question under study: how do elections and protest in competitive autocracies shape political attitudes (but see Sagnier and Zylberg 2015; Tertychnaya and Lankina 2016).

### Elections as information

First, consider elections. Electoral outcomes under competitive autocracy are typically treated as the result of the underlying popularity of the ruling party or leader and the extent of electoral fraud (Little 2014). Citizens see the reported electoral results, weigh them against their perceptions of the popularity of the ruling party and the perceived level of electoral fraud, and adjust their attitudes. Thus, we might expect that the greater the electoral manipulation, the lower the



level of trust in the government.<sup>2</sup> This logic is straightforward and guides common intuitions about the relationship between electoral fraud and democratic legitimacy. It also has some empirical support. Berman et al. (2014) show that an intervention to reduce electoral fraud bolstered trust in government even in the challenging environment of Afghanistan. If this argument is correct, then electoral fraud should be associated with less trust in government.

This hypothesis seems straightforward, but the relationship between electoral fraud and political trust may not be so simple because electoral fraud may not be new information. Having seen fraud in past elections, citizens may have adjusted their attitudes to expect electoral fraud. Where respondents have already “priced in” electoral fraud, we would expect little change in political attitudes following electoral manipulation. In addition, because citizens have only incomplete information about the extent of fraud, they often have difficulty evaluating claims that electoral fraud in any given election was higher than in the past. To add to the problem, modern autocrats rely on a mix of tactics to undermine elections, many of which are designed to be hard to detect (Mares and Young 2016). They mobilize, intimidate, or bribe voters far from the eyes of election observers or the media (Frye et al. 2014); manipulate seemingly democratic institutional rules that in practice tip the electoral playing field in their favor (Simpser 2013); and use control over state media to counter claims of electoral irregularities by domestic rivals and foreign observers (c.f., Guriev and Treisman 2016).

Finally, much research argues that citizens have difficulty processing new information accurately due to cognitive and motivational biases.<sup>3</sup> Most prominently, political partisanship is a powerful filter that makes partisans resistant to new information that does not conform to their prior beliefs and numerous studies show that these partisan biases guide how citizens respond to political shocks (e.g. Bartels, 2002; Lodge and Taber 2002 Zaller, 1992).<sup>4</sup> That individuals make the “facts fit the belief” rather than the vice-versa suggests that partisans will be slow to update their attitudes in light of new information about electoral fraud. If these arguments hold, then electoral fraud should have little impact on political attitudes.

---

<sup>2</sup> Simpser (2013) makes the useful distinction between fraud conducted to win elections and to signal ruler strength when electoral outcomes are not in doubt. We are interested in the former given the details of the case.

<sup>3</sup> Lodge and Taber (2000) argue that the need to achieve cognitive consistency leads partisans to interpret new information in ways that are congenial to and congruent with prior beliefs.

<sup>4</sup> Fischle (2000) identifies a strong partisan bias in perceptions of the scandal involving President Clinton and Monica Lewinsky. Chang and Kerr (2009) find that ethnic and partisan identities in Africa shape perceptions of corruption, while Anderson and Tverdova (2003) show that partisanship shapes perceptions of corruption in OECD countries.

## Elections as outcomes

Election results under competitive autocracy send a signal about the level of electoral fraud, but they also may reveal information about the magnitude and direction of change in the ruling party's bargaining power, and these shifts in bargaining power may shape political attitudes independent of the extent of electoral fraud. For example, in response to a shift in bargaining power that gives the ruling party fewer seats in parliament, supporters of the ruling party may express less trust in government, while supporters of opposition parties who receive more seats in the parliament may express more trust. While much more attention has focused on how the extent of electoral manipulation may shape citizen responses to electoral fraud, electoral outcomes by themselves may also shape political attitudes and this has been less well recognized in the literature. This argument roots trust in electoral outcomes and partisanship: Partisans whose party receive more (fewer) seats will express higher (lower) levels of trust in the government.

## Protest

As with elections, far more research explores the determinants of post-election protest than accounts for how protest influences political attitudes. Those works that take up this question focus on how the content of the new information revealed by the protest influences political attitudes. Using a novel data set of subnational protests in Russia, Tertychnaya and Lankina (2016) argue that spatial proximity to protest is associated with a heightened perception of electoral fraud and greater support for protestors' demands. Similarly, Sagnier and Zylberger (2015) argue that protests followed by repression reveal that institutions are too weak to deter the ruler from rent-seeking and thereby lead to less trust in government. They find evidence consistent with this claim from 13 countries in Africa. In these accounts protest reveals information about the extent of electoral fraud, and about the strength of monitoring institutions, respectively, and thereby influences perceptions of trust in government.<sup>5</sup> Thus, post-election protest should be associated with lower levels of trust.

But protest also reveals information about the willingness of the ruling elite to tolerate public opposition. According to this mechanism, citizens may cue not off the content of the protest, but off the holding of the protest itself. If respondents have a prior belief that the ruling party will repress anti-government demonstrations, and the ruling party responds with repression, then we should find little change in political attitudes as no new information is revealed. If, however,

---

<sup>5</sup> In this case, protestors called for new national elections – a demand far beyond the “rightful resistance” studied by Lorentzen (2013) and by O'Brien (2006).

respondents expect the ruling party to allow post-election demonstrations, but they are obstructed, then we would expect respondents to express lower levels trust, with non-regime supporters exhibiting the greatest levels of change.<sup>6</sup>

Finally, if citizens expect the ruling party to repress a post-election protest and it does not, then we would expect increases in trust in government as respondents come to believe that the government is more trustworthy than they previously believed. Moreover, these increases in trust would be greatest among non-regime supporters as they are most affected by the ruling party's decision not to repress.<sup>7</sup> This mechanism suggests that the government's decision to repress or allow public protest helps shape public attitudes about trust in government. It also suggests that citizens take their cue not from the content of the protest which is decidedly against the government, but from the ruling party's decision to allow protest. In this case, the medium is the message.

### 3 Background on the Russian case

Russia has held parliamentary elections for the Duma for more than 25 years. In the 1990s, pro-government parties struggled as the opposition often held a plurality of seats. In the 2000s, the pro-government party United Russia won large majorities in 2003 and 2007. By 2007, United Russia controlled more than 70 percent of seats and "systemic opposition" parties that cooperated with the government occupied the remainder.

The quality of parliamentary elections has varied over time as Russia has moved from a highly imperfect democracy in the 1990s, to a competitive autocracy at the time of our survey in 2011, to a more consolidated autocracy today. Elections in the 1990s were competitive and hard fought, but plagued by accusations of media bias and ballot stuffing by local officials. In the 2000s, Russia took an autocratic turn as political competition declined and barriers for non-systemic opposition parties increased.<sup>8</sup> Our study focuses on the December 2011 election for the

---

<sup>6</sup> Sagnier and Zylberger (2015) find that post-election protests are associated with less trust in government, but that these effects are magnified if the ruling party engaged in repression. In their sample of subnational protests in Russia, Tertychnaya and Lankina (2016) also find that respondents in close spatial proximity to at least one protest involving repression expressed greater concerns about electoral integrity.

<sup>7</sup> The argument is closest to Sagnier and Zylberger (2015) who develop a formal model in which an autocrat facing a protest chooses to comply or obstruct the protest based on the quality of monitoring institutions which would reveal the ruler's past misdeeds. If citizens see protest that the ruler does not obstruct, then citizens revise their prior beliefs about the level of trust in the government upward because respondents perceive that existing monitoring institutions are sufficiently powerful to deter the ruler from rent-seeking. In our argument, the protests reveal information not about the credibility of the monitoring institutions, but about the autocrat's willingness to allow protests to occur.

<sup>8</sup> Using departures from randomness in the last digit of reported electoral results, Myagkov et al. (2009) found a sharp increase in fraud beginning in the 1999-2000 electoral cycle.

Duma. This election was a disappointment for United Russia. The dominant party saw its vote share fall from 64 percent in 2007 to 49 percent in 2011 with declines in vote share of more than 30 percent in many large industrial regions, in the Far East, and in Moscow.

United Russia's vote share fell more anticipated. The popularity of the Prime Minister Vladimir Putin and then President Dmitri Medvedev declined before the election, but their approval rates were still above 60 percent. Surveys indicated that United Russia would receive fewer votes than in 2007 but still win a majority. Most experts saw little political change on the horizon. Roth (2011) notes: "The days are dwindling down to the elections, and no one has really decided yet what to expect from them. It is unlikely that we will see an electoral revolution in Moscow - the most exciting thing that may happen is United Russia losing its constitutional majority, and the only real question for the elections is how far United Russia's polling numbers have dropped in recent months."<sup>9</sup>

This election was notable not only for the poor performance of United Russia, but also for allegations of fraud. This was not new as various forms of electoral fraud have been a feature of Russian politics for years (Myagkov et al. 2009). Social media, which had expanded greatly since the 2007 election, played a much greater role in spreading information about electoral fraud and protest (Reuter and Szakonyi 2014; Enikolopov et al. 2015). Even on election-day observers posted *YouTube* videos documenting ballot box stuffing and, in the days that followed, newspapers were rife with reports of voting "carousels" and buses transporting voters from district to district among other types of fraud.

Academic studies uncovered irregularities. Enikolopov et al. (2012) randomly assigned monitors to electoral precincts in Moscow and found that United Russia vote totals were 11 percentage points higher in precincts that lacked election monitors. Frye et al. (2014) note that roughly one quarter of workers in the private sector experienced some form of pressure from their employer to vote. Kobak et al. (2012) and Rundlett and Svolik (2016) used departures from randomness in the last digit of reported results to argue that with a high likelihood many ballots had been misreported. Even the government tacitly admitted fraud was a problem by moving to put web camera in all electoral precincts for the March 2012 presidential election.

The (arguably) expanded scale and visibility of fraud allowed United Russia to retain its control over the State Duma, but at the same time, it spurred protests in Moscow. The first demonstration occurred December 5<sup>th</sup>. Organizers expected about 400 participants, but roughly 3000 protestors took to the streets. Police detained about 300 (including the main organizers)

---

<sup>9</sup> Forecasts from the Center for Strategic Research (CSR) were the exception. (Belanovsky et al. 2011).

when marchers attempted to approach the Kremlin (Shuster 2011; Elder 2011; Greene 2014, 202–209).

