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THE POLITICAL ECONOMY OF COLLECTIVE MEMORIES: EVIDENCE FROM RUSSIAN POLITICS

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The Political Economy of Collective Memories: Evidence from Russian Politics*

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Abstract

How do political elites exploit salient historical events to reactivate collective memories and entrench their power? We study this question using data from the Russian Federation under Putin. We document a substantial recollection campaign of the traumatic transition the Russian population experienced during the 1990s, starting with the year 2003. We combine this time discontinuity in the recollection of negative collective memories with regional-level information about traumatic experiences of the 1990s. Our results show that Russians vote more for the government, and less for the liberal political opposition, in regions that suffered more during the transition period, once memories from the period are recalled on state-controlled media. We then provide additional evidence on the mechanism and find, using a text analysis of local newspapers, that in those regions where local newspapers more intensively recall the chaotic 1990s, electoral support for the government is higher. Finally, we show that in regions in which the media is less independent from the state, this recollection campaign is more effective.

JEL Classification: D74, D83, P16, Z13.

Keywords: collective memory, recollection of the past, voting, Russia.

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Who controls the past controls the future. Who controls the present controls the past.

—1984, George Orwell

1 Introduction

For over a century, historians, sociologists and psychologists have been studying the ways in which societies remember, represent and interpret the past. Commemoration ceremonies and monuments, traditions and myths have been set up to transmit, preserve and alter the cultural and national identity of societies—shaping “communities of memory” (Bellah et al, 1985). Scholarly debate has been dominated, in particular, by the relation between history and memory, and by the extent to which modern societies use history at the service of memory.¹ Hundreds of events make headlines every year, but only very few among them contribute to create the collective memory of a society. What factors determine the selection of such events?

Human history is full of examples in which political elites, especially in authoritarian states, take control over the way history is represented to modify collective memories in their favour. Mussolini, for instance, relied extensively on Roman heritage to make Italians remember the greatness of their past and to install a new mindset at the service of the country’s economic resurgence. Similarly, Nazism in Germany used “historical evidence” about a common German ancestry of an Aryan master race to overcome social divisions and shape the idea of a homogeneous society (Baum, 2006).²

In other cases, the ruling elite has recalled *negative* historical events with the intention of building nations, homogenizing social groups, and preventing uprisings and popular revolts. One of the most salient examples in the twentieth century is the memory of war, with the First and Second World War having been intensively recalled and commemorated during the second half of the century (Mosse, 1990). Another example, common to all the antique religions, is the myth of a great flood. The flood was sent as divine retribution to punish populations in response to a disobedience to their gods and

¹For a brilliant overview of this debate see Olick and Robbins (1998). Novick (1988) and Iggers (1997), among others, point out the role of history in modern societies in selecting memories for political or cultural purposes. Schwartz (1996) theorised an orientational function of collective memory: “*collective memory is both a mirror and a lamp—a model of and a model for society*”. Pennebaker et al. (1997) focus on the recalling of political events throughout history.

²Another recent examples is Donald Trump’s election campaign, which similarly to the campaign of Ronald Reagan, has used the statement “*Make America Great Again*” to connect with an idealized version of a powerful American past.

religious leaders.

In all these examples political elites strategically select either the bright or the dark side of salient historical events to shape a collective memory consistent with the political status quo. Both Mussolini and Hitler used the myth of noble ancestry to convince their constituencies that their political programmes were a means to regain past greatness. On the other hand, commemorating wars can be a way to warn current generations from repeating the mistakes of the past. In the Middle Ages, stories about past disasters, plagues and mass killings in response to a disobedience to God were a way to strengthen the religious elite and to secure its hold on power against the possibility of peasant uprisings.³

Despite the paramount importance that collective memories have played in politics, this channel is often neglected by the political economy literature. Except for a few recent contributions that explore the role of collective memories in influencing individual economic decisions (Fisman et al., 2014; Fouka and Voth, 2016) or voting decisions toward extremist political parties (Ochsner and Roesel, 2017), most political economists have focused on material factors, ignoring the agenda power that the ruling elites have in strategically selecting and recalling specific historical events with the aim of aligning memories with the values of the political status quo. In this paper, we attempt to fill this gap in the literature, by documenting how the Russian government has been strategically recalling negative collective memories from the chaotic transition period of the 1990s, in order to persuade voters that the political status quo is superior to potential political alternatives.

The Russian case is particularly suitable to examine how a ruling elite can shape collective memories for political purposes, for at least two reasons. First, Russia's government has secured almost complete control over the country's main media outlets during recent years. Apart from a small number of independent online TV channels, radio stations and newspapers with a limited audience in Moscow and St. Petersburg, the country's main national-level TV channels and media outlets are either directly government controlled, or owned by corporations such as Gazprom that effectively also belong to the government. Russia's ruling elites therefore have the power to set the informational agenda for most of the population in the country, even though a substantial heterogeneity remains in the degree to which the media in Russia's regions is controlled

³Belloc, Drago, and Galbiati (2016), for instance, document how the exposition to an earthquake in the Middle Ages delayed the institutional transition from religious/autocratic regimes to self-government. Earthquakes were interpreted by the ruling religious elite as the will and the outrage of God in response to disobedience.

by the state. Second, a noticeable variation exists in the degree to which Russian regions have been affected by the transition from communism to a market economy. While some regions experienced a galloping inflation rate, a dramatic increase in crime, and the dismantlement of major industries, in others the transition of the 1990s has been less traumatic. This substantial variation among Russian regions permits us to test empirically whether the recollection of collective memories from the 1990s has affected voting behavior more intensively in regions with more traumatic memories from the 1990s.

In the paper, we document how the power to set the informational agenda has been used by the ruling elites to selectively recall negative aspects from the political and economic transition of the 1990s. The period of political and economic transition that followed the dissolution of the Soviet Union in 1991 was characterized by serious economic difficulties, political chaos and social disruption that translated into a severe downturn of GDP per capita (in 1998, GDP per capita was just 61% of GDP per capita in 1991). The social and political disruptions were no less significant, with a surge in crime, rising inequality, political infighting and instability. The campaign contrasts these negative elements with positive aspects of the status quo, to create political support for Vladimir Putin and United Russia, the government party. The fact that the 1990s were also the first time in Russian history that the country experienced genuine political pluralism, public debate, press freedom and democratic competition is on the other hand rarely mentioned on state-controlled media. The campaign is thus clearly a *selective* recollection of collective memories, as we document in Section 2.

We then combine data on several dimensions of the economic and social disruption during the 1990s with data on vote shares for the leading candidates in Presidential as well as the leading parties in Duma elections from 1999 to 2012, and data on the frequency of specific clusters of words in local newspapers to examine the impact of the recollection of negative aspects from the 1990s on political support for Vladimir Putin and the ruling party United Russia. Our unit of analysis are the 85 regions of the Russian Federation in the years when Presidential and Duma elections took place, between the years 1999 and 2012. Our empirical approach exploits two sources of variation. The first is a time discontinuity around the year 2003, when the campaign to recall negative collective memories from the 1990s started on state-controlled media. The second is cross-regional and is based on the differences in economic decline during the 1990s, which resulted from the collapse of the Soviet Union. Our hypothesis is that conditional on a set of time variant controls, regions that were more severely hit by the economic transition will also be more responsive to the recollection of negative collective memories. Our identification strategy is similar to a difference-in-differences approach, and to the

approach employed in Nunn and Qian (2011), and compares the vote share secured by United Russia in the post-recollection period (relative to the pre-recollection period) between regions that experienced more disruption during the transition of the 1990s to regions where the transition was less harsh.

In our baseline analysis we employ the number of times prices increased between 1990 and 1992 to capture the steep increase in the cost of living Russians experienced after the dissolution of the Soviet Union.⁴ Using OLS we estimate an increase of 3.81% in the vote share for the government candidate in Presidential elections after the recollection campaign started in 2003, for those regions where the increase in prices in the early 1990s was a standard deviation above the mean. This is about 6% of the average vote share for the government candidate in Presidential elections. The effect we find for Duma elections is even more substantial. In regions with a standard deviation above the mean in inflation during the early 1990s, we estimate an increase of 17.08% in the vote share for United Russia after the recollection campaign started in 2003—about 45% of the average vote share for United Russia in Duma elections.

While robust to the inclusion of a wide set of time variant controls and to the use of alternative outcome variables, these estimations are likely to capture a lower bound of the effect of the reactivation of negative collective memories. Regions traditionally exposed to higher rates of inflation could potentially be less sensitive to a campaign aimed at recalling high growth rates in prices. As this might have reduced the overall effect of recollecting memories from the 1990s on voting behavior, we then also instrument the growth rates of prices with the distance of the regional capital from Moscow. Our argumentation relies on the premise that after the end of the Soviet Union, more remote regions have been more intensely affected by the collapse of the public infrastructure system. Using 2SLS, we find that an increase in the level of prices (explained by the distance to Moscow) between 1990 and 1992 causes an upward shift in the vote share of United Russia which is one third higher (in both Presidential and Duma elections) than that estimated using OLS.

Our results also show that the increase in the vote share for United Russia is partially explained by the loss of votes for the liberal political opposition. This is important, as several leading politicians of the liberal opposition parties SPS and Yabloko such as Anatoly Chubais, Boris Nemtsov or Grigory Yavlinsky were also leading reformers during the 1990s. In the media campaign to remind the population of the 1990s, these politicians were often singled out as the main culprits for the failures of the transition (as

⁴As we will document in Section 5, prices have increased on average 25.41 times in two years. This amounts to an inflation rate of about 2400%.

we document in Section 8). We estimate a reduction of 0.39% in the vote share for the liberal candidate in Presidential elections in regions with one standard deviation above the mean in inflation in the 1990s, after the recollection campaign started in 2003. This effect is sizeable (as it explains almost 10% of the average vote share the liberals secured in the four Presidential elections from 2000 to 2012) and higher in absolute terms than the effect we obtained for United Russia itself. Similarly, in Duma elections we find that one standard deviation above the mean in inflation predicts a reduction of 0.58% in the vote share for the liberal parties SPS and Yabloko.

Finally, we also provide evidence on the specific mechanisms linking the recollection of the 1990s to the shift in voting in favor of United Russia. Here we explore the additional effect of local newspapers in recollecting memories from the 1990s⁵, as well as the effect of state control over the regional media. Using the online archive Integrum⁶, we conducted a text analysis of 3,832 local newspapers, searching for three clusters of words that helped us to identify articles recalling the economic crash that followed the end of the Soviet Union, the increase in crime and insecurity during the 1990s, and the dissolution of the Soviet Union and the associated loss of Russia's status as a leading world power. By using the location of the headquarters of the respective newspaper, we then matched each article with a specific Russian region. The resulting panel dataset uncovers a substantial cross-regional variation that we use to test whether regions where the recollection campaign was more intense in local newspapers exhibit a further increase in the vote share for the government. Our estimations are positive and statistically significant when we use Presidential elections, with the exception of the recollection of the increase in crime and insecurity, which is positive but not statistically significant.⁷ Furthermore, our results show a sizeable effect when looking at regions in which the frequency of the recollection is in the first decile of the sample distribution—for example, we estimate an additional effect of 2.48% in terms of standard deviations in the frequency of words that recall the economic crash during the 1990s. We also obtain a larger effect in regions with lower levels of media freedom and a higher degree of government control over the regional press.

