

## Beyond the Polls

### GOOGLE QUERIES AND PUBLIC PROTEST VOLATILITY IN RUSSIA

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Declining satisfaction with a country's direction—a measure that typically tracks with declining public support for a government in power—has been shown to precede mass anti-government protest, as the Arab Spring illustrated. For example, the end of Hosni Mubarak's 30-year reign followed a steady decline in Egyptians' satisfaction with their country's direction—from 55 percent of respondents in the Pew Charitable Trust surveys in 2006 to 28 percent in 2010. His successor, Muhammed Morsi, was forced out of office after public satisfaction with Egypt's prospects plunged from the post-revolutionary high of 65 percent in 2011 to 30 percent in 2013.<sup>1</sup>

In Russia, according to Levada Center surveys, satisfaction with the country's direction has gradually declined, for the most part, from a high of 64 percent in December 2007 to 41 percent in November 2011, the month preceding the largest public demonstrations against Putin's rule. Over the same timeframe, approval of Vladimir Putin went down from 87 to 67 percent. Not only was this decline significantly less pronounced than in Egypt, most of it took place prior to 2011. Since January 2011, these measures varied within a 10-percent range (plus or minus 5 percentage points, or just above the 3-4 percent margin of sampling error in these surveys)—not significant enough to foretell large-scale outbursts of public protest. Nor does one learn more from the question on the likelihood of political protest in the same surveys—this indicator has remained flat and low since 2001, whereas protest activity has varied (see **Figure 1**).

Moreover, the Russian government's pressure on NGOs—including taking over Levada's former head office, the All-Russian Center for the Study of Public Opinion (VTsIOM), in 2003 to ordering the Levada Center to report as a "foreign agent" in 2013—justifiably makes Russian pollsters wary of refining protest-related questions. The head of the Levada Center, Lev Gudkov, admitted using weighted coefficients based on

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<sup>1</sup> Pew Research, *Global Attitudes Project*, "Satisfaction with Country Direction - Egypt," July 2013 (<http://www.pewglobal.org/database/indicator/3/country/64/>).

Central Electoral Commission (CEC) voting and turnout data for prior elections.<sup>2</sup> These coefficients, in Gudkov's examples from early 2012, had marginal impact on estimates of electoral outcomes. Yet Gudkov based these coefficients on CEC turnout data from previous elections and the assumption that the CEC rigged the results in favor of ER and Putin to the order of 3-6 percent of the vote across Russia, whereas an analysis of electoral fraud statistics (such as the frequency of specific digits in reported results) in the 2008 elections suggests that the actual scale of vote inflation was over 25 percent and that CEC-reported turnout strongly correlated with the vote for the Kremlin's candidate.<sup>3</sup> Due to this correlation, the basing of weighting coefficients on CEC turnout data makes polling data indeterminate as a measure of support for the government in power—regardless of how accurate vote distortion estimates were and how well the polls may have predicted the official voting outcomes.

Moreover, as Gudkov revealed, sometimes Kremlin insiders may want to exaggerate drops in Putin's rating, to make Putin worry about his political future and crack down on political opponents and independent pollsters, as reportedly was the case in 2003.<sup>4</sup> The Russian pollsters' vulnerability to these pressures—particularly as the Kremlin has ratcheted up judicial penalties against regime critics—further reduces the value of Russian survey data as a social forecasting tool.

### Turning to Internet Queries

Luckily, other instruments are increasingly available. A growing body of research now shows that Internet search statistics can systematically predict important social and political behavior. Following a study that reliably predicts influenza epidemics in the United States using Google query data two weeks in advance<sup>5</sup> Seth Stephens-Davidowitz of Harvard University statistically estimated the impact of racial animus on the vote for Barack Obama using Google search statistics for a specific racially-charged term in 2004-2007 across the United States.<sup>6</sup> Tobias Preis of the Warwick Business School, Helen Susannah Moat of University College London, and H. Eugene Stanley of Boston University found that specific Google queries were significantly related to the overall direction of the Dow Jones closing prices on a weekly basis.<sup>7</sup> All of these studies relied on crucial methodological advantages of Internet search behavior, which elicits private sensitive attitudes that are unlikely to be revealed through surveys, interviews, focus groups, or other social research methods.