The government's response was largely dismissive. President Medvedev noted that while the government would investigate fraud, he believed that "United Russia got as many votes as it had – not more not less – and in that sense the elections were fair and just."<sup>10</sup> Prime Minister Putin noted the "need to have dialogue with those people who are opposition minded," but also accused protestors of receiving support from the US State Department (Filatova 2011).

## The protest of December 10

Most surprising, just six days after the election, 40,000–60,000 protestors gathered in central Moscow to challenge the election results.<sup>11</sup> It was the largest demonstration in Moscow since the early 1990s and saw Russia's middle class oppose the electoral results and call for a new elections (Gelman 2013; Robertson 2013). Observers vastly underestimated the scale of the protest (Rose 2011). Organizers optimistically predicted that 10,000 people would demonstrate, but privately expected far fewer. Skepticism toward the likelihood of a mass demonstration was reasonable because vote fraud in previous elections had not spawned large protests.

Just prior to the election, Dmitri Trenin a prominent Russian commentator expected that there would be allegations of fraud and noted: "A lot of people are unhappy with the authorities, and they are out to vent their anger against Mr. Putin's party...however very few people are actually likely to go to the street to take any form of action to challenge the election results when they are publicized."<sup>12</sup> Another popular commentator noted: "I flew out of Russia last Sunday. I arrived last night in order to attend the protest. And in the span of a week when I was away I flew back to a new country. Two weeks ago it would have been impossible to imagine. All that has happened after the election...can be characterized in one phrase: this is the end of legitimacy of the regime... I can honestly say that I did not expect any of this."<sup>13</sup>

The protest ran from noon until late in the evening with opposition activists, celebrities, and performers calling for new elections. In addition, protestors criticized the government and United Russia for engaging in vote fraud and corruption. A broad swath of opposition groups took part in the rally including prominent liberals, as well as leftist and nationalist groups.

---

<sup>10</sup> A later government investigation revealed technical violations but not large-scale vote rigging.

<sup>11</sup> To understand that determinants of protest see, among others Enikolopov et al. 2015.

<sup>12</sup> Tsubiks (2011). "Abuses in Parliamentary Elections Predicted." *Infazine*, December 3, 2011. <http://www.infazine.com/news/stories/op/storiesView/sid/49931/>

<sup>13</sup> Yulia Latynina on Echo of Moscow radio show, December 10<sup>th</sup>.

Not only was the protest large by Moscow standards, but it also occurred without incident. After some hesitation, the Moscow city government granted a permit for the protest. In contrast to recent much smaller demonstrations, the protest was officially sanctioned. In addition, reports of clashes between police and protestors were rare, and to the surprise of many, news reports of the protest were broadcast on state television largely without comment on the day of the protest.

Numerous sources reported on the peaceful nature of the demonstration and the lack of conflict between police and protestors. One reporter observed: “The organizers and participants of the meeting in Moscow said that the civility (*vezhlivost'*) and goodwill (*dobrozhelatel'nost'*) of the members of the police was unprecedented. A correspondent for *Kommersant'* witnessed dozens of protestors thanking the police for keeping order. Participants even gave members of the security forces hot coffee in plastic cups and gave them flowers (Kozenko 2012).”

The government response to the protest was ambiguous, if somewhat harsher. State television reported on the protest largely without bias, but they did not mention some protestors' call for Putin's resignation. During his annual radio call-in show on December 18<sup>th</sup>, Prime Minister Putin took a harder line toward the protestors accusing them of being paid by foreign governments and ridiculing the white ribbons worn by the protestors as resembling condoms. While recognizing that protestors had the right to express their views, he also argued that they needed to obey the law and avoid putting Russia's hard earned political stability at risk.

The government's response was less ambiguous in another respect. On December 15<sup>th</sup> the city government (almost certainly in consultation with federal authorities) granted permission for another protest on December 24<sup>th</sup>. Despite bitter cold, 100,000 protestors took part in an orderly march through Moscow, which, again occurred peacefully with few arrests or disruptions. In retrospect, this was the high point of the protest cycle for the opposition. In subsequent months, large pro-government rallies, withering media attacks on the political opposition, and administrative barriers curbed protest. Vladimir Putin's convincing victory in the presidential election of March 3, 2012 further eroded enthusiasm to take to the street. The protest cycle ended on May 6<sup>th</sup> when an unsanctioned demonstration ended in the arrests of two dozen protestors on charges of attacking the police. That those arrested were political neophytes and received jail times of up to two years left little doubt that the government would now deal harshly with any protests.

## 4 Identification and estimation strategy

This study takes advantage of the plausibly exogenous assignment of the day on which interviews were conducted. We organized a survey of Muscovites which began on November 25 and ended on December 25<sup>th</sup> and was conducted by the Levada Center, one of the most respected polling firms in Russia with more than 25 years of experience. The response rate was 52 percent where the respondent was contacted at home and the total response rate, including all forms of non-response, was 31 percent which is on par for surveys conducted in Moscow. About 20 percent of respondents were called back to check the quality of responses. The survey was organized to minimize the influence of interviewers. Interviewers could not contact respondents before the interview; moreover they learned of the interview assignments only on the day that they were conducted. Survey organizers at the Levada Center chose primary sampling units to ensure that many parts of the city were covered on the same day and we have good balance from administrative districts across the city. In 3 of the 10 districts more interviews were conducted before the protest, in 2 districts more interviews were conducted after the protest, and in 5 districts there is little difference in the number of interviews conducted before and after the protest.<sup>14</sup>

Nineteen percent of respondents ( $n = 291$ ) were interviewed prior to the election of December 4<sup>th</sup>, 2011 (including the day of election), 27 percent ( $n = 417$ ) were interviewed between the December 4<sup>th</sup> election and December 10<sup>th</sup> protest (including the day of protest) and 54 percent ( $n = 842$ ) were interviewed following the protest of December 10. To measure the impacts of exposure to the election and to the protest on trust in government, we compare the responses of those interviewed before and after the election of December 4<sup>th</sup> and those interviewed before and after the protest of December 10<sup>th</sup>. Because the assignment of the day of the interview is plausibly exogenous to attitudes toward the government, we attribute the differences in responses to our questions to the impact of the election and the protest.

We assume that the underlying baseline levels of trust in government would have remained constant over the pre-election, post-election, and post-protest periods were it not for the election and the protest. Given this narrow time frame, this assumption seems plausible. Moreover, we are unaware of any international, economic, or social shocks that would account for the sharp changes in attitudes documented above.

---

<sup>14</sup> See Appendix I.

Another assumption is that all respondents in the treatment groups – those interviewed after the election and after the protest – actually received the treatment. If respondents were unaware of these events, and therefore did not receive the treatment, then this bias would artificially reduce the differences in responses between treatment and control groups. While we lack measures of the intensity of exposure to the election and protest, the assumption that Muscovites were aware of the election and the protest is defensible. The survey occurred following a long election campaign and the results were widely available. The protest of December 10 was a signal political event that took place in the heart of the capital, was attended by parties across the political spectrum, and was widely covered in the media. A survey by the Levada Center conducted between December 8<sup>th</sup> and 16<sup>th</sup>, indicates that 86 percent of respondents knew about the protest.<sup>15</sup>

A third assumption is that populations across the three periods are not biased in covariates that predict trust in government. As indicated in Appendix II, on average, the groups of respondents interviewed before and after the protest were statistically indistinguishable in terms of age, gender, residence status, ethnicity, political preferences, and employment status. These features should not account for the differences in the average responses about trust in government across the three time periods. Balance across subgroups was not complete as respondents interviewed after the protests were less educated and less wealthy.<sup>16</sup> Because the groups are imbalanced on these two covariates, we control for them in the regression analyses.<sup>17</sup>

To measure attitudes toward the government, we asked respondents to rate their level of trust in 8 state institutions, the Russian Orthodox Church, and the United Nations. Each is measured on a 5-point scale where 1 equals “do not trust at all” and 5 equals “trust completely.” We include the United Nations as a placebo to test whether responses are driven by a “halo effect” that shapes attitudes toward all political institutions rather than just to those that can be reasonably tied to the election and protest. We created a “trust in government” index that sums the average response on each of the eight indicators related to state power and divides by eight. Scores for trust in the Russian Orthodox Church and the United Nations are excluded from this index.

---

<sup>15</sup> We do not know whether any respondents participated in the protest, but it is unlikely: Moscow has 10 million residents, roughly 50,000 took part in the protest and only 1550 participated in the survey.

<sup>16</sup> Education is measured using an 8-point scale from unfinished middle school to a doctoral degree. Wealth is measured using a 6-point scale which asks respondents to place themselves on a scale where 1 = not having enough money for food and 6 = do not experience material hardships and can buy a home or apartment if you wanted.

<sup>17</sup> The results are also robust to the inclusion of other demographic variables, such as age, gender, nationality, and years of residency in Moscow.



## 5 Results

Table 1 Trust in Institutions

	Period 1 pre-election before 12/4	Period 2 post-election 12/5–12/10	Period 3 post-protest after 12/10
Trust in Government index	2.65 (.77)	2.79 (.81)	2.92 <sup>b,c</sup> (.76)
Army	2.88 (1.06)	3.21 <sup>a</sup> (1.00)	3.18 <sup>c</sup> (1.00)
Police	2.50 (.90)	2.81 <sup>a</sup> (.94)	2.86 <sup>c</sup> (.97)
FSB (Federal Security Organ)	2.70 (1.05)	2.99 <sup>a</sup> (1.01)	3.06 <sup>c</sup> (.97)
Courts	2.57 (.94)	2.71 (.97)	2.76 <sup>c</sup> (.95)
Municipal Government	2.63 (.95)	2.76 (1.00)	2.91 <sup>b,c</sup> (.97)
Federal Government	2.69 (1.02)	2.78 (1.03)	2.98 <sup>b,c</sup> (.98)
Duma (Parliament)	2.48 (.99)	2.52 (.94)	2.66 <sup>b,c</sup> (.99)
Procuracy	2.77 (.93)	2.79 (.98)	2.92 <sup>b,c</sup> (.98)
Russian Orthodox Church	3.47 (1.02)	3.57 (1.00)	3.65 <sup>b,c</sup> (.94)
United Nations	2.98 (1.02)	2.97 (1.00)	3.04 (1.08)

Notes. Means for each period reported. Standard deviations in parenthesis. Period 1 includes the day of the election, and Period 2 includes the day of the protest. <sup>a</sup> indicates that differences between means in period 1 and period 2 are significantly different at the .05 level, <sup>b</sup> indicates that differences between means in period 2 and period 3 are significantly different at the .05 level, <sup>c</sup> indicates that differences between means in period 1 and period 3 are significantly different at the .05 level.

