

# Elite Defection under Autocracy: Evidence from Russia

## Supplementary Appendix

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## A Sample Construction

Our data on defections primarily comes from the website of the Russian Central Election Commission (<http://www.vybory.izbirkom.ru/region/izbirkom>). We first designed a scraper to download information on elections to 336 legislative convocations from 85 regions over the period 1999-2016. Systematic data on Russian regional legislative elections is not available prior to 1999. For the years 1999-2003, we supplemented the electoral data on legislators with entries from the database run by the Center in Support of Democracy and Human Rights Helix.

We first gathered official registration data on all candidates to office (age, gender, party affiliation, place of work, etc.), and matched their registration entries to either their spot on their respective party list (if he/she ran through the proportional representation system) or their individual level vote total and share (if he/she ran in a single-member district). For ease of exposition, we refer to a specific candidate to office as an ‘individual’ and the act of running for office as a ‘candidacy’. An individual can thus be associated with multiple candidacies over time. Altogether we have information on 117,834 candidacies conducted by 97,853 individuals. We start with this sample when defining the regional legislative elite.

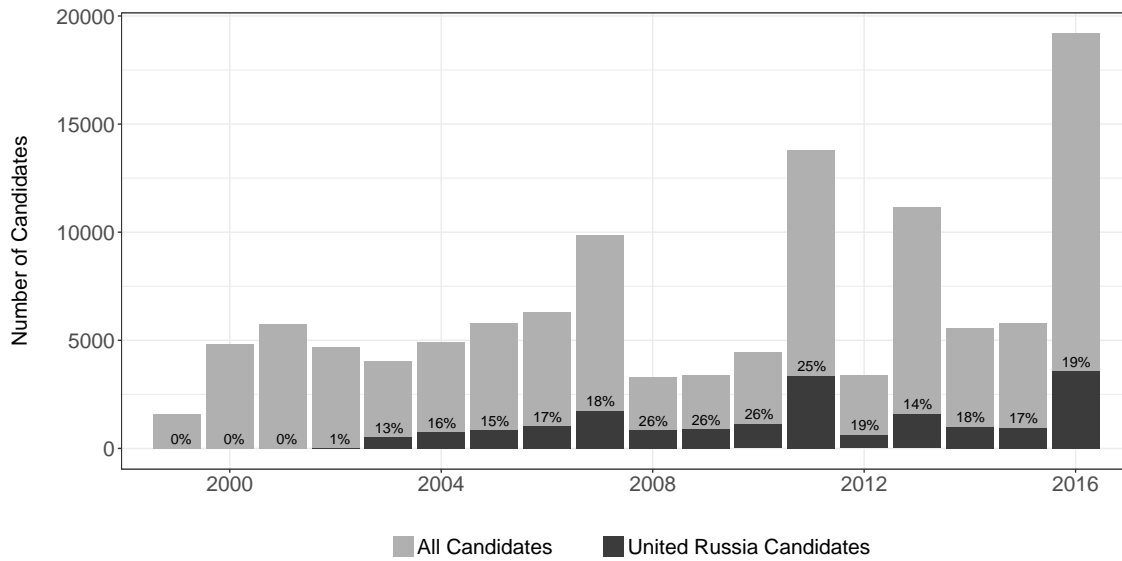
The primary outcome of interest in this study is a defection from the ruling party, United Russia (UR). As we discuss in the main text, the years 1999-2016 witnessed the rapid rise of the political fortunes of this party across all Russian regions. Appendix Figure A1 plots the total number of candidates across regional elections for each year of the sample (in light grey) as well as the portion of this total that affiliated with United Russia (in dark grey, with the exact percentage in the bar labels). The data shows that United Russia candidates did not start running en masse until 2003, when they made up roughly 13% of the total number. The party was formed in 2001 and was not actively contesting seats in the regions in 2002. But from 2003 onward, United Russia ran in significant numbers, ultimately winning 72% of all seats over the period of 2010-2016.

Our first requirement for a given candidate to enter the sample is that he or she affiliated with the ruling UR party during any regional election. Therefore, the emergence of United Russia candidates in 2003 determines the starting date of our analysis. As noted above, party affiliation is clearly indicated in candidate registration documents. We also remove the small number of candidates who ran simultaneously in multiple regional elections. These so-called ‘locomotives’ enjoy national name recognition and head regional party lists in order to win seats for their parties. This exclusion mainly affects parties besides United Russia, the main subject of our analysis.

Over the period, 16.2% of candidacies, or 19,131, had an UR affiliation (and as Appendix Figure A1 shows, the vast majority of these candidacies occurred from 2003-2016). Because they never publicly associated with the ruling party, the remaining 98,703 candidacies that were connected to opposition parties or registered as independents do not enter the sample. In Appendix Section H.3, we show placebo checks for our main hypotheses using these non-ruling party candidacies.

Our next requirement for entering the sample is that a UR candidate must have to face a choice about whether to remain with the ruling party or drop his or her affiliation. Our preferred method for measuring this choice is to look at candidates that not only initially ran under the UR banner,

**FIGURE A1: UNITED RUSSIA PARTICIPATION IN REGIONAL ELECTIONS**



This figure plots the total number of candidates over time running in each regional election (the grey bars), as well as the number that had a United Russia affiliation (the black bars). The percentage labels indicate the portion of the total number of candidates coming from United Russia.

but also participated in a subsequent regional legislative election. It is during this second election that candidates have the opportunity to either continue their affiliation with United Russia, or ‘defect’ by running as an independent or as a member of an opposition party.

Because we require an individual to run in consecutive elections, our unit of analysis is best thought of as an ‘electoral sequence’. In the first election of each sequence, all candidates must have affiliated with United Russia. In the second election, a candidate decides which party affiliation to adopt. We take the following steps to code these sequences. Once we define the sample of 19,131 UR candidates, we group the data by individuals using the combination of their first, middle, and last names and birthdates. For each of the UR candidacies, we then identify whether the individual responsible ran again for legislative office in the same region during the next six years (the median term for a legislative convocation is five years, but a small number of regions held elections every six years in the beginning of the sample). Not all legislators in Russia finish out their terms in office. Special elections to replace them can occur at any time and many candidates who lost in the main elections opt to run in them. We analyze both main and special elections.

As indicated in Appendix Figure A1, 4,313 candidates (or 22.5%) fall into this regime-affiliated ‘UR Repeat Runners’ category. These are candidates who a) have run for office at least twice and b) ran with a UR affiliation in their first balloting. Our final step in the sample construction is to define the outcome variable for ‘defection’. Of the 4,313 candidates, 341 dropped their UR affiliation and ran on a different party ticket or as an independent in the second election in each sequence. These are our potential defectors: we create a binary indicator to measure this change in affiliation over

the electoral sequence.<sup>1</sup>

To guard against the possibility that some of these changes in party affiliation were the consequence of an individual being expelled from United Russia, we perform one final data check. We asked a research assistant to perform internet research on each of the 361 suspected defections. Her task was to look for news articles and primary source materials that documented the circumstances under these individuals departed United Russia. In 21 of the cases, she uncovered strong evidence that the individuals' exit was potentially involuntary. That is, the sources suggest that the regional UR party leadership took some action to expel the member from their ranks. Although we cannot definitively establish whether an actual expulsion took place (often times, UR members who want to leave the party will wait to be removed for public relations reasons), we exercise caution and remove these observations from the sample. We are then left with 4,291 electoral sequences, of which 320 (7.5%) resulted in a defection.

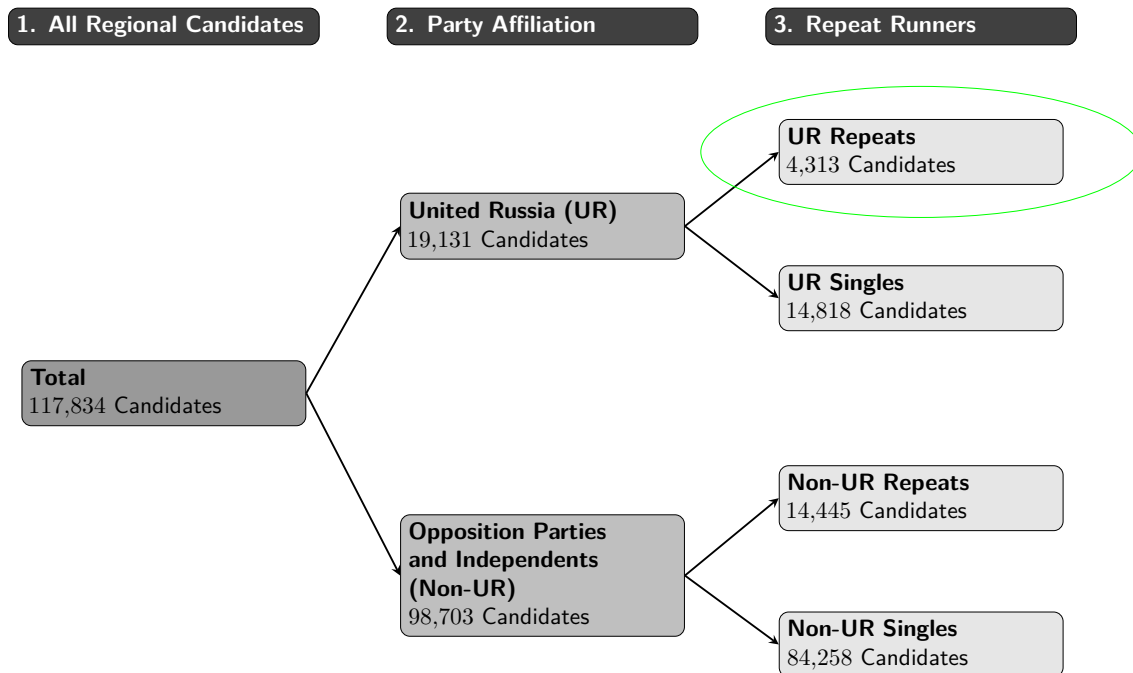
The remaining 14,818 UR candidates ('UR Single') ran only once for elected office and then either did not defend their legislative seat (if they won their initial election) or chose another career path (such as running for office at a different level of government or leaving politics all together). In Appendix Section [H.1](#), we investigate the career choices (to the extent possible) of these 14,818 single runners and run multinomial regressions to model a broader set of decisions.

