doi:10.1017/S0003055416000642

Who Defects? Unpacking a Defection Cascade from Russia's Dominant Party 2008–12

HENRY E. HALE George Washington University TIMOTHY J. COLTON Harvard University

Inder what conditions do individuals withdraw support from dominant parties in nondemocratic regimes? Employing an original panel survey, we measure the same individuals' support for Russia's dominant party first at the peak of its dominance in 2008 and again shortly after it suffered a cascading defection of regime supporters in 2011–12. This allows us uniquely to explore the microfoundations of theories of regime defection cascades, generally supporting the argument that they involve complex "informational" as well as "reputational" processes. Accordingly, we find that early and eager movers in such a cascade tend to come from less socially vulnerable segments of the population, to have greater need to rely on other people for interpreting events, to believe the regime has lower levels of popular support, and to come from more heterogeneous communities. We find little role for mass media (including social media) or democratizing zeal in driving Russia's regime defection cascade.

nder what conditions do individuals withdraw support from dominant parties in nondemocratic regimes? A burgeoning literature broadly agrees political parties are often a linchpin of the survival of any such regime (Brownlee 2007; Geddes 1999; Huntington 1968; Svolik 2012). While most research on these parties' strength has focused on elite sources (Levitsky and Way 2010; Reuter and Remington 2009; Smyth, Wilkening, and Lowry 2007), related work finds that mass support is also crucial (Hale 2006; Magaloni 2006; McFaul 2005). It can come in two forms. The more straightforward is what we call sincere support, pro-dominant-party behavior that corresponds with views actually held by the individual. Insincere support-or what Kuran (1995) has called "preference falsification"—has also been found to stabilize regimes led by dominant parties. That is, even if everyone privately dislikes the party, it can remain comfortably in control so long as most people publicly support it as a result of social pressures (possibly including threats from the regime). We use the term "defection" to refer to withdrawals of public support from a regime or dominant party, regardless of whether

either the original support or its withdrawal are sincere or insincere. By "public," we mean that the individual is willing to express this preference to strangers, a category that would include interviewers conducting a public opinion survey.

Many have observed that when mass support for a regime party drops, it sometimes does so in the form of a dramatic and potentially overwhelming cascade. If anyone doubts the power of such dynamics, they need only look to the collapse of Eastern Europe's communist party governments in 1989 (Kuran 1991; Lohmann 1994; Pfaff 2006; Yurchak 2005) or the downfall of Arab governments in the uprisings of 2011 (Kuran 2011; Patel 2013; Pearlman 2013).

We know remarkably little about such cascades. Different theories posit that different things are cascading, with possibilities including information about the regime's quality (Lohmann 1994), a sense of security in numbers (Kuran 1991), and emboldening emotions (Pearlman 2013)-or some complex combination of these (Kuran and Sunstein 1999). Accordingly, it is unclear what determines the specific preferences and thresholds that propel the cascade: Why would some people who once supported a ruling party be more likely or quicker than others to shift to opposing it? Further complicating the picture is that not everything that appears on the surface to be a cascade is in fact a cascade, with another possibility being near-simultaneous changes in views driven by a shift in underlying shapers of public opinion (Celen and Kariv 2004; Smith and Sørensen 2000).

To be sure, studies with strong empirical components have addressed the defection of elites (Bueno de Mesquita et al. 2003; Slater 2010; Svolik 2012). These afford us little leverage on the bulk of regime supporters, who do not control major economic or political assets but are still indispensable to regime survival. Some important work tracks macro-level trends in public opinion leading up to a ruling party's downfall (Magaloni 2006) or analyzes factors, such as economic performance, that may influence public opinion (Reuter

Henry E. Hale (lead and corresponding author) is Professor of Political Science and International Affairs, George Washington University, 1957 E Street, NW, Suite 412, Washington, DC 20052 (hhale@gwu.edu).

Timothy J. Colton is Morris and Anna Feldberg Professor of Government, Harvard University, 1737 Cambridge St., Knafel Building 156, Cambridge, MA 02138 (tcolton@fas.harvard.edu).

The surveys on which this article is based were funded principally by the National Council for Eurasian and East European Research (NCEEER) under authority of two Title VIII grants from the U.S. government and supplemental funding by the latter. The views expressed here are solely those of the authors and are not the responsibility of the U.S. government, the NCEEER, or any other person or entity. For comments on earlier drafts, the authors thank the journal's editors and anonymous reviewers, Ellen Carnaghan, Bruce Dickson, Thomas Remington, participants in the Political Economy Seminar of the Higher School of Economics and New Economic School in Moscow, and members of comparative politics workshops at Harvard University, George Washington University, and Cornell University.

Received: June 10, 2014; revised: August 24, 2016; accepted: October 19, 2016. First published online: April 4, 2017.

and Gandhi 2011). But without being able to observe the dispositions of the same individuals both before and after, such studies cannot tell us which specific people at the micro level are actually doing the defecting and why. Other scholarship examines what kinds of individuals participate in uprisings or antiregime protests (Beissinger 2013; Javeline 2003; Onuch 2014). This is not the question at hand for us. We are interested not in who protests, but in who goes from support to nonsupport of the regime, whether or not they turn out in the streets.

The small though growing empirical literature devoted to regime defection cascades, usually denied direct measurements of the public or private opinions of the same individuals before and after a cascade, tends to rely either on observing dynamics in aggregate public opinion or on qualitative evidence about individuals' changes that is often, though not always, gathered after the fact (Ellis and Fender 2011; Kuran 1995; Lohmann 1994; Pearlman 2013; Rubin 2014). But this is also problematic. Aggregate public opinion trends leave opaque which specific individuals are actually changing their positions, and research into preference falsification finds that many people misrepresent their prior dispositions after a cascade has run its course, with erstwhile regime supporters now identifying with the victorious revolutionaries and denying they had ever sincerely backed the old order. This, and the related problem that cascades can alter the information available to researchers in retrospect, complicates even the most careful examinations of the historical record (Kuran 1995, 256–7).

A rich interdisciplinary literature on cascades in nonpolitical spheres ranging from investment markets to software adoption has made an end run around this problem by creating cascades to study in laboratory settings (Anderson and Holt 1997, 2008; Celen and Kariv 2004), with some even examining the neural correlates of cascade behavior (Huber, Klucharev, and Rieskamp 2015; Innocenti, Rufa, and Semmoloni 2010). But this leaves the relationship between the laboratory and the real-world settings unclear. A few behavioral realms have allowed for the direct observation of cascading, as in the analysis of online movie ratings (Lee, Hosanagar, and Tan 2015) or field experiments involving financial markets (Alevy, Haigh, and List 2007). But nothing of the sort has been accomplished yet for defection cascades from nondemocratic political regimes, where information is hard to come by and cascades are too uncommon and unpredictable for researchers to get into place the necessary precascade measures.¹ The empirical microfoundations of regime defection cascades remain mysterious, and cascade theory in general would benefit from new findings regarding who precisely is most likely to join in.

The present article is based on an empirical strategy designed to overcome many of the difficulties just described. The strategy—to our knowledge unique in the literature—is to employ an original panel survey that measures the same individuals' support for one nondemocratic regime's dominant party at the peak of its dominance and then again just after it suffered its most severe political crisis since its founding, one where a great deal of anecdotal evidence suggests that a cascade of defections took place among some regime supporters in the broader population. The context is Russia, where the United Russia Party founded by Vladimir Putin went from dominance in 2008 to a major drop in support and an unprecedented tsunami of protest widely believed to be fueled by social media—shook the regime and forced it into a series of concessions in late 2011 and early 2012 before it ultimately regained control.²

On this basis, we find general support for the theory of "availability cascades," the notion that regime defection can gain momentum in a highly complex process. Chains of people learn about the nature of the regime from the defection of prior individuals at the same time that some safety in numbers accrues as the cascade unfolds, leading more socially vulnerable and less personally interested people to join in. Among our most important findings, early and eager movers in such a cascade are people who live in the largest communities, lack higher education, are young, are male, believe some party other than the ruling one has a chance to come to power in the foreseeable future, and think that Putin lacks majority support. Defection from Russia's dominant party had little to do with movement toward a more open and competitive political system and was much more about the party's more authoritarian elements shifting their loyalties to other parties that were no less autocratic. Perhaps surprisingly, mass media (including patterns of social media use and consumption of information from more independent outlets) are essentially a nonfactor, failing to predict who defects and who does not. Our theory would lead us to expect similar patterns in other countries roughly as repressive as Russia was at that time, though our major contribution is to open this up as a set of propositions for testing in other contexts. Altogether, our findings suggest we have much to learn about authoritarian stability from rigorous exploration of the microfoundations of regime defection cascades.

DEFECTION FROM A DOMINANT PARTY: CASCADE THEORY

In this section and the next, we draw on existing theory to produce a set of propositions with testable implications as to what kinds of individuals are most likely to join a wave of defection from a regime's dominant party. Since some of the relevant literature does not distinguish between ruling party and regime, and since ruling parties are tightly connected to the regimes they support, we sometimes use the term regime defection cascades with the understanding that defection from a ruling party is typically part of such a cascade. We begin

¹ One novel study employs agent-based modeling (Makowsky and Rubin 2013).

 $^{^2\,}$ Many of the concessions thus proved to be temporary or were later scaled down, but this rollback occurred mainly after our survey was conducted.

by discussing a literature on "informational cascades," then proceed to alternatives arising out of cascade theory, in particular notions of "reputational cascades" and "availability cascades," before considering alternatives to cascade theory.