⁵While Russia's main national TV stations are almost universally available across the country, Russia still has a large variety of regional and local newspapers that often differ substantially in content, editorial independence and political outlook from region to region.

⁶www.integrumworld.com

⁷For Duma elections, we do not find a statistically significant effect of articles mentioning the 1990s, although for articles recalling the economic difficulties and the end of the Soviet Union the sign is positive. However, we find strong, significant and *negative* effects with respect to the vote shares for the liberal opposition, both for Presidential and Duma elections.

We interpret this evidence as follows. When Russia’s ruling elites became concerned that Western democratic values could become salient for the Russian population⁸, the government started an intense campaign on state controlled media to persuade voters that the alternative political regime, a Western-type democracy that protesters in other post- Communist countries were fighting for, would be similar in content and results to Russia’s chaotic transition in the 1990s, and inferior to the political status quo.

The campaign affected voting decisions by the Russian electorate in two ways. First, by comparing the economic situation of the status-quo with a hypothetical future regime that might again resemble the chaotic past of the 1990s, the recollection campaign led to an increase in votes in favor of the status-quo, i.e. in votes for Vladimir Putin and United Russia. Second, by depicting a number of liberal politicians and reformers from the 1990s as being responsible for the economic and social hardship during the decade, the recollection campaign led to a loss in votes for Russia’s liberal political opposition. In Section 3, we provide a conceptual framework to interpret our results.

We contribute to a young literature that studies the salience of specific historical events for explaining sudden shifts in economic behavior, when exogenous shocks reactivate collective memories about these events. Fisman, Hamao, and Wang (2014) document the effect on Japanese firms of an adverse shock to Sino-Japanese relations, finding that firms more dependent on economic relations with China were more adversely affected by the international conflict. Fouka and Voth (2016) document a substantial reduction in the sales of German cars in Greece when the sovereign debt crisis of 2010-2014 reactivated collective memories about the German occupation during WWII.⁹

In our paper we provide evidence that the reactivation of salient collective memories can also affect political beliefs and voting behavior. In this respect we connect to Ochsner and Roesel (2017), who document an increase in support for the right-wing populist party FPÖ in those Austrian municipalities that were pillaged by Turkish troops in 1529 and 1683, after the FPÖ started a campaign against Turks and Muslims with explicit reference to the Turkish sieges.

We contribute to this literature in several ways. First and most importantly, we

⁸In the early 2000s, a number of formerly Communist countries experienced pro-Western political uprisings against the ruling political elites, the so-called color revolutions (in particular Serbia in 2000, Georgia in 2003, Ukraine in 2004 and Kyrgyzstan in 2005). During the period, Russia’s ruling elites became increasingly concerned that these revolutions might also spill over into Russia (see e.g. Duncan 2013).

⁹These results are in line with salience-based models such as Mullainathan (2002), Gennaioli and Shleifer (2010), and Bordalo, Gennaioli, and Shleifer (2013, 2016).

provide a framework as well as substantial evidence about the incentives politicians have to selectively recall collective memories. We show how the selective reactivation of memories can provide politicians with popular support for the political status quo.¹⁰ Our framework is general enough to account for voting behavior as well as institutional changes. Secondly, the Russian Federation under Vladimir Putin provides us with an example that is, for two main reasons, particularly suitable to illustrate our idea. First, the *de facto* lack of political competition gave the Russian government the possibility to control the information flow towards a large part of the Russia citizenship—thus avoiding the problem of overlapping information. This makes us confident that our findings are indeed the result of a specific political campaign. Second, the shock of the economic transition during the 1990s had very diverse effects on Russia’s regions, with some regions being much more affected than others (for example, our preferred measure of the disruption during the transition is inflation, which was galloping in some regions during the early 1990s, and relatively moderate in others). By exploiting this substantial variation, we are able to show that regions that were more adversely affected during the transition exhibited a higher increase in votes for the government, once the government started to recall the negative aspects of the 1990s on state-controlled media.

We also connect to a broader literature about the political economy of beliefs formation (Lott, 1999; Alesina and Angeletos, 2005; Saint-Paul, 2010; Aghion, Algan and Cahuc, 2011). In all these models, governments invest in the strategic manipulation of information, to change the preferences and beliefs of their citizens. In our framework, an autocrat seeks to convince the population that the status quo is preferable to a potential political alternative, even though the political alternative might be economically superior and therefore a priori preferable to his constituency. Our contribution to the literature on the formation of political beliefs is to show how current political beliefs might be affected by memories and shaped through a process of selectively recalling events from the recent past.

Finally, by showing how media control and exposure to a specific media treatment can influence political beliefs and behavior, we also connect to the literature studying the effects of media and information on political outcomes. Of particular relevance for our study in this respect is a recent experimental literature that documents how the effect of specific information or access to specific media outlets can affect political behavior

¹⁰In this respect, we also connect with Dessí (2008) who shows how collective memories are strategically transmitted from fathers to sons with the aim of boosting optimism in the economy. Her main finding is that parents optimally suppress negative memories while emphasizing and elaborating positive ones.

(see e.g. DellaVigna and Kaplan 2007; Gerber, Karlan and Bergan 2009; Ladd and Lenz 2009; Enikolopov et al. 2011; Peisakhin and Rozenas 2017 or Enikolopov et al. 2018).

Our paper is organized as follows. Section 2 presents and discusses salient examples from the recollection campaign carried on by the Russian government. Section 3 then illustrates our conceptual framework. Section 4 gives a brief overview about the historical background of our study, and Section 5 introduces the data we use. Sections 6, 7 and 8 present and discuss our empirical results, and Section 9 concludes.

2 The recollection of negative collective memories in Putin’s Russia

In his annual address to the Russian Federal Assembly on April 25th, 2005, Vladimir Putin referred to the “collapse of the Soviet Union” as “*the greatest geopolitical catastrophe of the century*.”¹¹

“For the Russian people, it became a real drama. [...] Savings of the population were devalued, old ideals destroyed. Many institutions were disbanded, or reformed superficially and in a rush. [...] Oligarchic groups, possessing absolute control over information flows, served only their own corporate interests. Mass poverty began to be perceived as the norm. And all this happened against the backdrop of a severe economic downturn, unstable finances, and paralysis of the social sphere.”

In explicitly contrasting the chaotic economic and political transition of the 1990s to the stability of his presidency, Putin set a theme that would dominate the political discourse of Russia’s ruling elites for years to come. Already from the year 2003 onwards, contrasting the chaotic 1990s with the economic and political stability under Putin had become a central element of Putin’s and the ruling party’s electoral campaigns. But even between electoral campaigns the theme of the “chaotic 1990s” was constantly repeated on Russia’s state-controlled TV channels. Documentaries such as “The Chaotic 1990s” (*Likh’ie Devianostie*) on the TV channel NTV used footage from the 1990s to remind its audience of the bad state of the Russian economy under president Yeltsin, and the ambiguous role played by Western advisers to the Kremlin. Crime dramas about the 1990s such as the TV series *Banditskiy Peterburg* or *Brigada* became vastly popular,

¹¹<http://www.independent.co.uk/news/world/europe/putin-collapse-of-the-soviet-union-was-catastrophe-of-the-century-521064.html>

as people enjoyed remembering the recent past from the relative safety of the present. Even the Russian Orthodox church participated, in comparing the Russian 1990s to the fall of the Byzantine empire in a documentary that was broadcasted on state TV.¹²

A good illustration of how this recollection strategy works in practice during electoral campaigns is provided by a pro-Putin video from the 2012 presidential election campaign. The video with the suggestive title “Russia Without Putin? Apocalypse Tomorrow!” uses images and themes from the 1990s to suggest what would happen to Russia in the event of an election victory by the political opposition.¹³ Three themes in particular are used that are all closely associated with the crisis of the 1990s. Accompanied by increasingly dramatic music, the video depicts a return to political chaos and anarchy, the loss of Russia’s national sovereignty to the West, an economic crisis characterized by hyperinflation and rising costs of bread, and a resurgence of infighting between competing mafia groups.

“Imagine for once—Russia without Putin: presidential elections are canceled, the Duma dissolved, the opposition triumphs, 200 new parties compete for parliament, nationalists and liberals win. Western powers greet the beginning of genuine democracy in Russia. [...] A new economic crisis hits the world, thousands of firms have to close in Russia. The government decides to close AvtoVAZ, workers in Tolyatti demand the separation of their region from the country. The central bank feverishly prints money, hyper-inflation, the cost of bread climbs astronomically, leading international companies start leaving...”

Although many Russians associate the 1990s also with an increase in personal, political and economic freedom, the Russian government focuses almost uniquely on recalling the negative aspects of the 1990s. In this paper, we illustrate empirically how this strategic recollection of negative collective memories has been successfully used by the Russian government to create support for the political status quo.

3 Conceptual framework

The anecdotal evidence we draw on in Section 2 is consistent with a political economy mechanism in which a political elite decide how much memory recalls from a past period of economic and political instability, so that the political status quo appears—

¹²<http://www.economist.com/node/10701960>

¹³<http://dustyroadseconomics.blogspot.de/2012/06/putin-russias-elections-and-internet.html>

in comparison—in a favorable light. This mechanism then maps onto voters’ political attitudes by limiting the desire of the electorate for political and institutional change.

To illustrate the circumstances under which the recollection of negative collective memories may have an impact on voting decisions, suppose that there are three types of political regimes:

- The status quo, A , corresponds to an autocratic political regime exemplified by the Russian Federation under Vladimir Putin.
- The Western-style democracy, D , with high levels of political and economic competition (as, for example, are Western Europe or Scandinavia).
- The chaotic regime, \tilde{D} , that resembles the period of economic and political transition that Russia went through during the 1990s. \tilde{D} shares with D the democratic decision-making processes, but is also characterized by the partial absence of the rule-of-law, which results in substantial economic inefficiency.

The utility voters obtain while living in the status quo is \mathcal{U}^A . They could alternatively obtain either \mathcal{U}^D or $\mathcal{U}^{\tilde{D}}$ if they decide to overthrow the current regime by voting for a more liberal political alternative. Utility may come from income as well as from political values.¹⁴ We assume $\mathcal{U}^D > \mathcal{U}^A$ to give voters a motivation to revolt against the current regime, but we do not pose any further restrictions on the utilitarian rank between \mathcal{U}^A and $\mathcal{U}^{\tilde{D}}$. Arguably, individuals choose to vote for the liberal alternative rather than to support the current regime if what they expect from the alternative is larger than what they get under the status quo—that is, if the following inequality holds:

$$\mathcal{U}^A \leq \mathbb{E}[\mathcal{U}^D] = \lambda \mathcal{U}^{\tilde{D}} + (1 - \lambda) \mathcal{U}^D, \quad (1)$$

where $\lambda \in [0, 1]$ denotes the salience of the particular historical event that individuals consider in their voting decisions (we hold λ fixed here). Note that if \tilde{D} is not part of the collective memory of the community (i.e., $\lambda = 0$), either because the population has never experienced the respective event or because the event is not of sufficient relevance, $\mathbb{E}[\mathcal{U}^D] = \mathcal{U}^D$. In this case, the electorate will trivially decide to vote for the liberal alternative. Conversely, if \tilde{D} is fully part of the collective memory of the community (i.e., $\lambda = 1$), $\mathbb{E}[\mathcal{U}^D] = \mathcal{U}^{\tilde{D}}$. For any intermediate values of λ , both \mathcal{U}^D and $\mathcal{U}^{\tilde{D}}$ contribute to shape the expectations voters have about the political regime they would end up in if they support the liberal alternative.