Finally, limiting our sample to politicians participating in consecutive elections reduces the time period we can effectively study. The modal legislative term in Russia is five years. Therefore, all UR candidates running in elections after 2012 have not had the opportunity to declare their candidacies in a subsequent campaign and do not enter the sample. This helps explain why the percentage of UR candidates running in a subsequent election may appear low when looking at Appendix Figure [A2](#) in the text. As noted in the text, there also were very few United Russia candidates prior to late 2003. Most of our sample is thus drawn from UR candidates with a sequence of elections that begins between 2004 and 2012.

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<sup>1</sup>Of these candidates, 98.2% ran in their second election during the period 2007-2016, with only 52 re-running in 2004, 2005, or 2006. We show robustness checks for the 2007-2016 sample in Section [G.3](#) below.

FIGURE A2: SAMPLE CREATION



This figure maps the procedures we use to select the analysis sample and reads left to right. The box circled is the final sample of ‘UR Repeat Runners’ from which we identify defections.

## A.1 A Note on Electoral Rules and Partisan Penetration of Regional Legislatures

Until 2003, most legislatures used single member district plurality (SMDP) electoral systems. Prior to that time, partisan penetration of regional legislatures was minimal. Between 1995 and 1999, 79% of all deputies ran as independents (Golosov, 2003). Following a 2003 electoral reform, however, all regional legislatures were required to elect at least half their deputies on party lists. Since then, almost all legislatures have used a mixed-electoral system.<sup>2</sup> This reform drastically increased the role of parties in regional legislatures. While independents continued to compete (and sometimes win) in the SMDP races, most deputies carried a party affiliation by the mid 2000s. We include indicators throughout our analysis that denote which ballot each candidate ran on (or both).

## A.2 Calculating Party List Rank

Our secondary measure of political standing captures candidates’ rank on the party list component of the ballot. Those who are higher on the list should be less likely to defect because they are more assured of getting a seat on the UR list. Creating this measure is somewhat complicated, since roughly half of regions require parties to submit both a ‘main’ closed list and separate sub-lists representing territorial groupings. Voters in regions with territorial groupings still cast a vote for

<sup>2</sup>Between 2007 and 2012, 11 regions switched to fully PR systems.

a party, but votes are aggregated and seats allocated with each grouping. To capture this quirk in electoral rules, we first create a dummy variable ('Ran on Closed PR List') which takes a 1 if a PR candidate was placed on a common 'closed' list, and a 0 if there ran on a territorial grouping list. We then code an ordinal measure for all candidates on the 'closed' list to capture the rank ordering of each candidates within his or her party. Candidates lower on the 'closed' list have a lower likelihood of winning a seat.

## **B Summary Statistics and Correlation Matrices**

- Table [B1](#) provides summary statistics for the analysis sample.
- Tables [B2](#) and [B3](#) presents the correlations between the main predictors we use to examine defections. Table [B2](#) uses the analysis sample of 4,291 'UR Repeat Runners' to build correlations between individual-level predictors. Table [B3](#) presents correlations of region-level predictors of defections by using a dataset of the 87 regions that enter the analysis sample over 2003-2016. Because many of our predictors vary over time, the unit of analysis in this table is the region-year.



**TABLE B1: SUMMARY STATISTICS**

Statistic	N	Mean	St. Dev.	Min	Max
Defected	4,291	0.07	0.26	0	1
Male	4,291	0.86	0.35	0	1
Age	4,291	49.02	9.12	21	79
Firm Director (self-described)	4,291	0.41	0.49	0	1
Private Firm Director (with SPARK data)	4,291	0.44	0.50	0	1
SOE Director (with SPARK data)	4,291	0.09	0.29	0	1
Government Employee	4,290	0.25	0.43	0	1
Private Sector Employee	4,290	0.02	0.15	0	1
Social Organization Employee	4,290	0.09	0.29	0	1
Political Party Employee	4,290	0.01	0.12	0	1
Professional Regional Legislator	4,290	0.02	0.12	0	1
Unemployed	4,290	0.16	0.37	0	1
Ran on SMD Ballot	4,291	0.46	0.50	0	1
Ran on PR Ballot	4,291	0.46	0.50	0	1
Currently in Office	4,291	0.74	0.44	0	1
Vote Share (SMD)	1,948	0.50	0.18	0.01	0.99
Ran on Closed PR List	4,291	0.26	0.44	0	1
Low Ranked on Closed PR List	4,186	3.24	8.25	0	104
Next Election - Won Seat	4,291	0.66	0.47	0	1
Won Seat as Independent Previously	4,291	0.26	0.44	0	1
UR Regional Vote Share	4,192	0.50	0.16	0.18	0.91
UR Leadership Share	3,891	0.86	0.15	0.10	1
Growth (t-1)	4,291	102.70	5.19	82.50	126.40
Chg. in Profitability: UR Firms	3,821	-0.01	0.07	-1.04	0.21
UR Party Spending as % of Total	4,251	0.77	0.10	0.48	1
Chief Executive from Ethnic Minority	4,291	0.21	0.41	0	1
Percent Non-Russian	4,291	0.26	0.25	0.03	0.99
Ethnic Republic	4,291	0.31	0.46	0	1
Personalized Appts. (%)	3,199	0.39	0.12	0.17	0.69
Personalized Appts. (%), Top Managers	1,865	0.37	0.16	0.10	0.74
Hiring Based on Connections	2,728	3.96	0.91	2.25	6.67
Press Freedom	4,272	1.96	0.71	1	3
NGOs Targeted	4,174	0.71	0.45	0	1
All Felony Convictions	4,107	0.46	0.11	0.26	0.96
All Fraud Convictions	4,107	0.42	0.16	0.08	0.96
Democracy Score	4,277	30.44	6.34	16	44
Change in Governor Type	4,291	0.25	0.43	0	1

**TABLE B2: CORRELATIONS BETWEEN INDIVIDUAL-LEVEL PREDICTORS**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Male									
(2) Age	0.001								
(3) Firm Director (self-described)	0.209*	-0.096*							
(4) Ran on SMD Ballot	0.098*	0.088*	0.158*						
(5) Ran on PR Ballot	-0.095*	-0.045*	-0.11*	-0.555*					
(6) Won Election	0.062*	0.091*	0.111*	0.347*	-0.214*				
(7) Vote Share (SMD)	0.087*	0.038	0.097*	NA	-0.179*	0.411*			
(8) Ran on Closed PR List	-0.029	-0.015	-0.119*	-0.348*	0.248*	0.031*	-0.158*		
(9) Low Ranked on Closed PR List	-0.035*	-0.077*	-0.051*	-0.31*	0.365*	-0.051*	-0.068*	0.473*	
(10) Won Seat as Independent Previously	0.09*	0.205*	0.026	0.278*	-0.135*	0.213*	0.059*	-0.015	-0.102*

This table presents correlations between a subset of the individual-level predictors used to examine defections. The sample includes all 4,291 'repeat runners.' Each cell denotes the correlation between the variable indicated in the row name and the corresponding variable as indicated by the number of the column. The blank space on row 4 is because the variables are perfectly collinear: a candidate cannot have a SMD vote share unless they ran on the SMD ballot.

**TABLE B3: CORRELATIONS BETWEEN REGION-LEVEL PREDICTORS**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) UR Regional Vote Share														
(2) UR Leadership Share	0.273*													
(3) Growth (t-1)	0.351*	0.048												
(4) Chg. in Profitability: UR Firms	-0.115	-0.101	0.023											
(5) Chief Executive from Ethnic Minority	0.532*	0.058	0.193	0.097										
(6) Percent Non-Russian	0.488*	-0.093	0.095	0.019	0.825*									
(7) Ethnic Republic	0.412*	0.048	-0.05	-0.094	0.71*	0.762*								
(8) Personalized Appts. (%)	0.159	0.047	0.226	0.179	0.23	0.173	0.151							
(9) Personalized Appts. (%), Top Managers	0.317	-0.004	0.213	0.305	0.271	0.304	0.245	0.877*						
(10) Hiring Based on Connections	-0.151	-0.084	-0.053	0.259	-0.147	-0.166	-0.193	0.096	0.121					
(11) Press Freedom	-0.551*	-0.098	-0.1	0.121	-0.374*	-0.358*	-0.326*	0.109	-0.16	-0.059				
(12) NGOs Targeted	-0.236*	0.109	0.054	-0.241*	-0.18	-0.244*	-0.226*	-0.057	-0.164	-0.158	0.244*			
(13) All Felony Convictions	-0.178	-0.023	0.163	-0.252*	-0.276*	-0.337*	-0.326*	-0.172	-0.268	-0.024	0.167	0.149		
(14) All Fraud Convictions	-0.258*	-0.055	0.108	-0.265*	-0.261*	-0.347*	-0.326*	-0.148	-0.318	-0.066	0.151	0.145	0.89*	
(15) Democracy Score	-0.565*	0.003	-0.092	-0.019	-0.484*	-0.548*	-0.349*	-0.303*	-0.431*	0.046	0.634*	0.373*	0.155	0.156

This table presents correlations between a subset of the region-level predictors used to examine defections. The sample includes all 87 regions from 2004-2016. Each cell denotes the correlation between the variable indicated in the row name and the corresponding variable as indicated by the number of the column.

## C Interpretation of Important Control Variables

- Due to space constraints, we were unable to interpret some of the control variables in the main text. But there are interesting results on some of these variables. Ballot structure has a large and significant effect. The likelihood of defection increases nearly six times for SMD candidates, from 2.5% to 12% (Figure 2 in the main text), even when controlling for their past electoral success. PR candidates who ran on the territorial groupings are also more likely to defect. Such candidates are more likely to have cultivated a personal vote, which could make them more independent of the regime. We interpret these results as further evidence that candidates that had to campaign directly to constituents in order to win their seat (rather than lobbying party officials for a spot on the party list) retain a degree of autonomy. More generally, this suggests that defections will be more common in autocracies with candidate-centered electoral systems. Indeed, this insight is consistent with the Russian authorities' efforts to use electoral reform—specifically the expansion of PR—as a means of controlling pro-regime deputies in the early-mid 2000s.
- We also find that defections are less common among candidates who won a larger percentage of the vote in their SMD districts. This result is harder to interpret. On the one hand, candidates who won large shares of the vote in their districts may have personal followings which should make them more autonomous from the regime and more likely to defect. At the same time, all of these candidates won their elections as UR nominees, so this could be a proxy for the popularity of the ruling party in their districts. If this is the case, then this finding is consistent with Hypothesis 1. Ultimately, we are unsure about how to interpret this variable.
- Finally, we find that men are slightly more likely to defect than women, though the effect is not statistically significant. Some of the models suggest older candidates are also less likely to defect. Candidates farther along in their careers may be less likely to jeopardize the investments they have made in the ruling party by jumping ship.