The key condition for an informational cascade, as first developed in two seminal models (Banerjee 1992; Bikhchandani, Hirshleifer, and Welch 1992) and refined to account for regime defection cascades by Lohmann (1994), is that each individual in society lacks reliable information about whether a regime is good or bad, usually because the regime represses or distorts the flow of information.³ A given individual may have had a bad personal experience with the regime, but knows that this may be an aberration and cannot know the personal experiences of others. But this individual can learn more about the regime by observing the behavior of others. If someone else is observed speaking out against the regime with all the risks that entails, a data point is gained: That outspoken dissenter, with some probability, likely had a bad experience with the regime, too. Of course, people understand that some citizens are political activists who always protest. Thus, what supplies the best information that a regime is bad is when ordinary people (whom Lohmann calls "moderates") turn out in force-that is, when the number of people expressing opposition is greater than expected. Assuming that people vary in levels of risk aversion, different individuals will require different numbers of others to join the opposition before they themselves conclude the regime is on balance bad, producing a cascade dynamic as each person's decision to defect triggers others to do so. What makes a cascade, then, is that the public information revealed by the number of other defectors overwhelms people's private information. Numbers generate more numbers. And this means cascades are not always correct in their assessments of the regime: Because people start relying on others more than on their own experiences, there is always a chance that a few people who defect early on but happen to be in the minority can trigger a cascade that masks the actual majority view.

In contrast, a reputational cascade of regime defection can take place when many people hold what Kuran (1995, 21) terms "dual preferences." That is, unlike with informational cascades, individuals already believe that the regime is bad; they just do not know how widely their sentiments are shared and fear that expressing their opposition publicly could subject them to social disapproval or political punishment. Thus they harbor a private preference for changing the regime but express a public preference for keeping it. As more people publicly give voice to their inner opposition, some safety in numbers arises and people can start to believe that opposition to the regime will become the dominant, socially desirable view. Because different kinds of people are more susceptible to social pressures or have other incentives to favor one outcome or other, they will have different thresholds for defection, and

early movers trigger others to move later, resulting in a cascade. At later stages of the cascade, with the old regime increasingly discredited, even its supporters can sense that they may be best off jumping on the "revolutionary bandwagon" (Kuran 1995, 251), presenting themselves as supporters of the new regime in a new form of preference falsification.

While informational and reputational cascades have distinct logics, most research acknowledges that they tend to go together, and theory has advanced accordingly (Kuran 1995, 256; Lohmann 1994, 55). In one particularly noteworthy development that only mentions applicability to regime defection cascades in passing, Kuran and Sunstein (1999) specify how informational and reputational cascades not only coexist, but reinforce each other and jointly interact with powerful cognitive heuristics that amplify the cascading process. Particularly important is the availability heuristic, which "involves estimating the probability of an event on the basis of how easily instances of it can be brought to mind" (Kuran and Sunstein 1999, 706). In short, an availability cascade of regime defection would involve people both updating their information about a regime and deciding how best to navigate social pressures, with each new revelation about the regime increasing the cognitive availability of that idea, therefore making people more likely to adopt it uncritically, which in turn further fuels both informational and reputational cascading. While Pearlman (2013) disputes Kuran's terms, her argument can be interpreted as a variation on his more basic "dual preference" model: People overcome preference falsification (which she attributes not to social pressures but to "dispiriting emotions" like fear, sadness, and shame) when the prior actions of others trigger "emboldening emotions" like anger, joy, and pride. To the list of cognitive mechanisms that can fuel cascade behavior consistent with a dual-preference model, the literature on voting might contribute a well-documented human tendency to prefer winners (Bartels 1988; Callander 2007), in which case one might support a regime or opposition that one would otherwise reject only because it appears likely to win.

Inasmuch as regime defection cascades can involve a variety of reinforcing cognitive processes, much will ultimately depend on individuals' thresholds for defection. As Granovetter (1978, 1424-5) points out in a seminal article, if one person's defection is needed to trigger a second (be it through informational, reputational, emotional, or availability reasons), and a third requires that two others defect first, and so on and so on, then the initial person's defection triggers a chain reaction that can bring everyone out onto the streets. But just raise the third person's threshold by one, and the cascade of defections never gets beyond the first two people. Yet this literature has tended to leave the discussion of individual thresholds at a very general level. While there is a good case to be made that individuals' thresholds are subject to change across time and situation (Granovetter 1978, 1436–7; Pearlman 2013, 390), it behooves us as social scientists to explore what is predictable and generalizable and what is not.

³ Earlier pioneers of cascade theory more generally include Schelling (1960) and Granovetter (1978).

THE DETERMINANTS OF THRESHOLDS

The present study takes a step in the direction of a more robust theory of thresholds by drawing out the implications of existing studies and testing them empirically. In his pioneering article, Granovetter (1978, 1436) argues that thresholds generally will be "affected by most of the causal variables typically studied as determinants of individual behavior." Fortunately, research into cascades does not leave us bereft of more specific propositions that can be tested with panel survey data.

Let us turn first to what informational cascade (IC) theories might lead us to expect if this were the underlying process driving an observed surge in defections from a dominant party. Initially, IC theory would lead us to expect people with better private information about the state of affairs in their country to be less likely to cascade because they would be more inclined to rely on their own private information and less responsive to the crowd (Alevy, Haigh, and List 2007; Lohmann 1994; Smith and Sørensen 2000). Assuming that information possession is correlated with formal education, we might expect:

H1. Individuals with higher levels of education will be less likely to defect than those with lower levels.

In addition, Lohmann (1994, 53) posits that cascading is more likely in heterogeneous communities than in homogeneous ones because there is a greater likelihood that some moderates (as opposed to anti-statusquo extremists) will be activated. Because large urban communities are usually more diverse than small rural ones, we obtain:

H2. Individuals in larger communities will be more likely to defect than those in smaller communities.

It also follows from IC theory that people who have had more negative private experiences with the regime (more negative "priors," to use Bayesian terminology) will be more likely to defect, *ceteris paribus*. Since there could be many such negative experiences with the regime, ranging from low material well-being to disagreements about redistribution (Ellis and Fender 2011, 765), we state the following general proposition here:

H3. Individuals who have had more negative experiences with the regime (in realms commonly associated with regime support in the context at hand) will be more likely to defect than those with more positive experiences.

Because the focus of this study is defection cascades from a nondemocratic regime, we are particularly interested in whether threshold-lowering dissatisfaction arises in large part from the regime's undemocratic nature. This is widely assumed to be the case not only with respect to the specific instance studied here (see below), but also such cases as the 2011 Arab uprisings and the postcommunist "color revolutions" (see review in Hale 2013). If this assumption is valid, we should observe:

H3.1. Individuals who have stronger beliefs in democracy will be more likely to defect than others.

In order to have the informational effect that IC theory expects, the defection of an individual must become known to others. Lohmann (1994, 56) posits that people who are more "socially connected" will be more likely to cascade. Since media are key conduits of such information, we would expect:

H4. Individuals who are more connected through the Internet (especially social media) will be more likely to defect than those who are less connected. And

H5. Individuals who consume information from media outlets that cover the authorities more critically will be more likely to defect than those who do not.

Lohmann's (1994, 51) model also supposes that people are willing to send costly informational signals (publicly expressing opposition) because there is a chance that a given individual's action could be decisive, triggering a cascade that topples the regime. We would thus also expect:

H6. Individuals who believe a regime's fall is more probable will be more likely to defect than those who think its fall is less probable.

Finally, because IC theory holds that information is reflected in numbers, we obtain the following proposition:

H7. Individuals who think that more other people support the regime will be less likely to defect than those who think fewer others support the regime.

Now let us turn to dual-preference models, including availability cascades but privileging the reputational cascade (RC) component that involves a logic clearly distinct from informational cascades. In many instances, as Kuran and Sunstein (1999) argue, RC logic points in the same direction as the IC logic, albeit for different reasons. For one thing, support for H3, a finding that people with more negative experiences with the regime are more likely to defect, would be consistent not only with IC theory (these people are starting with more negative prior information) but also with RC theory: People who are more dissatisfied with the regime tend to have lower thresholds for overcoming their fear of social pressures and going into public opposition (Kuran 1995, 257).4 IC and RC theory would also find support if H4 and H5 are borne out and strong

⁴ Kuran (1995, 253) is clear that discontent is not the only determinant of thresholds in his model and that "revolutionary bandwagons" (which also include informational cascades) can generate discontent through an IC process and availability heuristic even when they start for other reasons.

media effects are detected because mass media technologies are crucial conveyors not only of the preponderance of different views but also the nature of social pressures (Kuran and Sunstein 1999, 762; Makowsky and Rubin 2013). Similarly, confirmation for H6 and H7 would also be consistent with the RC perspective: People who expect a regime to fall and who believe many others disapprove of the regime are less likely to be cowed by social pressure into supporting it (Kuran 1995, 71–3, 253). H6 and H7 should also be upheld if cascade behavior is driven by the desire to back a winner for its own sake (Bartels 1988; Callander 2007).

Reputational cascade theory, and some empirical research in a variety of fields, does point to several distinct propositions, however. Contradicting IC theory, which expects the best informed to be less likely to join a regime defection cascade as expressed in H1, RC theory generally anticipates the opposite: Better informed people will likely be quicker to understand patterns of thresholds in society and the potential for gaining safety in numbers through early defection regardless of whether they privately think the regime is good or bad (Ellickson 2001). Thus, assuming again that education levels correlate with being informed about society:

H8. Individuals with higher levels of education will be more likely to defect than those with lower levels.