¹⁴It could be, for instance, that a constituency values more democracy as it holds higher democratic values. In this case, we say that that constituency has a higher level of \mathcal{U}^D .

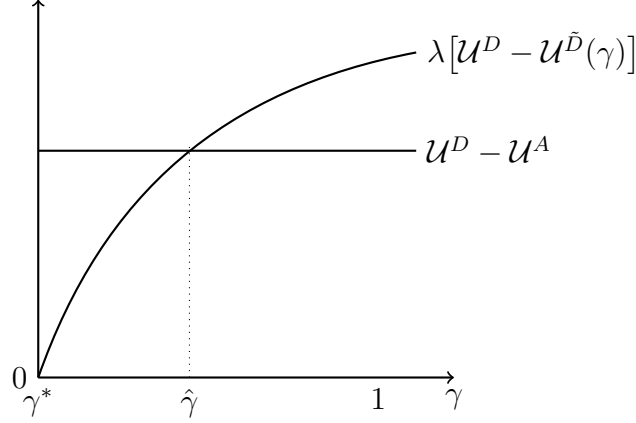


Figure 1: First best, γ^* , and second best, $\hat{\gamma}$, equilibrium.

The autocrat chooses how much negative collective memories to recall by maximizing his rents, R . We denote the intensity of the recollection activity as γ . We assume that the recollection of memory is costly and that its cost is proportional to its intensity. A higher γ would therefore imply a lower level of rents for the autocrat, $R(\gamma)$. After the autocrat chooses the optimal γ , voters decide whether to support the incumbent and remain in A or to vote for the liberal alternative and move to either D or \tilde{D} . Importantly, the perception voters have about the chaotic regime worsens the more the autocrat does memory recollection—i.e., $\mathcal{U}^{\tilde{D}}(\gamma)$ with $\mathcal{U}^{\tilde{D}}(\gamma)' < 0$. Moreover, no recollection implies that no traumatic past event exists, so that $\mathcal{U}^{\tilde{D}}(\gamma = 0) = \mathcal{U}^D$. By solving Equation (1) with respect to λ , we obtain the following cutoff point:

$$\lambda^\dagger(\gamma) := \frac{\mathcal{U}^D - \mathcal{U}^A}{\mathcal{U}^D - \mathcal{U}^{\tilde{D}}(\gamma)}, \quad (2)$$

above which the historical event is salient enough to allow the autocrat to secure his reelection.

The autocrat then maximizes rents subject to the reelection constraint:

$$\max_{\gamma} R(\gamma) \quad \text{s.t.} \quad \lambda \geq \lambda^\dagger(\gamma). \quad (3)$$

As rents $R(\gamma)$ are monotonically decreasing in γ , the autocrat's first best solution—in the absence of the threat of losing the election—would clearly be to set $\gamma^* = 0$. However, if the autocrat cares about remaining in power, he also has to take into account the threat of losing the election. In other words, he has to satisfy the inequality $\lambda \geq \lambda^\dagger(\gamma)$.

In Figure 1 we illustrate a graphical intuition of the solution. The horizontal line depicts the distance between the utility individuals would obtain in a Western-style

democracy and the utility they obtain under the status quo. This distance does not depend on γ , yet it is above the x-axis as we assume $\mathcal{U}^D > \mathcal{U}^A$. The second, curved line represents the distance between \mathcal{U}^D and $\mathcal{U}^{\tilde{D}}$. As recollection reactivates negative collective memories, an increase in γ shifts $\mathcal{U}^{\tilde{D}}$ downward, enlarging the distance between \mathcal{U}^D and $\mathcal{U}^{\tilde{D}}$. The inequality in (2) implies that the autocrat has to push $\mathcal{U}^{\tilde{D}}$ down, up to the point where the curve is above the horizontal line. Any $\gamma \geq \hat{\gamma}$ is a potential solution to the autocrat's maximization problem. However, as rents are monotonically decreasing in γ , the only stable equilibrium is obtained when the curve $\lambda[\mathcal{U}^D - \mathcal{U}^{\tilde{D}}(\gamma)]$ crosses the line from below $\mathcal{U}^D - \mathcal{U}^A$. In this point, the autocrat recalls a quantity $\hat{\gamma}$ of negative collective memories, voters support the status quo and reduce their willingness to support Liberals.

4 Historical background

4.1 The dissolution of the Soviet Union and the 1990s

With the exception of the Second World War, the event in Russia's recent history that had the strongest impact on the country's collective memory was the dissolution of the Soviet Union in 1991, and the decade of political and economic chaos that followed. On December 25th 1991, Mikhail Gorbachev resigned as President of the USSR, after having failed to reform the Soviet Union from within. On the same day, the 15 member republics of the USSR became independent states. By far the most important of these former Soviet republics was the Russian Soviet Federative Socialist Republic (RSFSR), which on December 26th 1991 became the Russian Federation, a presidential democracy headed by Boris Yeltsin.

During Yeltsin's two terms as president from December 1991 to December 1999, Russia underwent a period of economic and political transition that was aimed at transforming Russia's socialist economy into a capitalist market economy. However, the transition resulted instead in a severe economic contraction, with GDP per capita in 1998 being just 61% of GDP per capita in 1991.¹⁵ The economic crisis led to a catastrophic fall in living standards, as well as a rapid increase in crime, corruption, poverty, unemployment and income inequality. Despite the economic hardship, however, the period was also characterized by an opening-up of the country to the world, as well as an unprecedented degree of media freedom, political pluralism and democratic competition.

¹⁵Data are real GDP measures from the World Bank global development data (www.data.worldbank.org).

4.2 Russia under Putin: from 2000 to the present

When eventually the economic situation started to improve at the end of the 1990s, this improvement coincided with Boris Yeltsin announcing on December 31st, 1999 that he was going to resign in favor of his designated successor, Vladimir Putin. Many Russians therefore see Putin's ascent to the presidency as a symbolic turning point that ended the period of the chaotic 1990s. After being officially elected as president in March 2000, Putin initiated a series of fundamental economic reforms that further contributed to the economic recovery.

However, Putin also started relatively fast to reign in the political pluralism and open media landscape that was characteristic for the 1990s. One after the other, independent TV stations were brought under the control of the state. The process started when the state-owned company Gazprom bought a controlling stake in the TV station NTV in January 2001. In early 2014 one of the last remaining independent TV channels, "TV Dozhd," was forced to leave cable and satellite TV and was able to continue its activities only on the internet. The control over TV stations is important, as even in late 2015, 85% of the Russian population still got their knowledge about Russia and the world mainly from TV, with 60% of Russians watching TV news every day¹⁶. This is of crucial importance for our study, as Russia's ruling elites acquired the possibility to shape the informational agenda for a large part of the Russian population. Political competition was also increasingly limited, with opposition parties facing more and more difficulties to compete on an equal footing with the government party "United Russia". The elimination of independent media and of the political opposition as mechanisms of control and accountability went along with increasing rent-seeking by the elites in power. By the end of the 2000s, a small group of Putin's friends from the time when he was a mid-level official in St. Petersburg had joined the ranks of the richest people in the country (Dawisha 2014).

4.3 The beginning of memory recollection in 2003

Although high oil prices and Russia's economic recovery during the 2000s provided Putin and the government party United Russia with relatively high levels of electoral support during presidential and parliamentary elections, Russia's ruling elites remained concerned about their ability to win elections. These concerns had their origin in the series of so-called "colour" revolutions that toppled authoritarian governments in a num-

¹⁶<http://www.levada.ru/2016/06/06/tv-bez-alternativy/>

ber of neighboring post-Soviet states from the early 2000s onwards, with Russia’s ruling elites fearing that the protests could also spill over to Russia (Bunce and Wolchik 2011, Duncan 2013). During the pre-election period in 2003, Russia’s state controlled media therefore started to equate the democratic reforms that many protesters in the color revolutions aspired to with what was described on Russian TV as the “Western-style democracy” that was made responsible for the economic and social disruption of the 1990s. TV documentaries described the difficult situation many Russians lived through during the 1990s, highlighted the responsibility of Western advisers for these difficulties, and discredited the oligarchs and liberal politicians that played leading roles during the transition period. The troubles associated with “Western-style democracy” were then contrasted with what was later named by Kremlin adviser Vladislav Surkov as Russia’s own version of “sovereign democracy”.

Contrasting the negative aspects of the 1990s and its association with “Western-style democracy” with the economic prosperity and political stability under Putin has since then become a constant feature on Russian state TV, with the theme being of particular importance during the election cycles 2003/2004, 2007/2008 and 2011/2012 (see also Figure 3). In the sections below, we now test empirically if the campaign was indeed able to increase the share of votes for the government during Presidential and Parliamentary elections.

5 Data and descriptive statistics

To test whether the recollection of traumatic memories from the 1990s increased electoral support for the Russian government under Putin, we collected election data for Russian presidential and parliamentary elections from 1999 to 2012, as well as regional-level data on the intensity of the economic and social difficulties during the transition period of the 1990s. This section will present our data and data sources, with Table 1 reporting the summary statistics.

Electoral data. We collected election data from the official website of the Central Election Commission of the Russian Federation for each Russian region.¹⁷ To measure political support for the ruling political elite, we use the vote share for the government candidate at presidential elections, as well as for the ruling party United Russia in Duma elections. To see how the recollection campaign affected the liberal political opposition (which is often made responsible for the problems of the 1990s on state-controlled media),

¹⁷www.cikrf.ru

we then also look at the vote share of the candidate from the liberal political opposition in presidential elections, as well as the vote share for the two liberal parties SPS and Yabloko in Duma elections.

For the period we are interested in, four presidential elections were held in Russia, during the years 2000, 2004, 2008 and 2012. For three of them (2000, 2004 and 2012) Vladimir Putin was the government candidate, while Dmitry Medvedev competed during the elections in 2008. The aggregated vote share for the government candidate increased from 53.4% of votes in 2000 (Putin) to 71.9% in 2004 (Putin) and 71.2% in 2008 (Medvedev), before declining again to 63.6% in 2012 (Putin). For the liberal political opposition, we took the vote share for Grigory Yavlinsky (2000, 5.9%), Irina Khakamada (2004, 3.9%), Andrei Bogdanov (2008, 1.3%) and Mikhail Prokhorov (2012, 8.0%).

For Duma elections, we collected the vote share for the ruling party United Russia during the elections held in 2003 (37.6%), 2007 (64.3%) and 2011 (49.3%). For the Duma elections that took place in 1999, we take the vote share for the party Unity (23.3%), which was founded in September 1999 in support of Vladimir Putin, and then became United Russia by merging with another party in April 2001. For the liberal opposition, we merge the vote share for the two liberal parties SPS and Yabloko for the elections held in 1999 (14.45%), 2003 (8.3%) and 2007 (2.55%). In 2011, SPS did no longer compete, so here we only take the vote share obtained by Yabloko (3.43%).

