

Elections, Protest and Trust in Government:

A Natural Experiment from Russia

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Abstract

How do flawed elections and political protest against election fraud shape trust in government? Taking advantage of the largely exogenous variation in the timing of a survey conducted in Moscow in December 2011, we examine the short-term impact of the parliamentary election of December 4th, and the large protest of December 10th 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 10th increased trust in government. This increase in trust arises largely from non-United Russia supporters 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 autocratic governments can increase trust in government by allowing protest.

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1. Introduction

How does election fraud and a political protest against election fraud shape attitudes toward government? There is a widespread belief that electoral fraud undermines trust in government and democratic legitimacy. Many scholars cite electoral irregularities as key factor in declining trust in government (c. f., Diamond 2007). Indeed, that free and fair elections enhance democratic legitimacy is widely accepted in academia and has become a cornerstone of state-building efforts by international organizations (Berman et al. 2014).

Yet, there are good reasons to be less sanguine about how well we understand the link between electoral fraud, post-election protest, and political attitudes toward the government.¹ Where electoral fraud and post-election protest are widely expected by the populace, suspect elections may have little impact on political attitudes. Having seen electoral fraud or postelection protest in the past, citizens may have already “priced in” electoral fraud into their calculus of trust toward the government (Kumlin and Esiasson 2012).

While a high level of electoral fraud may have little effect on its own, a large increase in electoral fraud may cause voters to update their beliefs about the government in light of this new information. Indeed, increased use of social media and the internet – two popular forms for distributing information about electoral fraud – may heighten citizen’s awareness of electoral fraud compared to past elections.

Yet, even with these technological advances, it is often quite difficult for citizens in non-democracies to know whether electoral fraud has increased in a particular election. 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

¹ For studies of the relationship between electoral fraud and protest, see Tucker 2007; Hyde and Marinov 2014.

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 their control over state media to counter claims of electoral irregularities by domestic rivals and foreign observers (Wilson 2006).

Similarly, scholars have long argued that citizens view political shocks and scandals through the lens of political partisanship which may moderate or amplify the impact of the scandal on attitudes toward the government (Cambpell 1960; Greene and Gerber 1999; Bartels 2002; Anderson and Tverdova 2004; Wagner et al. 2012). What constitutes electoral fraud and political protest may be in the eye of the beholder. These factors suggest that electoral fraud and subsequent protests are unlikely to alter beliefs about the government.

We examine the short-term impact of a fraud-marred election and a subsequent political protest on self-reported trust in government by taking advantage of exogenous variation in the timing of interviews conducted during a survey of Muscovites in November-December 2011. More specifically, 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 attitudes toward the government. Because selection into these three groups appears to have been uncorrelated with many covariates commonly associated with trust in government, we are better able to identify the sources of attitudes toward government than are traditional observational studies (Dunning 2012).

We find that the highly suspect parliamentary elections of December 4th, had little systematic effect on trust in government. Respondents interviewed shortly before and shortly after the elections reported similar levels of trust toward many government institutions. The failure of the flawed election to shape attitudes is likely because allegations of vote fraud in

Russia were not new information for most respondents. This is line with arguments that only novel information is likely to alter political attitudes (c.f., Zaller 1992)

In contrast, respondents interviewed just after the large and unexpected protest of December 10th, exhibited strikingly higher levels of trust in many governmental institutions, including the federal government, the municipal government, the police, the courts and the security services (but not the Duma). That respondents expressed higher levels of trust in the police is particularly surprising as the police are among the least trusted institutions in Russia (Gerber and Mendelson 2008; Buckley et al. 2015).

To account for the surprising increase in trust in government following an anti-government protest, we examine four possible mechanisms. We find that these post-protest increases in trust in government are largely driven by non-United Russia supporters updating their beliefs about the government rather than due to social desirability bias, improved perceptions of the workings of the police, or a halo effect (Greene and Gerber 1999; Bartels 2002). Our findings indicate that trust in government is influenced by partisanship and imply that non-United Russia partisans cued off the government's willingness to hold a protest rather than off the content of the protest itself.

Our results suggest several larger implications. First, for scholars of autocratic politics, these results helps understand why electoral fraud on its own may not produce large-scale change in attitudes towards the government (Kuran 1991; Tucker 2007; Hyde and Marinov 2004). Perhaps even more surprising, the results are consistent with the argument that autocratic governments may be able to generate trust among political opponents by allowing protest. That

this result occurs in a setting where the government has quite low levels of trust to begin with and on the heels of a highly suspect election is surprising.²

Second, the results also speak to the broad literature on political trust. We can say little about the longer-term effects of the impact of protest on trust in government, but we can identify sharp changes in trust in government in response to the political protest of December 10th, 2011. Deeper, more structural determinants of political trust, such as culture or political institutions may also be important, but this work demonstrates that political shocks may shift trust in government rather quickly (Mishler and Rose 2001), suggesting some aspects of an individual “running tally” on trust in government (Fiorina 1981).

In addition this result suggests that the impact of protest on trust in government may be conditioned by regime-type, as it least in the case of autocratic Russia, this particular protest is associated with higher levels of trust in government (Miller 1974). This is important because we know much less about the dynamics of political trust in autocracies.

The results also speak to debates about the impact of partisanship on political attitudes, although our findings are more tentative. Partisanship influences overall 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 view of United Russia supporters and non-United Russia supporters following the protest of December 10th. This suggests that partisanship shapes perceptions of trust in government even in Russia’s weakly

² For the Russian case, this result suggests that government missed a promising opportunity to build on increases in trust among non-United Russia supporters following the protest. Indeed, the government responded with counter-mobilizations in support of the Kremlin and the harassment and arrest of anti-government protestors in future demonstration which likely did little to reassure political opponents (Gelman 2012; Robertson 2012).

institutionalized political system, but also that partisans update their evaluations of political trust in line with new information (Achen 1992; Greene and Gerber 1999; Bartels 2002).