On balance, as Table 1 indicates, we find little difference in responses about trust in government given just prior to the election (period 1) and just after the election (period 2). The trust in government index is 2.65 for respondents interviewed after the election and 2.75 for respondents interviewed between the election and the protest. The difference in levels of trust in the army, police and the FSB between period 1 and period 2 are significant at the  $p < .05$  level, but all other indicators show no significant differences between these two periods.

We do see however a dramatic jump in trust when comparing responses before the election (period 1) and after the protest (period 3). In all cases related to government institutions, we find statistically significant increases in trust following the protest of December 10<sup>th</sup> relative to

before December 4<sup>th</sup>. These increases are often significant if we compare responses given just prior to the protest (period 2) and those just after the protest (period 3) which suggests the importance of the protest in shaping average levels of trust in government.

To assess these arguments more rigorously, we estimate the following model which introduces controls for a respondent's wealth, education and place of residence using fixed effects for Moscow's 10 administrative districts.

$$\text{Trust} = \alpha_1 + \alpha_2 \text{PostProtest} + \alpha_3 \text{PostElection} + \alpha_4 \text{ProtestDay} + \alpha_5 \text{ElectionDay} + \alpha_6 \text{Wealth} + \alpha_7 \text{Education} + \alpha_8 \text{District} + \varepsilon$$

Of particular interest are the coefficients on dummy variables for *PostProtest* which equal 1 for respondents interviewed after December 10<sup>th</sup> and *PostElection* which equals 1 for respondents interviewed between December 5<sup>th</sup> and December 10<sup>th</sup>. We include dummy variables for respondents interviewed on the day of the election, *ElectionDay* and the day of the protest, *ProtestDay*.

Column 1 of Table 2 reports the coefficients from an OLS regression that uses the trust in government index as a dependent variable. We find that respondents interviewed after the protest expressed greater trust in government institutions compared to respondents interviewed prior to the election as indicated by the coefficient on *Post-Protest*. The size of the coefficient is about one quarter of a standard deviation in the index or about the size of moving from an individual with some high school education to a college graduate. The small and insignificant coefficient on *PostElection* reveals that respondents interviewed in the five days after the election expressed similar levels of trust in government relative to those interviewed prior to the election<sup>18</sup>.

---

<sup>18</sup> Wealth appears largely unrelated to trust in government while less educated respondents report significantly higher levels of trust in government. Controlling for whether respondents received their news primarily from the internet, the television, or personal experience had little impact on their political attitudes.

Table 2 Determinants of trust in institutions

	Gov't index 1	Army 2	Police 3	FSB 4	Court 5	City Gov't 6	Fed Gov't 7	Duma 8	Procuracy 9	Church 10	UN 11
Post-protest	.16*** (.06)	.23*** (.08)	.28*** (.07)	.27*** (.08)	.13* (.07)	.17** (.07)	.17** (.08)	.05 (.08)	-.01 (.08)	.14* (.07)	.05 (.09)
Post-election	.04 (.07)	.28*** (.09)	.24*** (.08)	.18** (.09)	.08 (.09)	-.04 (.08)	-.05 (.09)	-.06 (.09)	-.14 (.09)	.05 (.09)	-.11 (.10)
Protest day	.13 (.10)	.50*** (.12)	.38*** (.11)	.28** (.12)	.20* (.11)	.14 (.12)	.07 (.12)	-.09 (.12)	-.12 (.12)	.00 (.12)	.05 (.13)
Election day	-0.03 (0.12)	-0.09 (0.16)	0.22 (0.16)	0.21 (0.17)	0.11 (0.15)	-0.21 (0.15)	-0.28* (0.15)	-0.21 (0.14)	-0.04 (0.15)	-0.27 (0.20)	-0.49*** (0.17)
Constant	3.18* (.17)	3.94* (.20)	2.99* (.18)	2.30* (.26)	2.95* (.18)	3.35* (.19)	3.50* (.20)	3.06* (.20)	3.05* (.25)	3.66* (.19)	2.91* (.24)
Obs	1232	1491	1505	1338	1450	1485	1487	1466	1437	1445	1212
R-squared	.09	.07	.06	.09	.06	.07	.09	.06	.05	.04	.04

Notes. Dependent variable: trust in various institutions. OLS, robust standard errors in parentheses. Fixed effects for municipal district, wealth and education included but not reported. *Post-Protest* and *Post-Election* does not include protest day.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Models 2–9 examine the impact of the election and the protest on trust in a variety of institutions from the army and police to the Duma and the federal government. Across 6 of these 8 models, coefficients on the dummy variable for respondents interviewed after the protest of December 10 are statistically significant at the  $p < .10$  level. For example, in Model 3, *PostProtest* is positively and significantly related to trust in the police, while Model 6 indicates a similar relationship between *PostProtest* and trust in the city government. Moreover, this relationship is apparent even for the police where levels of trust have historically been low (Gerber and Mendelson 2008; Buckley et al. 2015). The results were substantively important. Depending on the dependent variable, respondents interviewed after the protest were between 7 and 14 percentage points more likely to place themselves at 4 or 5 on the 5-point scale of trust in government. Not all institutions received higher marks after the protest. Respondents expressed no change in trust in the Duma, the body most tainted by election fraud, and in the Procuracy, an institution largely irrelevant to the protest.

In contrast, the largely insignificant coefficient on *PostElection* indicates that the election had little impact on political attitudes towards a number of government institutions. Respondents express significantly higher levels of trust after the election in the army, the police and the FSB, but not in any of the other institutions of state power, and express marginally less trust in the Procuracy.<sup>19</sup> These results indicate the parliamentary election of December 2011 had little systematic effect on trust in government.

More fine-grained analyses that repeat the analyses in Table 2 using daily measures of trust in government tell a similar story. The results from Figure 1 indicate that in the two days immediately after the election, we see increases in trust in government, but these gains are quickly erased. More importantly, after December 10<sup>th</sup>, we see large and significant increases in trust in government on most days. The size of the coefficients on 8 of the days after the protest are more than half a standard deviation of the index of trust in government. Moreover, these increases are also apparent in the run-up to the large and peaceful protest of December 24<sup>th</sup>.<sup>20</sup> The high levels of trust in government on December 20–24<sup>th</sup> could be due to the protest of December 10<sup>th</sup> or the anticipation of a sanctioned protest on December 24<sup>th</sup>. Both interpretations are consistent with the view that respondents are cuing off the holding of the protest rather than off

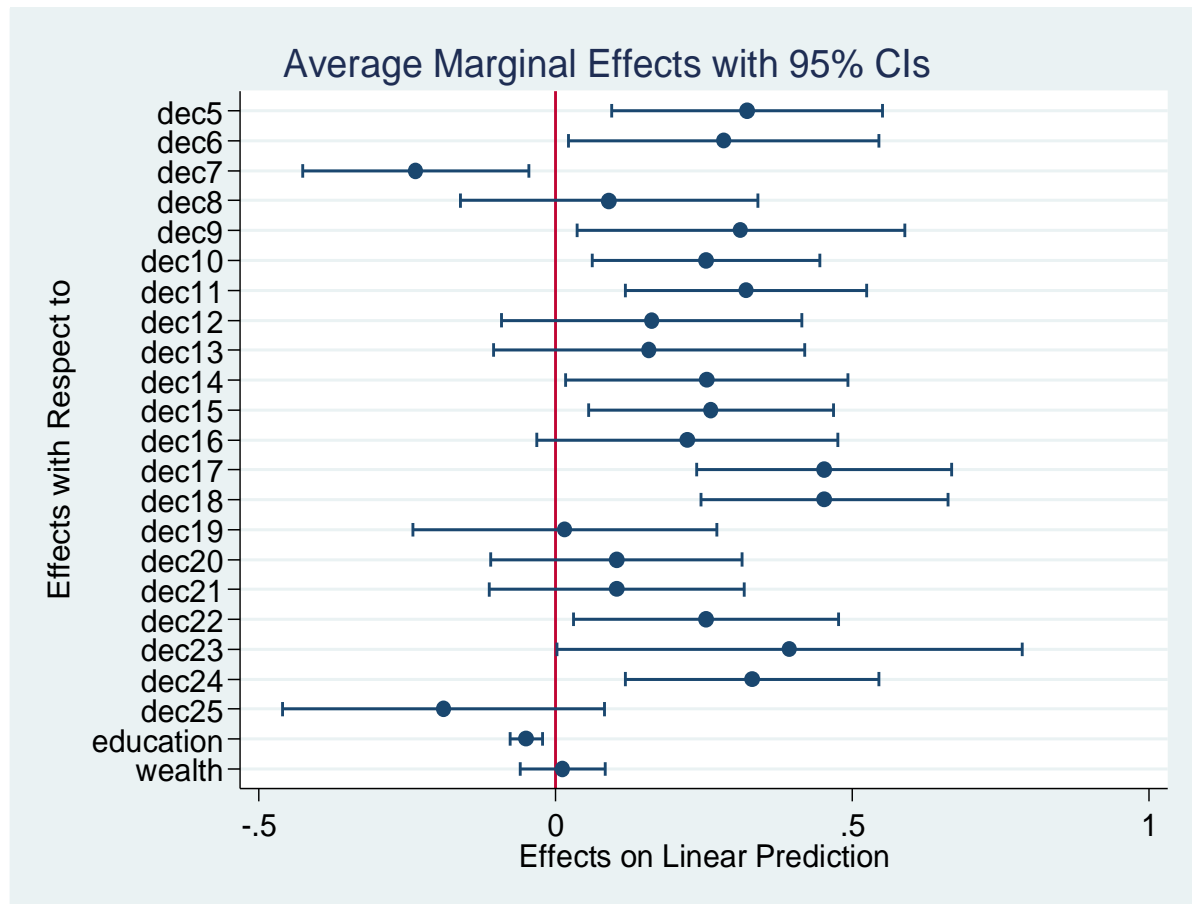
---

<sup>19</sup> One interpretation is that trust in the security services is a result of the repressive capacity of the government which declined following the poor showing of United Russia in the election.

<sup>20</sup> It is tempting to read too much into the daily fluctuations, but there is a noticeable drop in trust in government following Prime Minister Putin critical remarks about the protests in his radio call-in show on December 18<sup>th</sup>.

the content of the protest and that rulers in competitive autocracies can heighten trust in government by allowing peaceful protest without repression.