Economic and social disruption in the 1990s. To measure the intensity of the social and economic shock the Russian population experienced during the 1990s, we collected regional-level data on the degree of the economic and social disruption during the decade. We use several complementary indicators. The data was collected from the official website of the Federal Statistics Service of the Russian Federation.¹⁸

To capture the dramatic increase in the cost of living, we use the regional variation in the number of times prices increased between 1990 and 1992.¹⁹ We complement this

¹⁸www.gks.ru

¹⁹Due to the general liberalization of prices in January 1992, prices increased 25 times on average in 1992. Even though 1992 was the peak of hyper-inflation, prices continued to increase significantly in the years that followed. Note that this results in an inflation rate that is extraordinarily high by most standards, about 2400%. To obtain the inflation rate, let us call $\pi = \frac{p_{1992}}{p_{1990}}$ the number of times prices increased between 1990 and 1992. The inflation rate can then be expressed as follows:

$$infl_{90-92} = \frac{p_{1992} - p_{1990}}{p_{1990}} \times 100 = (\pi - 1) \times 100.$$

measure with the growth rate of bread production between 1990 and 1995, which we rescale so that higher values mean a higher reduction in the bread production. On average prices have increased about 25.41 times in two years. Note, from Table 1 as well as from the map in Figure 4, that the cross-regional distribution features a substantial variation, despite a general increase in the whole country. While in Magadan Oblast and Kamchatka Krai prices increased about 50 times, in Mordovia inflation was less intense with only a tenfold increase in prices. Similarly, bread suddenly became a scarce good, with production decreasing from 225 tons to 140 tons on average (a decrease of more than 40%). In some region, such as Ingushetia and the Chechen Republic, the industrial production of bread had basically stopped by 1995.

To measure changes in the production of heavy industry, we employ the growth rate of steel and cement production, two heavy industries represented in many regions of the country. We rescale these two indicators as well, so that higher values mean a higher reduction in the production of steel or cement. Between 1990 and 1995, the production of steel decreased by about 55% in Russia, a bit more than the production of cement which decreased by 25%.

Finally, we also exploit variation in social deprivation experienced by the Russian population during the 1990s, using the number of crimes per 100 thousand inhabitants in each region and computing the growth rate between 1990 and 1995. Crime increased markedly during the first five years of the 1990s: on average, by 55% with peaks bigger than 100% in Kursk Oblast, Sakhalin Oblast, and Magadan Oblast.

Controls To disentangle the effect of our main explanatory variables from other potentially confounding regional-level factors, we use a broad set of regional-level controls. Their summary statistics are reported in Table 1, Panel B for the years in which Presidential elections were run and Panel C for the years in which Duma elections were run. First of all, we gather information on the gross regional product (Grp), the share of people below the poverty line, and the unemployment rate to rule out any potential confounding economic mechanism. We then take a logarithmic transformation to take into account of the skewed distribution. From the Federal Statistics Service of the Russian Federation we also gather information on the number of registered crimes committed and on some crucial aspects of public expenditure, such as the average annual number of employees in public education, the average annual number of employees in public health care and social services, and the percentages of State investment in fixed capital.

6 Empirical strategy and results

We first investigate the effect of recalling negative collective memories on political support for United Russia by comparing the outcome of Presidential and Duma elections in regions with higher levels of inflation in 1992 to outcomes in regions with lower levels of inflation in 1992, before and after the 2003. We then refine our analysis by providing an instrumental variable estimation. Finally, we show the robustness of our results by employing a large set of alternative measures of disruptiveness regarding the 1990s.

6.1 Baseline Estimates

Our empirical strategy is similar in spirit to a standard differences-in-differences strategy and to that employed in Nunn and Quin (2011).²⁰ Relative to a standard differences-in-differences strategy, our analysis uses a continuous measure of the intensity of the treatment. Specifically, to measure the trauma the Russian population experienced during the 1990s we use the number of times prices have increased between 1990 and 1992 (*hyperinfl_i*). As we document in Section 5, the level of inflation varied substantially across regions at the time.

Our baseline regression assumes that the additional growth rate of vote share for United Russia in Duma elections and the government candidate in presidential elections after the year 2003 is a function of the disruptiveness Russians experienced during the 1990s:

$$y_{it} = \beta(\text{hyperinfl}_i \times \text{post2003}_t) + X_{it}\gamma' + \delta_i + \mu_j \times \text{Trend}_t + \varepsilon_{it}, \quad (4)$$

where i indexes regions, t indexes years, and j macroregions. For our analysis, we use data from 84 Russian regions, which are grouped into 8 macroregions or federal districts (Central, Southern, North-Western, Far Eastern, Siberian, Ural, Volga and North Caucasus district). The federal districts were introduced in the early 2000s to increase the control of the federal center over the countries regions. We exclude the region of Chechnya for reasons of data availability.

Our analysis employs a region-level panel and the unit of observation is region times election year. y_{it} is either the vote share that United Russia candidates obtained in Presidential elections—Vladimir Putin in 2000, 2004 and 2012 and Dmitry Medvedev in 2008—or the vote share that the party United Russia obtained in the four Duma

²⁰Specifically, Nunn and Quin (2011) compare the relative change in population and urbanization in countries more suitable to adopt potatoes to the relative change in those less suitable to adopt potatoes, before and after the adoption of the potato around the 1700s.

elections—from 1999 to 2011. $post2003_t$ is a dummy variable that takes on the value 1 after the year 2003, while X_{it} is a vector that gathers all the regional time variant controls. All the regressions include region fixed effects, δ_i , and the interaction between macroregion fixed effects, μ_j , and the time trend, $Trend_t$ —that is, a specific macroregion trend. This is important as we do not compare regions that are very different such as Yakutia (in the far east) and Moscow Oblast, but rather regions that are relatively similar, such as Yakutia and Amur—two regions of the same macroregion, the Far Eastern Federal District. Finally, ε_{it} is the idiosyncratic error term that we cluster at the regional level to account for intraclass correlation in the treatment.

If the recollection of the 1990s increases the vote share that United Russia candidates obtained in Presidential or Duma elections, then $\hat{\beta} > 0$ in Equation 4. We interpret this as evidence of a reactivation of negative collective memories with the goal of entrenching the political power of Vladimir Putin.

Table 2 reports the estimations results from Equation 4. Column 1 shows that, after the beginning of the political campaign focused around the recollection of the 1990s negative collective memory, regions that experienced a relatively higher rate of hyperinflation voted more for the government party’s candidates. The coefficient $\hat{\beta}$ is 0.540 and it is statistically significantly different from zero. In column 2 we additionally include a number of time variant controls. First, we include the logarithm of the gross regional product (GRP), the share of people below the poverty line, and the unemployment rate to control for the increase in the standard of living of Russians between 2000 and 2012. During this period, GRP increased on average by about 800%, the share of Russians below the poverty line decreased by more than 68% on average, while the unemployment rate decreases by about 40%. In view of these economic achievements, Russians might well be induced to vote for the government party, United Russia. For the same reason we also include the number of crimes committed that decreased by about 15% in twelve years. Our analysis might also be threatened by a potentially confounding pork barrel politics mechanism. The government could have increased the number of public employees to increase political support—a concern confirmed by official data, which indeed indicates a substantial increase in public sector employees from 2000 to 2012.²¹ To control for it we also include in Equation 4 the average annual number of employees in public education, the average annual number of employees in the public health care and social services sector, and the investments in capital by the State. Even after controlling for this large set of variables, $\hat{\beta}$ remains significantly different from zero with a magnitude of

²¹Between 2000 and 2012, in fact, the average annual number of employees in the educational sector has increased by a rate of 1.8%, while those employed in health care and social services by 11.21%.

about 0.564. To quantify the magnitude of $\hat{\beta}$, recall that the sample standard deviation of hyperinflation is 6.758. Therefore, our estimates predicts an increase of 3.81% in the vote share for the government candidate in Presidential elections from 2003 onwards in regions with a standard deviation above the mean in prices—about 6% of the average vote share of UR in Presidential elections (i.e., 64.11).

In columns 5 and 6 we repeat the analysis using election results for the Duma. Again, column 6 differs from column 5 by controlling for the wide set of time variant covariates listed above. In both cases, we estimates a positive and statistically significant coefficient $\hat{\beta}$. Focusing on column 6, we find a quite sizeable effect: in regions with a standard deviation above the mean in prices in the early 1990s, we obtain an increase of 17.08% in the vote share of the government party United Russia in Duma elections following the start of the recollection campaign (i.e., 0.665×25.68)—about 45% of the average vote share of UR in Duma elections (i.e., 37.80).

6.2 Flexible estimates

In columns 3 and 4 of Table 2 we investigate the timing of the effect of recollecting memories from the 1990s on the vote share for the government candidate in Presidential elections. In columns 7 and 8, we do the same exercise for Duma elections. This exercise brings on with a caveat: as United Russia was founded in 1999, the Presidential elections in the year 2000 and the Duma elections run in 1999 were the first in which candidates which can be counted into the government camp competed against the opposition. This impedes us to assess whether the assumption of parallel pre-trends holds. However, this exercise is important for another crucial reason: it allows us to assess whether the divergence in the post-trends between regions with higher levels of inflation in 1992 and regions with lower levels of inflation in 1992 began immediately after the start of the new political campaign and not later on in 2008 or 2012. If the divergence in the vote share begins immediately after 2003, being largely driven by the elections in 2003 and 2004, we would be less concerned that the shift in voting could be driven by other unobservables correlated with the vote share of United Russia.

We therefore estimate the following regression equation:

$$y_{it} = \sum_{t=2000}^{2012} \beta_t(hyperinfl_i \times \rho_t) + X_{it}\gamma' + \delta_i + \mu_j \times Trend_t + \varepsilon_{it}, \quad (5)$$

where all variables are defined as in Equation 4. Relative to Equation 4, we interact our disruptiveness measure ($hyperinfl_i$) with each of the election year fixed effects, ρ_t . The

estimated coefficients $\hat{\beta}_t$ s tell us the correlations between hyperinflation in 1992 and the vote share obtained by United Russia and government candidates in each election year.

The estimations, reported in columns 3 and 4, show that the political campaign focused on the recollection of negative collective memories of the 1990s increased the vote share of the government party immediately after its introduction, regardless of the election type we are looking at. Relative to the election run in 2000, the vote share of UR in Presidential elections increased by 0.656 point estimates in 2004 (0.370 in column 4 where we also include controls as well as macroregions trends), while returning in 2008 and 2012 at about the original levels. Similarly, relative to the election run in 1999, the vote share of United Russia in Duma elections increased by 1.352 point estimates in 2003 (0.520 in column 8), keeps up in 2007 and returns to about the original levels in 2011. These results are not supportive of a persistent effect; yet they show a transitory shift of Russians' political preferences.

6.3 Instrumental variable estimation

The results presented so far support our hypothesis that the reactivation of negative collective memories about the 1990s from 2003 onwards helped to increase political support for Vladimir Putin and United Russia. However, the estimations reported in Table 2 are likely to capture a lower bound of the total reactivation of negative collective memories effect. It is indeed plausible that regions traditionally exposed to high rates of inflations would be less sensitive to a campaign aimed at recalling high growth rates in the prices. We attempt to address this issue by isolating exogenous variation in the increase in prices that occurred during the transition of the 1990s. Specifically, we use the distance of regional capitals to Moscow, the capital of the Russian Federation, as an instrument for the intensity of the disruption that Russians experienced at the time. Our argument is as follow. After the dissolution of the Soviet Union, the public transport infrastructure system suffered from a lack of funding and maintenance, which generated substantial delays in delivering services in more remote regions. Sometimes, private businesses had to wait for 6 months or more to book and schedule railway transport, as the Russian Ministry of Railways still had monopoly on the service, and priority was given to state-owned companies (Leonhard and Pitt-Watson 2013). This led to an increase in consumer prices in peripheral regions to which transport costs were high. Evans (1996) also argues that the rise of the general prices was further exacerbated by the deterioration or breakdown of transport connections in rural regions and regions far away from Moscow, once the central state ceased to invest in the maintenance of roads

and other transport infrastructure.