Finally, our results speak to debates about causal identification. Many studies of political trust rely on observational data which raises concerns of causal identification (Kramer 1983; Gerber and Green 2012).³ In addition, by definition, political shocks are unexpected which makes it difficult to design studies *ex ante* that measure the impact of political shocks *ex post*. As we demonstrate later in the paper, the timing of exposure to the elections and to the protest was plausibly exogenous to most predictors of trust in government and provide a useful strategy for identifying causal effects. More generally, our results indicate the value of using a difference in difference design to estimate short-term changes in trust in government.

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

³ Among others, Bowler and Karp (2004) examine the heterogenous effects of scandal across electoral districts by comparing trust in government in districts whose representatives have and have not been implicated in a scandal. Vivyan et al. (2012) take a similar approach to study political scandal in the UK.

response to the behavior of state and non-state actors.” We begin this task with a discussion of the Russian case.⁴

2. Background on the Russian Case

Russia has regularly held parliamentary elections for seats in the Duma since 1990. In the 1990s, pro-government parties struggled as opposition parties often led by the Communist Party of the Russian Federation held a plurality of seats. In the 2000s, in the wake of President Putin’s rise to power, the pro-government party United Russia emerged as a dominant force winning large majorities in 2003 and 2007. By 2007, United Russia controlled more than 70 percent of seats in Parliament and so-called “systemic opposition” parties that frequently 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 in the 2000s, to a much more consolidated autocracy today. Elections in the 1990s were competitive and hard fought, but also plagued by accusations of media bias and ballot stuffing by local political officials. In the 2000s, Russia took an autocratic turn as competition among parties declined and barriers for non-systemic opposition parties increased. One analysis of vote fraud over time in Russia using departures from randomness in the last digit of reported electoral results documented a sharp increase in fraud beginning in the 1999-2000 electoral cycle (Myagkov et al. 2009).

Our study focuses on elections for the Russian Duma which took place on December 4th 2011 which were a disappointment for United Russia. The dominant party saw its vote share fall

⁴ Frye and Yakovlev (2016) also exploit exposure to election results to explore how changes in the bargaining power of the incumbent influences the perceptions of company managers about the property rights in their firms.

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 (see Table 1).

The drop in votes for United Russia was deeper than many anticipated. The popularity of then Prime Minister Vladimir Putin and then President Dmitri Medvedev declined before the elections, but their approval rates were still above 60 percent. Leading survey firms predicted that United Russia would receive fewer votes than in 2007 but still easily win a majority. In the end of November, forecasts of voting for United Russia, made by three leading public opinion organizations (the Russian Public Opinion Research Center [WCIOM], the Public Opinion Foundation [FOM] and the Levada-Center), were in the range of 53-54%. 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.”⁵

However, United Russia, fared badly. This happened despite the fidelity of all governors of these regions to the Kremlin, and a reliance on “administrative resources” on a large scale. After the elections, a pollster at the Levada Center called the fall in support for United Russia from 55-61 percent two weeks before the election to just 49 percent on election day “unexpected” (Khamraev, December 8, 2012).

⁵ Forecasts made by experts from the Center for Strategic Research (CSR) were the exception to this rule, because as early as spring of 2011, relying on in-depth interviews and focus groups, they predicted that sentiments of social protest would rise, and support for the “party of power” would decrease (Belanovsky and Dmitriev 2011; Belanovsky et al. 2011). The disparity between the assessments made by CSR, which used focus groups, and those using mass surveys are in line with Kuran (1991), who emphasizes that the political views of citizens in non-democratic countries are private information that they are often reluctant to reveal in public.

These elections were notable not only for the poor performance of United Russia, but also for allegations of falsification. This of course was not new. Various forms of electoral fraud have been a feature of Russian politics since the collapse of the Soviet Union. Even on election-day observers posted numerous *YouTube* videos documenting ballot box stuffing by election officials. Newspapers were rife with reports of voting “carousels” which allowed party officials to monitor voting and buses which transported voters from district to district.

Academic studies uncovered irregularities in the election. Enikolopov et al. (2012) conducted a field experiment that randomly assigned monitors to electoral precincts in Moscow and found that United Russia vote totals were about 11 percentage points higher in districts that lacked independent election monitors. Frye et al. (2014) found that one quarter of workers in the private sector experienced some form of pressure from their employer to vote in the Duma elections. Kobak (et al. 2012) 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 noted that the possibility of minimal fraud. As part of a larger effort to shore up public confidence in elections, the government installed web cameras in every voting place for presidential elections held in March 2012.

The extent of vote fraud may have been higher in Moscow as polls opened in the nation’s capital roughly 8 hours later than in the Far East. Some speculate that this may have allowed the authorities to calibrate their level of intervention in the voting process. As the vote totals from the Far East rolled in, United Russia faced the prospect of losing control of the parliament. After polls closed in the Far East, United Russia appears to have turned to electoral fraud on a large scale in the European part of Russia (including Moscow which has 6.6% of all voters).

Table 1. Election Results

	2007 Elections		2011 Elections	
	Number of Voters (2011)	Turnout (%)	Votes for United Russia (%)	Votes for United Russia (%)
Russia	109.2m	63.7	64.3	60.2
Primorskii Krai (+7 hours)*	1.5m	56.9	54.9	48.7
Khabarovsk Krai (+7 hours)	1.1m	61.4	60.7	53.2
Irkutsk Oblast (+5 hours)	1.9m	58.8	58.7	47.1
Krasnoyarsk Krai (+4 hours)	2.2m	59.5	60.7	47.1
Moscow	7.2m	55.1	54.2	61.7

* in brackets, time difference with Moscow

The (arguably) expanded scale of fraud allowed United Russia to retain its control over the State Duma, but at the same time, it gave rise to political protests in Moscow. The first protest took place in the evening of December 5th just after preliminary results of the elections were reported. Organizers of the protest expected about 400 participants, but roughly 3000 protestors took to the streets. Police detained about 300 of participants (including its main organizers) when they made an attempt to approach the Kremlin (Shuster 2011; Elder 2011; Greene 2014, 202-209).