## D Robustness Checks

In this section, we present additional model specifications that probe the robustness of our results, as well as vary the measures we use to operationalize our main hypotheses. We also present several empirical extensions, including subsetting the sample based on different indicators.

### D.1 Logit Models

- The main outcome in this paper, defection from the ruling party, is a binary indicator, which traditionally would necessitate logistic model specifications. However, of the 87 regions we examine in the sample, eleven observed zero defections from United Russia. Therefore, in the aim of consistency between our individual and region-level specifications in the main text, we use linear probability models to avoid issues of separation that arise in logit models when fixed effects are perfectly correlated with outcome variables.
- This section shows alternate specifications that use logit models, even though a number of regions are estimated inefficiently. The results indicate that our logit results are robust to using this modeling strategy, even including region fixed effects in the individual-level models. First, in Table D1, we replicate Table 1, Main Text, that looks at individual-level determinants of defection, substituting logit for linear probability models and showing marginal effects. Candidates are much less likely to defect if they won their initial election, enjoyed higher placement on the party list, or worked in the government or a political party. Similarly, having won a seat previously as an independent or directed a private firm (two measures of autonomous resources) increase the probability of defection.
- Table D2 show results using a logit model for the region-level specifications originally presented in Table 2 in the main text. We do not include region fixed effects because of the separation issues outlined above and the inclusion of slow-moving, time-invariant covariates. Once again, we see that all of our main results are robust. First, both of the measures capturing candidate resources (experience as a firm director and previous electoral victories as an independent candidate) positively predict defection. Next, we see that defections are more likely where the rents accruing to UR connected firms are lower. We also see that defections are more likely when UR shares more leadership posts with the opposition. Regions with more personalist institutions, as defined by the chief executive coming from an ethnic minority or the Quality of Government indicator on personalized appointments, also see more defections. In all, we see very minor differences between the linear probability and logistic specifications, but opt for the former in the main text because of the separation issues.

**TABLE D1: INDIVIDUAL DETERMINANTS OF DEFECTION: LOGIT MODELS**

	Dependent Variable: Defected (0/1)			
	(1)	(2)	(3)	(4)
Male	0.001 (0.002)	0.002 (0.002)	0.002 (0.002)	0.001 (0.002)
Age (log)	-0.003 (0.005)	-0.002 (0.005)	-0.003 (0.004)	-0.005 (0.004)
Ran on SMD Ballot	0.009*** (0.003)	0.009*** (0.003)	0.018*** (0.006)	0.017*** (0.006)
Currently in Office	-0.021*** (0.004)	-0.021*** (0.004)	-0.016*** (0.004)	
Firm Director (self-described)	0.004* (0.002)			
Private Firm Director (with SPARK data)		0.004* (0.002)	0.004* (0.002)	
SOE Director (with SPARK data)		-0.004 (0.003)	-0.003 (0.003)	
SMD Vote Share			-0.020** (0.008)	-0.029*** (0.008)
Ran on Closed PR List			-0.005** (0.002)	-0.008*** (0.002)
Low Ranked on Closed PR List			0.001*** (0.0002)	0.001*** (0.0002)
Won Seat as Independent Previously			0.007** (0.003)	0.005** (0.003)
Government Employee				-0.005** (0.002)
Private Sector Employee				-0.005 (0.004)
Social Organization Employee				-0.001 (0.003)
Political Party Employee				-0.008*** (0.003)
Professional Regional Legislator				-0.002 (0.002)
Unemployed				0.037* (0.022)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Observations	4,291	4,291	4,163	4,162

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1 This table examines individual-level determinants of defection in an identical manner to Table 1, main text, but all models use logistic regression. Marginal effects are shown. Errors are clustered on region; repeat election year and region fixed effects are both included. Note that the Observations row reflects the original sample analyzed and not those 396 observations that are dropped because of separation issues.

**TABLE D2: REGIONAL DETERMINANTS OF DEFECTION: LOGIT MODELS**

	Dependent Variable: Defected (0/1)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Male	0.009 (0.009)	0.009 (0.009)	0.008 (0.010)	0.006 (0.010)	0.010 (0.011)	0.008 (0.011)	0.007 (0.013)
Age (log)	-0.023 (0.019)	-0.022 (0.019)	-0.026 (0.018)	-0.023 (0.017)	-0.026 (0.018)	-0.022 (0.018)	-0.037** (0.018)
Firm Director (self-described)	0.012** (0.006)	0.012** (0.006)	0.017** (0.007)	0.019*** (0.007)			0.020* (0.010)
Private Firm Director (with SPARK data)					0.012** (0.006)	0.015*** (0.005)	
SOE Director (with SPARK data)					-0.009 (0.011)	-0.008 (0.010)	
Ran on SMD Ballot	0.032*** (0.008)	0.030*** (0.008)	0.027*** (0.007)	0.030*** (0.005)	0.028*** (0.007)	0.031*** (0.006)	0.035*** (0.008)
Won Seat as Independent Previously	0.028** (0.011)	0.029** (0.011)	0.036*** (0.011)	0.035*** (0.010)	0.035*** (0.010)	0.034*** (0.010)	0.031** (0.014)
Currently in Office	-0.096*** (0.013)	-0.094*** (0.013)	-0.089*** (0.012)	-0.099*** (0.015)	-0.088*** (0.012)	-0.099*** (0.014)	-0.101*** (0.019)
UR Regional Vote - Election #1	-0.058** (0.028)	-0.044 (0.029)	-0.009 (0.032)	-0.047* (0.028)	-0.010 (0.032)	-0.048* (0.027)	-0.016 (0.040)
Growth (1-year Lag)		-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003** (0.001)	-0.003* (0.001)
Chg. in Profitability: UR Firms				-0.100*** (0.026)		-0.099*** (0.025)	
UR Leadership Share			-0.077*** (0.022)	-0.078*** (0.021)	-0.076*** (0.022)	-0.078*** (0.021)	-0.093* (0.054)
Chief Executive from Ethnic Minority			0.024*** (0.002)	0.037*** (0.014)	0.025*** (0.002)	0.039*** (0.014)	
Personalized Appts. (%)							0.064** (0.033)
Democracy Score	0.0004 (0.001)	0.001 (0.001)	0.002** (0.001)	0.001*** (0.0004)	0.002** (0.001)	0.001*** (0.0004)	0.001 (0.001)
Change in Governor Type	0.021*** (0.007)	0.019*** (0.006)	0.019*** (0.005)	0.022*** (0.004)	0.019*** (0.005)	0.020*** (0.004)	0.018* (0.010)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region Fixed Effects	No	No	No	No	No	No	No
Observations	4,181	4,181	3,883	3,659	3,883	3,659	2,854

This table examines regional-level determinants of defection in an identical manner to Table 2, main text, but all models use logistic regression. Marginal effects are shown. Errors are clustered on region; repeat election year fixed effects are included.

## D.2 United Russia Vote Share Trends

- We have argued defections will be more likely when United Russia is performing poorly at the polls. To operationalize this hypothesis, we included a measure of the ruling party's regional vote share in the *first* election in each electoral sequence. The idea is that defections should be more likely in regions where United Russia's electoral position is weak. One might also be interested to know whether changes in UR's vote share affect defection. Unfortunately, given our data set-up, the defections we observe occur right *before* the second election in each sequence takes place; it is during the run-up to this election when we observe whether the candidate has switched parties. The party's vote share in the second election thus occurs as a post-treatment predictor and opens up such an analysis to endogeneity concerns. Defections may be driving down later ruling party vote share (we explore this in Section E.1). Therefore, for our main analysis, we are cautious about including any measure of UR vote share that includes information from the second election in the sequence.
- But for the sake of exposition, in Table D3, we test models that include this and related trend measures. First, in Columns 1-2 we calculate the Change in United Russia Regional Vote Share between the two elections in the sequence. Second, in Columns 3-4, we include a measure of the change in United Russia's PR vote share *prior to* Election #1 in the sequence (i.e. the change in vote share from the election that preceded the each). However, because UR rarely participated in regional elections prior to 2003 and the regional electoral calendar is staggered, we do not have data on early elections to create vote share trends for all regions. This results in a loss of nearly half of our sample, or roughly 1,900 observations. Moreover, this measure is very distant indeed from the point of defection (between 4 and 12 years prior to the potential defection). We keep the measure of vote share from Election #1 in the sequence to control for starting points.
- With these caveats in mind, the results show mixed results on these two trend measures. The Within Sequence change variable is negatively signed, while that capturing Pre-Sequence change is positive.
- Our other results remain robust. Defections are more common in regions with fewer opportunities for rent-seeking, where UR shares spoils with the opposition and where more personalist institutions are in place. We also see that our individual-level results come through: having autonomous resources positively predicts defection, and incumbents are less likely to defect.