In Table 3 we therefore use the distance of the regional capital to Moscow as an instrument for the number of times prices increased between 1990 and 1992 and estimate Equation (4) by 2SLS. In columns 1 and 4 we report the OLS estimations presented in Table 2 for easiness of comparison. Columns 2 and 5 present the 2SLS estimations, while column 3 and 6 report the first stage estimations, i.e. the effect of the distance to Moscow on inflation in the 1990s.²² All the columns include controls, region fixed-effects, and time trends at the macroregional level.

The first stage reveals that the distance to Moscow is highly correlated with the growth rate of prices between 1990 and 1992: one kilometer more predicts about 3.5 increase in prices—around 1.3% of its average. The Kleinbergen-Paap F statistics, that we compute to take into account the clustering of the standard errors, is well above the conventional level, indicating that our IV estimations are not affected by the employment of weak instruments. Turning to the second stage estimations, we find, as expected, a larger magnitude of the 2SLS estimates than in the OLS estimates. Specifically, we find that an increase in the level of prices (explained by the distance to Moscow) between 1990 and 1992 causes an upward shift in the vote share of the government candidate in Presidential elections of about 0.729 and of 0.956 in Duma elections.

6.4 Alternative measures of disruptiveness

In Table 4 we show that these results are not driven by the use of the specific explanatory variable we employed in Table 2, the increase in prices between 1990 and 1992, but are more general and hold for a large set of variables that capture several complementary dimensions of the economic and social disruption suffered by the Russian population during the 1990s. In columns 1 and 5 we use the growth rate in the production of bread between 1990 and 1995 to capture the fall in the provision of primary goods during the transition. Columns 2 and 6 employ the growth rate in the number of crimes committed between 1990 and 1995, to see whether regions that have experienced a higher escalation in crime relative to those that have experienced a lower escalation voted more for United Russia after 2003. In columns 3-4 and 7-8 we look at differences in the industrial production. In columns 3 and 7, we use the growth rate in the production of steel between 1990 and 1995—a heavy and strategically located industry. Finally, in columns 4 and 8 we look at differences in the production of common industrial goods,

²²As we missed two observations in the Duma elections in 1999 we report the first stage separated for the Presidential elections (in column 3) and the Duma elections (in column 6).

namely the growth rate in the production of cement between 1990 and 1995. As we explained in Section 5, we rescaled all these variables so that higher values indicate more serious levels of disruption in the 1990s.

All these additional explanatory variables confirm the results we obtained in Table 2: a reduction in the production of bread, steel, or cement as well as an increase in crime during the 1990s is associated with an increase in the vote share of United Russia candidates after the political campaign to recall the 1990s started in 2003, in both Presidential and Duma elections. In terms of magnitude, we obtain a quite similar effect of the disruptiveness of the 1990s on the voting behavior of the Russian population. After 2003, in regions with one standard deviation above the mean in the reduction of bread production, the government candidate and United Russia obtained 5.69% more votes in Presidential elections and 7.49% more in Duma elections. Similarly, in regions with one standard deviation above the mean in crime, votes in Presidential and Duma elections increased by 4.37% and 3.33%, respectively. Finally, in regions with one standard deviation above the mean in the reduction in steel production, the government candidate and United Russia obtained 3.50% more votes in Presidential and 5.74% more votes in Duma elections, while a one standard deviation above the mean in the reduction in cement production is associated with an increase of 4.66% of votes in Presidential and 4.60% of votes in Duma elections.²³

In conclusion, our results document that the political campaign adopted from 2003 by the government determined a strengthening of the government party itself, United Russia, and an increase in the support of their candidates in Presidential elections. We interpret these results as evidence of the effect of the reactivation of the negative collective memory of the 1990s on Russians' vote decisions. However, it could still be the case that our results capture the effect of the improvement in the living conditions and that those regions that after 2003 supported more Putin and United Russia were also those that benefit more from the economic reforms undertaken by Putin. Although this is unlikely, as we control for the Gross regional production, the population below the cost of living, and the unemployment rate, in the next section we strengthen our argument that the patterns we find are indeed the results of a media campaign endorsed by members of the political elite, focusing directly on the mechanisms at play. We show that this shift in the voting was additionally triggered by the recollection advertised on

²³Recall, from Table 1, that the sample standard deviation of the sample percentage reduction in bread provision is 19.111, the sample standard deviation of the sample percentage increase in crime is 31.684, the sample standard deviation of the sample percentage reduction in steel production is 30.189, and the sample standard deviation of the sample percentage reduction in cement production is 32.611.

media outlets, such as local newspapers, as well as by the government’s local strength in controlling media.

7 Mechanisms

In this section, we put more structure on Equation (4) to pin down the mechanisms that link the recollection of negative collective memories to an increase in political support for Vladimir Putin and the ruling party United Russia.

Our theory as well as the anecdotal evidence presented in Section 2 suggest that the Russian government strategically used state-controlled media to generate political support, by reminding the Russian population about the political and economic chaos during the years before Putin came to power. A sizeable literature has shown that the media can indeed significantly affect voting behavior (DellaVigna and Kaplan 2007; Gerber, Karlan and Bergan 2009; Ladd and Lenz 2009; Enikolopov et al. 2011; Della Vigna et al., 2014; Adena et al., 2015; Peisakhin and Rozenas 2017; Enikolopov et al. 2018), as well as electoral turnout (Campante, Durante, Sobbrío, 2017). In our paper, we build on this literature by providing further evidence that pro-government media content and state-control over the media can generate political support for the ruling party.

As depicted in Section 2, the campaign used by the Russian government has been advertised using the state-controlled TV. However, the main Russian TV channels are available almost universally across Russia’s regions and this impedes us to exploit considerable variation among regions. We overcome this issue by focusing on the local and regional newspapers, of which a large variety exists across Russian regions. Specifically, in Section 7.1 we exploit regional variation in the coverage of the speeches we discussed in Section 2 that local newspapers advertised during the period 1999-2012. We complement this strategy in Section 7.2 where we use variation among Russian regions in the extent to which regional media is controlled by the state.

7.1 Articles in local and regional newspapers

To construct a regional measure for the intensity of the recollection campaign, we have conducted a text analysis of 3,832 Russian local and regional newspapers and analyzed every single article published by these newspapers between 1999 and 2012, through a

systematic search on the internet archive *Integrum*.²⁴ We have then matched each local newspaper with a Russian region, by using information on the location of the newspaper’s headquarters. On average, we found 6.84 newspapers per region and year that published at least one article with a negative description of the 1990s. The number of newspapers with at least one article varies substantially across regions, with a standard deviation of 6.81. In other words, while in some regions the 1990s are no longer a topic in the local press, in others they are still intensely discussed, with especially the negative aspects of the decade being highlighted in regional-level publications.

As we argue in Section 2, the discussion of the 1990s in the Russian media is mainly clustered around three dimensions of the post-Communist transition: the economic downturn, the lack of security and rule of law, and the political disillusionment brought about by the end of the Soviet Union and Russia losing its place as a central power in world politics. Accordingly, we select an article to our text analysis if it includes the terms “the nineties” or “90s” in a sentence, together with at least one of the terms from the following three clusters of keywords²⁵:

- 1) **The economic crash that followed the end of the Soviet Union.** To capture the economic disruption of the early 1990s, we used the following keywords: inflation, hyperinflation, default, voucher, privatization, financial pyramid, crash, barter and oligarch. In Russian, all these words are specifically linked to the economic chaos and disruption of the 1990s, and for many Russians still vividly recall the economic difficulties during the period. For example, the Russian word “voucher” specifically refers to the Russian “voucher privatization” in 1994, during which a small group of well-connected businessmen, the oligarchs, got control over many formerly state-owned companies (Boycko, Shleifer, and Vishny, 1997). Similarly, the word “financial pyramid” usually refers to the Ponzi scheme MMM, which in 1994 defrauded thousands of Russians of their savings.
- 2) **The increase in organized crime.** To capture the increase in organized crime, we employed the following keywords: crime, murder, racket, bandit, mafia and violence. Again, for many Russians these words are strongly linked to the 1990s, recalling bitter memories from a period of lawlessness and state collapse.

²⁴*Integrum* is an online archive that permits to search the archives of practically every published Russian regional newspaper, regional news site, and other regional publications. Access is available on www.integrum.ru.

²⁵For a list of all the original Russian keywords used, see Appendix ***

- 3) **The end and dissolution of the Soviet Union.** To collect articles about the end of the Soviet Union, we used the terms “disintegration” (*raz’pad*) and “breakup” (*raz’val*) of the Soviet Union. Both terms recall more generally what Putin referred to as the “greatest geopolitical catastrophe of the 20th century.”

We code the frequency of each group of words in local newspapers by region i and year t . We define frequencies as *Economic Crash 1990s*, *Crime 1990s*, and *Fall Soviet Union* and present their summary statistics in Table 5. On average per year and region, we found 14.85 articles recalling the economic difficulties of the 1990s, 17.28 articles recalling the crime and lack of security, and 30.11 articles with the fall of the Soviet Union as subject matter. As before, in our sample we find that the number of articles varies widely across regions.

Figure 3 shows how the number of articles evolved between 2000 and 2012 for each group of words. The respective graphs illustrate how the recollection of negative collective memories from the 1990s began in earnest only from 2003 onwards, and that prior to this year only a negligible number of articles mentioned the hardships of the 1990s. This is important, as it confirms our argument from Sections 2 and 4 about the media campaign first being put into practice during the 2003 Duma elections.

We use the article frequencies counted by region and year to estimate the differential effect of recollecting negative collective memories on the vote share of Putin and United Russia that can be attributed to the recollection in local newspapers. In accordance with our theory, we would expect that in those regions where local newspapers focus more intensely on the recollection of the 1990s, the overall recollection effort should be stronger, with the article frequencies therefore having a positive effect on the vote share for the government candidate in presidential elections, and for United Russia in Duma elections.

The effect of local newspapers is captured by the parameter θ in the following regression:

$$y_{it} = \theta(hyperinfl_i \times post2003_t \times articles_{it}) + X_{it}\gamma' + \delta_i + \mu_j \times Trend_t + \varepsilon_{it}. \quad (6)$$

Equation (6) is similar to Equation (4) with the exception of $articles_{it}$, a variable measuring the number of articles including a specific group of words in local newspapers published in a given region i in the election year t . j indicates the 8 macroregions that divide the Russian Federation into more homogeneous territories. As in Equation (4), the unit of observation is region-by-year. Unlike Equation (4), however, we also include in X_{it} the number of newspapers to control for potential mechanical variation in the news supply in both Russian regions and the *Integrum* database.