The Protest of December 10

Most surprising, just six days after the election, roughly 40,000-60,000 protestors gathered in central Moscow to challenge the election results. This protest was remarkable in several respects. It was the largest demonstration in Moscow since the early 1990s and saw Russia's middle class take to the streets to oppose the electoral results and call for a new elections (Gelman 2012; Robertson 2012). Even in the days before the demonstration, observers vastly underestimated the scale of the protest (Rose 2011). Organizers optimistically predicted

that 10,000 people would demonstrate, but privately expected far fewer to actually turn out. Skepticism toward the likelihood of a mass demonstration was reasonable because vote fraud in previous elections had not spawned large public 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 take to go to the street to take any form of action to challenge the election results when they are publicized.”⁶ Another popular news 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.”⁷

The protest ran from noon until late in the evening with opposition party activists, celebrities, and performers calling for new elections. In addition, protestors criticized the government and the United Russia for overseeing the vote fraud and engaging in massive corruption. The broad swath of opposition groups participating in the rallies of December including well-known liberal opponents, as well as a range of leftist and nationalist groupings.

⁶Tsubiks (2011). “Abuses in Parliamentary Elections Predicted.” *Infazine*, December 3, 2011. <http://www.infozine.com/news/stories/op/storiesView/sid/49931/>

⁷ Yulia Latynina on Echo of Moscow radio show, December 10th. “получилось что я в прошлое воскресенье улетела из России. Прилетела вчера, как раз чтобы успела пойти на митинг. И вот за эту неделю, пока меня не было в России, я прилетела в другую Россию. Причем 2 недели назад то невозможно было себе представить. Все, что происходит после выборов, которые, как оказалось, у нас были, можно охарактеризовать только одним словом: это конец легитимности режима....Я могу честно сказать, что не ожидала всего этого. “

Not only was the protest large by Moscow standards, but it was also well run. 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, there were few reports of clashes between state security officers and protestors. Protestors filed through metal detectors onto Bolotnaya Square in central Moscow without incident. Few arrests were made and to the surprise of many observers 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 march and the lack of conflict between police and protestors. Andrei Kozenko (December 12, 2012) from the newspaper *Kommersant* observed: “The organizers and participants of Sunday’s 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.”

3. Hypotheses

How might citizens respond to this electoral fraud and large post-election protest? Most relevant to the case at hand is work that examines how political shocks influence perceptions of trust (Gaines 2002, Chanley 2002). For example, the terrorist attacks of Sept. 11th 2001 on the World Trade Center led to a rapid and large increase in trust in the U.S. President and the government to levels not seen in 40 years (Gaines 2002, Chanley 2002). Other studies find that scandals with politicians and elections erode trust in government (Bowler and Karp 2004; Chanley, Rudolph, and Rahn 2000). Bowler and Karp (2004) show that in the US and Great Britain citizens expressed less confidence in legislative institutions when politicians from their

district were implicated in corruption scandals. The effects of all these events were pronounced if they are *unexpected*. If, however, scandal becomes a norm and is widely expected, then its negative effect on trust in government dissipates (Kumlin and Esaiasson 2012).⁸

New Information

Did the election of December 4th reveal new information? Certainly electoral irregularities were hardly novel. According to a survey conducted by the Levada Center in Moscow between December 8 and 16th, almost 66 percent of respondents thought the share of votes for United Russia was less than actually reported, only 14 percent believed there were practically no violations during the Duma elections, and almost 44 percent said there were serious violations and fraud.⁹ If respondents have already “priced in” a certain level of vote fraud in their calculations of trust in government, we would likely find that respondents’ interviewed after the elections will express levels of trust in government no different from their counterparts interviewed before the election.

At the same time, new technologies such as the expansion of the internet may have changed the visibility and verifiability of electoral fraud in Russia. Internet penetration in Russia roughly doubled from 28 percent in 2007 to 56 percent in 2011 and much of the fraud from the election was readily visible on YouTube.¹⁰ Whether vote fraud was more extensive than in past elections was a matter of debate, but the visibility of fraud was likely greater in 2011. Videos of

⁸ There is of course a very large literature on the sources of change in political attitudes more generally. See Campbell et al. 1960, Zaller 1992, among others.

⁹ This was another Levada survey different from the main that we use in this paper. We are grateful to Alexey Grazhdankin for giving it to us. Figures include those who did not know the answer or refused to give it. If we exclude these groups supportive evidence would be even stronger.

¹⁰ The internet played a key role in mobilizing supporters and opponents of the government to the street during this protest cycle (Reuter and Szakonyi 2014; Enikolopov et al. 2016). <http://russiansearchmarketing.com/facts-figures-russian-internet-growth-and-development/>

voting carousels, ballot-box stuffing, and voter intimidation became a staple of public commentary in the wake of the election. Major newspapers published numerous accounts of fraud as well. In an appropriately titled report “An Exciting End to a Dull Election,” Nikolai Petrov (2011) noted that the “elections were not more fraudulent than past elections, but they were more scandalous.”¹¹ This view would suggest that some respondents would treat the more visible evidence of vote fraud as new information and reduce their level of trust in the government following the election.

While it can be debated whether the elections of December 4th, produced new information, there is little doubt that the unexpected political protest of December 2011 did. Few foresaw a large scale, anti-government protest in the wake of the parliamentary elections and respondents may have cued off new information generated by the government’s decision to allow the protest to occur. This types of updating would be roughly in line with classic forms of rational information processing ala Bayes’ Theorem which suggests that individuals make reasonable conclusions in line with content of new information (Achen 1992; Greene and Gerber 1999). This line of research argues that while partisan attachments inform prior beliefs, citizens update their beliefs about political institutions based on the content of new information (Achen 1992; Green and Gerber 1999).