Figure 1 Daily results of protest and trust in government



## 6 Extending the analysis

The next section explores support for collective action in support of a government initiative to reduce crime as an alternative measure of trust in government. These questions offer a more behavioral and specific measure of attitudes toward government and provide a robustness check. More specifically, interviewers asked:

How would you behave in the following three situations?

- 1) Your local police officer holds a meeting where he will report to the public about the work of the police in maintaining security. Would you attend this meeting? Yes or No.
- 2) You heard about a meeting of people in your neighborhood who are concerned about crime in the region in which you live. Would you attend this meeting? Yes or No.
- 3) A public committee of residents of your district and local police officers that will meet regularly (not less than once a month) to discuss crime in your district. Would you agree to be part of this committee. Yes or No.

Affirmative responses were 38 percent, 41 percent, and 21 percent, respectively. These figures likely reflect social desirability bias in that respondents would like to impress interviewers by answering yes, but this bias is likely to be constant across periods. By using multiple measures of attitudes toward the government, we not only examine how attitudes differ across governmental institutions; we also determine whether these results extend to more behavioral measures, such as a reported willingness to engage in collective action.

We begin by estimating three probit models on the likelihood of answering yes to each of these three questions and report the results in columns 1–3 of Table 3. In column 4, we create a simple additive index of responses that ranges from 0 to 3 by summing the responses to the three questions about the willingness to engage in collective action. This dependent variable has a mean of 1.06 and standard deviation of 1.2.

Table 3 Another measure of trust

	Meeting 1	Meeting 2	Meeting3	Meeting index
	1	2	3	4
Post-protest	.11** (.04)	.11** (.04)	.02 (.04)	.25** (.11)
Post-election	.05 (.05)	.08 (.05)	-.05 (.04)	.09 (.13)
Protest day	.18*** (.07)	.11* (.07)	-.02 (.06)	.26 (.17)
Election day	-.23*** (.07)	-.10 (.09)	-.05 (.08)	-.43** (.17)
Constant	—	—	—	1.66*** (.27)
Estimation	Probit	Probit	Probit	OLS
Obs	1313	1320	1260	1130
F/Wald	60.19	54.83	70.66	4.59
R-squared/ Pseudo R-squared	.03	.03	.06	.05

Notes. Dependent variable: willingness to engage in collective action. Robust standard errors in parentheses. Fixed effects for municipal district, wealth and education included but not reported. Marginal effects for a one unit change in the independent variables reported for Models 1–3. *Post-Protest* and *Post-Election* does not include protest day. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

With a slightly different measure, we see similar results. Respondents interviewed after the protest reported a greater willingness to take part in collective meetings. In columns 1 and 2 respondents interviewed after the protest are 11 percentage points more likely to say that they would participate in collective action than those interviewed before the election. The results observed in Table 2 are not just an artifact of the direct question about trust in government. Moreover, the size of the effects is rather large.

## 7 Mechanisms

Taken together these results suggest that exposure to the flawed election of December 4<sup>th</sup> produced little systematic effect on trust in government. In some estimations, we find a higher level of trust in government after the election, but this result is inconsistent. More importantly, we identify a robust positive relationship between exposure to public protest and trust in government across a wide range of measures. This is surprising as one would expect protests critical of the ruling party to reduce trust in government or have little impact on political attitudes. What mechanisms might underpin this relationship? We explore four possibilities.

These differences could be driven by a “halo effect” in which all political institutions are viewed more positively following the protest in response to this brief moment of political liberalization. Given that the protest was seen by some as a “festival” more than a political protest, there is the possibility that a halo effect is driving the results. However, this does not seem to be the case. For example, Model 11 in Table 2 finds that dummy variables for *PostElection* and *PostProtest* are unrelated to trust in the United Nations. This placebo test suggests that respondents are distinguishing among institutions of government rather than just basking in the “halo effect” of a possible political liberalization.<sup>21</sup>

Differences in responses across periods could be due to social desirability bias. Respondents may have falsified their true preferences due to concerns about the possible costs of revealing their lack of support in the government. It is difficult to completely rule out preference falsification, but the evidence does not support this mechanism. The costs of revealing distrust in government were likely higher prior to the election and the protest when the ruling party was stronger, but trust in government is higher after the protest and, if anything, after the election. Moreover, respondents expressed low levels of trust in the Duma across all three periods. Finally, non-response bias to questions of political trust as a form of preference falsification also does not appear to be a serious problem for reasons discussed below.<sup>22</sup>

A third possibility is that the behavior of state officials during the protest itself improved perceptions of government. In contrast to past protests in Moscow, the demonstration of December 10<sup>th</sup> proceeded peacefully, with few arrests, and almost no charges of abuse. The cooperation of the police and the city government toward the protest may have provided new information that led respondents to update their attitudes. This good behavior may have produced higher levels of trust in government in general and in the police in particular.

However, the evidence for this view is weak. We have few questions that allow us to discern precise beliefs about the city government or federal government, but we did ask respondents to evaluate the police along a range of dimensions including their effectiveness, transparency, professionalism, willingness to abide by laws, equity, and their corruptibility on a scale of 1–5 with 1 indicating the lowest quality and 5 the highest. If this was at work, we might expect respondents to rate the police more favorably after the protest. As indicated in Table 4, we find that respondents viewed the police as less corrupt following the election and protest but along all

---

<sup>21</sup> To some degree evaluations of the Procuracy, an organization largely unrelated to the protest also serve as a placebo test.

<sup>22</sup> Because we lack non-participation rates by period, we cannot rule out the possibility that respondents based their decisions to participate in the survey on political events. We believe this unlikely as our results hold for the inclusion of covariates that might predict participation in the survey.



other dimensions, we find no discernible impact of the election or protest on attitudes. This suggests that the differences in reported trust in government across periods are not due to a form of institutional updating.

Table 4 Evaluation of police in Moscow

	Professional	Uncorrupt	Effective	Fair	Law-Abiding	Transparent
	1	2	3	4	5	6
Post-protest	.10 (.07)	.24*** (.07)	.02 (.07)	.07 (.07)	.07 (.07)	-.04 (.07)
Post-election	-.17** (.08)	.25*** (.08)	-.21*** (.08)	.01 (.08)	-.07 (.08)	-.02 (.08)
Protest day	.15 (.11)	.25** (.12)	.18 (.12)	.28** (.11)	.21 (.13)	-.18 (.13)
Election day	.08 (.14)	.39** (.16)	-.04 (.15)	.16 (.16)	.18 (.14)	.11 (.16)
Constant	2.74*** (.17)	1.93*** (.18)	2.98*** (.17)	2.30*** (.20)	3.06*** (.18)	2.38*** (.17)
Obs	1486	1454	1480	1457	1465	1449
R-squared	.10	.02	.09	.05	.09	.03

Notes. Dependent variable: evaluation of police along different dimensions. OLS, robust standard errors in parentheses. Fixed effects for municipal district, wealth and education included but not reported. *Post-Protest* and *Post-Election* does not include protest day.

\*\*\* p<0.01, \*\* p<0.05, \* p<.10.

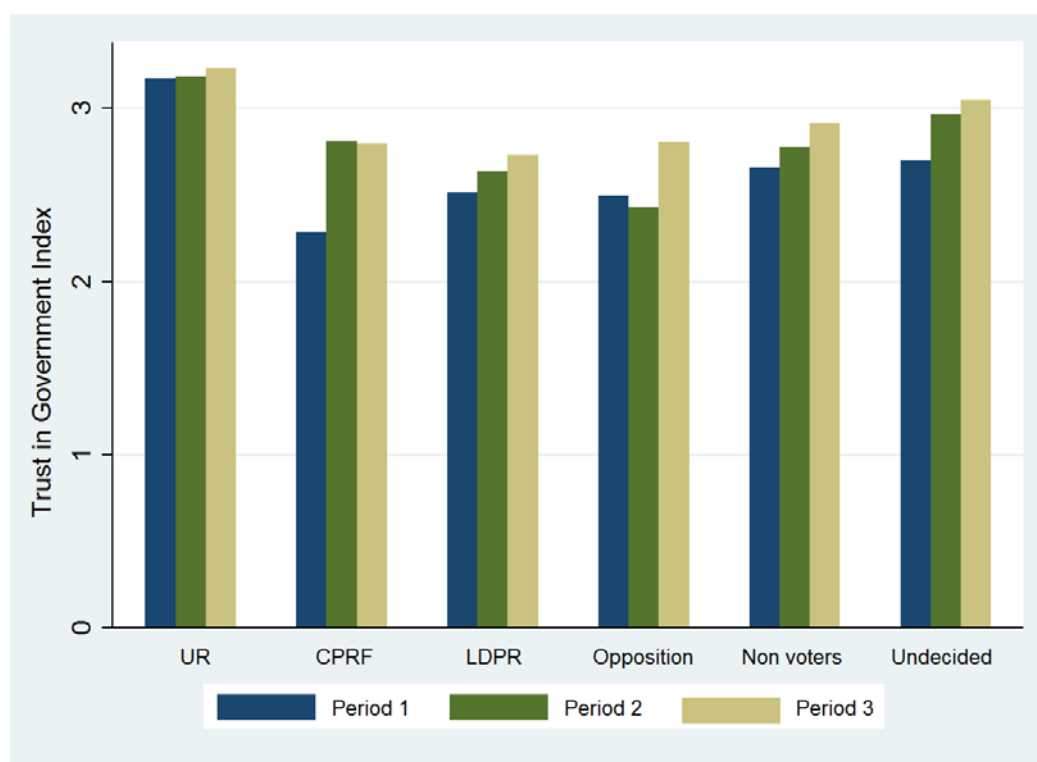
Finally, respondents may increase their levels of trust in government based on the holding of the protest itself. As the city government (certainly in consultation with the federal government) sanctioned the protest, and the police and security services were responsible for overseeing the sanctioned march, respondents who expected the government to repress the protest may have updated their beliefs about these organizations and the government more generally. If this argument is at work, we should find that trust is higher after the protest and that the increases in trust come largely from those who do not support the government.