We report the estimations of $\hat{\theta}$ using Equation (6) in Table 6. Columns 1 and 6 use the cluster of words aimed at recalling the economic crash of the 1990s, columns 2 and 7 look at the recollection of crime and a lack of the rule of law, and columns 3 and 8 use the recollection of the fall of the Soviet Union. Overall, our estimations of θ are positive and statistically significant when we look at Presidential elections, with the exception of the recollection of the increase in crime that lacks statistical significance. In terms of magnitude, the average additional propagation effect on the vote share for United Russia is small and equal to 0.0046 when we use the first cluster on economic crash (about 0.058% in terms of standard deviations). However, when we look at regions with a high number of newspaper articles recollecting the 1990s, the marginal effect becomes sizeable. In regions with a frequency of recollection in local newspapers in the first decile of the sample distribution, the marginal effect is 0.1386 (about 2.48% in terms of standard deviations). Similarly, while the average additional propagation effect reported in column 3 is quite small and equal to 0.0029 (about 0.10% in terms of standard deviations), its marginal effect in regions with a high number of articles (first decile) is 0.1869 (6.67% in terms of standard deviations—about twice the original effect estimated in Table 2).

For Duma elections, we do not find significant effects, although the effect is positive for the clusters on economic difficulties and on the fall of the Soviet Union. In Section 8, however, we will document a sizeable negative effects of the number of newspaper articles that recall the 1990s on Duma election results for liberal political parties, which are often associated with the liberal reforms of the 1990s.

7.1.1 Placebo analysis as robustness check

To test whether the results we find are indeed the effect of recalling the 1990s on voting behavior, and not the result of an idiosyncratic feature of Russia’s regional newspaper scene, we do then also test the effect of a number of placebo words. Specifically, we searched for four different clusters of words which we expect would either adversely affect political support for the government, or have no effect on political behavior.

We present our estimation results in Table A1 in Appendix. First, we searched for articles mentioning the the word *Navalny*, a Russian lawyer and political activist who emerged as Putin’s main opponent during the late 2000s (columns 1 and 5). We then searched for two clusters of words that might reflect the attitude of the Russian population with respect to its current government, namely problems with corruption in general (columns 2 and 6), and increase in the cost of daily life and problems with

petty corruption (columns 3 and 7). As expected, results are mostly negative (with the exception of column 2), but not significant. The only exception were articles mentioning the rise in living costs and problems with small-scale corruption, which had a significant and negative effect on support for United Russia in Duma elections (column 7).

Finally, we also looked at a cluster of words with no connection to politics, namely reports on the weather (*good weather*, *bad weather*, *rainy weather*, and/or *sunny weather*). Here the effect is weakly negative for both Duma and Presidential elections, and significant at the 10% level for Duma elections. Potentially, this could be caused by voters turning out less to vote for the government party if the weather is unpleasant (an effect amply documented in the literature, see e.g. Gomez et al. 2007).

All in all, our placebo tests make us confident that what we capture in Section 7.1 is indeed the effect of media reporting on the 1990s on voting behavior.

7.2 Media control

In addition to looking at the content of regional newspapers, another way of exploring the role played by the regional media in recalling the 1990s is to look at the extent to which media outlets are controlled by the state in a given region. While government control over the media has significantly increased in Russia during recent years (see e.g. Walker and Orttung 2014), Russia's regions still vary substantially with respect to the degree of media freedom. In some regions, the regional press is still largely independent, and might not be easily enticed to produce the kind of articles we describe in Section 7.1. In other regions, however, media freedom is severely limited or sometimes altogether absent, with the regional government being often able to fully determine the headlines and content of regional newspapers.²⁶

We use two alternative variables to measure the degree of media freedom in Russian regions. A first measure has been developed by Petrov and Titkov (2013), and uses a systematic survey of regional experts to evaluate the degree to which the media in Russian regions is controlled by the state. A second, alternative measure is developed by the Center for the Defense of Glasnost (CDG), an NGO based in St. Petersburg.²⁷ Every two years, CDG publishes a map that divides Russia's regions into regions where the press is free, relatively free, relatively unfree and unfree. We used the map to develop an indicator for the degree of media freedom across Russia's regions.

²⁶As regional governors are largely evaluated by the central government according to their ability to secure high election results for the ruling party (see e.g. Reuter and Robertson 2012, or Rochlitz 2016), they might indeed have strong incentives to use their authority to micro-manage local media content.

²⁷<http://www.gdf.ru/map/>

To test the role of media control as a mechanism in the campaign to recall negative collective memories, we then re-estimate Equation (4), this time by interacting the focal effect $hyperinfl_i \times post_{2003}$ with each of our two measures of media control:

$$y_{it} = \theta(hyperinfl_i \times post_{2003_t} \times media_control_{it}) + X_{it}\gamma' + \delta_i + \mu_j \times Trend_t + \varepsilon_{it}. \quad (7)$$

We report the estimations of θ from Equation (7) in Table 6. In columns 4 and 5, the vote share of the government candidate in Presidential elections is taken as dependent variable, and in columns 9 and 10 the vote share of United Russia in Duma elections. In both specifications, we find a positive and significant additional effect of media control on the reactivation of negative collective memories. When we employ the first measure, $\hat{\theta}$ equals to 0.1608 (0.14% in terms of standard deviations) in Presidential elections and 0.1854 (0.16% in terms of standard deviations) in Duma elections. Similarly, we obtain a point estimation of 0.1822 of $\hat{\theta}$ (about 0.12% in terms of standard deviations) in Presidential elections and 0.2342 (0.16% in terms of standard deviations) in Duma elections for the second measure.

We interpret these additional evidence as supporting of a stronger reactivation of the negative collective memories of the 1990s in regions where the regional government is more effective in influencing the content of regional media. This result is not surprising, given that Russia’s regional governments have strong incentives to use their control over local media to influence election results in favor of the ruling party, as they are themselves appointed by the central government during the period we study (see e.g. Reisinger and Moraski 2012, Reuter and Robertson 2012, or Rochlitz 2016).

8 The liberal political opposition as scapegoats

So far we have documented an upward shift in the vote share for the government following the recollection of negative collective memories in regions more affected by the transition during the 1990s. In this section, we show how this shift in voting decisions of Russian voters has been partially driven by a simultaneous loss of votes for the liberal political opposition.

The recollection campaign depicted Russia’s liberal political opposition as responsible for the problems and difficulties during the transition period of the 1990s. Politicians such as Grigory Yavlinsky, Anatoly Chubais or Boris Nemtsov, who were both leading economic reformers during the 1990s and leading politicians of the liberal parties Yabloko and SPS during the 2000s, were singled out as representatives of the kind of “Western-style democracy” that was then often represented as being responsible for the country’s

economic decline during the 1990s. A good example to illustrate this point is a fake campaign-add that appeared in the newspaper *Vecherniy Stavropol* on November 23rd, 2007, that is shortly before the Duma elections that took place on December 2nd, 2007 (see Figure 2 in Appendix A.2 for the original article). In style and content, this excerpt from a regional newspaper is similar to many others that we identified for our analysis in Section 7.1. The article is designed as a campaign-add for the liberal political party SPS (Union of Right Forces):

“Forward for the Movement SPS! Back to the times of Nemtsov and Chubais! Of course, in these times: Every day the prices for products, good and services were rising. [...] The economy of the country was destroyed. [...] Pensions were cut and not paid. [...] Salaries were cut and withhold. [...] The number of poor people in Russia was growing. [...] But on the other hand, we had real democracy in the country.”

To show how and to what extent this recollection campaign contributed to a decrease in votes for the liberal political opposition, we collect information on the vote share for the candidate who most closely represented the liberal agenda in the Presidential elections of 2000, 2004, 2008 and 2012.²⁸ For Duma elections, we merge the vote share for the two liberal parties SPS and Yabloko for the elections held in 1999, 2003 and 2007.²⁹ In 2011, SPS did no longer compete, so here we only take the vote share obtained by Yabloko.

In Tables 7 we document a significant and negative effect of the recollection of negative collective memories on the share of votes for the liberal political opposition in both Presidential (columns 1 to 4) and Duma elections (columns 5 to 8), once the campaign to recollect memories of the 1990s started in 2003. Specifically, in column 1 we estimate a reduction of 0.057 point estimations in Presidential elections when we use our main explanatory variable, the number of times prices increased between 1990 and 1992 (or a 0.39% reduction in votes in regions with one standard deviation above the mean in inflation). This effect is quite sizeable, as it explains almost 10% of the average vote

²⁸Specifically, we selected the following candidates as representatives of the liberal political opposition during presidential elections: Grigory Yavlinsky (2000, 5.9%), Irina Khakamada (2004, 3.9%), Andrei Bogdanov (2008, 1.3%) and Mikhail Prokhorov (2012, 8.0%).

²⁹Yabloko (meaning "Apple" in Russian) was founded by the liberal economist and reformer Grigory Yavlinsky in the early 1990s, represents a social-liberal agenda, and still competes in Russian elections to this day as the main representative of a European-style social-liberal political party. SPS (Union of Right Forces) was a liberal-conservative party founded in 1999 and dissolved in 2008. It was founded by a number of "young reformers" from the 1990s, in particular Anatoly Chubais, Boris Nemtsov, and Yegor Gaidar, and is associated with the free market reforms and privatizations of the transition period.

share the liberal political opposition secured in the four Presidential elections between 2000 and 2012. In absolute terms, this is higher than the effect we obtained for the government candidate in Presidential elections. Using the same explanatory variable, in column 5 we obtain a similar result for the vote share of the liberal opposition in Duma elections: one standard deviation above the mean in inflation during the early 1990s predicts a reduction of 0.58% in the vote share for the liberal opposition.

We obtain similar estimates for our alternative measures of disruption during the 1990s, namely the reduction in the production of bread, steel and cement, as well as the increase in crime. The effect when looking at the increase in the crime rate during the early 1990s is especially sizeable, with a reduction of 1.27% in the vote share for the liberal opposition in regions where the increase in crimes between 1990 and 1995 was one standard deviation above the mean. In other words, people in regions with high levels of insecurity during the 1990s were significantly less likely to vote for SPS and Yabloko, once they were reminded about difficulties of the transition period.

In Table 8 we also look at the additional effect of local and regional newspapers, as well as the level of media control on the vote share for the liberal political opposition. In almost all our specifications, we find a negative, significant and sometimes quite substantial additional propagation effect of negative memories being recalled in local and regional newspapers on the vote share for the liberal opposition. It thus seems to be the case that especially for Duma elections, the recollection campaign in newspapers worked even better to discredit the liberal opposition than it worked for encouraging people to vote for the government. Finally, as expected the degree of government control over the media also had an additional negative effect on the vote share for the liberals, although here the effect is not significant for Duma elections.

9 Conclusion

During the early 2000s, Slobodan Milosevic in Serbia, Eduard Shevardnadze in Georgia, Viktor Yanukovich in Ukraine and Askar Akayev in Kirgystan lost power in a series of popular protests that became known as “color revolutions.” During these revolutions, often young and pro-Western protesters used colorful symbols and organized, nonviolent resistance to oust governments that were seen as corrupt, authoritarian, as well as linked to the respective country’s Communist past.

As early as 2003, and until today Russia’s ruling elites have been concerned that a similar revolution might also take place in Russia. In a speech to Russia’s Security Council in November 2014, President Vladimir Putin underlined that Russia has to use

all available means to prevent a similar revolution from occurring:

*“We see what tragic consequences the wave of so-called colour revolutions led to. For us this is a lesson and a warning. We should do everything necessary so that nothing similar ever happens in Russia.”*³⁰

In this paper, we document one strategy in particular that has been used by Russia’s ruling elites to lower the desire of the Russian population for political change. We show how the Russian government uses its control over the media to remind the Russian population about the economic and social difficulties of the 1990s. These difficulties are then described as an outcome of the kind of “Western-style democracy” that Russian and Western reformers tried to implement in Russia during the transition from Communism. The “Western-style democracy” of Russia’s 1990s is then often explicitly equated with to the kind of liberal economic and political institutions the protesters during the color revolutions aspire to, with both being described as leading to economic chaos and social decline.