In line with this view, if citizens cued off the new information provided by the holding of the protest itself, we may find that those respondents who expected the government to prevent the protest or arrest the demonstrators will update their beliefs about the trustworthiness of the government. We should find higher average levels of trust after the protest of December 10th, particularly among non-United Russia supporters who change their view of the government. In

¹¹ <http://carnegie.ru/2011/12/06/exciting-end-to-dull-election/auh1>

addition, we should find some convergence between the views of United Russia and non-United Russia supporters in their evaluations of the government.¹²

Partisanship as Filter

However, a long line of literature suggests that citizens have difficulty processing new information accurately due to deep-rooted cognitive and motivational biases. Most prominently, scholars have emphasized that partisanship influences how citizens interpret political events (e.g. Bartels, 2002; Campbell *et al.*, 1960; Johnston, 2006; Zaller, 1992). These biases have often been found in how citizens respond to political shocks and scandals. Fischle (2000) identifies a strong bias in how those more and less favorably disposed to President Clinton responded to the scandal involving his admission of a sexual relationship with White House intern Monica Lewinsky. Closer to the case at hand, Chang and Kerr (2009) find that ethnic and partisan identities shape perceptions of corruption using data from 18 countries in sub-Saharan Africa, while Anderson and Tverdova (2004) show that partisanship shapes perceptions of corruption in OECD countries.

Thus, partisanship is a powerful filter that makes partisans resistant to new information that does not conform to their prior beliefs (c.f., Campbell 1960; Bartels 2002). Lodge and Tabor (2002) argue that individuals have a strong cognitive need to process information and do so in line with specific goals such as accuracy and direction. The need to achieve cognitive consistency leads partisans to interpret new information in ways that are congenial to and congruent with their prior beliefs. That individuals make the “facts fit the belief” rather than the

¹² Bartels (2002) notes: “In general, the characteristic pattern of opinion change suggested by the simple Bayesian model is one of converging opinion among people with different prior views; the strength of that convergence depends on the weight of new information assimilated between successive opinion readings. It is failure to converge that requires explanation within the Bayesian framework.”

vice-versa suggests that partisans will be slow to update their political attitudes in light of new information.

If this view of partisanship as a powerful filter of new information is correct, we might expect United Russia supporters to express higher levels of trust in the government across all periods and to be much more resistant to negative information about the dominant party revealed by irregularities in the election or the content of the protests. Non-United Russia supporters should express lower levels of trust in government across the three periods, and be generally resistant to changing their views in light of the new information produced by the government's decision to allow the protest of December 10th. More generally, we should see little convergence in the views of United Russia and non-United Russia supporters after the protest as partisans of both sides cling stubbornly to their views.

3. Identification and Estimation Strategy

This study takes advantage of the plausibly exogenous assignment of the day on which interviews were conducted with particular respondents. We organized a survey which began on November 25 and ended on December 25th 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 in those cases 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 on the results. Interviewers could not contact respondents before the interview; moreover prior to the day that they conducted their interviews they even did not know who will be their respondents, they were just choosing flats randomly. 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.¹³

Nineteen percent of respondents (n = 291) were interviewed prior to the election of December 4th, 2011, 27 percent (n = 417) were interviewed between the December 4th election and December 11th protests and 54 percent (n = 842) were interviewed following the protest of December 10. To measure the impact of exposure to the election on trust in government, we compare the responses of those interviewed just before (control) and just after the election of December 4th (treatment) relying on the assumption that on average these two groups are statistically indistinguishable on other predictors of trust in government. Because the timing of the day of the interview is plausibly exogenous to attitudes toward the government, we can attribute the differences in responses to the treatment under study. We follow a similar procedure in estimating the impact of the protest of December 10th on attitudes toward the government.

One underlying assumption is that there are no other factors that are correlated with attitudes toward the government that are independent of the elections or the protests and are driving the results. In other words, 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 the narrow time frame of this study, 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.

¹³ See Appendix V.

Another important assumption is that all respondents in the treatment groups -- those interviewed after the election and after the protest -- actually received the treatment. If respondents interviewed after the election or the protest were unaware of these events, and therefore did not receive the treatment, the resulting bias would reduce the differences in responses between treatments and control and make it harder to find statistically significant results. While we lack good measures of the intensity of the exposure to the elections and protests, the assumption that Muscovites were aware of the election results and the protests seems defensible. The survey took place in the nation's capital following an extended election campaign and the results were widely broadcast on all sources of media. Similarly, the protests were a signal political event that took place in the heart of the capital, was attended by political parties across the political spectrum, and was widely covered in the media. A survey by the Levada Center conducted between December 8th and 16th, indicates that 86 percent of respondents knew about the protests. We can reasonably assume that both the election and the large protest that followed would have been difficult to avoid in Moscow in this period.

A third assumption is that populations across the three periods are not biased in covariates that would predict trust in government. We find relatively good balance between samples of respondents taken pre-election and post-election and samples taken pre-protest and post-protest. As indicated in Appendices I and 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. Thus, 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 across all relevant variables. Respondents interviewed after the protests were significantly less educated

and less wealthy.¹⁴ Because the groups are imbalanced on these two covariates, it is important to control for them in the regression analyses.¹⁵

To measure attitudes toward the government, we asked respondents to rate their level of trust in 8 governmental 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 or not responses are being 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 also created a “trust in government” index that simply sums the average response on each of the 8 indicators related to state power and divides by eight. Scores for trust in the Russian Orthodox Church and the United Nations are not part of this trust in government index.

¹⁴ Here education is measured using an 8-point scale which ranges from unfinished middle school to a doctoral degree. Wealth is measured using a six point scale which asks respondents to place themselves on a scale where 1 = not having enough money for food to 6 = do not experience material hardships and can buy a home or apartment if you wanted.

¹⁵ The results are also robust to the inclusion of other demographic variables, such as age, gender, nationality, and years of residency.