**TABLE D3: REGIONAL DETERMINANTS OF DEFECTION:  
INCLUDING TRENDS IN UR VOTE SHARE**

	Dependent Variable: Defected (0/1)			
	(1)	(2)	(3)	(4)
Male	0.009 (0.012)	0.007 (0.012)	0.009 (0.011)	0.008 (0.011)
Age (log)	-0.028 (0.019)	-0.024 (0.017)	-0.064*** (0.020)	-0.062*** (0.022)
Firm Director (self-described)	0.018*** (0.007)	0.021*** (0.007)	0.019* (0.011)	0.023** (0.010)
Ran on SMD Ballot	0.031*** (0.010)	0.035*** (0.008)	0.035** (0.015)	0.043*** (0.015)
Won Seat as Independent Previously	0.034*** (0.011)	0.035*** (0.010)	0.048*** (0.011)	0.048*** (0.012)
Currently in Office	-0.077*** (0.019)	-0.086*** (0.020)	-0.100*** (0.020)	-0.110*** (0.024)
UR Regional Vote - Election #1	-0.042 (0.040)	-0.101** (0.046)	0.023 (0.041)	-0.036 (0.031)
Chg. in UR Regional Vote: Within Sequence	-0.089 (0.072)	-0.109 (0.080)		
Chg. in UR Regional Vote: Pre-Sequence			0.105*** (0.026)	0.061 (0.040)
Growth (1-year Lag)	-0.003*** (0.001)	-0.002* (0.001)	-0.001 (0.002)	-0.0002 (0.003)
Chg. in Profitability: UR Firms		-0.127*** (0.036)		-0.118*** (0.037)
UR Leadership Share	-0.108*** (0.035)	-0.109*** (0.031)	-0.142*** (0.016)	-0.155*** (0.018)
Chief Executive from Ethnic Minority	0.025*** (0.006)	0.036*** (0.011)	0.027*** (0.007)	0.042** (0.019)
Democracy Score	0.001 (0.001)	0.0005 (0.001)	0.003** (0.001)	0.002*** (0.001)
Change in Governor Type	0.024*** (0.003)	0.027*** (0.005)	0.035** (0.016)	0.038** (0.017)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	3,767	3,554	2,094	1,991

This table examines both individual- and region-level covariates. All models use OLS with repeat election year fixed effects and cluster standard errors on region and year. This table further includes two trend measures of change in United Russia regional vote share at various points around the electoral sequence.

### D.3 Varying Regional-Level Controls and Fixed Effects

- Table D4 presents a number of robustness checks for Table 2 in the main paper. Column 1 shows random effects models grouped at the region and repeat election year. Some of the slow-movingIn the main paper, we model year effects using the year of the *repeat election*. To our minds, this makes the most sense because this is the year when defections are observed, and usually, occur. Column 2 replicates the main model (Column 3 in Table 2, main text), but substitutes initial election year fixed effects for repeat election fixed effects. Overall our main results are robust to including these different specifications with random and fixed effects.
- In Column 3, we then control for opposition protest in the region, which was discussed in the main text as a possible confounder for *UR Leadership Share*. The variables are the number of protest events held by the KPRF in a given year and the number of protest events held by non-system opposition groups. This data is from Reuter and Robertson (2015) and is described in more detail there. The number of observations drops dramatically in these models, because data on protest is only available from July 2007-July 2012. Results on *UR Leadership Share* are robust to the inclusion of these variables, as are the main coefficients of interest.
- In Column 4, we exclude autonomous okrugs from the analysis sample; again the results are robust. In Column 5, we test the claim that business resources may offer less of an electoral advantage in more personalist regions. Electoral mobilization under these regimes may be controlled more heavily by the state, giving less leeway for independent candidates to influence electoral results. However, the interaction term on firm director and a Chief Executive from Ethnic Minority is not statistically significant and very close to zero. We use a five-year moving average for growth in Column 6 that improves data coverage for the later years in the sample. Here we find that growth over the entire convocation has a positive, but not statistically insignificant effect on defections. Candidates appear to pay more attention to recent economic trends, rather than assessing the ruling party's longer term record of success.
- Next, in columns 7 and 8, we include a control over the candidates' ethnicity. Data on ethnicity is not given by the central election commission. We adopt a second-best approach and use the candidate's last name to make a best guess at their ethnicity. . To this end, we uploaded the names of all 4,291 candidates to the website Ahunter (<http://www.ahunter.ru>), a leading data processing firm that works with most of Russia's top companies to clean and standardize their data. One of Ahunter's proprietary algorithms uses Russian passport data to probabilistically assign ethnicity to complete Russian names (first, middle, and last names).
- The algorithm was able to assign an ethnicity to 81% of the candidates in our sample, or 3,469 individuals. For the remaining 20%, we coded them as part of an ethnic minority (Non-Russian), since the algorithm could not assign them to the Russian category.

- There is interesting diversity in our candidate sample. Table [D5](#) presents the results. Roughly 70% of the sample is purely 'Russian', with many Tatar, Turkish, and North Caucasian names entering the mix. The ethnicities in bold are coded as being part of an 'Ethnic Minority.' We know of no way of validating this data, but we do find that 28% of candidates in ethnic republics are coded as being part of an 'Ethnic Minority', versus 2% elsewhere.
- The results of including these variables are shown in Columns 7 and 8. When included by itself, we find that candidates from ethnic minorities are no more likely to defect than their counterparts. Interacting this variable with our preferred measure of personalism, we find a positive but statistically insignificant effect.

**TABLE D4: ROBUSTNESS CHECKS: REGIONAL LEVEL**

	Dependent Variable: Defected (0/1)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Male	0.009 (0.012)	0.010 (0.012)	0.009 (0.012)	0.012 (0.011)	0.010 (0.011)	0.009 (0.011)	0.009 (0.012)	0.008 (0.011)
Age (log)	-0.030 (0.021)	-0.035 (0.023)	-0.067*** (0.022)	-0.036 (0.024)	-0.031 (0.022)	-0.033 (0.022)	-0.031 (0.022)	-0.031 (0.023)
Firm Director (self-described)	0.020** (0.009)	0.018** (0.008)	0.021*** (0.008)	0.021*** (0.008)	0.021*** (0.008)	0.021*** (0.007)	0.020*** (0.007)	0.021*** (0.007)
Ran on SMD Ballot	0.034*** (0.010)	0.044*** (0.009)	0.030** (0.012)	0.032*** (0.009)	0.033*** (0.008)	0.033*** (0.008)	0.033*** (0.008)	0.033*** (0.008)
Won Seat as Independent Previously	0.037*** (0.010)	0.035*** (0.011)	0.049*** (0.010)	0.038*** (0.010)	0.038*** (0.009)	0.038*** (0.009)	0.038*** (0.009)	0.038*** (0.009)
Currently in Office	-0.091*** (0.010)	-0.104*** (0.017)	-0.096*** (0.019)	-0.088*** (0.019)	-0.089*** (0.018)	-0.090*** (0.018)	-0.089*** (0.018)	-0.090*** (0.017)
UR Regional Vote	0.010 (0.047)	-0.034 (0.023)	0.004 (0.031)	-0.025 (0.040)	-0.011 (0.033)	-0.030 (0.035)	-0.011 (0.032)	-0.015 (0.030)
UR Leadership Share	-0.108*** (0.033)	-0.121*** (0.035)	-0.134*** (0.036)	-0.099** (0.043)	-0.108*** (0.035)	-0.102*** (0.037)	-0.108*** (0.036)	-0.104*** (0.036)
Growth (1-year Lag)	-0.003** (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.003** (0.001)	-0.004*** (0.001)		-0.004*** (0.001)	-0.004*** (0.001)
Chief Executive from Ethnic Minority	0.020 (0.016)	0.024** (0.012)	0.032*** (0.006)	0.026*** (0.004)	0.026* (0.014)	0.024*** (0.008)	0.021*** (0.003)	0.002 (0.013)
Democracy Score	0.002* (0.001)	0.001 (0.001)	0.003** (0.001)	0.002** (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)
Change in Governor Type	0.020* (0.011)	0.023*** (0.008)	0.031*** (0.011)	0.020*** (0.006)	0.022*** (0.006)	0.026*** (0.007)	0.022*** (0.006)	0.022*** (0.006)
KPRF Protests			-0.005 (0.009)					
IKDP Protests			0.002 (0.004)					
Firm Director (self-described) * Chief Executive					-0.009 (0.030)			
Growth (5-year Moving Average)						0.160 (0.375)		
Ethnic Minority Candidate							0.005 (0.009)	-0.007 (0.011)
Ethnic Minority Candidate * Chief Executive								0.042 (0.028)
Repeat Election Year Random Effects	Yes	No	No	No	No	No	No	No
Repeat Election Year Fixed Effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Starting Election Year Fixed Effects	No	Yes	No	No	No	No	No	No
Region Random Effects	Yes	No	No	No	No	No	No	No
Observations	3,883	3,883	2,830	3,811	3,883	3,883	3,883	3,883

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Columns 1 and 2 introduce random effects models, varying whether the random effect on year was measured during the initial year that the UR candidate ran as a member of United Russia or the year of the election when they ran again. Column 3 includes a measure of the number of protests by the Communist Party of the Russian Federation (KPRF) and by non-system groups during the initial year that the candidate ran for office; fixed effects for that year are included. Column 4 excludes all defections from the sample that occurred in autonomous okrugs. Column 5 interacts businessperson candidates with our measure of personalism. Columns 7 and 8 include an indicator of ethnicity for each candidate. All models use OLS and cluster errors on region.

TABLE D5: ETHNIC COMPOSITION OF SAMPLE

Russian	3034	Armenian	7	West German	1
<b>Tatar</b>	<b>103</b>	<b>Kazakh</b>	<b>7</b>	Spanish	1
<b>Turkish</b>	<b>69</b>	<b>Arabic</b>	<b>6</b>	<b>Caucasian</b>	<b>1</b>
European	53	<b>Buryat</b>	<b>5</b>	<b>Karachaev-Balkar</b>	<b>1</b>
<b>Azerbaijani</b>	<b>38</b>	<b>North Caucasian</b>	<b>5</b>	<b>Crimean Tatar</b>	<b>1</b>
<b>Dagestani</b>	<b>25</b>	<b>Adygean</b>	<b>3</b>	<b>Nakh</b>	<b>1</b>
<b>Chechen</b>	<b>19</b>	Jewish	3	<b>Tajik</b>	<b>1</b>
<b>Ossetian</b>	<b>18</b>	<b>Kalmyk</b>	<b>3</b>	<b>Uzbek</b>	<b>1</b>
Eastern Slavic	17	German	3	French	1
Slavic	16	Ukrainian	3	<b>Khakass</b>	<b>1</b>
English	10	Georgian	1	Japanese	1
<b>Bashkiri</b>	<b>9</b>	<b>Dargin</b>	<b>1</b>	Not Found	822

This table shows the ethnicity breakdown of the 4,291 candidacies in our sample according to the coding of their last names using the company Ahunter's proprietary website. The bolded cells are those we code as ethnic minorities. The remaining unbolded names could not be clearly linked to ethnic minorities in Russia.