In our paper, we show how the campaign is successful in mobilizing the Russian population for the regime. We also document that the recollection of negative collective memories to mobilize political support works better in regions that have been more severely affected by the transition of the 1990s. Finally, we document a strong negative effect of the recollection campaign on political support for the liberal political opposition.

Our paper contributes to a new strand of literature that shows how authoritarian regimes in the 21st century no longer rely on violence and repression, but on subtler methods of political control (see e.g. Guriev and Treisman 2015 for a theoretical framework). In these “new authoritarian regimes” government control over information and the media has begun to play a particularly important role in securing political support for the regime. The authoritarian turn in politics worldwide will make sure that studying and understanding these methods of popular control will remain relevant for many years to come.

³⁰<https://www.telegraph.co.uk/news/worldnews/europe/ukraine/11243521/Vladimir-Putin-we-must-stop-a-Ukraine-style-coloured-revolution-in-Russia.html>

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Table 1: Summary Statistics

	mean	sd	min	max	<i>N</i>
Panel A – Unit of Observation: Region					
Prices (1992 - 1990 %)	25.41	6.79	10.90	52.60	78
Bread Production (1995 - 1990 %)	40.35	19.20	-28.17	100.00	82
Crime (1995 - 1990 %)	55.26	31.85	-18.17	143.65	72
Cement Production (1995 - 1990 %)	24.76	32.76	-1.20	100.00	82
Steel Production (1995 - 1990 %)	55.33	30.33	0.00	100.00	82
Panel B – Unit of Observation: Region \times Presidential election year					
UR Vote %	65.05	11.81	25.01	99.76	345
Liberals Vote %	4.12	3.10	0.02	20.40	332
Grp (ln)	11.58	1.56	6.38	16.18	341
With Income Below Cost of Living (%)	23.81	14.38	5.60	94.30	328
Unemployed (%)	9.17	6.06	0.00	53.30	344
Employees in Public Education	22878.16	18033.21	0	91812	344
Employees in Other Public Services	69266.05	62367.50	0	414900	350
Number of Registered Crimes	32406.95	30885.02	345	211914	344
State Investments in Fixed Capital (%)	25.20	18.44	0.30	100.00	344
Panel C – Unit of Observation: Region \times Duma election year					
UR Vote %	38.06	26.69	0.00	99.48	346
Liberals Vote %	6.25	5.54	0.00	28.85	333
Grp (ln)	11.43	1.51	7.55	16.11	334
With Income Below Cost of Living (%)	25.05	13.82	5.70	90.50	323
Unemployed (%)	10.11	7.07	0.00	55.80	346
Employees in Public Education	22747.95	18158.69	0	92291	346
Employees in Other Public Services	69726.27	62507.27	0	423000	350
Number of Registered Crimes	33386.10	32084.67	158	230631	346
State Investments in Fixed Capital (%)	25.31	18.01	0.70	100.00	344

Note. In Panel A, bread, cement, and steel production are rescaled so as higher percentages mean a larger reduction between 1990 and 1995.

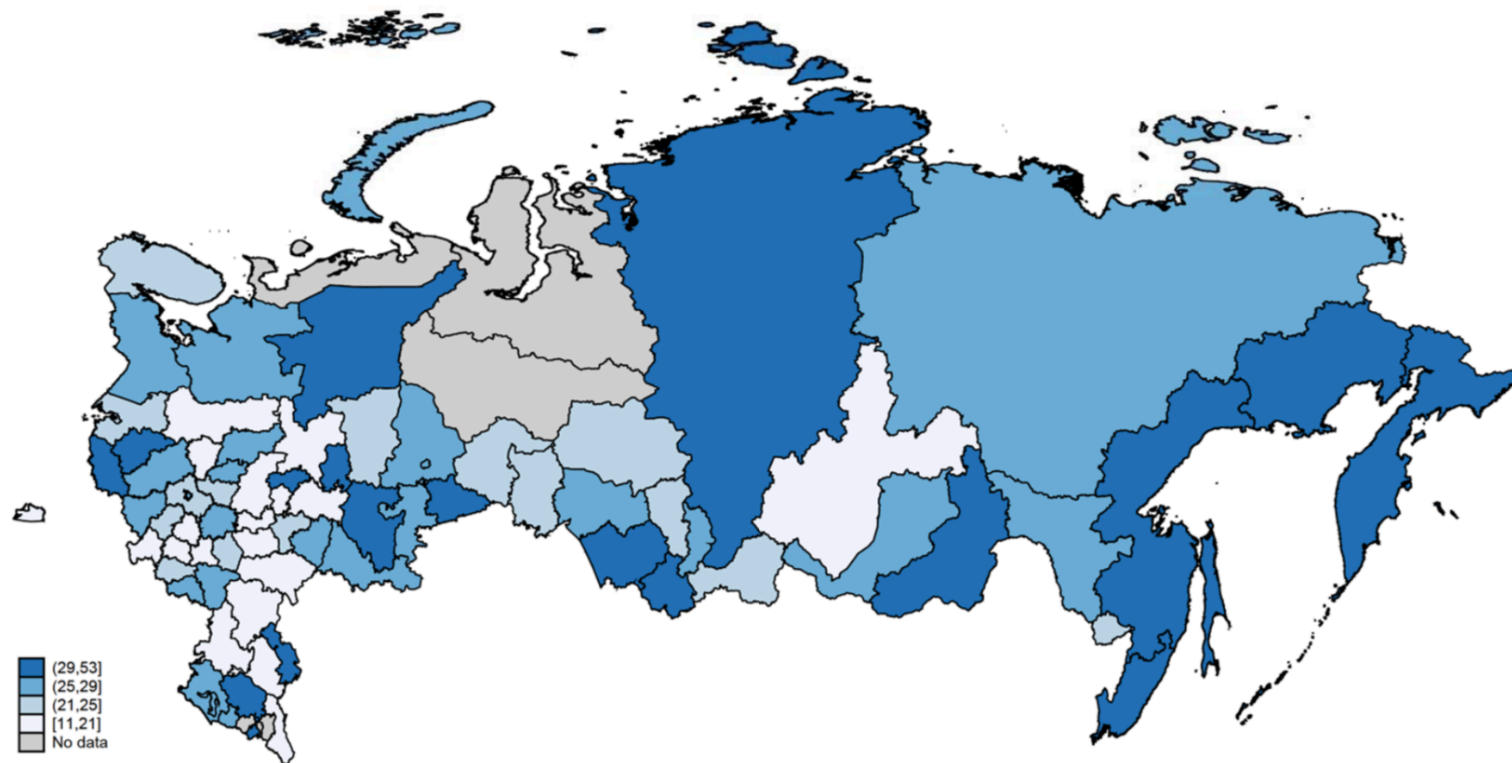


Figure 2: Regional distribution of the number of times prices increased between 1990 and 1992.

Table 2: Reactivation of collective memories on the pro-government vote share — Baseline and flexible estimates

	Dependent variable is vote share for the government in %							
	Presidential Elections				Duma Elections			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>hyperinfl90s</i> \times <i>post</i> ₂₀₀₃	0.540*** (0.050)	0.564*** (0.081)			1.802*** (0.087)	0.665*** (0.096)		
<i>hyperinfl90s</i> \times <i>year</i> 2004			0.656*** (0.049)	0.370*** (0.071)				
<i>hyperinfl90s</i> \times <i>year</i> 2008			0.589*** (0.054)	0.037 (0.115)				
<i>hyperinfl90s</i> \times <i>year</i> 2012			0.374*** (0.053)	-0.230 (0.148)				
<i>hyperinfl90s</i> \times <i>year</i> 2003							1.352*** (0.070)	0.520*** (0.095)
<i>hyperinfl90s</i> \times <i>year</i> 2007							2.328*** (0.104)	0.762*** (0.178)
<i>hyperinfl90s</i> \times <i>year</i> 2011							1.726*** (0.094)	-0.227 (0.246)
Controls	No	Yes	No	Yes	No	Yes	No	Yes
Macroregion FE \times Trend	No	Yes	No	Yes	No	Yes	No	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	312	311	312	311	312	309	312	309
<i>R</i> ²	0.504	0.712	0.604	0.760	0.711	0.882	0.853	0.934

The dependent variable is the vote share for the government candidate in Presidential Elections in columns 1-4 and for United Russia in Duma Elections in columns 5-8. Even columns include GRP (ln), share of people below the poverty line, unemployment rate, average annual number of employees in public sector, investments in capital by the State. Standard errors in parentheses are clustered at the region level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Reactivation of collective memories on the pro-government vote share — 2SLS estimates

	Dependent variable is the pro-government vote share in %					
	Presidential Elections			Duma Elections		
	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	2SLS	first stage	OLS	2SLS	first stage
<i>hyperinfl90s</i> \times <i>post</i> ₂₀₀₃	0.564*** (0.081)	0.729*** (0.076)		0.665*** (0.096)	0.956*** (0.098)	
<i>dist to Moscow</i> \times <i>post</i> ₂₀₀₃			3.535*** (0.159)			3.587*** (0.144)
Kleinbergen-Paap F statistics			496.885			624.055
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Macroregion FE \times Trend	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	311	303	303	309	301	301
R^2	0.712	0.693	0.950	0.882	0.893	0.952

The dependent variable is the vote share for the government candidate in Presidential Elections in columns 1-3 and for United Russia in Duma Elections in columns 4-6. All the columns include GRP (ln), share of people below the poverty line, unemployment rate, average annual number of employees in public sector, investments in capital by the State. Standard errors in parentheses are clustered at the region level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Reactivation of collective memories on the pro-government vote share — Alternative measure of disruptiveness in the 1990s

	Dependent variable is the pro-government vote share in %							
	Presidential Elections				Duma Elections			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>bread</i> 90s \times <i>post</i> ₂₀₀₃	0.298*** (0.032)				0.392*** (0.047)			
<i>crime</i> 90s \times <i>post</i> ₂₀₀₃		0.138*** (0.021)				0.105** (0.041)		
<i>steel</i> 90s \times <i>post</i> ₂₀₀₃			0.116*** (0.023)				0.190*** (0.038)	
<i>cement</i> 90s \times <i>post</i> ₂₀₀₃				0.143*** (0.027)				0.141*** (0.050)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Macroregion FE \times Trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	324	287	324	324	319	287	319	319
R^2	0.699	0.621	0.600	0.601	0.887	0.869	0.871	0.860

The dependent variable is the vote share for the government candidate in Presidential Elections in columns 1-4 and for United Russia in Duma Elections in columns 5-8. All the columns include GRP (ln), share of people below the poverty mline, unemployment rate, average annual number of employees in public sector, investments in capital by the State. Standard errors in parentheses are clustered at the region level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Summary statistics

	mean	sd	min	max	<i>N</i>
<i>Economic Crash</i> 1990s (headlines)	14.85	18.44	1	163	992
<i>Crime</i> 1990s (headlines)	17.28	24.21	1	238	1018
<i>Fall Soviet Union</i> (headlines)	30.11	34.99	1	321	1043
<i>Economic Crash</i> 1990s (newspapers)	5.309	4.805	1	50	992
<i>Crime</i> 1990s (newspapers)	5.371	4.739	1	57	1018
<i>Fall Soviet Union</i> (newspapers)	7.064	6.791	1	71	1043
media control	3.219	0.875	1	5	1144
media control fsg	1.986	0.681	1	3	1055