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<sup>2</sup> Lev Gudkov and Georgi Satarov. "Sociology: a Crisis of Confidence," *Novaya Gazeta*, April 3, 2012 (<http://en.novayagazeta.ru/politics/51942.html>).

<sup>3</sup> Evgeniya Lukinova, Mikhail Myagkov, and Peter C. Ordeshook. "Metastisised Fraud in Russia's 2008 Presidential Election," *Europe-Asia Studies* 63:4, 603-621.

<sup>4</sup> <http://www.kommersant.ru/doc/2247769>.

<sup>5</sup> Google, "Flu Trends," 2011 (<http://www.google.org/about/flutrends/how.html>).

<sup>6</sup> Seth Stephens-Davidowitz, "The Cost of Racial Animus on a Black Presidential Candidate: Using Google Search Data To Find What Surveys Miss," March 24, 2013 (<http://www.people.fas.harvard.edu/~sstephen/papers/RacialAnimusAndVotingSethStephensDavidowitz.pdf>).

<sup>7</sup> Rob Kozlowski, "Google searches appear to predict stock market moves, new paper says," *Pensions & Investments*, April 25, 2013 (<http://www.pionline.com/article/20130425/DAILYREG/130429931>).

More importantly, national surveys and other sampling-based opinion measures are designed to assess prevalent views in a country as a whole, whereas mass protests typically involve a small fraction of a country's population—people whose views are more aggrieved, emotionally charged, and action-oriented than those of society at large. Internet search data, however, can be calibrated to identify precisely these kinds of users. One of the most challenging issues in Internet query analysis is the selection of diagnostic search terms. Ensuring validity—i.e., that the Internet terms putatively representing a certain attitude or behavior actually represent them—is one major challenge. The analysts of the flu epidemic, for example, went through several stages of sophisticated maximum likelihood estimations starting with thousands of search terms, which were then broken down into meaningful diagnostic clusters. Reliability of terms over time is another problem. When trends are assessed over years and political language changes, Internet search terms may lose their predictive power.

### **Deriving Internet Protest Indicators from Theory and Context**

In Russia's political and social context, an Internet query arguably needs to meet at least three criteria to be a proxy for anti-government protest mobilization. First, it must contain the target of blame or the name of the principal scapegoat. Russia's top-heavy political system rests single-handedly on Vladimir Putin. Debra Javeline's statistical analysis of Russia's public opinion data has shown that blame attribution has been a decisive catalyst of mass public protest in Russia.<sup>8</sup> Standing out unequivocally as the man in charge of the country, Putin is the most prominent target for any potential protestor.

Second, the query must contain a "blame target characterization" that evokes negative associations. Moreover, this characterization must be consistent with themes that have significant public resonance. One way to identify such themes is Internet content analysis. Excellent data is available in a 2011 study of nationalist, communist, and liberal opposition discourses taken from Russia's largest social network, *Vkontakte*, by professor Emil Pain, a former Yeltsin advisor on nationality policy, and his associates. Their quantitative analysis singled out three principal themes that cross over at least two of these three groups—corruption, xenophobia (ethnic hatred), and anti-Americanism.<sup>9</sup> Thus, more protest-bound Internet users in Russia are likely to be those who search for evidence that Putin might be corrupt, or might not be a Slav, or might be secretly vested in the West's interests and norms to the detriment of Russia.

Third, given that rumors often serve as a key catalyst of mass collective action, speculative but plausible attributes are likely to be better predictors of mass protest behavior than accurate or known-for-a-fact attributes.

Based on these considerations, the key search term picked for this analytic probe was "Putin Jew" ("Путин еврей"). The phrase captures queries that are statements or

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<sup>8</sup> Debra Javeline, "The Role of Blame in Collective Action: Evidence from Russia," *American Political Science Review* 97 (February 2003): 107-121.