## E Political Costs of Defection

An assumption in our paper is that defections from the ruling party can cause both short and long-term damage to regime stability. In the paper, we marshal an array of outside evidence to demonstrate this. In this section, we use our own data to illustrate some of the potential costs of defections. However, it should be noted from the start that endogeneity problems abound in such an analysis. In the main text, we show that defections are endogenous to a range of region and individual factors. This severely complicates our ability to show that defections exogenously cause any negative consequences later on. With a clear understanding of the limitations of putting defections on the right hand side of the regression, this section looks at the political effects of defections.

### E.1 Regional Level

- In Table E1, we examine whether the number of defections from United Russia before a given election affects the party's vote share in that same election. We conduct analysis at the region-level, looking at 183 legislative elections from 2004-2016. The outcome variable is UR's regional vote share in each election. We then count the number of UR candidates that defected by registering with another party or as an independent in the run-up to that same election (with the requirement that these same candidates had run with UR in a previous election). We control for the size of the legislature being contested in all models, vary the inclusion of year fixed effects, and cluster errors at the regional level. In Column 2, we subset just to ethnic republics, but do not include covariates because of the small sample size.
- The results show that indeed a greater number of defections is associated with a decrease in UR's vote share. We should not put too much emphasis on these coefficients however, because as we have argued, declining vote share could just be a cause, and not a consequence of defections. But the point estimates are large and statistically significant, even when controlling for standard factors used to explain ruling party popularity: economic prosperity, urbanization, ethnic republic status, the level of democracy, etc. A one-standard deviation change in the number of defections reduces UR's vote share by approximately 3%. We find suggestive evidence that defections impose immediate political costs on the regime.
- Next, we investigate whether defections at time  $t-1$  affect later defections at time  $t$ . In other words, do defections incite cascades, whereby later candidates see other elites defecting and then flee the party themselves? Our sample available to analyze this question is necessarily reduced by nearly half. Most regions only had two elections during the analysis period; we can only examine cascading defections in the second election in each sequence.
- Table E2 presents the results for this cascade analysis. The reduced-form model without year fixed effects and errors clustered on the region shows a positive relationship over time: each defection at time  $t-1$  increases the subsequent number of defections by 0.34. However,

when controls are introduced in columns 2 and 3, this coefficient is no longer statistically significant (though still remains substantively large). We suspect that with a larger sample size, we would be able to more precisely estimate these effects and uncover stronger evidence that defections beget later defections.

**TABLE E1: DEFECTIONS AFFECT SUBSEQUENT UR VOTE SHARE: REGION LEVEL**

	Dependent Variable: UR Regional Vote Share			
	(1)	(2)	(3)	(4)
Number of Defections from UR	-0.013** (0.006)	-0.028*** (0.010)	-0.011** (0.005)	-0.014*** (0.005)
Legislature Size (logged)	0.057 (0.042)	0.115* (0.062)	0.080 (0.049)	0.058 (0.047)
Number of UR Candidates (logged)			-0.010 (0.035)	0.013 (0.043)
Urbanization			-0.150 (0.117)	-0.123 (0.115)
GRP per Capita (logged)			-0.001 (0.015)	-0.001 (0.019)
Percentage Non-Russian			0.172*** (0.054)	0.163*** (0.049)
Democracy Score			-0.012*** (0.002)	-0.011*** (0.003)
Growth (1-year Lag)			-0.0002 (0.001)	-0.001 (0.002)
Election Year Fixed Effects	No	No	No	Yes
Regions	All	Republics	All	All
Observations	183	49	183	183

This table uses OLS models to regress United Russia's PR vote share on the number of defections from that party that occurred during the run-up. The sample in Column 2 is subset to only ethnic republics. All models control for the size of the legislature (which influence the overall number of candidates contesting the election), as well as other commonly theorized predictors of ruling party popularity. Errors are clustered on the region level.

**TABLE E2: DO CURRENT DEFECTIONS AFFECT FUTURE DEFECTIONS?**

	Dependent Variable: Number of Defections		
	(1)	(2)	(3)
Number of Defections from UR (t-1)	0.342** (0.168)	0.250 (0.181)	0.176 (0.191)
Legislature Size (logged)	2.325*** (0.482)	1.990*** (0.670)	1.722*** (0.643)
Number of UR Candidates (logged)		0.273 (0.586)	0.253 (0.608)
Urbanization		1.775 (2.453)	1.907 (2.348)
GRP per Capita (logged)		0.086 (0.277)	-0.074 (0.290)
Percentage Non-Russian		1.077 (0.848)	1.500* (0.873)
Democracy Score		0.083* (0.042)	0.111*** (0.039)
Growth (1-year Lag)		-0.065 (0.049)	-0.042 (0.060)
Election Year Fixed Effects	No	No	Yes
Observations	102	102	102

This table uses OLS models to regress the number of defections occurring in the run-up to an election in time  $t$  on the number that occurred in the run-up to the previous election in the same region. The sample is limited to the 102 regional elections where we have data on UR defections from the previous election (many observations drop out because of our limited time coverage). Errors are clustered on the region level.



## E.2 District Level

- Next, we look at whether defections hurt the ruling party at the district level. One question is whether defections create problems for political recruitment. Can United Russia find a suitable replacement if it suffers a defection?
- To investigate this question, we turn to the micro-level data on the 320 defectors in our main analysis sample. Roughly 52% of this number ran in a single-member district (SMD). SMD districts can, more or less, be linked across elections based on their assigned number and a region identifier.<sup>3</sup> We then build a district-level dataset of all SMD races from 2007-2016, and code whether a specific district experienced a defection by a UR candidate in the run-up to the race. In other words, we examine how defections change political competition by comparing those districts which saw continuity among UR candidates and those which saw the UR candidate run again, but under a different party banner. Note again that this analysis is subject to some of the same endogeneity concerns discussed above.
- To examine political costs, we look at three outcomes. First, we code whether a different UR candidate ran in the race that had experienced a UR defection. That is, did United Russia field a replacement candidate to fill the void left by the defection? Second, if the party did field a candidate, what percentage of the vote did that UR candidate win? We are interested in whether that candidate performed better or worse than his or her peers in other districts, i.e. was the replacement candidate as strong as the defector? Finally, we look at whether a UR candidate won the district: did the defection cause the district to flip to the opposition or an independent? Our sample includes roughly 5,000 individual SMD races, and we bring in all the electoral information we can find as controls: the number of voters registered on the list, turnout, the number of candidates that ran (logged), and a binary indicator for whether the incumbent in the race ran for re-election. We also include region and year fixed effects, and cluster errors at the region level.
- The results are shown in Table E3. We find that defections are strongly correlated with worse performance by United Russia. First, the ruling party is not always able to recruit a replacement to run in the race; the probability that a UR candidate runs after a defection drops by roughly 7%. When the party is able to find a replacement, that candidate receives on average 4 fewer percentage points of the share of the total vote. In the main text, we argue defectors to be much more likely to win office than other non-ruling party candidates; this evidence is supported by the fact that they take away vote share from their UR rivals. Finally, we find that United Russia is 11% less likely to win the seat after a defection takes place. In all, we interpret this as further evidence that defections impose immediate political costs on the

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<sup>3</sup>This process is by no means precise. Regional legislatures regularly alter district boundaries between elections, both creating and eliminating some districts and changing the constituency. Unfortunately, we are unaware of any work that has studied regional legislation and successfully linked districts ('okrugs') across years, which would be a herculean task. Our simple matching procedure on region and okrug number is the best approximation.

regime, which translates into lower electoral returns.

**TABLE E3: DEFECTIONS AFFECT SUBSEQUENT UR VOTE SHARE: DISTRICT LEVEL**

	UR Candidate Ran (1)	UR Candidate Vote Share (2)	UR Candidate Won (3)
Previous UR Candidate Defected	-0.073*** (0.028)	-0.038*** (0.014)	-0.107*** (0.041)
Size of Voter List (log)	0.014 (0.041)	0.064*** (0.024)	0.125*** (0.038)
Turnout	0.025 (0.040)	0.370*** (0.044)	0.114* (0.064)
Number of Candidates (log)	0.037** (0.015)	-0.210*** (0.011)	-0.132*** (0.024)
Incumbent Ran	0.023** (0.010)	-0.003 (0.004)	0.016 (0.013)
Region Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Observations	5,279	4,848	5,279

This table uses OLS models to regress several measures of United Russia electoral performance on a binary indicator of UR defection. Column 2 subsets to only races where a UR candidate (a non-defector) entered the race. We include controls for district-level voting patterns as well as region and year fixed effects. Standard errors are clustered on the region level.

## F Varying Measures

### F.1 Personalism

- Devising credible measures for personalism is not simple. Definitionally, we agree with [Geddes, Wright, and Frantz \(2017\)](#) that “the defining feature of personalist dictatorship is that the dictator has personal discretion and control over the key levers of power in his political system.” Personalist leaders exercise exclusive and unfettered control over high-level appointments of other officials. Institutions do little to constrain their choices, as they can circumvent institutionalized or meritocratic hiring procedures to place their own supporters into power and thus promote a patronage-based system that fortifies their own position. A reasonable measure of latent personalism thus would capture, for example, the degree to which personal loyalty to the leader determines access to higher office, the exercise of personal control over appointments, and the relative absence of other political institutions that could check the arbitrary power of the leader. This is a tall order.
- In the main text, we proxy personalism with a binary indicator whether the region is an ethnic republic that is headed by a member of the republic’s titular group. As we note in the main text, the particular history of these regions have led to more personalist patterns of political exchange.
- This section examines a number of alternate measures of personalism. We find that the four different indicators of personalism are correlated with defection (and amongst themselves, see Section B). In all, we interpret the evidence as providing additional confirmation that regime elites face increased uncertainty about their ability to access spoils in regions with more personalist institutions. In such regions, membership in a political institution, such as the ruling party, provides an insufficient guarantee of dependable spoil access. Correlations between the measures are positive and strong, as shown in Table B3, increasing our confidence that each is capturing the underlying dimension of personalist rule across Russian regions.
- Our first alternative measure draws the Expert Survey on the Quality of Government in Russia’s Regions. Conducted jointly by scholars working at the Quality of Government Institute (University of Gothenburg) and the Higher School of Economics (Moscow, Russia), the 2014 survey collects subjective assessments from 311 scholars and experts that “document the structural characteristics of public bureaucracy and bureaucratic behavior in Russia’s regions” ([Nistotskaya, Khakhunova, and Dahlström, 2016](#)). The short questionnaire covers such topics as bureaucratic recruitment and replacement, the terms and conditions of work, impartiality in public service provision, among others. [Nistotskaya, Khakhunova, and Dahlström \(2016\)](#) introduce and validate the resultant database, finding relatively minor levels of perception bias among respondents.<sup>4</sup> Unfortunately, the data is cross-sectional and

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<sup>4</sup>See [Nistotskaya, Khakhunova, and Dahlström \(2016\)](#) for an extended explanation of the design and recruitment

thus a snapshot of the state of affairs in Russia.