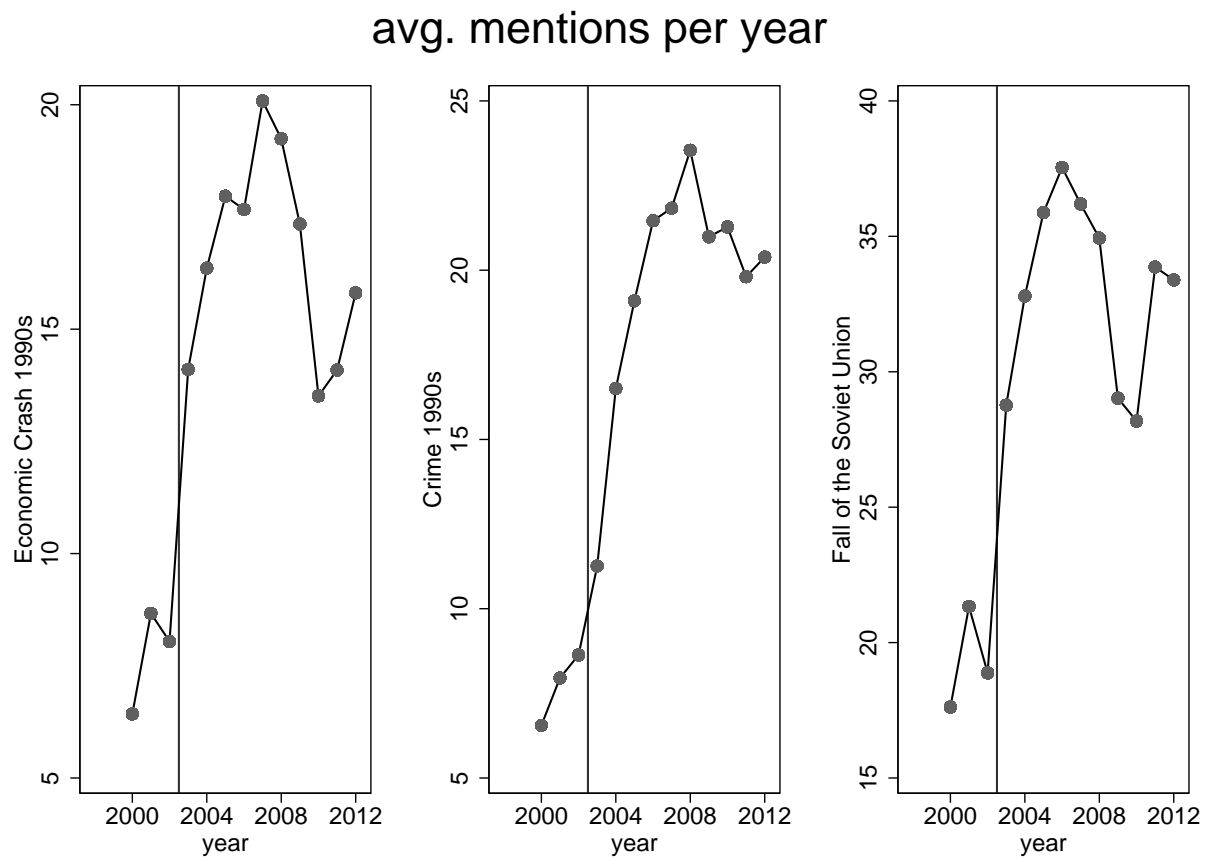


Figure 3: Average number of headlines in local newspapers per year.

Table 6: Reactivation of collective memories on the pro-government vote share — Additional propagation effects

Dependent variable is the pro-government vote share in %										
	Presidential Elections					Duma Elections				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
$post_{2003} \times hyperinfl_{90s} \times$										
$\times Economic\ Crash\ 1990s$	0.0032** (0.0016)					0.0022 (0.0040)				
$\times Crime\ 1990s$		0.0009 (0.0011)					-0.0037 (0.0024)			
$\times Fall\ Soviet\ Union$			0.0028*** (0.0010)					0.0010 (0.0026)		
$\times media_control$				0.1608*** (0.0234)					0.1854*** (0.0268)	
$\times media_control_fsg$					0.1822*** (0.0311)					0.2342*** (0.0382)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Macroregion FE \times Trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	282	292	302	311	307	281	292	300	309	306
R^2	0.567	0.516	0.582	0.716	0.664	0.849	0.849	0.858	0.886	0.880

The dependent variable is the vote share for the government candidate in Presidential Elections in columns 1-5 and for United Russia in Duma Elections in columns 6-10. All the columns include GRP (ln), share of people below the poverty line, unemployment rate, average annual number of employees in public sector, investments in capital by the State. Standard errors in parentheses are clustered at the region level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Reactivation of collective memories on the vote share for the liberal opposition — Baseline estimates and alternative measures

Dependent variable is the vote in % for the liberal opposition										
	Presidential Elections					Duma Elections				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>hyperinfl</i> 90s \times <i>post</i> ₂₀₀₃	-0.057*** (0.015)					-0.086*** (0.023)				
<i>bread</i> 90s \times <i>post</i> ₂₀₀₃		-0.024*** (0.007)					-0.042*** (0.015)			
<i>crime</i> 90s \times <i>post</i> ₂₀₀₃			-0.019*** (0.005)					-0.040*** (0.011)		
<i>steel</i> 90s \times <i>post</i> ₂₀₀₃				-0.019*** (0.005)					-0.024*** (0.008)	
<i>cement</i> 90s \times <i>post</i> ₂₀₀₃					-0.018*** (0.006)					-0.026** (0.011)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Macroregion FE \times Trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	311	324	287	324	324	309	319	287	319	319
R^2	0.602	0.597	0.610	0.603	0.596	0.828	0.827	0.840	0.824	0.822

The dependent variable is the vote share for the liberal candidate in Presidential Elections in columns 1-5 and the combined vote share for SPS and Yabloko in Duma Elections in columns 6-10. All the columns include GRP (ln), share of people below the poverty line, unemployment rate, average annual number of employees in public sector, investments in capital by the State. Standard errors in parentheses are clustered at the region level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Reactivation of collective memories on the vote share for the liberal opposition — Additional propagation effects

Dependent variable is the vote in % for the liberal opposition										
	Presidential Elections					Duma Elections				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
$post_{2003} \times hyperinfl_{90s} \times$										
$\times Economic\ Crash\ 1990s$	-0.0014** (0.0006)					-0.0023*** (0.0008)				
$\times Crime\ 1990s$		-0.0007 (0.0005)					-0.0023*** (0.0006)			
$\times Fall\ Soviet\ Union$			-0.0007* (0.0004)					-0.0018*** (0.0005)		
$\times media_control$				-0.0093** (0.0039)					-0.0074 (0.0055)	
$\times media_control_fsg$					-0.0135** (0.0065)					-0.0091 (0.0080)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Macroregion FE \times Trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	282	292	302	311	307	281	292	300	309	306
R^2	0.622	0.604	0.602	0.590	0.591	0.846	0.830	0.832	0.818	0.819

Dependent variable is the vote share for the liberal candidate in Presidential Elections in columns 1-5 and the combined vote share for SPS and Yabloko in Duma Elections in columns 6-10. All the columns include GRP (ln), share of people below the poverty line, unemployment rate, average annual number of employees in public sector, investments in capital by the State. Standard errors in parentheses are clustered at the region level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A Additional figures and tables

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Вечерний
СТАВРОПОЛЬ

Движение «СПС – вперед!» выступает за возвращение эпохи НЕМЦОВА – ЧУБАЙСА

Конечно, в то время:
Каждый день росли цены на продукты, товары и услуги
В 90-е годы с началом либеральных реформ инфляция достигла 3000%. Цены выросли в 20 раз. Несмотря на обещания реформаторов улучшить ситуацию, цены росли каждый день. Только в 97 – 98 годах инфляция составила почти 100%.

Экономика страны разрушалась
1997 – 1998 гг. – одни из самых тяжелых по потерям ВВП. В 1997 г. они составили 250 млрд рублей в сопоставимых ценах, а в 1998-м вышли на рекордную отметку в 267 млрд рублей. Добыча нефти сократилась на 3 млн тонн, а угля – на 13 млн тонн. Последовательно сокращалось строительство жилья. На 160 тыс. кв. метров в 1997 году и на 210 тыс. кв. метров в 1998 году. Фактически не платились детские пособия. Задолженность по ним на 1 июля 1998 г. составляла 17,6 млрд рублей.

Результатом работы реформаторов в правительстве стал дефолт и банковский кризис 1998 года. Курс рубля по отношению к доллару упал более чем в три раза. Разорилось большое количество малых предприятий, лопнули многие банки. Миллионы граждан России потеряли свои сбережения. Резко упал уровень жизни.

Пенсии сокращались и не выплачивались
В 1997 году пенсии сократились почти на 15%, а в период с 1998 по 1999 г. – на 34%. Средняя пенсия в 1997 году составляла 78 – 88 рублей, а официальный прожиточный минимум – 408 – 415 рублей. Задержка пенсий на несколько месяцев стала обычным делом. А в Воронежской, Оренбургской, Ульяновской областях и Кабардино-Балкарии задержки достигали до полугода.

Сокращались и задерживались зарплаты
Реальный размер заработной платы в 1997 году упал на 8%, а в течение 1998 года падение составило еще 20%. Но даже эти деньги не платили регулярно. Постоянно рос объем номинальной задолженности по заработной плате. Если в 1996 году задолженность составляла 48,6 млрд рублей; в 1997 году – 52,6 млрд рублей, в 1998 году – 77,0 млрд рублей. В большинстве регионов задержки по выплате заработной платы достигали 3 – 6 месяцев.

В России увеличивалось число бедных
В 1998 году почти на 4,5 миллиона выросло количество россиян, живущих за чертой бедности (с доходами ниже прожиточного минимума). В 1997 году – 30,7 млн человек, в 1998 году – 35 млн человек.

Зато в стране была настоящая демократия.

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Figure 4: Anti-liberal campaign add in the regional newspaper Vecherniy Stavropol, November 23rd, 2007.

Table A1: Reactivation of collective memories on the pro-government vote share — Additional propagation effects, placebo analysis

Dependent variable is the pro-government vote share in %								
	Presidential Elections				Duma Elections			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$post_{2003} \times hyperinfl_{90s} \times$								
$\times Navalny$	-0.0000 (0.0001)				-0.0000 (0.0003)			
$\times Corruption\ Today$		0.0054 (0.0061)				-0.0077 (0.0057)		
$\times Daily\ Life$			-0.0012 (0.0011)				-0.0022* (0.0013)	
$\times Weather\ Reports$				-0.0002 (0.0007)				-0.0019* (0.0011)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Macroregion FE \times Trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	147	209	295	303	146	208	294	301
R^2	0.642	0.493	0.539	0.556	0.820	0.834	0.853	0.857

The dependent variable is the vote share for the government candidate in Presidential Elections in columns 1-4 and for United Russia in Duma Elections in columns 5-8. All the columns include GRP (ln), share of people below the poverty line, unemployment rate, average annual number of employees in public sector, investments in capital by the State. Standard errors in parentheses are clustered at the region level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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