To gain a measure of a respondent's partisan affiliations, interviewers asked respondents about their voting intentions if they were interviewed prior to the election and about their vote choice if they were interviewed after the election. Fourteen percent reported that they had voted for or were planning to vote for United Russia (UR), while 8 percent had voted for or were planning to vote for the main opposition party, Yabloko. Thirteen percent favored the Communist Party of the Russian Federation (CPRF), 10 percent backed the nationalist Liberal Democratic

Party of Russia (LDPR), and 10 percent favored Just Russia (JR). These last three parties are often seen as “systemic opposition” parties as their leadership often collaborates with the Kremlin to siphon off left-wing and nationalist voters in exchange for keeping their seats in parliament. Non-voters and undecided voters made up 34 percent and 14 percent of the sample, respectively.<sup>23</sup>

We begin by comparing mean levels of trust in government across the pre-election, post-election, and post-protest periods by partisan leanings (Figure 2). Across all three periods, United Russia supporters expressed similar levels of public trust. However, those who did not support United Russia expressed sharply lower levels of trust in the government prior to the election and the protest. Undecided and non-voters also expressed greater trust in the government following the protest.

Figure 2 Partisanship and trust in government



To determine whether these relationships hold in a more rigorous analysis, we repeat the estimation reported in Table 2, but also examine whether the impacts of the protest on trust in government are conditional on respondent partisanship. We include an interaction term that captures the impact of being a United Russia supporter interviewed after the protest ( $UR*PostProtest$ ) and

<sup>23</sup> Once non-voters and the undecided are taken into account, these results are similar to Enikolopov et al.'s (2012) predictions for what vote totals for United Russia in Moscow would have looked like absent fraud.

are especially interested in the coefficient on *PostProtest* which captures the impact of exposure to the protest on trust in government for non-United Russia supporters.

The results from Model 1 of Table 5 indicate that non-United Russia supporters exposed to the protest express significantly higher levels of trust in government relative to those interviewed before the election as indicated by the coefficient on *PostProtest* while United Russia supporters interviewed prior to the protest expressed higher levels of trust as revealed by *UnitedRussia*. In columns 2–9, we repeat the analysis for different branches of government and find similar results to those found in Table 2. In all cases, save for the Duma, the Procuracy, and the United Nations, non-United Russia supporters express higher levels of political trust after the protest than before the election.

We also present the results using the trust in government index as a dependent variable in Figure 3. Most importantly, *PostProtest*, which captures the impact of exposure to the protests on non-United Russia supporters, is significant and substantively important.

Figure 3 Impact of protest and partisanship on trust in government

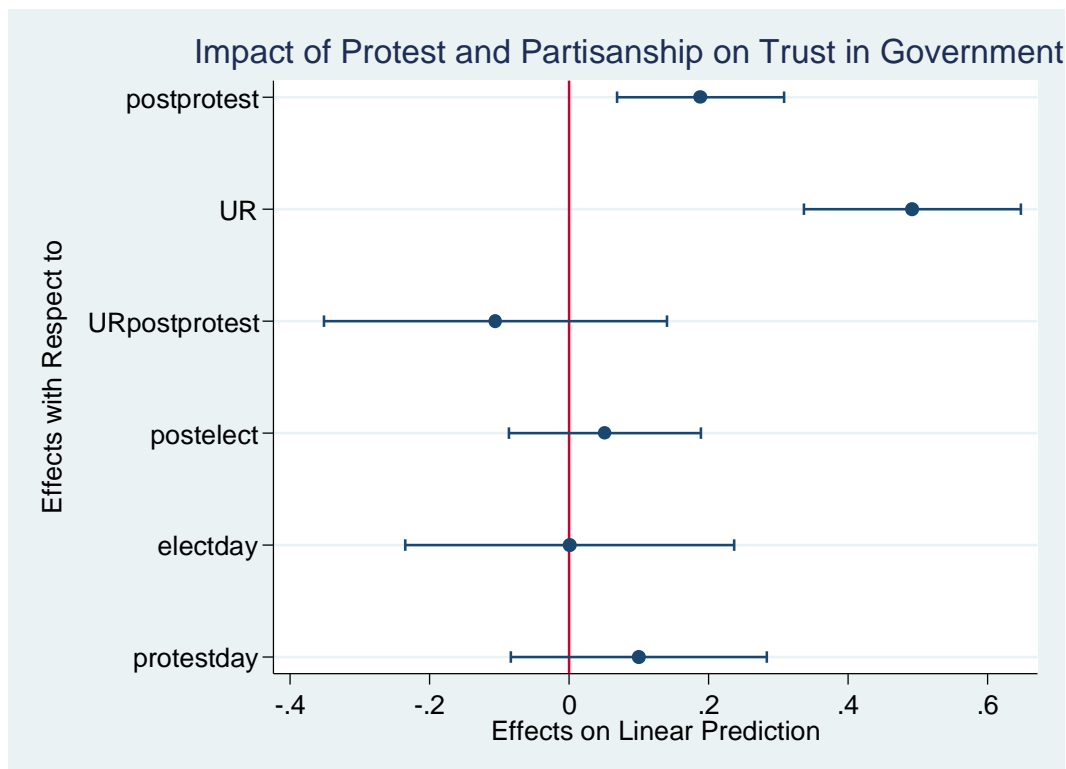


Table 5 Partisan impact of the election and protest on trust

	Gov't index 1	Army 2	Police 3	FSB 4	Court 5	City Gov't 6	Fed Gov't 7	Duma 8	Procuracy 9	Church 10	UN 11
Post-protest	.19*** (.06)	.23*** (.08)	.32*** (.07)	.30*** (.08)	.15** (.07)	.19*** (.07)	.20*** (.08)	.09 (.08)	.01 (.08)	.15** (.08)	.07 (.09)
Post-election	.05 (.07)	.29*** (.09)	.25*** (.08)	.20** (.09)	.09 (.09)	-.03 (.08)	-.04 (.09)	-.04 (.08)	-.13 (.09)	.06 (.09)	-.11 (.10)
Protest day	.15 (.10)	.51*** (.12)	.39*** (.11)	.30** (.12)	.21* (.11)	.15 (.12)	.09 (.12)	-.07 (.12)	-.11 (.12)	.02 (.12)	.05 (.13)
Election day	.00 (.12)	-.07 (.16)	.25* (.15)	.24 (.17)	.12 (.15)	-.17 (.15)	-.24 (.16)	-.17 (.15)	-.02 (.15)	-.24 (.20)	-.48*** (.17)
United Russia	.49*** (.08)	.32*** (.11)	.50*** (.10)	.50*** (.10)	.28*** (.10)	.56*** (.10)	.67*** (.10)	.60*** (.10)	.34*** (.11)	.40*** (.09)	.15 (.12)
United Russia* Post protest	-.11 (.13)	-.02 (.15)	-.17 (.14)	-.14 (.15)	-.13 (.14)	-.07 (.14)	-.12 (.14)	-.19 (.14)	-.15 (.16)	-.07 (.13)	-.10 (.18)
Constant	3.10*** (.17)	3.71*** (.20)	3.07*** (.19)	2.16*** (.26)	2.98*** (.19)	2.97*** (.19)	3.25*** (.20)	2.84*** (.19)	2.94*** (.25)	3.59*** (.19)	2.89*** (.24)
Obs	1232	1491	1505	1338	1450	1485	1487	1466	1437	1445	1212
R-squared	.13	.08	.08	.11	.06	.11	.13	.09	.06	.06	.04

Notes. Dependent variable: trust in various institutions. OLS, robust standard errors in parentheses. Fixed effects for municipal district, wealth and education included but not reported. *Post-Protest* and *Post-Election* does not include protest day.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

The results also hold using an alternative measure for trust that focuses on the willingness to engage in collective action. In Table 6, we estimate the likelihood that a respondent answered yes to each of the three questions which tap respondents' willingness to attend meetings aimed at reducing crime. In models 1 and 2, non-United Russia supporters are significantly more likely to report a willingness to engage in collective action following the protest as indicated by the coefficient on *PostProtest*. Finally, in column 4, we regress the "meeting index" on dummy variables for *PostProtest* with various controls and again we find that non-United Russia supporters interviewed after the protest are more likely to take part in collective action sponsored by the government.

Table 6 Partisan impact of the election and protest on willingness to engage in collective action

	Meeting 1	Meeting 2	Meeting3	Meeting index
	1	2	3	4
Post-protest	.13*** (.04)	.12*** (.04)	.04 (.04)	.30*** (.12)
Post-election	.05 (.05)	.09* (.05)	-.05 (.04)	.11 (.13)
Protest day	.20*** (.07)	.12* (.07)	-.01 (.06)	.29* (.17)
Election day	-.23*** (.07)	-.09 (.09)	-.04 (.08)	-.38** (.17)
United Russia	.20*** (.06)	.15*** (.06)	.10* (.06)	.47*** (.16)
United Russia* Post Protest	-.14** (.07)	-.06 (.08)	-.09* (.06)	-.32 (.21)
Constant	—	—	—	1.49*** (.27)
Estimation	Probit	Probit	Probit	OLS
Obs	1313	1320	1260	1130
F/Wald	74.65	64.45	71.74	4.82
R-squared/ Pseudo R-squared	.04	.04	.06	.06

Notes. Dependent variable: willingness to engage in collective action. Robust standard errors in parentheses. Fixed effects for municipal district, wealth and education included but not reported. Marginal effects for a one unit change in the independent variables reported for Models 1–3. *Post-Protest* and *Post-Election* does not include protest day. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

We note two possible mechanisms for these results. First, non-United Russia supporters could expect changes in policy to flow from the election results and political protest. The share of seats held by United Russia fell from 64 to 49 percent which might have led non-United Russia supporters to expect more favorable policy in the future and therefore express greater support for the

government. In favor of this view we find that supporters of the Communist Party, a party that received more seats in the new Duma, expressed higher levels of support in the Duma immediately after the election. Weighing against this view, however, is that other non-United Russia supporters did not express more trust in the Duma after the protest despite the weakened positions of United Russia in this body. In addition, even non-voters and the undecided expressed higher levels of trust in government after the protest.

A second and more plausible explanation is that non-United Russia supporters expressed higher levels of support due to expectations of greater political liberalization after the protest than before the election. That is, respondents updated their beliefs about the trustworthiness of the government in light of the new information provided by the holding of the protest itself rather than the content of the protest. In line with this view, we find that a politically diverse group of respondents expressed higher levels of trust in the government after the protest. The systemic and the non-systemic opposition as well as non-voters and the undecided also expressed greater support for the government following the protest.

A quote from opposition activist and well-known writer Boris Akunin supports this view: “In general, the meeting produced a great impression. Everyone was polite, even the police. And by the way, there were very few of them. I have a feeling that we are at the beginning of some great (and knock on wood) positive changes.”<sup>24</sup> More generally, a spring 2012 survey found that 64 percent of Russians believed that “demonstrations were an important way for people to express their views (Sakwa 2015: 197). In sum, we find evidence consistent with the view that the holding of the protest helped to increase trust in government.