- To our knowledge, this is the most comprehensive attempt to measure differences across Russian regions with regard to decision-making within the executive branch and the bureaucracy. Data from the Quality of Government survey is available for only 65 regions in aggregate (the authors drop all values for regions where fewer than three experts answered). For some questions, we only have data from 59 regions; we lose between 30% and 60% of our sample when using these measures.
- Several of the questions are closely related to the degree of personalism in appointment-making by the chief executive. First, we draw on one section that asks experts to answer the following question:
  - When a new head of the regional executive is appointed/elected, how many public administrators of the following categories are dismissed and the posts filled by supporters (sympathizers) of the new chief executive?
    1. Low to mid-level specialists
    2. Top-layer managers
    3. Top managers of state-funded (fully or partially) profit and non-profit organizations

We first calculate the average across all three categories (values range from 0 to 100). In additional analyses, we also analyze the third category separately, which focuses on the governor's arbitrary control over lucrative positions in state-owned enterprises and other agencies.

- We also draw upon a second question about the importance of connections in gaining access to lower levels of the bureaucracy. Although deputies in regional legislatures are not rank and file officials, the importance of patronage in obtaining such positions probably correlates with personalist norms at the top. Respondents gave answers on a seven-point scale ranging from Hardly Ever (1) to Almost Always (7).
  - When recruiting to regional public administration (to positions known as “specialists”), political connections of the applicants decide who gets the job.
- Table F1 shows the results using these three alternative personalism measures in our main region-level models. The specifications are identical to those in the main paper, controlling for the standard set of predictors and year effects included in all models. The point estimates on all three measures are positively correlated with defection.

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procedures undertaken, as well as the full questionnaire.

**TABLE F1: REGIONAL DETERMINANTS OF DEFECTION  
PERSONALISM MEASURED USING QUALITY OF GOVERNMENT SURVEYS**

	Dependent Variable: Defected (0/1)					
	(1)	(2)	(3)	(4)	(5)	(6)
Male	0.009 (0.015)	0.006 (0.015)	0.005 (0.017)	0.001 (0.016)	0.010 (0.018)	0.006 (0.019)
Age (log)	-0.047* (0.025)	-0.047* (0.024)	-0.038* (0.019)	-0.037*** (0.011)	-0.049 (0.035)	-0.054 (0.035)
Firm Director (self-described)	0.023** (0.011)	0.027** (0.011)	0.056*** (0.012)	0.062*** (0.007)	0.020* (0.012)	0.021* (0.012)
Ran on SMD Ballot	0.039*** (0.010)	0.037*** (0.011)	0.047*** (0.012)	0.042*** (0.015)	0.030*** (0.007)	0.027*** (0.006)
Won Seat as Independent Previously	0.034*** (0.013)	0.036*** (0.012)	0.060*** (0.011)	0.063*** (0.013)	0.038*** (0.013)	0.041*** (0.014)
Currently in Office	-0.098*** (0.023)	-0.101*** (0.025)	-0.132*** (0.035)	-0.136*** (0.039)	-0.081*** (0.023)	-0.085*** (0.026)
UR Regional Vote	-0.021 (0.044)	-0.041 (0.043)	-0.015 (0.102)	-0.044 (0.110)	-0.022 (0.052)	-0.044 (0.049)
UR Leadership Share	-0.113 (0.075)	-0.108 (0.079)	-0.039 (0.108)	-0.044 (0.127)	-0.063 (0.072)	-0.058 (0.081)
Chg. in Profitability: UR Firms		-0.300*** (0.115)		-0.247* (0.137)		-0.439*** (0.084)
Growth (1-year Lag)	-0.003* (0.002)	-0.0001 (0.001)	-0.003 (0.002)	-0.00002 (0.002)	-0.004* (0.002)	-0.001 (0.002)
Democracy Score	0.001 (0.001)	0.001 (0.001)	0.001 (0.002)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Change in Governor Type	0.024** (0.010)	0.025** (0.011)	0.001 (0.012)	0.006 (0.016)	0.029* (0.015)	0.032** (0.014)
Personalism: % All Appts. Given to Sympathizers of Chief Exec.	0.067** (0.033)	0.048 (0.042)				
Personalism: % Managerial Appts. Given to Sympathizers of Chief Exec.			0.104*** (0.032)	0.087*** (0.020)		
Personalism: Hiring Based on Connections					0.014** (0.006)	0.013*** (0.004)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,854	2,666	1,617	1,496	2,502	2,367

This table examines both individual- and region-level covariates. All models use OLS with repeat election year fixed effects and cluster standard errors on region and year. We include three additional measures of personalism based on a Quality of Government Survey of Russian regions, which are unavailable for all regions in our sample (leading to the drop in sample size).

- Finally, we also examine alternative proxies for the ethnic republic-based measure of personalism used in the main text. In Columns 1 and 2 we include a simple control for whether the region is an ethnic republic. In Columns 3 and 4 we include a control for the share of the population that is non-Russian. Scholars have noted higher levels of personalism in those republics that have larger non-Russian populations (due to the development of ethnic based political machines in the 1990s). There is little variation in the share of the non-Russian population in oblasts and krais.
- The results show that defections are higher in ethnic republics and in regions with larger non-Russian populations.

**TABLE F2: REGIONAL DETERMINANTS OF DEFECTION  
PERSONALISM MEASURED BASED ON ETHNIC REPUBLICS**

	Dependent Variable: Defected (0/1)			
	(1)	(2)	(3)	(4)
Male	0.010 (0.012)	0.009 (0.012)	0.009 (0.011)	0.008 (0.012)
Age (log)	-0.032 (0.022)	-0.030 (0.022)	-0.031 (0.023)	-0.029 (0.022)
Firm Director (self-described)	0.020*** (0.007)	0.022*** (0.007)	0.020*** (0.007)	0.023*** (0.007)
Ran on SMD Ballot	0.032*** (0.008)	0.036*** (0.008)	0.033*** (0.008)	0.036*** (0.008)
Won Seat as Independent Previously	0.037*** (0.009)	0.037*** (0.009)	0.037*** (0.009)	0.038*** (0.009)
Currently in Office	-0.088*** (0.018)	-0.097*** (0.021)	-0.089*** (0.018)	-0.098*** (0.021)
UR Regional Vote	-0.016 (0.045)	-0.051 (0.040)	-0.017 (0.043)	-0.066 (0.042)
UR Leadership Share	-0.105*** (0.037)	-0.109*** (0.033)	-0.103*** (0.039)	-0.106*** (0.036)
Chg. in Profitability: UR Firms		-0.113** (0.058)		-0.114** (0.050)
Growth (1-year Lag)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.002** (0.001)
Democracy Score	0.002* (0.001)	0.001* (0.001)	0.002* (0.001)	0.001 (0.001)
Change in Governor Type	0.024*** (0.006)	0.027*** (0.007)	0.023*** (0.007)	0.027*** (0.007)
Personalism: Ethnic Republic	0.026** (0.011)	0.031** (0.013)		
Personalism: Percentage Non-Russian			0.041*** (0.012)	0.071*** (0.026)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	3,883	3,659	3,883	3,659

This table examines both individual- and region-level covariates. All models use OLS with repeat election year fixed effects and cluster standard errors on region and year. We include two additional measures of personalism based on ethnic republics (a binary indicator and a measure of the percentage of Russians living in each region).

## F.2 Repression

- In this section, we show models that include alternate measures of repression rather than just the level of democracy (as shown in the main text). We draw on recent work on Russian regional politics for these indicators, inserting them into the main models. Our main results are robust to these different operationalizations.
- First, in Columns 1-2, Table F3, we include a variable measuring press freedom. Ordered on a three-point scale, this time-variant measure for all regions was created by the Glasnost' Defense Foundation, which classified regions based upon their monthly monitoring of threats against journalists and other challenges to the freedom of the press.<sup>5</sup> Consequently, recent work has shown it to be a good general proxy for variation in the level of repression across regions (Marques, Govorun, and Pyle, 2014; Crabtree, Fariss, and Kern, 2015; Reuter and Robertson, 2015). All of our main results are robust to the inclusion of this variable. Greater repression (as marked by less press freedom) leads to fewer defections, but the results are not statistically significant.
- Next, in Columns 3-4 from the same table, we replace that measure of repression with another concerning NGO targetings, which is adapted from Gorokhovskaia (2017). Put together by the monitoring group Agora,<sup>6</sup> this measure calculates the number of checks of NGOs by regional prosecutor general offices in 2013. Altogether the group identified 270 such checks in 57 regions, which serves as a proxy for pressure that civil society feels from the government. Many of these checks lead to organizations being shut down or fined by the government. As in Gorokhovskaia (2017), we include a binary indicator if a region saw any NGOs being targeted. Again, higher levels of repression reduce the number of defections, but the point estimates are not statistically significant. However, our main results do not change when this variable is included.
- Finally in Columns 5-8, we include two measures from Kozlov, Libman, and Schultz (2018), which explains variation in repression across Russian regions using data on individual governor characteristics. The authors argue that because governors in Russia have little access to extra-judicial resources (such as paramilitary units or security forces), they often apply pressure to formal institutions and attempt to influence judicial decision-making. Governors often invoke so-called 'telephone law' to set the judicial agenda. The measures of repression then capture how aggressively regional courts punish identical felony charges: regions where convicted felons receive harsher sentences (resulting in actual prison time) are viewed as having higher levels of repression. We use two indicators from the Kozlov, Libman, and Schultz (2018) paper: (1) the ratio between the number of actual prison sentences made by the regional court to the number of all felony cases and (2) that same ratio but restricted to

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<sup>5</sup>Found at <http://www.gdf.ru/map/>.