While Kuran and other RC theory trailblazers do not make the following point, a recent study of cascading online movie ratings finds that when there is a larger audience for one's own public expressions, an individual is more likely to voice positive than negative positions due to social pressure, becoming less likely to join negative cascades (Lee, Hosanagar, and Tan 2015). If we assume that one's community is an important expected audience, the following proposition that contrasts with IC theory should be true if this finding extends to regime defection cascades:

H9. Individuals in larger communities will be less likely to defect than those in smaller communities.

Youth are also anticipated to be among the earliest and most eager defectors because "new entrants to society" are more likely to engage in independent thinking and be less resistant to novel ideas (Kuran 1995, 188).⁵ In addition, the young will have more of their life to live under whatever future regime exists and so would stand to benefit more from a positive regime change (Shadmehr and Haschke 2016), and greater expected benefits to regime change should lower the threshold for defection (Kuran 1995, 254). Hence:

H10. Younger individuals will be more likely to defect than older ones.

Since RC theory begins from a situation in which social pressures lead people to suppress private opposition to the regime, we would expect people who are the most vulnerable to proregime social pressures to be the most resistant to joining a defection cascade. This might apply to those on state pensions, which would be another reason to expect H10 to hold. Recent research has also demonstrated that vulnerability can be particularly strong for people whose livelihoods depend on state-sector employment (Frye, Reuter, and Szakonyi 2014; Jiang and Yang 2016). One might also expect ethnic or religious minorities and women to be more vulnerable than majority groups or men.⁶ This yields:

H11. Individuals employed by the state will be less likely to defect than those who are not employed by the state.

H12. Ethnic and religious minorities will be less likely to defect than those in the majority groups.

H13. Women will be less likely to defect than men.

Finally, if Pearlman's interpretation is correct that regime defection cascades hinge on emotions, we anticipate:

H14. Individuals who experience dispiriting emotions when thinking about regime actions will be less likely to defect than others.

THE CASE OF UNITED RUSSIA'S CRISIS 2011–12: A PANEL SURVEY

A panel survey can be a unique tool for empirically testing theories of defection from ruling parties. By interviewing the very same individuals before and after a defection cascade, we gain true and comparable measures of public support. The measures are true because the very act of telling a stranger who appears at one's doorstep and claims to be from a polling agency whether one supports the regime is itself a measure of public support. That is, there is no need here to assume that responses to our survey are in each and every case accurate reflections of people's actual private views or for whom they voted. Instead we treat these responses as important forms of public (non)support in their own right. While the forms of public support for a regime are many, the type we study here is as good as any for testing theories of regime defection cascades.

Russia between 2008 and 2012 presents a strong context for such analysis because (a) it is widely agreed then to have been a nondemocratic regime featuring a dominant party, Putin's United Russia Party; (b) this party went from a high level of support to a much lower level in this period; and (c) observer accounts provide masses of firsthand evidence that these defections featured a strong element of cascading. United Russia's dominance was arguably at its peak when it won an outright two-thirds majority (enough to amend

⁵ For regimes that endure for multiple generations, however, Kuran (1995, 113–4, 141) observes that youth come to lack the private information that the regime is bad that their parents once had because it ceases to become available in public discourse.

⁶ On ethnic and religious nationalism in Russia, see Kolstø and Blakkisrud (2016). On the patriarchal nature of contemporary Russian society, see Sperling (2014).

the constitution on its own) in the parliamentary election (to the lower and more important house of parliament, the State Duma) of December 2007 and then claimed victory in the presidential contest, as its nominee Dmitry Medvedev handily dispatched of rivals in the March 2008 election (his patron Putin had made room for him by shifting to become prime minister). By fall 2011, however, the party's standing in the polls had noticeably declined and other signs of latent discontent had been building (Robertson 2013; Volkov 2012). A pivotal moment, by many accounts, was Medvedev's announcement on September 24, 2011, that he was sacrificing his political ambitions to allow Putin to return to the presidency. His accompanying statement that this had been planned long ago seemingly cast much of Medvedev's own presidency as a charade and voters as dupes, offending many citizens (Hale 2011; Krastev and Holmes 2012). The pre-election decline in support translated into a stunning drop of even its official vote count to below 50% in the December 2011 Duma election (49.3%, to be exact, down 15 percentage points from 2007). The regime was revealed as unable or unwilling to save the party from its poor result by fraud, although there was considerable public evidence of sufficient fraud taking place to have kept United Russia's announced result from being even worse (Enikolopov et al. 2013).

In this context, initially small efforts at protest shocked almost all observers (even their organizers⁷) when they resulted in tens of thousands of people turning up in Moscow's streets in two major rallies in December 2011 and accompanying events in other cities-the largest such manifestations since the early 1990s. Reports related euphoria in what seemed to be a sudden public revelation of widespread dissatisfaction with United Russia (and even the regime itself). This included many media personalities and other public figures who had before been content to suppress any dissatisfaction with the regime in order to make their careers but who now suddenly decided to take a stand. For example, the well-known writer Grigorii Chkhartishvili (pen name Boris Akunin) was asked in a February 2012 interview why, after years of avoiding active politics, he suddenly joined the protest movement in December 2011. In terms that Kuran could hardly have improved upon, he replied that he had nursed discontent since Putin had been elected but had limited himself only to "muttering" a few things on a very few occasions because:

Regime representatives were stunned as Moscow protests reached over 100,000 people by some accounts.

Showing signs of panic, the authorities evidently concluded they could not repress such large crowds in this moment of weakness and responded instead with some makeshift liberalizing reforms to placate the protesters. This included relaxing the media environment, even allowing on the main television stations some opposition voices that had long been absent except where portrayed in a negative light. The Kremlin then remobilized, conducting a massive campaign to rebuild support for Putin and his return to the presidency in the March 2012 election based on "conservative" values that had strong support outside the rebellious cities (Petrov, Lipman, and Hale 2014; Smyth and Soboleva 2014). The campaign downplayed United Russia, though he still accepted the party's nomination. These actions, leaving most fundamental controls on the election process intact, did take much of the steam out of the protest movement and allowed Putin to recover his support. By the time of his reelection victory, United Russia's ratings had revived somewhat, too, far behind its 2008 popularity level but still comfortably ahead of rival parties even by the most independent surveys. All the same, many were still predicting the party's continued decline as of late spring 2012 (e.g., Ivanov and Samokhina 2012; Krastev and Holmes 2012; Wolchik 2012). In September 2016, in the next Duma election, conducted under new mixed-system rules (half of the seats allocated on the basis of national party lists and half in territorial districts), United Russia would more than hold its own.8

What apparently happened in 2011–12, then, is at a minimum a significant wave of defection from United Russia and, by many field accounts, a cascade that the regime was ultimately able to stanch through tactical concessions and a countermobilization that built on strong genuine support that the regime had long been believed to hold among certain large segments of the population with concentrations in more rural areas.⁹

We were able to measure the "before" and "after" levels of public support through the Russian Election Studies (RES) series of surveys of voting-age subjects that have been regularly conducted right after Russian federal election cycles. Crucially, the spring 2008 and spring 2012 surveys included a panel component, asking the same set of respondents each time many questions pertinent to both the parliamentary elections of 2007 and 2011 and the presidential elections of 2008 and 2012.¹⁰ This survey accordingly captured the high water mark of the United Russia Party's dominance

[[]T]he time was not right... I considered my selfish opposition (*fronderstvo*) accordingly, as a strictly personal gesticulation, not having any social significance. But in December (2011), I saw that around me there had suddenly appeared very many who thought like me. And this was already something serious. Serious enough to make possible putting aside all personal projects (Akunin 2012).

⁷ The New Times, December 12, 2011, 2–7.

⁸ The party's official proportional-representation vote share in 2016 was 54.2 percent, not far off from the 49.3 percent it received in 2011 when all seats were allocated this way, but its seat count swelled from 238 of 450 in 2011 to 343 in 2016, entirely because of successes in the territorial districts.

⁹ Theories of cascades generally recognize that an injection of new information or other interventions can halt a cascade under certain circumstances, or that localized cascades can occur (Bikhchandani, Hirshleifer, and Welch 1992, 1006; Kuran and Sunstein 1999, 687, 743).

¹⁰ RES surveys, conducted through the World Research Corporation, are based on a multistage area probability sample designed to be nationally representative for Russia, employing the Kish method for identifying a single person from each household. The first wave

in March–May 2008 and spanned the party's 2011–12 nadir, with the second wave in the field during April– May 2012, just after Putin's and United Russia's ratings had begun to recover. While it would have been ideal to have organized additional waves of the panel in, say, September 2011 and early January 2012, when the outlook for the regime was most uncertain, such is fate that this was not possible. But it makes methodological sense to begin the study at the party's peak of dominance (2008), and the April–May 2012 wave of the survey nevertheless captures patterns of support after the posited cascade had fully run its course but also when it was still unclear whether the defection wave would ultimately succeed or fail.