<sup>9</sup> E. A. Pain, S. V. Mokhov, E. I. Polyakov, S. A. Prostakov, and S. Yu. Fedyunin, "Etnopoliticheskie protsessy v zerkale runeta" [Ethnopolitical processes through the prism of Runet], 2011 (unpublished paper).

questions. It contains the principal blame target accompanied by a socially resonant, speculative, and not implausible (if untrue) target attribute. Social research has demonstrated that anti-Semitism has been strong and persistent in Russia's society, where hinting that someone is a "hidden Jew" has long been a standard attribute of negative rumors about a person. Ethno-religious animus in this characterization is also combined with stereotyping of Jews as affluent swindlers who shun honest manual labor and are unfaithful to Russia's national interests due to an affinity with Israel and the West. Those who search the Internet wondering if Putin might be a "hidden Jew" would be likely to do so not only—and probably not so much—out of curiosity or a conspiracy theory fetish, but because they suspect that Putin and his government are corrupt and fail to serve the interests of the ethnic Russian (Slav) majority and of Russia as a state. Thus, the term captures the three key themes that Emil Pain and his associates found in Russian Internet discourses of the principal anti-government opposition users: leadership corruption, xenophobia, and anti-Americanism.

### **Looking Back: Google Searches Presaged Protest Mood Rise in 2008-2011**

Google query statistics for the test term above yield significant insights (see **Figure 2**):

- Intense anti-Putin sentiment emerged and spread to a small but noticeable segment of the Russian public in December 2007 and spiked in winter 2008 (following the designation of Dmitry Medvedev as caretaker president). After December 2007, Putin was no longer Russia's "Teflon president."
- Opinion polls missed this development, as satisfaction with the country's direction and Putin's approval ratings, according to polls, were still rising in late 2007 toward an all-time peak in the first half of 2008. However, the first large rise in the number of searches for "Putin Jew" preceded the turnaround in Putin's approval and valuation of Russia's direction in the polls—from a steady multi-year increase before early 2008 to a steady though slow multi-year decrease thereafter.
- All three most significant spikes in Google searches for "Putin Jew" (April 2008, April 2011, and December 2011)—accompanied by continued search activity at one or more standard deviations above the mean level of interest (see **Figure 2**, the mean is represented by "0")—were followed by large-scale anti-government protests about six months later. Discontent with Putin built up steadily from 2008 to 2011, peaking between April and December 2011.
- Judging from the polling data, intense anti-Putin sentiments in 2011 and 2012 were most likely confined to the 25-35 percent of the Russian public who disapproved of Putin's activity as president in Levada Center polls. Yet, even though they affected probably a much smaller proportion of the population than 25-35 percent, these sentiments were still widespread, capable of sustaining long-lasting mass protests.

- Anti-Putin sentiment was mostly confined to Moscow and St. Petersburg, and strongly correlated with searches for the term, *Vkontakte*, which is Russia's largest social network.

The significance of this probe should not be overestimated. One would need to examine other plausible and control queries and specify what exact level of change in search term frequency is likely to presage what level of anti-government protest on what issue. The query tracked here also does not necessarily capture motivations for other protest types, notably mass strikes. Still, the results show promise in tracking protest mood volatility in a way that surveys do not.

### **Looking Ahead**

Google queries show that Putin's government faces a much lower risk of public protest today than in 2011-2012. Anti-Putin protests on the 2011-2012 scale are unlikely, at least through early 2014. At the time of writing in June 2013, search frequency for "Putin Jew" on Google in Russian has dropped eightfold from its peak in December 2011. Queries about Putin ostensibly being a thief ("Путин вор")—a popular 2011-2012 protest slogan—dropped tenfold from its peak in February 2012. Queries alleging that Putin might be an American spy ("Путин американский шпион")—controlling for direct association of Putin with anti-Americanism, a significant anti-government opposition theme identified in Pain's study—never reached enough volume to show up on Google Trends. After conducting various such searches, one may conclude that the emotionally charged protest mood has softened and will need time to rebuild momentum.