Table 2. Trust in Institutions

	Period 1 Pre-Election Before 12/4	Period2 Post-Election 12/5-12/10	Period3 Post-Protest After 12/10
Army	2.88 (1.06)	3.21 (1.00)	3.18* (1.00)
Police	2.50 (.90)	2.81 (.94)	2.86* (.97)
FSB (Federal Security Organ)	2.70 (1.05)	2.99 (1.01)	3.06* (.97)
Courts	2.57 (.94)	2.71 (.97)	2.76* (.95)
Municipal Government	2.63 (.95)	2.76 (1.00)	2.91* (.97)
Federal Government	2.69 (1.02)	2.78 (1.03)	2.98* (.98)
Duma (Parliament)	2.48 (.99)	2.52 (.94)	2.66* (.99)
Procuracy	2.77 (.93)	2.79 (.98)	2.92* (.98)
Russian Orthodox Church	3.47 (1.02)	3.57 (1.00)	3.65* (.94)
United Nations	2.98 (1.02)	2.97 (1.00)	3.04 (1.08)
Trust in Government Index	2.65 (.77)	2.79 (.81)	2.92* (.76)

Notes. Means for each period reported. Standard deviations are in parenthesis. Period1 includes election day, period2 includes protest day. * indicates that differences between means in period1 and period3 are significantly different at the .05 level.

On balance, as Table 2 indicates, we find little difference in responses about trust in government given just prior to the elections (period1) and just after the election (period2). The trust in government index is 2.65 for respondents interviewed after the elections 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 prior to the elections (period1) and after the protest (period3). In all cases related to institutions of the Russian government, we find statistically significant increases in trust following the protest of December 10th relative to those interviewed before December 4th. These increases are often significant if we compare responses given just prior to the protest (period2) and those just after the protest (period3) which suggests the importance of the protest in shaping the average levels of trust in government.

As noted above, these periods are largely balanced in many covariates. Thus age, partisan preferences, employment status, resident status, nationality, and gender cannot account for the differences in responses across these three periods. The results are also surprising in that the imbalances built into the data are (if anything) biased against finding more positive attitudes toward the government following the protest of December 10, 2011. As respondents after the protest are somewhat poorer and less well educated, one might have expected (arguably) that respondents would have even more negative attitudes toward the government following the protests. The next section introduces controls for a respondent's wealth and education. It also controls for a respondent's place of residence using fixed effects for Moscow 10's administrative districts. Of particular interest are the coefficients on dummy variables for *PostProtest* which take a value of 1 for respondents interviewed after December 10th and *PostElection* which takes a value of 1 for respondents interviewed between December 5th and December 10th. We also include dummy variables for respondents interviewed on the day of the election *ElectionDay* and the day of the protest, *ProtestDay*.

Column 1 of Table 3 reports the coefficients on an OLS regression that uses the trust in government index described above as a dependent variable. We find that respondents

interviewed after the protest expressed significantly higher levels of trust in government institutions compared to respondents interviewed prior to the elections as indicated by the coefficient on *Post-Protest*. The size of the coefficient is modest -- about one-fifth of a standard deviation in the index.

In contrast, the small and insignificant coefficient on *PostElection* indicates that respondents interviewed in the five days after the elections expressed similar levels of trust in government relative to those interviewed prior to the election. *Wealth* appears largely unrelated to trust in government while less educated respondents report significantly higher levels of trust in government that seems natural for a country with bad institutions where new knowledge could bring skepticism.

Table 3. 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	Procu racy 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 corrected* does not include protest day.

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

Models 2-9 of Table 3 examine the impact of the elections and the protest on trust in a variety of government 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 quite low (Gerber and Mendelson 2008; McCarthy et al. 2015). Not all institutions are received higher marks after the protest. Most notably, respondents expressed no change in their levels of trust in the Duma and in the Procuracy.

In contrast, respondents interviewed just prior to and just after the election of December 4th expressed levels of trust in government that are largely indistinguishable from each as other indicated by the largely insignificant coefficient on *PostElection*. Respondents express significantly higher levels of trust after the elections in army, the police and the FSB, but not in any of the other institutions of state power, and they express marginally less trust in the Procuracy following the elections. These results indicate the flawed parliamentary elections of December 2011 had little systematic effect on trust in government.

One can argue that difference of the results for the post-election and post-protest periods could be driven by a small number of days between elections and the protest. People may need time to adapt their trust levels. But if we examine a 5-day period just after the protest of December 10 we find the same patterns as for the longer period included in the sample reported

in Table 3 that extends from December 10 to December 25. Increase in trust for almost all government institutions still holds.

5. Extending the Analysis

As an alternative measure of trust in government, the next section explores support for collective action in support of a government initiative to reduce crime. This set of questions offers a more behavioral and specific measure of attitudes toward government than the more general questions about trust 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 to the three questions were 38 percent, 41 percent and 21 percent, respectively. Surely these figures reflect a degree of social desirability bias in that respondents would like to make a good impression on the interviewers by answering yes, but this bias is likely to be constant across periods. By using multiple measures of attitudes toward government, we can not only examine how attitudes differ across governmental institutions; we can 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 4. In column 4, I 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 4. 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 corrected* does not include protest day.

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

With a slightly different measure, we see quite similar results. Respondents interviewed after the protests were more likely to say that they would be willing to take part in collective meetings in support of a neighborhood crime initiative. For example, in column 2, we find that respondents interviewed after protests are 11 percentage points more likely to say that they would participate in collective action than those interviewed before the elections. Thus, the

results observed in Table 3 do not seem to be just an artifact of the direct question about trust in government.

6. Mechanisms

Taken together these results suggest that exposure to the flawed elections of December 4th produced little systematic effect on trust in government. In some estimations, we find a higher level of trust in government after the elections, but this result is inconsistent. More importantly, we identify a robust positive relationship between exposure to public protest and trust in government. 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.

One possibility is that these differences are driven by a “halo effect” in which all government institutions are viewed in a positive light following the protest of December 10 in response to this brief moment of political liberalization. Given that the protest of December 10 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 3 finds that dummy variables for *PostElection* and *PostProtest* are unrelated to trust in the United Nations. This suggests that respondents are distinguishing among institutions of government rather than just basking in the “halo effect” of a possible political liberalization of December 2011 in Russia.