Our survey panel consists of 661 people from the original 2008 sample of 1,130 whom we were able to re-interview in 2012. Of the 1,130, 516 said that they had cast a vote for United Russia in 2007, and 334 of these were successfully re-interviewed in 2012. Naturally, the set of successfully re-interviewed people cannot be considered fully representative of the population as of 2012. It will exclude people too young to be polled in 2008 but who were adults by 2012, and may well underor over-represent other groups in the population. To get a sense of how severe this representativeness issue is, we estimated a logit model to test whether any of the factors that interest us as possible correlates of dominant party defection are indeed correlated with selection into the sample. The results, presented in OA Table 1 in the Online Appendix, indicate that only two variables of interest are statistically significantly (using 95% confidence intervals) correlated with disappearing from the set of 2008 United Russia supporters in the 2012 survey wave. Those living in larger urban communities and those with lower levels of education are more likely to drop out, and if one very slightly relaxes the confidence interval cutoff to 95.7%, men are also more likely to drop out. Presumably, this is because they are more mobile social groups in the Russian context. While the theory discussed above gives us reason to expect all of these variables to be related to defection from a ruling party, the concept of mobility is not part of this logic. We do not expect this slightly patterned sample attrition to significantly impact our findings even for these three variables other than potentially to reduce the chances we find them significant since we have fewer data points on them to analyze. To confirm, we ran the main regression analysis reported below with a Heckman probit selection model, which models the attrition process as well as the equation of primary interest. This exercise resulted in only insignificant changes in our findings.¹¹

TABLE 1.	Percentage of United Russia
Supporters	s in 2008 and 2012 (shares saying
they voted	for United Russia in 2007 and 2011)

	Whole Survey	Panel
In 2008 survey (2007 election)	45	53
In 2012 survey (2011 election)	40	51

DEFECTING FROM UNITED RUSSIA

We adopt as our chief measure of public support whether a respondent said in a postelection survey that they voted for United Russia in that election. While cascade theorists often treat voting as a process that reveals private information due to secret ballot assurances (Kuran 1995, 341; Kuran and Sunstein 1999, 724), actual voting is not precisely what we are studying. Instead, we are studying people's public statements (given to a stranger, the survey interviewer) about how they voted. Reading the results in this light, our survey registers a net decline in public United Russia support amongst the population between 2008 and 2012. As Table 1 illustrates, such dominant party supporters constituted 45% of the population in 2008 and 40% in 2012.¹² This change gets reduced somewhat when we move from estimates based on the whole survey population to estimates based on the set of respondents in the panel, those who were successfully reinterviewed. Using the panel only, 53% claimed to have voted for United Russia in 2008 and 51% in 2012. Of course, the figures here for 2012 reflect not only United Russia's losses relative to 2008 but new supporters that the party managed to bring in on the coattails of Putin's comeback presidential election campaign in early 2012. OA Table 2 in the Online Appendix provides more information about the distribution of relevant dispositions in Russia as of 2008 and 2012, both among the population as a whole and United Russia supporters.

We break the panel down into four categories with respect to whether respondents claim to have voted for United Russia in 2007 and/or 2011. These are summarized in Table 2. We dub *loyalists* those individuals, comprising about a third of our panel, who both times claim to have cast their ballots for Russia's dominant party. We call *oppositionists* those who would not say in either wave of the survey that they voted for it, a category making up another third of the panel respondents. The category that interests us most here is the *defectors*: those who claimed in 2008 to have voted for United Russia in 2007, but did not tell survey researchers in 2012 that they had done so in 2011 when asked. About 16% of our panel falls into this category.

discussed in the present article included 1,130 respondents and was taken March 18–May 8, 2008. Of these respondents, 661 were successfully re-interviewed in 2012 during the period April 1–May 18, 2012. These 661 were supplemented during the same period by another 1,021 respondents to compose a nationally representative sample for 2012 consisting of 1,682 respondents. These data are available for replication and other studies at doi:10.7910/DVN/DTIEPU.

¹¹ The more data-taxing Heckman probit results are presented in OA Table 4 in the Online Appendix. Along with community size, education, and gender in the selection equation, we include a variable

expected to be correlated with mobility but not defection: whether a respondent reported having children living with them at home.

¹² Frequencies reported in this article are calculated using weights appropriate for the Kish sampling technique.

TABLE 2.Patterns of Self-Reported Votingfor United Russia

Lovalists (support in 2008 and 2012)	36
Oppositionists (no support 2008 and 2012)	33
Defectors (support 2008, no support 2012)	16
Joiners (no support 2008, support 2012)	14
	14

Note: Percent of population, N = 661.

TABLE 3. For Which Parties Did Defectors Say They Voted in 2012 and Joiners Say They Voted in 2008?

Party	Who Defectors Backed in 2012	Who Joiners Backed in 2008
Communist Party	14	16
A Just Russia	18	12
LDPR	9	5
Yabloko	2	1
Right Cause	1	
Agrarian Party		2
Civic Force		2
Democratic Party		2
Patriots of Russia		1
Spoiled ballot	2	2
Did not vote	45	50
Hard to say/refuse	10	8
N	108	97

This is slightly more than the 14% turning up in the category of *joiners*, those who did not support United Russia in 2008 but wound up supporting it in our 2012 survey.

Whither the defectors in 2012 and whence the joiners? Table 3 indicates that in both cases, a plurality moved in or out of the category of self-declared nonvoters. Some 45% of defectors said that they did not vote at all in 2011, while 50% of joiners had said in 2008 that they did not cast a ballot in the 2007 Duma election. A tenth of defectors and 8% of joiners moved in and out (respectively) of the category of those unable or unwilling to venture a response, the kind of behavior which Carnaghan (1996) finds can indicate a form of apathy or withdrawal. When defectors did say they went to the polls in 2011, they tended most often to support A Just Russia, a left-of-center party which observers typically consider a loyal opposition group (March 2009) but which did take a sharply critical line against the Kremlin and United Russia in 2011 (Hale 2011). The LDPR, which captured 9% of our defectors' self-reported votes, is also widely regarded as a loyal opposition party, though one interpreted as regularly capturing protest votes due almost entirely to its leader Vladimir Zhirinovsky's flamboyant rhetoric. The more clearly opposition Communist Party (leftist) and Yabloko Party (liberal) got 14% and 2% of defectors' self-reported votes, respectively, and another

2% claimed to have spoiled their ballots. About twofifths of joiners came from other parties, mostly A Just Russia and the KPRF.

APPROACH

As noted above, the data tell us that about a third of respondents in our panel switched either to or from supporting United Russia between 2008 and 2012, with the share of defectors being a bit larger than the share of joiners. One possibility is that this movement reflects standard measurement error: Surveys are imperfect measures of true dispositions that can be thrown off by question wording, interviewer effects, and respondents' own awareness or mood on a given day (Green, Palmquist, and Schickler 2002). Because such factors are random with respect to the important variables in our study, if this were the only explanation for the difference between the two waves in our panel survey, we should not find theoretically interesting variables to be systematically correlated with defection from United Russia. As the tables below make clear, this is not the case; instead, we seem to be dealing with nonrandom changes in support for United Russia between 2008 and 2012.

To study patterns of defection, we examine the 334 respondents in our 2008 survey who originally said that year they had cast a ballot for United Russia in the December 2007 Duma elections and who were successfully re-interviewed in 2012. This number is naturally not as large as we would have chosen had greater funding been available and had we anticipated a regime defection cascade with sufficient credibility to raise such funding. But since such obstacles are inherent to research on complex and mercurial phenomena like regime defection cascades, our dataset represents the best opportunity of which we are aware to study the microfoundations of a regime defection cascade. An N of 334, while not ideal, supplies enough information for meaningful tests of the propositions developed above.

For those respondents who supported United Russia in 2008, we created a dummy variable coded 1 for those who had defected by 2012 and 0 for those who had not. This is our primary dependent variable, and since it is binary, it is appropriate to use the well-established logit model. Following Miller and Shanks (1996) and Colton (2000), we report the magnitude of the "effects" as total *effects* since these are highly intuitive.¹³ A total effect is the change in likelihood of defection that would be generated by an otherwise typical individual (someone who has the median score on all other relevant variables) moving from the lowest value of a given factor to the highest value, factoring in information we have that some independent variables may be influenced by other independent variables. That is, if factor A influences defection both on its own and by influencing

¹³ We calculate them using the software CLARIFY with *Stata*. CLARIFY generates estimates of total effects from highly opaque logit (and multinomial logit) coefficients through a stochastic simulation technique (King, Tomz, and Wittenberg 2000; Tomz, Wittenberg, and King 2003).

factor B, the total effect measures both the direct and indirect effects. This is accomplished by reporting factors' effects as estimated only with controls that are at the same or prior stages in a causal chain. For example, H10 posits that young people are more likely to defect from United Russia simply by virtue of being young. Some readers might suspect young people also to be more likely to use the Internet, a media form which H4 leads us to expect will also promote defection. If the effects of both youth and Internet usage were calculated only when both were included in the same equation, the model would not take into account the fact that we know the direction of any causal relationship there might be between youth and Internet usage: Being younger can make one more likely to use the Internet, but using the Internet cannot make one any younger. We are safe in calculating the total effect of youth by including only "age" and other "first-stage" variables such as gender in the equation. But to calculate the total effect of Internet use (a secondary-stage variable in this simple example), we must include age as a control. Following prior practice (Colton 2000; Miller and Shanks 1996), the analysis that follows begins by assuming the following stages, with latter-stage variables being placed downstream because it is believed they are more influenced by the preceding variables than the other way around: demographic variables (stage 1), perceptions of economic well-being (stage 2), values (stage 3), partisanship (stage 4), presidential performance evaluations (stage 5), and patterns of media use (stage 6).¹⁴ In the tables that follow, the stage of each variable is indicated by the number in subscript.