<sup>6</sup>Found at [http://openinform.ru/fs/j\\_photos/openinform\\_405.pdf](http://openinform.ru/fs/j_photos/openinform_405.pdf).



fraud felonies. These indicators are available for the majority of Russian regions, but again are a cross-section from the year 2010.

- The measures of sentence severity are negatively correlated with the probability of a candidate defecting (but neither is statistically significant). We thus find only suggestive evidence that greater repression reduces candidates' ability to leave the party, potentially for fear of repercussions. Our main results are robust to including these measures of repression in the models.

**TABLE F3: REGIONAL DETERMINANTS OF DEFECTION  
REPRESSION MEASURED BY PRESS FREEDOM, NGO TARGETINGS, AND COURT  
SENTENCINGS**

	Dependent Variable: Defected (0/1)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Male	0.011 (0.012)	0.009 (0.013)	0.010 (0.012)	0.008 (0.013)	0.011 (0.011)	0.008 (0.012)	0.011 (0.011)	0.008 (0.012)
Age (log)	-0.032 (0.023)	-0.029 (0.022)	-0.036 (0.023)	-0.033 (0.022)	-0.036 (0.023)	-0.032 (0.022)	-0.036 (0.023)	-0.032 (0.022)
Firm Director (self-described)	0.020*** (0.007)	0.022*** (0.007)	0.021*** (0.008)	0.024*** (0.007)	0.020** (0.008)	0.024*** (0.007)	0.020** (0.008)	0.024*** (0.007)
Ran on SMD Ballot	0.033*** (0.009)	0.037*** (0.008)	0.031*** (0.009)	0.033*** (0.009)	0.030*** (0.009)	0.033*** (0.008)	0.030*** (0.009)	0.033*** (0.008)
Won Seat as Independent Previously	0.037*** (0.009)	0.038*** (0.009)	0.039*** (0.010)	0.039*** (0.009)	0.038*** (0.010)	0.039*** (0.009)	0.038*** (0.010)	0.039*** (0.009)
Currently in Office	-0.089*** (0.018)	-0.099*** (0.021)	-0.088*** (0.020)	-0.096*** (0.023)	-0.087*** (0.019)	-0.095*** (0.023)	-0.087*** (0.019)	-0.095*** (0.023)
UR Regional Vote	-0.019 (0.037)	-0.062 (0.039)	-0.017 (0.033)	-0.065* (0.037)	-0.029 (0.037)	-0.064 (0.039)	-0.029 (0.042)	-0.068 (0.044)
UR Leadership Share	-0.099** (0.042)	-0.104*** (0.038)	-0.108*** (0.034)	-0.112*** (0.032)	-0.120*** (0.028)	-0.115*** (0.035)	-0.120*** (0.028)	-0.115*** (0.036)
Chg. in Profitability: UR Firms		-0.129*** (0.049)		-0.373*** (0.075)		-0.377*** (0.070)		-0.372*** (0.070)
Growth (1-year Lag)	-0.003** (0.001)	-0.002** (0.001)	-0.004*** (0.001)	-0.002* (0.001)	-0.003** (0.001)	-0.002* (0.001)	-0.003** (0.001)	-0.002* (0.001)
Chief Executive from Ethnic Minority	0.025*** (0.003)	0.038** (0.017)	0.023*** (0.005)	0.036** (0.017)	0.022*** (0.007)	0.030* (0.016)	0.025*** (0.007)	0.032** (0.016)
Democracy Score	0.002* (0.001)	0.001* (0.0004)	0.002* (0.001)	0.001** (0.001)	0.001 (0.001)	0.001** (0.001)	0.001* (0.001)	0.001** (0.0004)
Change in Governor Type	0.021*** (0.006)	0.023*** (0.006)	0.023*** (0.006)	0.025*** (0.005)	0.023*** (0.007)	0.026*** (0.006)	0.022*** (0.007)	0.025*** (0.006)
Repression: Press Freedom	0.004 (0.007)	0.006 (0.006)						
Repression: NGOs Targeted			-0.005 (0.011)	-0.009 (0.013)				
Repression: All Felony Convictions					-0.046 (0.053)	-0.047 (0.051)		
Repression: All Fraud Convictions							-0.015 (0.040)	-0.026 (0.039)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,872	3,648	3,804	3,583	3,762	3,583	3,762	3,583

This table examines both individual- and region-level covariates. All models use OLS with repeat election year fixed effects and cluster standard errors on region and year. We include two additional measures of repression based on press freedom and NGO targetings, and two measures from [Kozlov, Libman, and Schultz \(2018\)](#) on repression measured using court sentences.

### F.3 Access to Spoils

- To measure spoils, we draw on unique data on the firm-level returns to holding regional legislative office, discussed in [Szakonyi \(2018\)](#). Not only do many businesspeople win seats in Russian regional legislatures (roughly 40%), but also there are immense profits to be made by taking a seat in the legislature. For the purposes of our research design, these firm-level returns help proxy for the rent-seeking opportunities available to legislators, whether affiliated with the ruling party or not. Our hypothesis holds that when ruling party members see limited access to such corruption avenues, they may look to other political groupings to help secure those gains.
- Our goal is to create a measure of how firms connected to sitting legislatures performed financially over one term in office. Just as United Russia chooses the degree of spoils to share with the opposition, party leaders also can act to curb or encourage corruption by their own members. Therefore, we require not only convocation-specific, but also a ruling party-specific measure of the payoffs to serving in a legislature: in a given regional legislature, how much can a legislator hope to benefit financially from staying with the ruling party?<sup>7</sup>
- We begin with data on 3,051 firms connected to 2,487 individual legislators from 82 regions.<sup>8</sup> These legislators either served as directors, deputy directors, or on the board of directors for each firm.<sup>9</sup> These legislators could have attained seats through either the PR or the SMD lists. Each firm has complete financial data available from the Russian State Statistics Agency (Rosstat) for both the year in which the election to each regional convocation was held and the final year of the convocation. This gives us before-and-after snapshots of each firm in order to trace its performance over one convocation in which its director held office.
- Simply taking the difference between the before and after overlooks important differences in firm characteristics that could determine profitability. For example, a large firm might on paper appear to be increasing its profits at a high rate, but relative to its initial starting position, those gains may be rather small. To obtain a more precise estimate of performance changes over time, we run the following regression:

$$Profit_{f,s,t,r} = Profit_{f,s,r,t-1} + Rev_{f,s,r,t-1} + Assets_{f,s,r,t-1} + FirmCov_{f,s,r,t-1} + \lambda_s + \mu_t + \nu_r + \epsilon_{f,s,t,r} \quad (1)$$

where  $Profit_{f,s,t}$  is the profit in the final year of the convocation,  $Profit_{f,s,t-1}$  is the profit in the first year of the convocation,  $Rev_{f,s,t-1}$  and  $Assets_{f,s,t-1}$  are the revenue (logged) and

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<sup>7</sup>Note in this case, we are not interested in the value of legislative office relative to not gaining access to this institution. After all, all of our defectors continue to run for office in the second election of the sequence. Instead, the correct comparison is between firms whose directors hold different political affiliations, so that candidates decide which party to join, conditional on seeing benefits from running at all.

<sup>8</sup>Legislators can be connected to more than one firm.

<sup>9</sup>Detailed information the coding can be found in [Szakonyi \(2018\)](#).

assets (logged) in the first year of the convocation,  $FirmCov_{f,s,t-1}$  is a vector of firm-specific covariates (dummies for state-owned enterprises, importers, exporters, as well as measures of firm age, the number of connected candidates in the legislature, and whether these candidates were incumbents),  $\lambda_s$  is a sector-specific fixed effect,  $\nu_r$  is a region-specific fixed effect, and  $\mu_t$  is a year-specific fixed effect.

- We then extract the residuals from this regression, which we interpret as the differences in profitability over time between politically connected firms that is not explained by pre-existing firm characteristics or starting point financials. It is this variation that we partly attribute to having a director in legislative office. We then subset the sample to only firms run by deputies that are members of United Russia. To derive our measures of spoils, we then average these residuals by 'region-year' (the region-year designation matches to each legislative convocation in the defections dataset).
- In other words using this firm-level data, we create a measure of how much United Russia firms earned in profit over the *previous* convocation in that regional legislature. This change in profitability measure takes into account variation in firm size, sector, ownership, among others, to hone in on the relative value of party affiliation. We then merge these region-year profitability measures for UR into our main 'UR Repeat Runners' samples and examine how UR candidates react to the differences in access to spoils enjoyed by businessperson legislators across Russian regions.

## G Testing Different Sample Subsets

### G.1 United Russia Electoral Strength

- United Russia's electoral strength varies considerably across regions. It is interesting, then, to examine whether politicians in regions where UR completely dominates the legislature behave differently than those where political competition is greater. For instance, the risks of distributing spoils to the opposition may become more acute when opposition parties have a fighting chance within the legislature. In these settings, UR candidates may be more likely to defect in order to improve their career prospects.
- In the main text, we find evidence that defections increase when UR performs worse in regional elections; although this effect disappears when we control for economic growth, which is correlated with UR electoral performance. In this section, we go one step further and divide the sample according to whether UR faced strong competition from its rivals for legislative seats. Because electoral margins in proportional representation systems can be somewhat difficult to interpret, we divide the sample based on the median electoral performance of United Russia in each regional election. Coincidentally, that figure is roughly 50%, meaning half of our 'UR Repeat Runners' declare their party choice in regions where UR received less than half of the vote in the previous election. We then run analysis identical to that found in the main text on these two subsets.
- Table G1 presents the results, with the subset with low UR vote share in Columns 1-2 and that with high vote share in Columns 3-4. First, the effect of sharing leadership positions on defections is much stronger and precisely estimated when UR's vote share is weak. This makes sense: in places where UR is fiercely competing with the opposition, sharing spoils with other parties increases the incentives for its own members to defect.
- On the other hand, we find that our preferred measure of personalism is more strongly correlated with defection when United Russia is performing well at the polls.
- Beyond this, we find few important differences in our main individual-level factors. Whereas firm directors might be more likely to defect in competitive regions, our other measure of autonomous resources (having won as an independent) comes through in both settings.