## 8 Caveats and challenges

One may be concerned that response bias may be influencing the results. The poor showing of United Russia could have led respondents to over-report their opposition to the ruling party after the election and after the protest, but this does not appear to be the case. As shown in Appendix III, respondents interviewed after the election and after the protest are just as likely to report supporting United Russia as before the election and before the protest. The same is largely true for other parties. This should allay concerns that changes in trust are related to changes in the reported levels of partisanship in the three periods.

---

<sup>24</sup> <http://newsru.com/russia/12dec2011/pressprotest.html>

Non-response bias across periods presents a second challenge, although the nature of non-response in this study is difficult to interpret. Non-response to particular questions may stem from a fear of expressing disapproval of the government. Russia is an autocracy and social desirability bias is a common feature of survey research (Kuklinski et al. 1997). In support of this view, we find that non-response is high (12 percent) when respondents are asked about their level of trust in the Federal Security Services.<sup>25</sup>

Yet this form of non-response bias is unlikely to imperil the results. Appendix IV illustrates that non-response is low (less than 3 percent) for most government institutions, including the police, the army, the federal government, the municipal government, and the procuracy. Non-response is highest among the three institutions with which citizens are least likely to interact: the UN, the FSB, and the courts (21, 12, and 6 percent respectively). That the empirical results hold at varying levels of non-response for the dependent variables of interest gives confidence that the results are not plagued by non-response bias.<sup>26</sup>

If fear is driving response bias one might expect non-response to be higher prior to the election and the protest when the government was in a stronger position viz-a-viz the opposition, but, if anything, non-response bias is higher after the protest than before. This higher non-response after the protests could be due to greater general uncertainty about political institutions induced by the protest. Indeed, the “don’t know” response is higher for almost all institutions – whether or not they are likely to induce social desirability bias – after the protests than before.

Finally, looking outside of this survey, Frye et al. (2016) use a double list experiment in surveys conducted in January and March 2015 and find little evidence of dissembling to a question on President Putin’s approval rating. That respondents were willing to answer this more politically sensitive question honestly in a more repressive political environment suggests that non-response bias may be less of an issue in the study at hand.

One shortcoming of the analysis is that we do not know how long the impact of the protest on attitudes toward the government endures. The effect may not last beyond the two weeks after the protest period or it may be longer lasting. It is also likely that subsequent events continued to shape political attitudes. The analysis here is akin to a survey experiment where researchers randomly provide new information to some respondents to capture the impact of this

---

<sup>25</sup> See Appendix IV. Interviewers replaced non-participants and those who were not at home after three visits by going to the door of the nearest neighbor. Within the house, interviewers used the nearest birthday technique to choose the participant. In all cases, interviewers were instructed to conduct the interview without observation by others.

<sup>26</sup> The results also largely hold if we examine levels of trust across periods within Moscow’s 10 administrative districts. They also are unchanged if the fixed effects for administrative districts are dropped.

new information on attitudes, but here we are able to trace this effect over time for two weeks after the initial protest.

As with all surveys this analysis only captures public opinion at a particular point in time. In addition, the results are taken only from Moscow and should not be generalized to all of Russia. Further, not all elections and protest are alike. The two protests in our sample were early in the protest cycle and peaceful. A more violent protest or a more repressive response by the state may have led to different effects on political attitudes.

## 9 Conclusion

Trust in government is critical to good governance and has been much studied (c.f., Banfield 1958; Putnam et al. 1993; Braithwaite and Levi 2003; OECD 2013). Scholars have traced trust in government to institutional quality, economic performance, corruption, features of the leader, and other contextual variables (c.f., Chanley, Rudolph, and Rahn 2000; Campbell 2004; Feldman 1983; Anderson and Tverdova 2003; Manion 2006; Chang, Chu 2006; Keele 2007). Others point to demographic factors such as partisanship, age, and gender (Keele 2007; Anderson and Tverdova 2003; Christensen and Lægveid 2005; Uslaner 2012).

We take advantage of largely exogenous variations in the timing at which interviews were conducted to assess the impact of a fraud-marred election and a large political protest on attitudes toward the Russian government. The parliamentary election of December 4<sup>th</sup>, 2011 had little systematic impact on trust in government, while the large protest six days later led to significantly higher levels of trust in government. These surprising increases in public trust in government after the protest are attributed to non-supporters of United Russia who expressed more positive attitudes toward the government after the protest than before rather than to social desirability bias, a halo effect or institutional updating. Moreover, these results are robust to different measures of trust in government. Rather than decreasing trust in government, political protest may increase it.

Several broader implications flow from the results. Most importantly, the work provides insights into the study of competitive autocracies. The results suggest that if respondents expect electoral fraud, then any particular instance of electoral manipulation may have little impact on political attitudes. Electoral fraud may provide a useful focal point for collective action, but not all cases of electoral fraud lead to protest (Tucker 2007; Little et al. 2015).

In addition, rulers in a competitive autocracy can bolster trust in the short-run by allowing peaceful protest where it is not expected. Citizens who cue off the holding of the protest



rather than off the content of the protest may come to believe that the government is more trustworthy than they previously thought. This gives an autocratic ruler some agency to influence the level of trust in government via allowing peaceful protest – even if the protest is directed against the government.

For the Russian case, this suggests that the government missed an opportunity to build on increases in trust among non-United Russia supporters following the demonstrations of December 2011. Instead, the government responded with counter-mobilizations in support of the ruling party and the harassment and arrest of anti-government protestors in future demonstrations which likely did little to reassure political opponents (Gelman 2013; Robertson 2013).

Most studies of political attitudes focus on slow-moving variables such as demographic features of the respondent, institutions, or government performance, but we find that short-run exogenous shocks can lead respondents to update their beliefs about government. Even much reviled organizations like the police can see more supportive attitudes in response to the protest. This suggests that respondents update their trust in government in part based on short-term events.

Finally, political partisanship shapes changes trust in government even in Russia's weakly institutionalized political system. Non-supporters of United Russia exhibited far higher levels of trust in response to the protest, while the election and the protest had little impact on the attitudes of pro-United Russia respondents. This positive response to the political protest of December 10<sup>th</sup> from non-United Russia supporters was quite broad-based and included non-voters as well as the undecided. This suggests that the heightened average levels of trust in government stems from the perceived increase in political liberalization after the protest.

## References

- Anderson, Christopher J. and Yuliya V. Tverdova. 2003. "Corruption, Political Allegiances, and Attitudes toward Government in Contemporary Democracies." *American Journal of Political Science* 47(January): 91–109.
- Banfield, Edward C., with Laura Fasano. 1958. *The Moral Basis of a Backward Society*. Glencoe, IL: The Free Press, 1958.
- Bartels, Larry. 2002. "Beyond the Running Tally: Partisan Bias in Political Perception." *Political Behavior*. 24:2, 117–50.
- Belanovsky Sergei, Mikhail Dmitriev, Svetlana Miskhina, Tatyana Omelchuk. 2011. "Socio-Economic Change and Political Transformation in Russia." Moscow: Center for Strategic Research, November 7th.
- Berman, Eli, Michael Callen, Clark Gibson, and James Long. 2014. "Election Fairness and Government Legitimacy in Afghanistan." NBER Working Paper 19949.
- Bowler, Shaun, and Jeffrey A. Karp. 2004. "Politicians, Scandals, and Trust in Government." *Political Behavior* 26 (September): 271–87.
- Braithwaite, Valerie, and Margaret Levi., eds. 2003. *Trust and Governance*. Russell Sage Foundation, New York.
- Buckley, Noah, Timothy Frye, Scott Gehlbach, and Lauren McCarthy. forthcoming. "Cooperating with the State: Evidence from Survey Experiments on Policing." *Journal of Experimental Political Science*.
- Campbell, William Ross. 2004. "The Sources of Institutional Trust in East and West Germany: Civic Culture or Economic performance?" *German Politics* 13: 401–18.
- Chang, Eric C. C., and Yun-han Chu. 2006. "Corruption and Trust: Exceptionalism in Asian Democracies?" *The Journal of Politics* 68 (May): 259–71.
- Chang, E.C.C. and Kerr, N.N. 2009. "Do Voters Have Different Attitudes Toward Corruption? The Sources of Popular Perceptions and Tolerance of Political Corruption." Afrobarometer Working Paper 16
- Chanley, Virginia A., Thomas Rudolph, and Wendy M. Rahn. 2000. "The Origin and Consequences of Public Trust in Government: A Time Series Analysis." *Public Opinion Quarterly* 64 (Autumn): 239–57.
- Christensen, Tom, and Per Lægveid. 2005. "The Relative Importance of Service Satisfaction, Political Factors, and Demography." *Public Performance & Management Review* 28(June): 487–511.
- Dimitrov, Martin 2009. "Popular Autocrats." *Journal of Democracy*. 20:1, 78–81.
- Dunning, Thad. 2012. *Natural Experiments in the Social Sciences*. New York: Cambridge University Press.
- Egorov, Georgy, Sergei Guriev, and Konstantin Sonin. 2009. "Why Resource-Poor Dictators Allow Freer Media: A Theory and Evidence from Panel Data." *American Political Science Review* 103(4): 645–668.
- Elder, Miriam. "Russia election descends into violence as riot police clash with protesters." *The Guardian*, Monday December 5, 2011. <http://www.guardian.co.uk/world/2011/dec/05/russia-election-violence-arrests-moscow>