Yet, the Teflon is not back. The new stability is more brittle than before 2011 in a way that at first glance may appear counterintuitive. Thus, one of the Kremlin's strategies to prop up public support for Putin in his third term has been to beef up nationalist and patriotic credentials through scapegoating and criminalizing social behaviors that are viewed with suspicion or denounced by most Russians—such as receiving foreign funding or displaying homosexual preferences. Google search traffic suggests, however, that this strategy may backfire. Notably, the passing of restrictions on homosexuals earlier in 2013 was accompanied by a significant—and continuing—rise in the number of Google queries about Putin himself ostensibly being gay ("Путин гей"). These searches may well reflect the new source of anti-Putin protest mood.<sup>10</sup> Its increase could have partly fueled an unexpectedly large outpouring of demonstrators onto the streets of Moscow in July 2013 when Putin critic and anti-embezzlement

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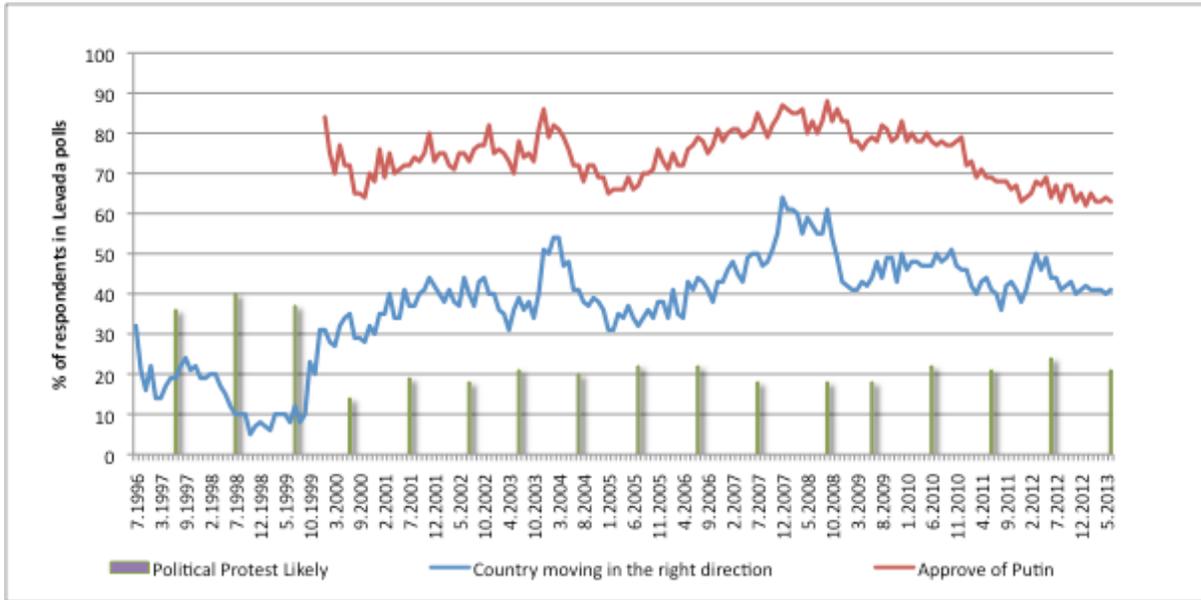
<sup>10</sup> Additional tests ruled out a hypothesis that Russians were searching for "Putin gay" predominantly for the latest news on Putin and the laws affecting homosexuals. If this were the case, one would expect searches for "Putin lesbians" to rise and fall and sync. Yet this query was not searched enough to be registered by Google Trends, whereas searches for "gay" and "lesbian" in Russia have gone up and down in sync since 2004. Additionally, the analysis on Google Correlate of top twenty other searches correlated with "Putin gay" revealed no queries related to laws or legislation or politics, yet several queries related to explicit sexual behavior and one query related to a website that posted rumors about Putin's sexual relationships.

activist, Alexey Navalny, was himself sentenced to jail for embezzlement by a court in Kirov.