A second possibility is that differences in responses across periods is largely driven by social desirability bias. That is, respondents falsified their true preferences toward the state 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, however, the evidence fits uncomfortably

with this mechanism. The costs to revealing a lack of trust in government were likely higher prior to the elections and the large protest when the ruling party was stronger, but we find that expressed trust in government is higher after the protests and, if anything, after the election as well. Moreover, respondents expressed low levels of trust in the Duma across all three periods. Finally, non-response as a form of preference falsification also does not appear to be a serious problem for reasons discussed below.

A third possibility is that the response by the government during the protest itself improved perceptions of the government. By most accounts, the police and the security services behaved professionally during the protest. Moreover, as the city government (certainly in consult with the federal government) sanctioned the protest, respondents may have updated their beliefs about the security services and the city government. In contrast to recent past protests in Moscow, the demonstration of December 10, 2011 proceeded peacefully, with few arrests, and almost no charges of abuse by the police or other government officials. The cooperative behavior of the police and other state officials toward the protest may have provided new information about these organizations that led respondents to update their attitudes toward the government. Far from undermining attitudes toward the government, this well ordered and peaceful protest may have produced higher levels of trust in government in general and in the police in particular. We may call this “institutional updating.”

However, we have little direct evidence to support this view. We have few questions that allow us to discern more precise beliefs about the city 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. If “institutional updating” was at work, we might expect respondents to rate the police more

favorably after the protest than before. As indicated in Table 5, we find that in most cases there is little difference across the three periods in evaluations of the police along across the three periods. Respondents viewed the police as less corrupt following the elections and protest, albeit from a very low base, but along all other dimensions, we find no discernible impact of the elections or protests on attitudes toward these different dimensions of attitudes toward the police. This suggests that the differences in reported in trust in government across periods is not due to a form of institutional updating.

Table 5. Evaluation of police in Moscow

	Professional	Uncorrupt	Effective	Fair	Law-Abiding	Transparency
	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 corrected* does not include protest day.

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

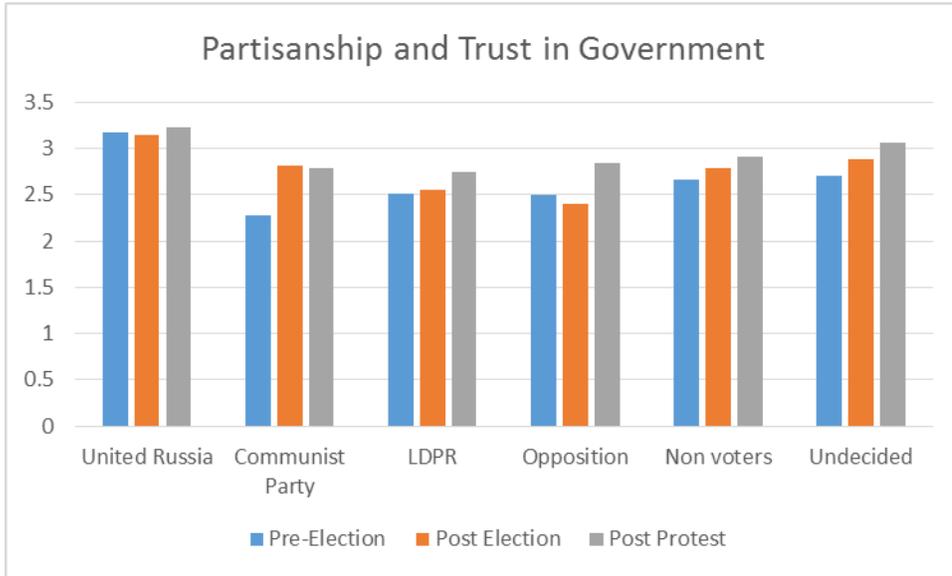
Finally, “partisan updating” may be at work. Respondents may be viewing trust in government through their partisan bias (Keele 2005; Anderson and Tverdova 2005). As the election results and subsequent protests weakened United Russia, it may be that respondents who did not support the ruling party expressed greater trust in the government after the elections and the protest than before. Non-supporters of the ruling party may expect that greater political liberalization is in the offing or that the new balance of forces in the government may bring them more favorable policies.

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 of respondents reported that they had voted for or were planning to vote for United Russia, while 8 percent of respondents had voted for or were planning to vote for the main opposition party, Yabloko. Thirteen percent of voters favored the Communist Part of the Russian Federation (CPRF), 10 percent of respondents 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 frequently collaborates with the Kremlin in a strategy 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.

We begin by simply comparing mean levels of trust in government across the pre-election, post-election, and post-protest period by partisan leanings. Across all three periods, respondents who said that they voted for or planned to vote for United Russia expressed quite similar levels of trust in government. However, supporters of the Communist Party, the Liberal Democratic Party, and the non-systemic opposition, (Yabloko, Just Russia, and Right Cause)

expressed sharply lower levels of trust in the government prior to the elections and the protest than after. Surprisingly, even undecided and non-voters expressed greater trust in the government following the protests.

Figure 1



To determine whether these simple relationships hold in a more rigorous analysis, we repeat the estimation reported in Table 3, but also seek to parse out whether the impacts of the election and the protest on trust in government are conditional on the partisanship of the respondent. To do so we include an interaction term that seeks to capture the impact of being a United Russia supporter interviewed after the election ($UR*PostElection$). We 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.

We begin by reporting the results of an OLS regression on the trust in government index that explores the impact of being interviewed after the protest conditional upon being a United Russia supporter. The results from Model 1 indicate that United Russia supporters interviewed

prior to the election express significantly higher levels of trust in government prior as indicated by the coefficient on *United Russia*, but that the estimates for trust in government for UR supporters interviewed after the elections are imprecisely estimated (*UR*PostElection*).

Non-United Russia supporters exposed to the protest in contrast express significantly higher levels of trust in government relative to those interviewed before the elections as indicated by the coefficient on *PostProtest*, while non-United Russia supporters interviewed after the election expressed levels of trust similar to non-United Russia supporters interviewed prior to the election as revealed by the coefficient on *PostElection*.