To sharpen the focus on cascading, our analysis controls for the possibility that defection results not only from cascading but also from correlated but not interdependent shifts in public beliefs. For example, if the economy suddenly collapses and each individual suffers severely, each person might cease supporting the regime based on his or her own private information regardless of what others are observed doing; these individuals' changes will be correlated with each other but not dependent on each other.¹⁵ We thus include four control variables that capture this possibility in different ways. First, we consider the extent of change in individuals' positions on major policy issues in a given direction between 2008 and 2012 (attitudes on how Russia should treat the West and attitudes toward

The analysis proceeds in four steps. First, we take advantage of the panel design and consider the overall pattern of defection we find in the data using only predictors from 2008, where we have the most confidence that we are free of endogeneity concerns.¹⁶ Second, we test those parts of the theory elaborated above that can only be evaluated with data gathered in 2012 because either the questions are about what has happened since 2008 or the questions happened to not be asked in 2008. Variables that can only be tested using 2012 data are treated as later stages in the total effects calculations; that is, the total effects of 2008 variables are calculated without the 2012 variables included in the equation, but the total effects of the 2012 variables are calculated with all of the 2008 variables in the equation.¹⁷ Third, we explore the determinants of different patterns of defection, considering why some defect by moving to true opposition parties while others simply decide not to vote. And fourth, we present an analysis of patterns among those who began in 2008 as nonsupporters of United Russia but in 2012 joined it, going against the net flow but likely responding to state authorities' comeback effort in early 2012. For the sake of presentation, we discuss the specific measures we use for the different propositions as we present the results, referring readers to the Online Appendix for the specific wording of the survey questions utilized.

CORRELATES OF DEFECTING FROM UNITED RUSSIA 2008–12

Table 4 presents our core findings on the relationship between variables of interest and defection from United Russia during the interval 2008–12 and relates them to our hypotheses. Several results are in line with informational cascade theory. For one thing, typical 2008 United Russia supporters who lived in Russia's largest cities were 41 percentage points more likely to defect than those in Russia's smallest quintile of population points. And in follow-up analysis, we find that the effect is specifically about community size, not anything special about Moscow and St. Petersburg as some

¹⁴ Results do not change substantially if we dispense with the stages. Tables reporting calculations made when all variables are in the equation together are presented in the Online Appendix (OA Table 3, OA Table 4, OA Table 5, OA Table 6) for each of the tables reporting total effects here in the main text. In particular, OA Table 3 reports all of the results from all of the models used to compose our main results table, Table 4. Total effects are reported in the main text because we believe them superior since they take into account what we know about likely patterns of mutual causality among the independent variables.

¹⁵ This correlated but not interdependent behavior is sometimes called "herding," though the precise line between "cascading" and "herding" is blurry in the literature, starting with some of the founders of these research agendas (Banerjee 1992; Bikhchandani, Hirshleifer, and Welch 1992; Celen and Kariv 2004; Chamley 2003; Smith and Sørensen 2000).

¹⁶ That is, since the defection occurred only after the 2008 survey was taken but all independent variables come from the 2008 survey, it cannot be the case that the act of defection influenced any of the values of the independent variables.

¹⁷ Within the set of 2012 variables, we treat assessments of economic well-being as causally prior to other political dispositions and expectations and treat media use in 2012 as a final stage variable. This makes them the seventh, eighth, and ninth stage variables in our analysis.

Variable	Total effect (95% conf.)	Hypotheses Supported	Hypotheses Not Supported
Larger community size (quintiles) 20081	41 (24,56)*	H2	H9
Age 20081	- 29 (-47,-10)*	H10	
Woman 20081	- 20 (-33,-08)*	H13	
Education 2008	- 36 (-57,-12)*	H1	H8
Republic 20081	1 (–13,18)		H12
Russian 2008	13 (-2,23)		H12
Orthodox 2008	1 (–17,15)		H12
Gained from 2000s 2008 ₂	5 (-16,28)		H3
Democracy good fit for Russia 20083	- 43 (-64,-20)*	H3	H3.1
United Russia partisan 2008₄	- 5 (-15,5)		
Approves Putin 20085	- 35 (-71,4)		H3
Internet user 20086	-3 (-18,14)		H4
REN-TV news watcher 20086	2 (-10,17)		H5
Employed in state sector 20127	- 11 (-25,1) [′]		H11
Pocketbook up last year 2012	- 16 (-58,29)		H3
Pocketbook up last year: change 2008-127	- 55 (-86,-8)*		
Promarket: change 2008–128	- 12 (-40,18)		
Anti-Western: change 2008–128	33 (1.70)*		
Disappointed with September 24, 2011 ₈	18 (-6.50)		H14
Other party likely to win in 10 years 2012	15 (2,33)*	H6	
A majority supports Putin 2012 ₈	- 17 (-27,-7)*	H7	
Social network user 2012	- 1 (-11,0) ²		H4

TABLE 4. Correlates of Defecting from United Russia 2008–12

Note: Among panel respondents who reported voting for United Russia in 2008; logit model, total effects (%), 95% confidence interval in parentheses, subscripts indicating stages in the total effects calculations. $*p \le 0.05$. N = 334.

might suspect.¹⁸ IC theory also successfully predicts a finding that specialists on Russia are likely to consider counterintuitive: Otherwise ordinary people with the lowest levels of education, once other demographics are controlled for, were 36 percentage points more likely to defect than were those with the highest levels. Instead of educated people being more associated with opposition, it appears that they were more likely cautiously to rely on their own private information, leaving the rush to defection to consist more of people with lower levels of education relying on the crowd for information about what to do. Even more direct evidence that defection involved relying on the crowd comes from two additional findings: Average people who believed that a party other than United Russia had a chance to win in the next ten years were 15 percentage points more likely to defect than were those who did not (in line with H6), and individuals who thought that a majority supported Putin were 17 percentage points more likely to act in line with that perceived majority by not defecting (consistent with H7).¹⁹ In what is likely to be a surprise for analysts who have emphasized the role of social media in fueling Russia's 2011 protests (e.g., White and McAllister 2014), we find no evidence

that the Internet and more-independent sources of information promoted defection from United Russia.²⁰

There is only limited evidence that people with more negative "priors" were more likely to defect, and the pattern found is surprising. To begin, bad economic experiences under Putin and even approval of Putin's performance as of 2008 did not make one any more or less likely to defect.²¹ Nor is there evidence that the 2011–12 defection wave was driven by previously latent democrats among the party's base. In fact, average

¹⁸ That is, when we included (in addition to community size) a variable coding whether a respondent lived in Moscow or St. Petersburg, it had no significant effect.

¹⁹ These two results are also consistent with the argument that people simply have a preference for being on a winning side, or the side of a majority.

²⁰ Binary variables coded 1 if a respondent in the 2008 survey reported, respectively, being an Internet user and having watched news in the last week on REN-TV, a channel providing relatively objective political coverage at the time. Since some readers are likely to find the negative results on the Internet's influence surprising and wonder whether our 2008 measure was too early to capture the most politically important Internet usage patterns for 2011-12, we also tried adding several other media variables created from 2012 survey responses: self-reported Internet use for any purpose, use of the Internet as one's staple news source, REN-TV news consumption, and listening to independent Ekho Moskvy Radio news. None of these are statistically significant. We also broke down the general variable capturing social network usage into the three major sites used in Russia: Odnoklassniki ("Classmates"), Vkontakte (Incontact), and Facebook. The only one of these to be significantly related to defection from United Russia was Facebook, but in the opposite of the expected direction: otherwise typical 2008 United Russia supporters who used Facebook were 12 percentage points less likely to defect in 2012 than others. We leave this finding to be interpreted in future work.

²¹ In this case, people who reported in 2008 having lost more than they had gained from Putin-era reforms (a five-point scale) and people who in 2008 were less approving of Putin's performance in office on a five-point scale (despite having said they voted for him in 2008). The latter variable would, though, meet a 90% significance standard.

party supporters who thought democracy was a "very good fit" as a system of government for Russia were 43 percentage points less likely to defect than those who thought democracy was a very bad fit for Russia. While this finding might seem puzzling to Russia watchers, reframing it makes it more sensible: What we seem to have witnessed, in part, in 2011–12 is United Russia's less democratic elements abandoning it for more authoritarian alternatives that were abundantly available among parties registered at the time—an interpretation that finds further support in results reported in the next section. Thus we wind up disconfirming H3.1 at the same time that the more general H3 is confirmed.

There is also evidence consistent with dualpreference models, in particular theories of reputational cascades. In three instances, results that support IC theory also support RC theory: the findings that expectations of opposition success and beliefs about Putin's popularity are significant predictors of defection (in line with H6 and H7) and the (albeit thin) correlation between negative regime experiences and defection (H3). Conversely, the negative findings regarding media defy both RC and IC theory (H4, H5). Distinct evidence of reputational cascades (not anticipated by IC theory) comes from two other results, however: Women, arguably more vulnerable to social pressures than men, are 20 percentage points less likely to defect than men; and the youngest individuals, thought more ready to embrace new ideas and standing to gain more from future change, are 29 percentage points more likely to defect. It may also bear noting that were we to have adopted the slightly less strict 90% significance standard, two other socially vulnerable populations would have been found less likely to defect: people employed in the state sector and ethnic minorities (non-Russians). Significant findings contradicting hypotheses emerging out of RC theory are those for education, where IC theory performs better, and potentially for larger communities, though in principle the idea that the greater social heterogeneity found in urban areas could make cascading more likely is consistent with RC logic as well as IC logic despite the argument of Lee et al. (2015). We also include the best measure available in the survey to test Pearlman's theory of emotions, creating a binary variable coded 1 for people who responded with a dispiriting emotion (disappointment) to the September 24 announcement that Putin and Medvedev would switch posts. The disappointed prove to be no more or less likely to defect than anyone else.²²

There is an indication that at least some of the defection wave may have resulted from people changing their opinions between 2008 and 2012 on issues linked to regime support. In particular, otherwise typical United Russia supporters whose personal material fortunes had deteriorated the most the year prior to the 2012 survey relative to how they had fared prior to the 2008 survey were 55 percentage points more likely to defect.²³ Interestingly, changes in material conditions in the year prior to 2012 alone do not appear associated with defection; what matters is whether these changes were better or worse than the changes leading up to the 2008 vote. And people who had become more anti-Western between 2008 and 2012 were more likely to defect than others,²⁴ though a change in one's views on the market did not appear to impact defection.²⁵ United Russia's partisans were also no less likely to defect than were others who had backed the party in 2008.²⁶ These findings are not inconsistent with cascading, however, instead simply indicating other processes were at work too.