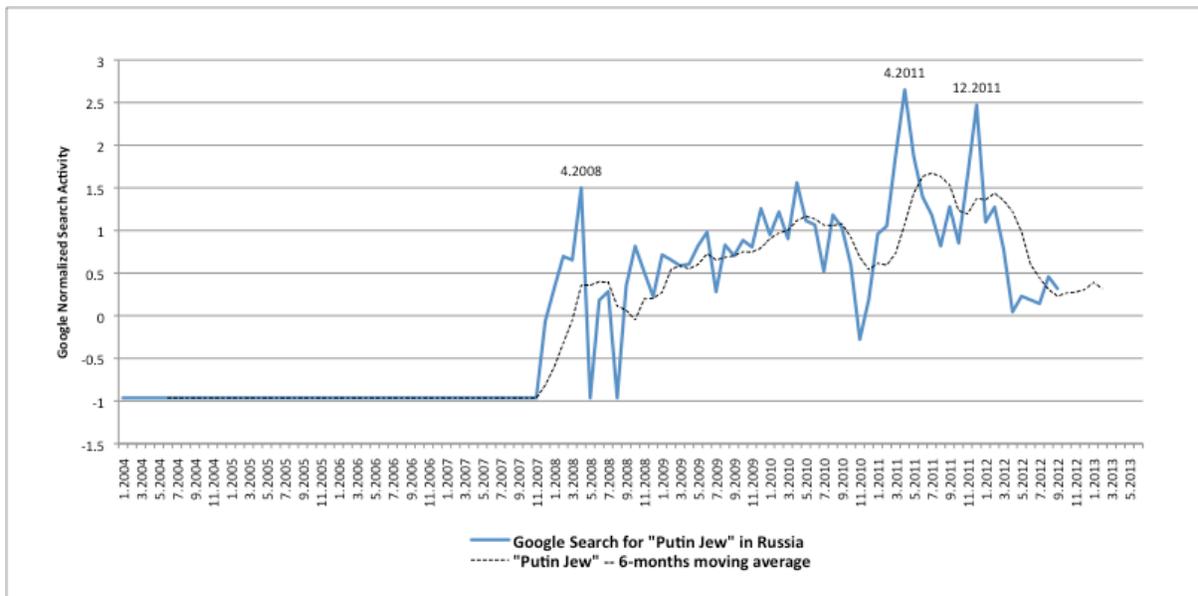
While this analysis is at best suggestive and requires more systematic testing, it is helpful in casting a searchlight on political stability in Russia where otherwise it may not have been cast. Two general conclusions are paramount. First, it would be naïve to equate anti-Putin public protests in Russia with support for Western-style democracy. If anything, such protests are more likely to tap into ethnocentric, xenophobic, homophobic, and anti-Western attitudes that are widespread among the Russian public. In other words, Russians would be more likely to protest when they no longer find Putin as an adequate embodiment of these sentiments. Second, the 2014 Sochi Olympics—an event Putin has cherished as a springboard to a place in history as an internationally revered leader of Russia—is likely to be the most serious testing ground of his political legitimacy in the first half of his third presidential term. Putin faces an unenviable task of striking a balance between international stature and national recognition. If Putin makes exceptions to the new anti-homosexuality promotion laws, and orders Russia's law enforcement agencies to turn a blind eye to violations of Russia's ban on public displays of homosexual symbols by the world's top athletes during the 2014 Olympics, he risks diffusing his core public base of support. If he cracks down on the same displays following the letter of the new Russian laws, he risks going down in history outside Russia as a small-minded, backward-looking autocrat who diminished Russia's international prestige. One way or another, a perceptive analysis of Internet search traffic—more than opinion polls or other sociological indicators—is likely to offer a more sensitive indicator of how well Putin may be managing his tricky balancing act in the run-up to Sochi 2014.

**Figure 1. Levada Surveys Foresaw No Spikes of Anti-Putin Protest Mood, 2000-2013**

Levada Centre "Indices" available at: <http://www.levada.ru/indeksy>



**Figure 2. Google Trends Presage Spikes in Anti-Government Protest Approximately Six Months in Advance.**



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