In columns 2-9, we repeat the analysis for different branches of government and find similar results to those found in Table 3. In all cases, save for the Duma and the Procuracy, non-United Russia supporters express higher levels of political trust after the protest than before.

Table 6. Partisan impact of elections 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	Procu racy 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 corrected* 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 reported above. In Table 7, we estimate the likelihood that a respondent answered yes to each of the three questions which tap respondents' willingness to engage in collective action by agreeing to attend meetings aimed at reducing crime. In models 1 and 2, we see that 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 5, we regress using ordinary least squares the "meeting index" on dummy variables for *PostElection* and *PostProtest* with various controls. Here again we find that non-United Russia supporters interviewed after the protest are more likely to take part in a collective action cooperating with the police.

Table 7. Partisan impact of elections 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 corrected* does not include protest day.

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

We note two possible mechanisms for this “partisan updating.” 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. Weighing against this view, however, is that non-United Russia supporters did not express more trust in the Duma after the protest despite the weakened position of United Russia in this body. If this view were correct, we almost might expect that United Russia supporters would express less trust in government after the elections and protest than before as the position of their preferred party weakened, but this is not the case. United Russia supporters do not express significantly less trust after the protests than before.

A second possibility is that non-United Russia supporters expressed higher levels of support due to expectations of greater political liberalization after the protest than before. 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 increased trust in the government after the protests than before. The systemic and the non-systemic opposition as well as non-voters and the undecided also expressed greater support for the government following the protests. In addition, a Levada Center survey of Muscovites conducted from December 8-16 shows that 43 percent of interviewed described behavior of authorities as adequate and only 21 percent treated their actions as rude.

A quote from opposition activist and well-known writer Boris Akunin provides further support for 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.”¹⁶ While we cannot determine the precise mechanisms underpinning the increased trust reported by non-United Russia supporters, we find evidence consistent with the view that the holding of the protest itself helped to increase trust in government.

7. Caveats and Challenges

One may be concerned that response bias may be influencing the results. For example, the poor showing of the pro-government party United Russia could have influenced respondents to over-report their opposition after the election and after the protest, but this does not appear to be the case. As we show in Appendix III, the elections and the protest do not appear to have influenced the reported partisanship of the respondents. That is, respondents interviewed after the election and after the protest are just as likely to report supporting United Russia as before the elections and before the protest. The same is largely true for other parties as well. This is important to allay concerns that changes in level of trust are related to changes in the reported levels of partisanship across different parties in the three periods.

Non-response bias presents a second challenge, although the nature of non-response in this study is difficult to interpret. Non-response bias may stem from a fear of expressing disapproval of the government. This is reasonable given that Russia is an autocracy and social desirability bias is a common feature of survey research (Kuklinski et al. 1997). In support of

¹⁶ In Russian: "А вообще, впечатление от митинга сильное. Все вежливые, даже полиция. Ее, кстати говоря, было очень немного. У меня ощущение, что мы находимся в самом начале каких-то больших и (тьфу-тьфу-тьфу) позитивных перемен." See <http://newsru.com/russia/12dec2011/pressprotest.html>

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.

Yet there are also reasons to be skeptical that non-response bias imperils the results. As Appendix IV illustrates non-response bias is low (less than 3 percent) for most governmental institutions, including the police, the army, the federal government, the municipal government, and the procuracy. Response bias is highest among the three institutions with which citizens are least likely to interact: the United Nations, 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 suggests gives some confidence that the results are not plagued by social desirability bias.¹⁷

If fear is driving response bias, one might expect non-response to be higher prior to the elections and the protests when the government was in a more dominant position viz-a-viz the opposition, but, if anything, we find that 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, non-response bias 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 the survey, Frye et al. (2016) use a double list experiment and find little evidence of dissembling to pollsters when respondents were asked about President Putin's approval rating in surveys conducted in Russia in January and March 2015. That respondents were willing to answer this more politically sensitive question honestly in a more

¹⁷ More generally, 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 district are dropped and standard errors are clustered on the date of the interview.

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 be fleeting and not last beyond the immediate post protest period or it may be longer lasting. The analysis here is perhaps most akin to a survey experiment where researchers randomly provide new information to some respondents to capture the impact of this new information on attitudes.

As with all surveys this analysis only captures a narrow slice of 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. Indeed, the protests in Moscow were significantly larger than in any other metropolitan area of Russia. This is not to say that large protests may not have a similar effect elsewhere in the country. It is only to say that these particular protests were unlikely to be large enough elsewhere Russia to produce similar effects.

It is also important to note that not all elections and protest are alike. Features specific to these particular elections and protest may be influencing the results. For example, the large protest of December 10th was peaceful, orderly, and saw few arrests. A more violent protest may have led to different effects, although this is difficult determine with the data in hand.

8. Conclusion

Trust in government is a critical element of good governance and economic development (c.f., Banfield 1958; Putnam et al. 1993; Braithwaite and Levi 2003; OECD 2013). As such, it has been the subject of much research. 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 2005). Others have studied how demographic factors such as partisanship, age, and gender shape trust in government (Keele 2005; Anderson and Tverdova 2005 Christensen and Lægneid 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 election of December 4th, 2011 had little systematic impact on trust in government, while the large protest of December 10 led to significantly higher levels of trust in government. These surprising increases in public trust in the government after the protest are largely attributed to non-supporters of United Russia who expressed far more positive attitudes toward the government after the protest of December 10th, 2011 than before rather than to other mechanisms, such as social desirability bias, a halo effect or institutional updating. Moreover, these results appear robust to different measures of trust in government. Rather than decreasing trust in government, political protest may actually boost trust in government.

Several broader implications flow from these results. These results suggests that short-term events may shape trust in government. Most studies of attitudes toward government focus on slow moving variables such as demographic features of the respondent, institutions, or government performance. Here we see that in the 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. Thus, even hardened attitudes toward government institutions are subject to short-term change.