- Enikolopov, Ruben, Alexey Makarin and Maria Petrova. 2015. "Social Media and Protest Participation: Evidence from Russia." Ms. 1–53.
- Enikolopov, Ruben, Vasily Korovkin, Maria Petrova, Konstantin Sonin, and Alexei Zakharov. 2012. "Field experiment Estimate of Electoral Fraud in Russian Parliamentary Elections. *Proceedings of the National Academy of Sciences of the United States of America*, December 2012. <http://www.pnas.org/content/early/2012/12/19/1206770110.full.pdf>
- Feldman, Stanley. 1983. "The Measure and Meaning of Trust in Government." *Political Methodology* 9: 341–54.
- Filatova, Irina. 2011. "Prime Minister Accuses Hilary Clinton of Instigating Protests." *Moscow Times*. December 9. page 1.
- Fiorina, Morris. 1981. *Retrospective Voting in American Elections*. New Haven: Yale University Press.
- Fischle, Mark. 2000. Mass Response to the Lewinsky Scandal: Motivated Reasoning or Bayesian Updating." *Political Psychology*. 21:1, 135–152.
- Fisman, Ray. 2001. Estimating the Value of Political Connections." *American Economic Review*. 91:4, 1095–1102.
- Frye, Timothy, Reuter, Ora John, and David Szakonyi. 2014. "Political Machines at Work Voter Mobilization and Electoral Subversion in the Workplace." *World Politics* 66 (April): 195–228.
- Frye, Timothy, Scott Gehlbach, Kyle Marquardt, and Ora John Reuter. 2016. "Is Putin's Popularity Real?" *Post-Soviet Affairs*.
- Garcia-Ponce, Oman and Benjamin de Pasquale. 2015. "How Political Repression Shapes Attitudes Toward the State." Ms. New York. 1–37.
- Gehlbach, Scott, and Alberto Simpser. 2015. "Electoral Manipulation as Bureaucratic Control." *American Journal of Political Science* 59(1): 212–224.
- Gehlbach, Scott, Milan Svolik, and Konstantin Sonin. 2016. "Formal Models of Non-Democratic Politics." *Annual Review of Politics*.
- Gelman, Vladimir. 2013. "Cracks in the Wall: Challenges to Electoral Authoritarianism in Russia." *Problems of Post-Communism* 60: 3–10.
- Gerber, Theodore, and Sarah Mendelson. 2008. "Public Experiences of Police Violence and Corruption in Contemporary Russia: A Case of Predatory Policing?" *Law & Society Review* 42 (March): 1–44.
- Gerber, Alan S., and Donald P. Green. 1999. "Misperceptions About Perceptual Bias." *Annual Review of Political Science*. 2: 189–210.
- Gerber, Alan S. and Donald P. Greene. 2012. *Field Experiments: Design, Analysis, and Interpretation*. New York: W.W. Norton.
- Greene, Samuel. 2014. *Moscow in Movement: Power and Opposition in Putin's Russia*. Stanford University Press. Stanford, California.
- Guriev, Sergei and Daniel Treisman 2016. "How Dictators Survive: An Informational Theory of the New Authoritarianism." Ms. 1–58.

- Hollyer, James R., B. Peter Rosendorff, and James Raymond Vreeland. 2015. "Transparency, Protest, and Autocratic Instability." *American Political Science Review*. 109:04, 764–84.
- Hyde, Susan and Nikolay Marinov 2014. "Information and Self-Enforcing Democracy: The Role of International Election Observation." *International Organization* 68:2, 329–359.
- Keele, Luke. 2007. "Social Capital and the Dynamics of Trust in Government." *American Journal of Political Science* 51: 241–54.
- Kobak, Dmitry, Sergey Shpilkin, and Maxim S. Pshenichnikov. 2012. "Statistical anomalies in 2011–2012 Russian elections revealed by 2D correlation analysis." arXiv:1205.0741.
- Kramer, Gerald H. 1983. "The Ecological Fallacy Revisited: Aggregate Versus Individual-level Evidence on Economics and Elections and Sociotropic Voting." *American Political Science Review* 77: 92–111.
- Kuklinski, James, Michael Cobb, and Martin Gilens. 1997. "Racial Attitudes and the 'New South.'" *Journal of Politics* 59:323–49.
- Kuran, Timur. 1991. "Now Out of Never: The Element of Surprise in the Revolutions of 1989." *World Politics*. 44:3, 7–48.
- Levitsky, Steven, and Lucan A. Way. 2010. *Competitive Authoritarianism: Hybrid Regimes After the Cold War*. New York: Cambridge University Press.
- Little, Andrew T. 2012. "Elections, Fraud, and Election Monitoring in the Shadow of Revolution." *Quarterly Journal of Political Science* 7(4): 249–283.
- Little, Andrew T., Joshua A. Tucker, and Tom LaGatta. 2015. "Elections, Protest, and Alternation of Power." *Journal of Politics*. 77:4, 1142–1155.
- Lodge, M. and Taber C. 2000. "Three Steps Toward a Theory of Motivated Political Reasoning." *In Elements of Reason: Cognition, Choice and the Bounds of Rationality*. Eds. Arthur Lupia and Samuel Popkin. Cambridge, MA: Cambridge University Press. 183–213.
- Lorentzen, Peter L. 2013. "Regularizing Rioting: Permitting Public Protest in an Authoritarian Regime." *Quarterly Journal of Political Science* 8: 128–158.
- Magaloni, Beatriz. 2006. *Voting for Autocracy: Hegemonic Party Survival and Its Demise in Mexico*. New York: Cambridge University Press.
- Malesky, Edward and Paul Schuler. 2010. "Nodding or Needling: Analyzing Delegate Responsiveness in an Authoritarian Parliament." *American Political Science Review*. 104: 03, 482–502.
- Manion, Melanie. 2006. "Democracy, Community, Trust The Impact of Elections in Rural China." *Comparative Political Studies* 39 (April): 301–24.
- Mares, Isabela and Lauren Young. 2016. "Buying, Expropriating and Stealing Votes." *Annual Review of Political Science*. 19.
- Miller, Arthur. 1974. "Political Issues and Trust in Government: 1964– 1970." *American Political Science Review* 68: 951– 72.
- Mishler, William, and Richard Rose. 2001. "What are the Origins of Political Trust? Testing Institutional and Cultural Theories in Post-Communist Societies." *Comparative Political Studies* 34 (February): 30–62.

- Myagkov, Mikhail, Peter Ordeshook, and Dimitri Shakin. 2009. *The Forensics of Election Fraud*. New York: Cambridge University Press.
- O'Brien, Kevin. 2006. "Rightful Resistance." *World Politics* 49:01, 31–55. OECD. 2013. *Government at a Glance 2013*. OECD Publishing, Paris.
- Pop-Eleches, Grigore and Graham Robertson. 2016. "Elections, Information and Political Change in post-Cold War Era." *Comparative Politics*.
- Putnam, Robert D., Robert Leonardi and Raffaella Y. Nanetti. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press.
- Reuter, Ora John and David Szakonyi. 2015. "Online Social Media and Political Awareness in Authoritarian Regimes." *British Journal of Political Science*. 45:1, 29–51.
- Robertson, Graeme. 2013. "Protesting Putinism: The Election Protests of 2011–2012 in Broader Perspective." *Problems of Post-Communism* 60: 11–23.
- Rose, Richard William Mishler and Neil Munro. 2011. *Popular Support for an Undemocratic Regime: The Changing Views of Russians*. New York: Cambridge University Press.
- Roth, Andrew. 2011. "Slowly, But Surely." *Russia Profile*. December 1. <http://www.russia-list.org/archives/russia-duma-elections-analysts-take-long-view-828.php>
- Rundlett, Ashlea, and Milan W. Svobik. 2016. "Deliver the Vote! Micromotives and Macrobehavior in Electoral Fraud." *American Political Science Review*.
- Sagnier, Marc and Yanos Zylberg. 2015. "Protests and Trust in the State: Evidence from African Countries." Ms. 1–42.
- Sakwa, Richard. 2015. "Questioning Control and Contestation in Putinite Russia." *Europe-Asia Studies* 67:2, 192–208.
- Sharkey, Patrick. 2010. "The Acute Effect of Local Homicides on Children's Cognitive Performance." *PNAS*. 107: 26, 11733–38.
- Shuster, Simon. "Occupy the Kremlin: Russia's Election Lets Loose Public Rage." *Time*. December 5th, 2011. <http://www.time.com/time/world/article/0,8599,2101569,00.html#ixzz2JCgJpyx1>
- Simpser, Alberto. 2013. *Why Governments and Parties Manipulate Elections: Theory, Practice, and Implications*. New York: Cambridge University Press.
- Svobik, Milan W. 2012. *The Politics of Authoritarian Rule*. New York: Cambridge University Press.
- Treisman, Daniel. 2011. "Presidential Popularity in a Hybrid Regime: Russia Under Yeltsin and Putin." *American Journal of Political Science*. 55:3, 590–609.
- Tsubiks (2011)
- Tucker, Joshua. 2007. "Enough! Electoral Fraud, Collective Action Problems, and Post-Communist Colored Revolutions." *Perspectives on Politics* 5:3, 537–553.
- Tertychnaya, Ekaterina and Tomila Lankina. 2016. "Electoral Protests and Political Attitudes under Electoral Authoritarianism: The case of Russia's 2011–2012 Anti-Regime Rallies". Paper presented at MPSA Annual Meeting. Chicago, IL. 1–62.
- Uslaner, Eric. 2012. *Corruption, Trust, and the Rule of Law*. New York: Cambridge University Press.

- Vivyan, Nick, Markus Wagner and Jessica Tarlov. 2012. "Representative misconduct, voter perceptions and accountability: Evidence from the 2009 House of Commons expenses Scandal." *Electoral Studies* 31:4, 750–763.
- Yakovlev, Pavel and David Gilson. 2015. "Public Trust and Press Freedom", *Economics Bulletin*, 35: 1, 214– 225
- Young, Lauren. 2016. "Preying on the Poor: The Impact of Repressive Violence on Citizen Behavior." Ms. Columbia University. 1–52.
- Zaller, John 1992. *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press

## Appendices

### Appendix I Balance tests

	Pre-election	Pre-protest	Post-protest
Wealth (1–6)	3.70	3.74	3.62AB
Education	5.41	5.31	5.10A,B
Age	43	43	44
Male	.45	.47	.48
Permanent resident	.94	.95	.95
Russian ethnicity	.91	.88	.90
Not working	.20	.21	.23
State sector work	.02	.04	.03
UR supporter	.15	.13	.14
Communist party supporter	.13	.13	.12
Opposition supporter	.14	.16	.14

Notes. Means for each period reported. <sup>A,B</sup>  $p < .05$  for difference between period 1 and 2 means and period 1 and 3 means, respectively.