EXPLAINING DIFFERENT KINDS OF DEFECTION

While the main story is conveyed in Table 4, our study also finds some important nuances in the precise form defection took. As summarized in Table 3, some defectors said they voted for another party, while others declared they did not vote at all. Table 5 goes a step beyond Table 4, reporting results from a multinomial logit analysis that tells us what variables are correlated with remaining loyal²⁷ and with two sorts of defection: saying one voted for another party and not saying one voted for another party.²⁸ This distinction is of significance in light of a voting strategy prominently advanced ahead of the 2011 Duma election by leading opposition blogger-politician Aleksei Navalny.²⁹ Navalny (2011) argued that in Russia's proportional representation voting system (since modified), United Russia's opponents should vote for any other party likely to clear the representation threshold (then 7%, since modified), even if this party may not be a genuine

 $^{^{22}}$ This is, admittedly, a weak test and so should not be treated as definitive disconfirmation of her theory in the case of Russia, but it serves as a starting point given the lack of better data.

²³ The difference between two identical five-point scales (one for 2008, one for 2012) on how an individual's material situation had changed in the 12 months preceding the interview, 2008 subtracted from 2012.

²⁴ The difference between two identical four-point scales where the highest value means people think Russia should treat the West like an enemy, with other responses (in declining order) being as a rival, as an ally, or as a friend, 2008 subtracted from 2012.

²⁵ The difference between two identical three-point scales (one for 2008, one for 2012) where the highest value reflects support for continued market reform, the middle value captures backing for the status quo, and the smallest value represents a desire to return to socialism, 2008 subtracted from 2012.

²⁶ The measure reported in Table 4 is binary, based on Colton's (2000) "transitional partisanship," which records as a party's "partisan" anyone who names that party (without being given a list) when asked if there is any party they would call "my party" or if there is one that "more than the others reflects your interests, views, and concerns."

²⁷ Even though the multinomial logit approach is more taxing of the data, it is worth noting that the variables found to be significant in Table 4 generally remain significant predictors of whether one defects, testifying to their robustness.

²⁸ This category mainly consists of people who said they did not vote, but also includes saying one cast a spoiled ballot, not giving a definite answer, or declaring support for a nonexistent party (a very rare volunteered response), all of which for our purposes constitute forms of defection. Since multinomial logit is taxing on data, we do not have enough observations to allow for separate examination of all these different categories of voting and nonvoting defection.

²⁹ We thank an anonymous reviewer for this suggestion.

Variable	No defection	To a party	To a nonvote
Larger community size (quintiles) 2008 ₁	- 41 (-56,-25)*	12 (0,30)*	28 (17,41)*
Age 2008 ₁	29 (9,47)*	-8 (-21,7)	-21 (-37,-7)*
Woman 20081	20 (7,34)*	- 12 (-22,-4)*	-8 (-18,0)
Education 20081	38 (11,62)*	-4 (-20,10)	- 34 (-56,-14)
Republic 2008 ₁	-2 (-19,13)	1 (-9,17)	0 (-9,12)
Russian 2008 ₁	- 12 (-23,5)	8 (2,14)*	4 (-11,13)
Orthodox 2008	-0 (-15,19)	-1 (-15,8)	1 (-16,11)
Gained from 2000s 2008 ₂	-6 (-30,16)	4 (-17,28)	1 (-15,16)
Democracy good fit for Russia 2008 ₃	44 (20,68)*	- 30 (-58,-6)*	- 14 (-32,0)
United Russia partisan 20084	5 (-6,16)	-0(-7,7)	-5 (-13,2)
Approves Putin 2008 ₅	36 (-1,69)	-22 (-61,2)	- 14 (-48,13)
Internet user 2008 ₆	3 (-14,17)	2 (-10,17)	-5 (-13,7)
REN-TV news watcher 2008 ₆	-3 (-18,11)	1 (-7,14)	2 (-8,17)
Employed in state sector 20127	13 (-2,26)	-1 (-10,7)	- 12 (-21,3)*
Pocketbook up last year 20127	15 (-33,57)	-9 (-42,20)	-7 (-42,32)
Pocketbook up last year: change 2008–127	57 (8,85)*	- 16 (-48,15)	-41 (-73,-3)*
Promarket: change 2008–128	11 (-20,38)	-1 (-8,9)	- 10 (-34,17)
Anti-Western: change 2008–128	-40 (-75,-7)*	4 (-1,14)	36 (5,74)*
Disappointed with September 24, 20118	- 14 (-51,8)	5 (-0,23)	9 (-10,47)
Other party likely to win in 10 years 20128	-9 (-27,4)	14 (4,35)*	-5 (-14,3)
A majority supports Putin 20128	14 (3,25)*	-5 (-12,-1)*	-9 (-19, 1)
Social network user 20129	1 (-11,12)	-0 (-2,3)	-1 (-12,11)

TABLE 5. Correlates of Different Forms of Defection from United Russia 2008–12

opposition party, on the grounds that this would act to reduce United Russia's share of the seats in parliament. If Russia's opposition abstained from voting, on the other hand, United Russia would be left as the party with the largest share of votes cast and hence the most seats. If its opponents cast spoiled ballots, United Russia, as the leader in the vote count, would get the majority of the seats corresponding to these spoiled ballots. Since only 3% of all respondents said they voted for a party that did not clear the threshold (Yabloko or Right Cause), our distinction between defecting to any party and defecting to an expressed nonvote can be interpreted as a distinction between forms of defection that are more and less damaging to the dominant party's standing.

Examining the results summarized in Table 5, we find only one factor to be a significant predictor of both kinds of defection. People living in the largest quintile of communities are 12 percentage points more likely to defect to a party and 28 percentage points more likely to express a nonvoting defection than are those living in the smallest quintile of settlements. All other significant factors correlate strongly with one form of defection only, supplying us with additional information about the nature of their effects.

Factors associated with defecting to another *party* include being a man (total effect of 12 percentage points), being an ethnic Russian (8 percentage points), holding that democracy is a poor fit for Russia (30 percentage points), thinking another party has a chance to win in the next decade (14 percentage points), and

believing Putin lacks majority support (5 percentage points). Considering who the alternative parties are helps us understand these patterns. As Table 3 reports, the parties raking in the most defectors were the Communists, the LDPR, and A Just Russia-all regarded as having strong authoritarian tendencies and positing an assertive or even aggressive nationalism relative to Putin and United Russia, with the LDPR especially being associated with appeals to a virile hard line (Sperling 2014). Bearing special mention, the fact that antidemocratic defectors are going precisely here, as distinct from a professed nonvote, adds confirmation to the idea that the "democracy" result in Table 4 does not reflect an irregularity in the data but is in fact capturing a tendency for United Russia's most authoritarian supporters to abandon ship for even more authoritarian alternatives. And the association of Russian ethnicity with defecting to nationalist party alternatives also supplies some support for H12 and reputational cascade theory, as the more socially vulnerable non-Russians are more likely to remain loyal to United Russia.³⁰ The finding that a belief in other parties' potential for victory correlates precisely with defecting to a party rather than to a nonvote position adds to our confidence that this variable is capturing what is expected. It is less clear why believing that a majority supports Putin would correlate specifically with defecting to a

³⁰ As can be seen in Table 4, Russian ethnicity is very close to the threshold of statistical significance in the analysis of the binary defection variable and would clear a standard of $p \leq 0.10$.

party as opposed to a nonvote position, a nuance we leave for future research to explore.

Turning to nonvote defection, it appears this is more characteristic of some of the least empowered defectors, including youth (21 percentage-point total effect), the uneducated (34 percentage points), and those whose pre-election pocketbook trends were worse in 2012 than in 2008 (41 percentage points). The finding that people who are not employed by the state are 12% more likely to engage in nonvote defection is consistent with research findings that state employees are prone to being mobilized to vote by their bosses (Frye, Reuter, and Szakonyi 2014).³¹ It is somewhat surprising that people who became more anti-Western in their outlook between 2012 and 2014 tended to defect more to nonvoting (a 36 percentage-point total effect) than to one of Russia's nationalist parties, leaving us with another wrinkle to explore in future research.

PATTERNS AMONG UNITED RUSSIA JOINERS

Just to make sure that defectors from United Russia are not being replaced by virtually identical joiners, a pattern that might suggest we are only witnessing some kind of structured fluctuation in and out of party support instead of patterned defection, we also conducted an analysis of the 327 people in our panel who were not United Russia supporters in 2008 to see who had gravitated to United Russia by 2012. Remarkably, our central finding is the statistical insignificance of almost all of the variables considered in our analysis of defection presented above (see Table 6). The only two variables observed in 2008 that turn out to be good predictors of being pulled into the ruling party's orbit by 2012 are living in an ethnic-minority-designated republic (28 percentage points more likely to become a joiner) and approval of Putin's performance in office as president (34 percentage points more likely to become a joiner). Only two variables measured in 2012 were correlated with joining: the belief that a majority supported Putin (total effect of 28 percentage points) and not being disappointed with the September 24 announcement that Putin and Medvedev would swap posts (18 percentagepoint total effect).