In addition, the results indicate that changes in the level of trust in government are shaped in important ways by political partisanship. 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 10th from non-United Russia supporters was quite broad-based and included non-voters as well as the undecided. As argued above, this suggests that the heightened average levels of trust in government stems from the perceived increase in political liberalization after the protest, although this interpretation is difficult to verify precisely.

This work indicates the value of a difference in difference design in estimating political shocks on short-term changes in attitudes toward government. The plausible exogeneity of the timing of interviews can give causal leverage to identify the impact of political shocks and this strategy may be employed in other settings (c.f. Garcia-Ponce and Pasquale 2015; Young 2016). To exploit this strategy one can imagine designing a survey to test the impact of a political shock by randomly the assigning the timing of an interview, but this requires some foresight in anticipating the political shock. This research strategy may also be useful in settings where public opinion polls are frequently conducted around political events with surprising outcomes.

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Appendix I.

Balance Tests period3 versus Periods 1 and 2

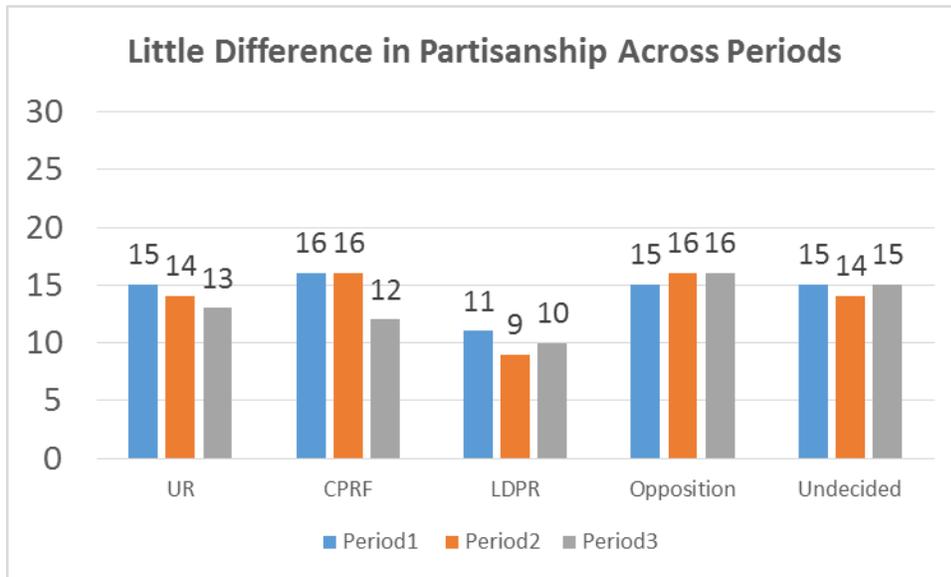
	Pre-Protest	Post-Protest	Difference t-test
Wealth (1-6)	3.74	3.62	.15 p = .001
Education	5.39	5.10	.29 p = .001
Age	43	44	1 p = .44
Male	.45	.48	.03 p = .30
Permanent Resident	.95	.95	0 p = .78
Russian ethnicity	.88	.99	.02 p = .78
Not working	.22	.20	.02 p = .35
State Sector Work	.03	.03	0 p = .64
UR supporter	.14	.14	0 p = .70
Communist Party Supporter	.13	.12	.01 p = .91
Opposition Supporter	.15	.14	.01 (.72)

Appendix II

Balance Tests: Period1 versus Period2

	Pre-Election Period 1	Post-Election but Pre-Protest Period2	Difference t-test
Wealth (1-6)	3.70	3.80	.10 p = .07
Education	5.41	5.37	.04 p = .77
Age	43	44	1 p = .41
Male	.45	.46	.03 p = .30
Permanent Resident	.94	.96	.02 p = .30
Russian ethnicity	.91	.86	.05 p = .06
Not working	.18	.23	.05 p = .12
State Sector Work	.02	.04	.02 p = .04
UR supporter	.15	.14	.01 p = .65
Communist Party Supporter	.13	.12	.01 p = .4
Opposition Supporter	.14	.16	.02 (.45)

Appendix III.



Appendix IV Table. Non-responses

	Whole sample	Pre-Protest	Post-Protest	Difference
Army	.02	0.2	.02	0
Police	.01	.02	.01	0
FSB (Federal Security Organ)	.12	.09	.15	.06
Courts	.05	.05	.05	0
Municipal Government	.03	.04	.02	.02
Federal Government	.03	.02	.03	0
Duma (Parliament)	.04	.04	.04	0
Procuracy	.06	.04	.07	0.3
Russian Orthodox Church	.06	.04	.07	0.2
United Nations	.21	.17	.24	.07
Trust in Government Index	.19	.16	.22	.07
Meeting 1	.14	.17	.12	.05
Meeting 2	.14	.14	.13	.01
Meeting 3	.18	.18	.17	.02
Meeting Index				

Notes. Means for each period reported.

Appendix V Distribution of Districts by Periods

	Whole sample	Pre-Protest	Post-Protest	Difference
District 1	.07	.10	.04	-.06*
District 2	.09	.08	.10	-.02
District 3	.11	.13	.09	-.06*
District 4	.13	.11	.14	.03
District 5	.11	.13	.10	-.03
District 6	.15	.19	.12	-.07*
District 7	.13	.11	.15	.04*
District 8	.11	.10	.11	0.01
District 9	.08	.02	.13	.11*
District 10	.02	.02	.01	.01

Notes. Means for each period reported. * $p < .05$ for difference between pre and post protest means.

Appendix V Distribution of Districts by Periods Period1 versus Period3

	Whole sample	Pre-Election	Post-Protest	Difference
District 1	.07	.14	.04	-.10*
District 2	.09	.10	.10	.00
District 3	.08	.05	.09	.05*
District 4	.12	.07	.14	.07*
District 5	.10	.09	.10	.01
District 6	.16	.25	.12	-.13*
District 7	.13	.10	.15	.05*
District 8	.12	.11	.12	0.1
District 9	.10	.03	.13	.10*
District 10	.02	.04	.01	-.03*

Notes. Means for each period reported. * $p < .05$ for difference between pre and post protest means.