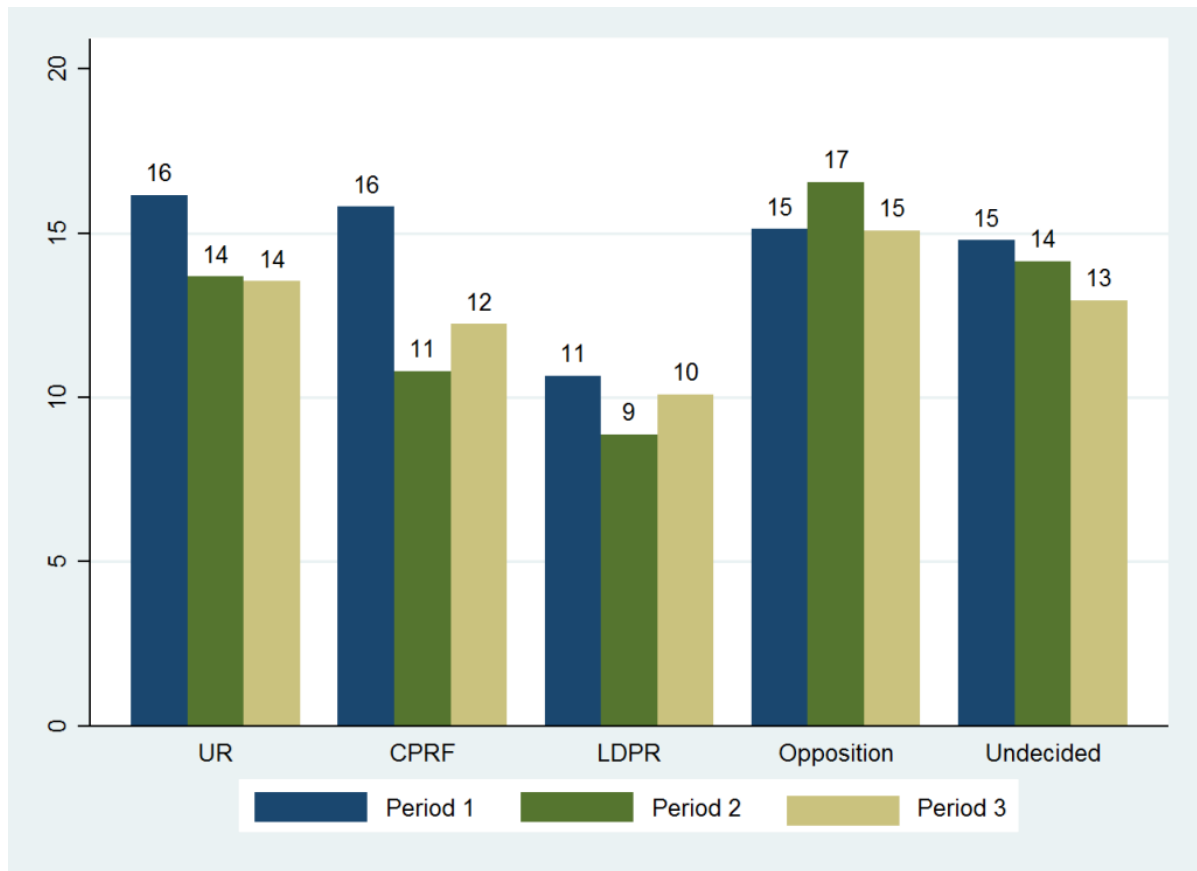
## Appendix II    Distribution of districts by periods, periods 1 and 2 versus period 3

	Whole sample	Pre-election period 1	Pre-protest period 2	Post-protest period 3
District 1	.07	.14	.10	.04 <sup>AB</sup>
District 2	.09	.10	.08	.10
District 3	.11	.05	.13	.09 <sup>AB</sup>
District 4	.13	.07	.11	.14 <sup>A</sup>
District 5	.11	.09	.13	.10
District 6	.15	.25	.19	.12 <sup>AB</sup>
District 7	.13	.10	.11	.15 <sup>AB</sup>
District 8	.11	.11	.10	.11
District 9	.08	.03	.02	.13 <sup>AB</sup>
District 10	.02	.04	.02	.01 <sup>A</sup>

Notes. Means for each period reported. <sup>A,B</sup>  $p < .05$  for difference between period 1 and 2 means and period 1 and 3 means, respectively.



## Appendix III Difference in partisanship across periods



## Appendix IV Non-responses

	Whole sample	Pre-protest	Post-protest	Difference
Army	.02	.02	.02	0 p=.76
Police	.01	.02	.01	0 p=.53
FSB (Federal Security Organ)	.12	.09	.15	.06 p=0
Courts	.05	.05	.05	0 p=.40
Municipal Government	.03	.04	.02	.02 p=.07
Federal Government	.03	.02	.03	0 p=.68
Duma (Parliament)	.04	.04	.04	0 p=.77
Procuracy	.06	.04	.07	0.3 p=0
Russian Orthodox Church	.06	.04	.07	0.2 p=.07
United Nations	.21	.17	.24	.07 p=0
Trust in Government index	.19	.16	.22	.07 p=.001
Meeting 1	.14	.17	.12	.05 p=.0.01
Meeting 2	.14	.14	.13	.01 p=.45
Meeting 3	.18	.18	.17	.01 p=.61
Meeting index	.26	.27	.25	.01 p=.53

Notes. Means for each period reported.

# BOFIT Discussion Papers

A series devoted to academic studies by BOFIT economists and guest researchers. The focus is on works relevant for economic policy and economic developments in transition / emerging economies.

- 2015 No 1 Qing He, Liping Lu and Steven Ongena: Who gains from credit granted between firms? Evidence from inter-corporate loan announcements Made in China
- No 2 Ke Pang and Pierre L. Siklos: Macroeconomic consequences of the real-financial nexus: Imbalances and spillovers between China and the U.S.
- No 3 V.V. Mironov, A.V. Petronevich: Discovering the signs of Dutch disease in Russia
- No 4 Joshua Aizenman: The internationalization of the RMB, capital market openness, and financial reforms in China
- No 5 Yu-Fu Chen, Michael Funke and Kunyu Tao: Financial market reform – A new driver for China's economic growth?
- No 6 Jarko Fidrmuc and Iikka Korhonen: Meta-analysis of Chinese business cycle correlation
- No 7 Jarko Fidrmuc, Zuzana Fungáčová and Laurent Weill: Does bank liquidity creation contribute to economic growth? Evidence from Russia
- No 8 Elena Deryugina, Olga Kovalenko, Irina Pantina and Alexey Ponomarenko: Disentangling loan demand and supply shocks in Russia
- No 9 Michael Funke, Petar Mihaylovski and Haibin Zhu: Monetary policy transmission in China: A DSGE model with parallel shadow banking and interest rate control
- No 10 Riikka Nuutilainen: Contemporary monetary policy in China: A move towards price-based policy?
- No 11 Iftekhar Hasan, Nada Kobeissi, Haizhi Wang and Mingming Zhou: Banking structure, marketization and small business development: Regional evidence from China
- No 12 Linlin Niu, Xiu Xua and Ying Chen: An adaptive approach to forecasting three key macroeconomic variables for transitional China
- No 13 Heiner Mikosch and Stefan Neuwirth: Real-time forecasting with a MIDAS VAR
- No 14 Alexander Libman and Björn Volla: Anti-Western conspiracy thinking and expectations of collusion: Evidence from Russia and China
- No 15 Mikhail Stolbov: Causality between credit depth and economic growth: Evidence from 24 OECD countries
- No 16 Keifei You: What drives China's outward FDI? A regional analysis
- No 17 José R. Sánchez-Fung: Estimating the impact of monetary policy on inequality in China
- No 18 Christian Hattendorff: Economic concentration and finance: Evidence from Russian regions
- No 19 Alexey Porshakov, Elena Deryugina, Alexey Ponomarenko and Andrey Sinyakov: Nowcasting and short-term forecasting of Russian GDP with a dynamic factor model
- No 20 Qing He, Iikka Korhonen, Junjie Guo and Fangge Liu: The geographic distribution of international currencies and RMB internationalization
- No 21 Haining Wang, Zhiming Cheng and Russell Smyth: Does consuming more make you happier? Evidence from Chinese panel data
- No 22 Mikhail Mamonov and Andrei Vernikov: Bank ownership and cost efficiency in Russia, revisited
- No 23 Rui Mao and Yang Yao: Fixed exchange rate regimes, real undervaluation and economic growth
- No 24 Elena Deryugina, Alexey Ponomarenko, Andrey Sinyakov and Constantine Sorokin: Evaluating underlying inflation measures for Russia
- No 25 Christian Dreger, Jarko Fidrmuc, Konstantin Kholodilin and Dirk Ulbricht: The Ruble between the hammer and the anvil: Oil prices and economic sanctions
- No 26 Zuzana Fungáčová, Riikka Nuutilainen and Laurent Weill: Reserve requirements and the bank lending channel in China
- No 27 Simo Leppänen, Laura Solanko and Riitta Kosonen: Could climate change affect government expenditures? Early evidence from the Russian regions
- No 28 Mariarosaria Comunale: Current account and REER misalignments in Central Eastern EU countries: an update using the macroeconomic balance approach
- No 29 John Fernald, Eric Hsu and Mark M. Spiegel: Is China fudging its figures? Evidence from trading partner data
- No 30 Jyri Kinnunen and Minna Martikainen: Expected returns and idiosyncratic risk: Industry-level evidence from Russia
- No 31 John P. Bonin and Dana Louie: Did foreign banks "cut and run" or stay committed to Emerging Europe during the crises?
- No 32 Anna Krupkina and Alexey Ponomarenko: Deposit dollarization in emerging markets: modelling the hysteresis effect
- No 33 Paul-Olivier Klein and Laurent Weill: Is it worth issuing bonds in China? Evidence from stock market reactions
- 2016 No 1 Guonan Ma and Wang Yao: Can the Chinese bond market facilitate a globalizing renminbi?
- No 2 Iikka Korhonen and Riikka Nuutilainen: A monetary policy rule for Russia, or is it rules?
- No 3 Hüseyin Şen and Ayşe Kaya: Are the twin or triple deficits hypotheses applicable to post-communist countries?
- No 4 Alexey Ponomarenko: A note on money creation in emerging market economies
- No 5 Bing Xu, Honglin Wang and Adrian van Rixtel: Do banks extract informational rents through collateral?
- No 6 Zuzana Fungáčová, Anastasiya Shamshur and Laurent Weill: Does bank competition reduce cost of credit? Cross-country evidence from Europe
- No 7 Zuzana Fungáčová, Iftekhar Hasan and Laurent Weill: Trust in banks
- No 8 Diana Ayala, Milan Nedeljkovic and Christian Saborowski: What slice of the pie? The corporate bond market boom in emerging economies
- No 9 Timothy Frye and Ekaterina Borisova: Elections, protest and trust in government: A natural experiment from Russia