All this (plus the finding in Table 3 that fully half of joiners were nonvoters in 2008) would argue that while defection is highly patterned in the ways anticipated by theory, the people the party was able to regain were drawn primarily by the person of Putin and from a pool of people who had largely abstained from public politics in the past. This makes sense in the Russian context. As discussed above, after suffering a large wave of defection reflected in official voting results and tracking polls, the party's recovery came on the heels of Putin's comeback in the 2012 presidential campaign where his personal status as father of the nation was emphasized and United Russia's qualities

TABLE 6. Correlates of Rallying to United Russia in 2012 among People Who Did Not Say in 2008 that They Had Voted for United Russia in the Most Recent Election

Variables	Total effects
Larger community size (quintiles)	-11 (-27,4)
Age 2008	-1 (-20 21)
Woman 2008	_1 (_12 9)
Education 2008	_4 (_29 20)
Bepublic 2008	28 (9 15)*
Puesian 2008	10 (5 22)
Arthodox 2009	5(-5,23)
Gained from 2000a 2008	0(-11,10)
Democracy good fit for Puppin	0(-12,29)
2008 ₃	20 (-2,51)
United Russia partisan 2008 ₄	-1 (-16,15)
Approves Putin 2008 ₅	34 (12,53)*
Internet user 2008 ₆	-5 (-19,12)
REN-TV news watcher 2008 ₆	-9 (-21,5)
Employed in state sector 20127	-2 (-13,12)
Pocketbook up last year 20127	11 (–22,45)
Pocketbook up last year: Change 2008–127	18 (–28,60)
Promarket: Change 2008–128	-15 (-39.10)
Anti-Western: Change 2008–128	-15 (-48,17)
Disappointed with September 24.	-18 (-27,-10)*
2011 _°	
Other party likely to win in 10	-4 (-11,4)
A majority supports Putin 2012	28 (14 42)*
Social network user 2012	14 (-2.33)
000101 HELWOIK USEI 20129	1+(-2,00)

theses, subscripts indicating stages in the total effects calculations). * $p \le 0.05$. N = 327.

as a party deemphasized. Russia's ethnic republics have been found to be among the country's most disciplined political environments, where leaders are most capable of mobilizing resources in support of such a campaign (Hale 2003). And the correlation with the perception of Putin's majority support implies that people here, too, are following what they perceive to be the crowd; they just have a different view of where the crowd is moving than do the defectors. Whereas the party's aggregate support in spring 2012 looked on the surface not too dissimilar to that of spring 2008, the losses from the defection wave were being compensated by attracting a different sort of person, primarily those drawn to Putin's personality.

CONCLUSION

Our panel survey data spanning a wave of defections from the dominant United Russia Party between 2008 and 2012 supply significant leverage for building theory as to the behavioral microfoundations of regime defection cascades and cascading social phenomena more generally.

³¹ Table 4 also indicates state employment is very close to being a significant predictor of nondefection generally and would clear a standard of $p \leq 0.10$.

Regarding regime defection, this study confirms the insight from availability cascade theory that regime defection cascades are enormously complex processes, involving interactions among both informational and reputational chain reactions while still leaving room for some ordinary opinion change to occur. Particularly potent evidence of cascading is that United Russia supporters' decisions to defect were strongly linked to their beliefs about how many other people supported the regime and how likely any other party was to come to power in the foreseeable future. Strong evidence of informational cascading is IC theory's anticipation of an otherwise unexpected finding on education: While many observers would expect the educated to be most likely to go into opposition, informational cascade theory suggests they may be among the latest to join a wave of defection because they rely more on private information and are thereby less susceptible to jumping to the conclusion that a rapidly developing crowd must be right. IC logic also correctly predicts that defection is most likely to occur in the largest urban communities because the resulting diversity of thresholds makes a cascade more likely to propagate.

Findings that youth and socially vulnerable populations (women, ethnic minorities, and people employed by the state) are less likely to engage in defection are supportive of the notion that Russia's 2008-12 regime defection cascade also involved a significant reputational component. In line with both IC and RC theory, we find that negative prior experience with the regime makes one more likely to defect, but in a surprising way. The dissatisfaction appears not to be with a lack of democracy, but too much of it: The defectors were among United Russia's more authoritarian supporters, many of whom defected to relatively authoritarian parties. Also surprising is the almost complete insignificance of media variables, touted in nearly all theories to be major purveyors of cascades and beliefs. This may reflect that Russia as of 2008-12 was not nearly so closed an information space as some have presumed, and media exposure may gain significance in more closed media environments like communist East Germany or today's China.

Many of the results presented here are relevant not only for the study of political regimes, but for our understanding of cascading human behavior in general, an interdisciplinary research agenda that spans everything from financial markets to online movie ratings to media frenzies regarding both real and apparent social dangers (e.g., Alevy, Haigh, and List 2007; Kuran and Sunstein 1999; Lee, Hosanagar, and Tan 2015). At the most general level, this study confirms that informational and reputational cascades indeed tend to go together, validating the broader concept of availability cascades. Only a step down the ladder of generality, the findings remind researchers how important selffulfilling prophecies can be in driving social behavior, including cascades, and should prompt us not to neglect measuring and explaining people's expectations in our research designs. Some of the more specific findings may also travel to other kinds of cascades, including findings that youth, the less educated, and the least

socially vulnerable populations (e.g., men or representatives of the ethnic majority) have the greatest propensity to engage in cascade behavior once one controls for other factors. And the surprising insignificance of media in driving this cascade supports arguments that their role in cascades may be more complex and contingent than often supposed, neither clearly promoting nor counteracting cascading behavior that might also involve the spread of "fake news" or major shifts in accepted standards of morality (Farrell 2012; Reuter and Szakonyi 2015).

Because our method is replicable in many contexts, including authoritarian ones where surveys can still be conducted (Gandhi and Lust-Okar 2009), we hope our study will encourage others to follow our lead in different countries so that we can better study how different contexts influence outcomes. A major methodological hurdle, of course, is that theory holds that cascades are by their nature highly unpredictable, all the more so when we have so little research at hand into their empirical microfoundations. But researchers often can, for example, leave a public opinion study undertaken for other purposes open for "paneling" just in case a cascade happens to take place at a time when enough original respondents can still be re-interviewed. As Kuran notes, cascades can seem "unthinkable" before they actually happen, but a low-cost dose of preparation can pay off in the longer run should such an event happen at a time useful for the research.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit https://doi.org/10.1017/S0003055416000642.

REFERENCES

- Akunin, Boris. 2012. "Interv'iu: 'Putinskii Period Vkhodit v Final'nuiu Fazu." *The New Times* (5): 6. February 18. https:// newtimes.ru/stati/others/3f3cb49855736c5f03aa6c552e7f897bpytunskui-peruod-vhodut-v-funalnyu-fazy.html.
- Alevy, Jonathan E., Michael S. Haigh, and John A. List. 2007. "Information Cascades: Evidence from a Field Experiment with Financial Market Professionals." *The Journal of Finance* 62 (1): 151–80.
- Anderson, Lisa R., and Charles A. Holt. 1997. "Information Cascades in the Laboratory." *The American Economic Review* 87 (5): 847–62.
- Anderson, Lisa R., and Charles A. Holt 2008. "Information Cascade Experiments." In *Handbook of Experimental Economics Results*, eds. Charles R. Plott and Vernon L. Smith. Oxford, UK: Elsevier, 335–43.
- Banerjee, Abhijit V. 1992. "A Simple Model of Herd Behavior." The Quarterly Journal of Economics 107 (3): 797–817.
- Bartels, Larry M. 1988. *Presidential Primaries and the Dynamics of Public Choice*. Princeton: Princeton University Press.
- Beissinger, Mark R. 2013. "The Semblance of Democratic Revolution: Coalitions in Ukraine's Orange Revolution." American Political Science Review 107 (3): 574–92.
- Bikhchandani, Sushil, David Hirshleifer, and Ivo Welch. 1992. "A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades." *Journal of Political Economy* 100 (5): 992– 1026.
- Brownlee, Jason. 2007. Authoritarianism in an Age of Democratization. New York: Cambridge University Press.

- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. 2003. *The Logic of Political Survival*. Cambridge, MA: MIT Press.
- Callander, Steven. 2007. "Bandwagons and Momentum in Sequential Voting." *The Review of Economic Studies* 74 (3): 653–84.
- Carnaghan, Ellen. 1996. "Alienation, Apathy, or Ambivalence? 'Don't Knows' and Democracy in Russia." *Slavic Review* 55 (2): 325–63.
- Celen, Bogachan, and Shachar Kariv. 2004. "Distinguishing Informational Cascades from Herd Behavior in the Laboratory." *The American Economic Review* 94 (3): 484–98.
- Chamley, Christophe P. 2003. Rational Herds: Economic Models of Social Learning. Cambridge, UK: Cambridge University Press.
- Colton, Timothy J. 2000. *Transitional Citizens: Voters and What In-fluences Them in the New Russia*. Cambridge, MA: Harvard University Press.
- Ellickson, Robert C. 2001. "The Evolution of Social Norms: A Perspective from the Legal Academy." In *Social Norms*, eds. Michael Hechter and Karl-Dieter, Opp. New York: Russell Sage Foundation, 35–75.
- Ellis, Christopher J., and John Fender. 2011. "Information Cascades and Revolutionary Regime Transitions." *The Economic Journal* 121: 763–92.
- Enikolopov, Ruben et al. 2013. "Field Experiment Estimate of Electoral Fraud in Russian Parliamentary Elections." Proceedings of the National Academy of Sciences 110 (2): 448–52.
- Farrell, Henry. 2012. "The Consequences of the Internet for Politics." Annual Review of Political Science 15: 35–52.
- Frye, Timothy, Ora John Reuter, and David Szakonyi. 2014. "Political Machines at Work: Voter Mobilization and Electoral Subversion in the Workplace." *World Politics* 66 (2): 195–228.
- Gandhi, Jennifer, and Ellen Lust-Okar. 2009. "Elections Under Authoritarianism." *Annual Review of Political Science* 12: 403– 22.
- Geddes, Barbara. 1999. "What Do We Know About Democratization After Twenty Years?" *Annual Review of Political Science* 2 (1): 115–44.
- Granovetter, Mark. 1978. "Threshold Models of Collective Behavior." American Journal of Sociology 83 (6): 1420-43.
- Green, Donald, Bradley Palmquist, and Eric Schickler. 2002. Partisan Hearts and Minds. New Haven: Yale University Press.
- Hale, Henry E. 2003. "Explaining Machine Politics in Russia's Regions: Economy, Ethnicity, and Legacy." *Post-Soviet Affairs* 19 (3): 228–63.
- Hale, Henry E. 2006. Why Not Parties in Russia: Democracy, Federalism, and the State. New York: Cambridge University Press.
- Hale, Henry E. 2011. "The Putin Machine Sputters: First Impressions of Russia's 2011 Duma Election." *Russian Analytical Digest* 106 (21): 2–5.
- Hale, Henry E. 2013. "Regime Change Cascades: What We Have Learned from the 1848 Revolutions to the 2011 Arab Uprisings." *Annual Review of Political Science* 16 (1): 331–53.
- Huber, Rafael E., Vasily Klucharev, and Jörg Rieskamp. 2015. "Neural Correlates of Informational Cascades: Brain Mechanisms of Social Influence on Belief Updating." *Social Cognitive & Affective Neuroscience* 10 (4): 589–97.
- Huntington, Samuel P. 1968. *Political Order in Changing Societies*. New Haven, CT: Yale University Press.
- Innocenti, Alessandro, Alessandra Rufa, and Jacopo Semmoloni. 2010. "Overconfident Behavior in Informational Cascades: An Eye-Tracking Study." *Journal of Neuroscience, Psychology, and Economics* 3 (2): 74–82.
- Ivanov, Maksim, and Sofia Samokhina. 2012. "Partiia Ukhodishchikh." *Kommersant*: 2. Accessed February 8, 2017. http://www.kommersant.ru/doc/1924105.
- Javeline, Debra Lynn. 2003. Protest and the Politics of Blame: The Russian Response to Unpaid Wages. Ann Arbor: University of Michigan Press.
- Jiang, Junyan, and Dali L. Yang. 2016. "Lying or Believing? Measuring Preference Falsification From a Political Purge in China." *Comparative Political Studies* 49 (5): 600–34.
- King, Gary, Michael Tomz, and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44 (2): 347– 61.

- Kolstø, Pål, and Helge Blakkisrud, eds. 2016. The New Russian Nationalism: Imperialism, Ethnicity and Authoritarianism 2000-2015. 1st ed. Edinburgh: Edinburgh University Press.
- Krastev, Ivan, and Stephen Holmes. 2012. "An Autopsy of Managed Democracy." *Journal of Democracy* 23 (3): 33–45.
- Kuran, Timur. 1991. "Now Out of Never: The Element of Surprise in the East European Revolution of 1989." World Politics 44 (1): 7–48.
- Kuran, Timur. 1995. Private Truths, Public Lies: The Social Consequences of Preference Falsification. Cambridge, MA: Harvard University Press.
- Kuran, Timur. 2011. "The Politics of Revolutionary Surprise." *Project Syndicate*. http://www.project-syndicate.org/commentary/ the-politics-of-revolutionary-surprise (November 7, 2012).
- Kuran, Timur, and Cass R. Sunstein. 1999. "Availability Cascades and Risk Regulation." *Stanford Law Review* 51: 683.
- Lee, Young-Jin, Kartik Hosanagar, and Yong Tan. 2015. "Do I Follow My Friends or the Crowd? Information Cascades in Online Movie Ratings." *Management Science* 61 (9): 2241–58.
- Levitsky, Steven, and Lucan A. Way. 2010. Competitive Authoritarianism: Hybrid Regimes after the Cold War. New York: Cambridge University Press.
- Lohmann, Susanne. 1994. "The Dynamics of Informational Cascades: The Monday Demonstrations in Leipzig, East Germany, 1989-91." World Politics 47 (1): 42–101.
- Magaloni, Beatriz. 2006. Voting for Autocracy: Hegemonic Party Survival and Its Demise in Mexico. Cambridge; New York: Cambridge University Press.
- Makowsky, Michael D., and Jared Rubin. 2013. "An Agent-Based Model of Centralized Institutions, Social Network Technology, and Revolution." *PLoS One* 8 (11): e80380.
- March, Luke. 2009. "Managing Opposition in a Hybrid Regime: Just Russia and Parastatal Opposition." *Slavic Review* 68 (3): 504–27.
- McFaul, Michael. 2005. "Transitions from Communism." Journal of Democracy 16 (4): 212–44.
- Miller, Warren E, and J. Merrill Shanks. 1996. *The New American Voter*. Cambridge, MA: Harvard University Press.
- Navalny, Aleksei. 2011. "Chto nado delat' v eti tri dnia." Personal blog, December 1. http://navalny.livejournal.com/2011/12/01/.
- Onuch, Olga. 2014. Mapping Mass Mobilizations: Understanding Revolutionary Moments in Argentina and Ukraine. London: Palgrave Macmillan.
- Patel, David Siddhartha. 2013. "Preference Falsification, Revolutionary Coordination, and the Tahrir Square Model." *Annual Proceedings of the Wealth and Well-Being of Nations* 4: 61–71.
- Pearlman, Wendy. 2013. "Emotions and the Microfoundations of the Arab Uprisings." *Perspectives on Politics* 11 (2): 387– 409.
- Petrov, Nikolay, Maria Lipman, and Henry E. Hale. 2014. "Three Dilemmas of Hybrid Regime Governance: Russia from Putin to Putin." *Post-Soviet Affairs* 30 (1): 1–26.
- Pfaff, Steven. 2006. Exit-Voice Dynamics and the Collapse of East Germany: The Crisis of Leninism and the Revolution of 1989. Durham, NC: Duke University Press.
- Reuter, Ora John, and Jennifer Gandhi. 2011. "Economic Performance and Elite Defection from Hegemonic Parties." *British Journal of Political Science* 41 (01): 83–110.
- Reuter, Ora John, and Thomas Remington. 2009. "Dominant Party Regimes and the Commitment Problem: The Case of United Russia." *Comparative Political Studies* 42 (4): 501–26.
- Reuter, Ora John, and David Szakonyi. 2015. "Online Social Media and Political Awareness in Authoritarian Regimes." *British Journal of Political Science* 45 (1): 29–51.
- Robertson, Graeme. 2013. "Protesting Putinism." Problems of Post-Communism 60 (2): 11–23.
- Rubin, Jared. 2014. "Centralized Institutions and Cascades." Journal of Comparative Economics 42 (2): 340–57.
- Schelling, Thomas. 1960. "The Strategy of Conflict (Cambridge: Harvard University Press."
- Shadmehr, Mehdi, and Peter Haschke. 2016. "Youth, Revolution, and Repression." *Economic Inquiry* 54 (2): 778–93.
- Slater, Dan. 2010. Ordering Power: Contentious Politics and Authoritarian Leviathans in Southeast Asia. New York: Cambridge University Press.

- Smith, Lones, and Peter Sørensen. 2000. "Pathological Outcomes of Observational Learning." *Econometrica* 68 (2): 371–98.
- Smyth, Regina, and Irina Soboleva. 2014. "Looking beyond the Economy: Pussy Riot and the Kremlin's Voting Coalition." *Post-Soviet Affairs* 30 (4): 257–75.
- Smyth, Regina, Brandon Wilkening, and Anna Urasova Lowry. 2007. "Engineering Victory: Institutional Reform, Informal Institutions, and the Formation of a Hegemonic Party Regime in the Russian Federation." *Post-Soviet Affairs* 23 (2): 118–37.
- Sperling, Valerie. 2014. Sex, Politics, and Putin: Political Legitimacy in Russia. 1st ed. New York: Oxford University Press.
- Svolik, Milan W. 2012. *The Politics of Authoritarian Rule*. New York: Cambridge University Press.
- Tomz, Michael, Jason Wittenberg, and Gary King. 2003. *CLAR-IFY: Software for Interpreting and Presenting Statistical Results.* Stanford University, University of Wisconsin, Harvard University. http://gking.harvard.edu.
- Volkov, Denis. 2012. "The Protesters and the Public." Journal of Democracy 23 (3): 55-62.
- White, Stephen, and Ian McAllister. 2014. "Did Russia (Nearly) Have a Facebook Revolution in 2011? Social Media's Challenge to Authoritarianism." *Politics* 34 (1): 72–84.
- Wolchik, Sharon L. 2012. "Can There Be a Color Revolution?" *Journal of Democracy* 23 (3): 63–70.
- Yurchak, Alexei. 2005. *Éverything Was Forever, Until It Was No More.* Princeton: Princeton University Press.