**TABLE G1: REGIONAL DETERMINANTS OF DEFECTION  
SUBSET BY UNITED RUSSIA VOTE SHARE**

	Dependent Variable: Defected (0/1)			
	Low UR Vote Share		High UR Vote Share	
	(1)	(2)	(3)	(4)
Male	0.019 (0.015)	0.024* (0.014)	0.001 (0.020)	-0.00003 (0.022)
Age (log)	-0.002 (0.027)	-0.002 (0.027)	-0.079 (0.050)	-0.077 (0.050)
Firm Director (self-described)	0.029*** (0.011)		-0.001 (0.015)	
Private Firm Director (with SPARK data)		0.014 (0.012)		0.003 (0.019)
SOE Director (with SPARK data)		-0.020 (0.023)		-0.007 (0.028)
Ran on SMD Ballot	0.002 (0.012)	0.005 (0.012)	0.013 (0.009)	0.013 (0.009)
Won Seat as Independent Previously	0.027** (0.013)	0.026** (0.013)	0.028*** (0.010)	0.027*** (0.010)
UR Regional Vote - Election #1	0.208 (0.128)	0.202 (0.126)	-0.081 (0.069)	-0.082 (0.069)
Growth (1-year Lag)	-0.002 (0.002)	-0.002 (0.001)	-0.005* (0.003)	-0.005* (0.003)
UR Leadership Share	-0.166*** (0.043)	-0.165*** (0.045)	-0.003 (0.109)	-0.003 (0.109)
Chief Executive from Ethnic Minority	0.007 (0.040)	0.007 (0.042)	0.041** (0.018)	0.041** (0.019)
Democracy Score	0.001 (0.001)	0.001 (0.001)	0.002 (0.002)	0.002 (0.002)
Change in Governor Type	0.017** (0.008)	0.017** (0.008)	0.016 (0.014)	0.016 (0.014)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	2,071	2,071	1,812	1,812

This table examines both individual- and region-level covariates. The reference category for the three firm director variables is all non-businessperson candidates. All models use OLS with repeat election year fixed effects and cluster standard errors on region and year. Columns 1-2 subset the sample to regions where United Russia won less than 50% of the vote in the first election; Columns 3-4 subset the sample to regions where United Russia won more than 50% of the vote in the first election.

## G.2 Incumbency

- The main results show that UR incumbents are much less likely to defect from the ruling party than those who lost election and did not take office. Here we explore whether our main explanatory variables have differential effects conditional on whether the UR candidate won the first election in the sequence. Incumbents may be less likely to defect in regions where the ruling party has established a dominant foothold since their chances of retaining their seat under a different party banner will be lower.
- Table G2 first shows the results subsetting on ‘non-incumbents’ (Columns 1-2) and ‘incumbents’ (Columns 3-4) separately. We must keep in mind the difference in sample size between the two subsets, which affects our ability to precisely estimate coefficients.
- As for the individual-level variables, we see broad similarities between non-incumbents and incumbents. One interesting deviation, however, is the result on past history of successfully running as an independent. Candidates who had won previously as an independent, but then lost as a UR candidate, are much *more* likely to defect from the ruling party, than those that had won office both as an independent and as a United Russia candidate. This suggests that these popular local candidates saw little value in remaining with a ruling party that could not guarantee them victory, and chose to exit and try their luck on their own.
- At the region level, there are both important similarities and differences between the two tables, even with the drop in sample size. When United Russia shares leadership posts with the opposition, the party sees departures from both its winning and losing candidates, though the effect is more precisely estimated among incumbents. Furthermore, incumbents are more likely to leave the party when economic growth is poor. However, personalism has similar effects in both samples and the difference is not statistically significant.
- To demonstrate this, we show interaction effects in Table G3. To ease exposition, we create a variable “Non-Incumbent” which is the reverse of “Incumbent”, taking a 1 if a repeat runner lost his or her first election. We then interact this variable with our measures of political competition and personalism: UR vote share and having a chief executive from an ethnic minority. In both cases, we do not see more defections among non-incumbents in either more competitive regions or in more personalist ones. The point estimates on the interaction effects are small and statistically indistinguishable from zero.

**TABLE G2: REGIONAL DETERMINANTS OF DEFECTION  
SUBSET BY INCUMBENT STATUS**

	Dependent Variable: Defected (0/1)					
	Non-Incumbents		Incumbents		No SMD Losers	
	(1)	(2)	(3)	(4)	(5)	(6)
Male	-0.003 (0.015)	0.005 (0.015)	0.015 (0.013)	0.015 (0.013)	0.013 (0.010)	0.015 (0.010)
Age (log)	-0.077 (0.061)	-0.076 (0.063)	-0.008 (0.025)	-0.006 (0.024)	-0.034* (0.020)	-0.033 (0.021)
Firm Director (self-described)	0.037** (0.018)		0.011 (0.008)		0.014* (0.008)	
Private Firm Director (with SPARK data)		0.015 (0.020)		0.013* (0.007)		0.009 (0.008)
SOE Director (with SPARK data)		-0.044** (0.021)		-0.006 (0.016)		-0.016 (0.012)
Ran on SMD Ballot	0.051 (0.059)	0.054 (0.059)	0.027*** (0.009)	0.028*** (0.009)	0.026*** (0.009)	0.027*** (0.009)
Won Seat as Independent Previously	0.210*** (0.028)	0.210*** (0.029)	0.010 (0.009)	0.009 (0.009)	0.024** (0.009)	0.023** (0.009)
UR Regional Vote - Election #1	0.110 (0.113)	0.101 (0.111)	-0.029 (0.023)	-0.029 (0.023)	-0.037 (0.034)	-0.039 (0.034)
Growth (1-year Lag)	0.0001 (0.004)	0.001 (0.004)	-0.005*** (0.001)	-0.005*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)
UR Leadership Share	-0.128 (0.084)	-0.122 (0.088)	-0.089*** (0.027)	-0.090*** (0.026)	-0.111*** (0.033)	-0.110*** (0.032)
Chief Executive from Ethnic Minority	0.039 (0.024)	0.039 (0.025)	0.013 (0.009)	0.014 (0.010)	0.026* (0.015)	0.027* (0.015)
Democracy Score	0.006** (0.003)	0.006** (0.003)	0.0003 (0.001)	0.0002 (0.001)	0.001* (0.001)	0.001* (0.001)
Change in Governor Type	0.020* (0.011)	0.018* (0.011)	0.023*** (0.008)	0.023*** (0.008)	0.026*** (0.005)	0.026*** (0.005)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,010	1,010	2,873	2,873	3,732	3,732

This table examines both individual- and region-level covariates. The reference category for the three firm director variables is all non-businessperson candidates. All models use OLS with repeat election year fixed effects and cluster standard errors on region and year. The sample in Columns 1-2 is subset to only candidates who lost the first election in the electoral sequence (and thus did not take office); Columns 3-4 look at those that did win office in the first election; Columns 5-6 remove all candidates who lost in an SMD race, but keep all incumbents and those who lost on the party list.



**TABLE G3: REGIONAL DETERMINANTS OF DEFECTION  
COMPETITION INTERACTIONS**

	Dependent Variable: Defected (0/1)			
	(1)	(2)	(3)	(4)
Male	0.010 (0.011)	0.013 (0.012)	0.010 (0.011)	0.012 (0.012)
Age (log)	-0.031 (0.022)	-0.030 (0.023)	-0.031 (0.022)	-0.030 (0.023)
Firm Director (self-described)	0.020*** (0.007)		0.020*** (0.007)	
Private Firm Director (with SPARK data)		0.015* (0.008)		0.014* (0.008)
SOE Director (with SPARK data)		-0.011 (0.012)		-0.011 (0.012)
Ran on SMD Ballot	0.032*** (0.009)	0.034*** (0.008)	0.032*** (0.008)	0.034*** (0.008)
Won Seat as Independent Previously	0.038*** (0.009)	0.037*** (0.009)	0.038*** (0.009)	0.037*** (0.009)
UR Regional Vote - Election #1	-0.023 (0.024)	-0.024 (0.024)	-0.011 (0.033)	-0.013 (0.031)
Growth (1-year Lag)	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)
UR Leadership Share	-0.110*** (0.036)	-0.108*** (0.035)	-0.109*** (0.036)	-0.108*** (0.035)
Chief Executive from Ethnic Minority	0.023*** (0.005)	0.024*** (0.005)	0.020** (0.009)	0.022** (0.009)
Democracy Score	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)
Change in Governor Type	0.022*** (0.006)	0.022*** (0.006)	0.022*** (0.006)	0.022*** (0.006)
Non-Incumbent	0.070* (0.042)	0.071* (0.042)	0.087*** (0.018)	0.087*** (0.019)
Non-Incumbent * UR Regional Vote - Election #1	0.038 (0.099)	0.036 (0.100)		
Non-Incumbent * Chief Executive from Ethnic Minority			0.009 (0.034)	0.008 (0.034)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	3,883	3,883	3,883	3,883

This table examines both individual- and region-level covariates. The reference category for the three firm director variables is all non-businessperson candidates. All models use OLS with repeat election year fixed effects and cluster standard errors on region and year.

### G.3 Later Years (2007-2016)

- Our strategy for constructing our sample discussed in Section A indicates that most of the ‘repeat runners’ (98%) originating from the United Russia ruling party ran in their second election during the period of 2007-2016. In this section, we remove the 52 candidates that re-ran before this period (2004, 2005, or 2006) and run identical analyses to what is presented in the main text at the individual and region levels. The results are presented in Tables [G4](#) and [G5](#).
- Overall, we see little difference in our results when the sample is restricted to 2007-2016. If anything, the coefficients on several of our main predictors of interest (UR Leadership Share, Percentage Non-Russian, and the variables capturing business connections) are more precisely estimated and statistically significant.

**TABLE G4: INDIVIDUAL DETERMINANTS OF DEFECTION  
SAMPLE SUBSET TO 2007-2016**

	Dependent Variable: Defected (0/1)			
	(1)	(2)	(3)	(4)
Male	0.008 (0.012)	0.009 (0.013)	0.009 (0.012)	0.009 (0.010)
Age (log)	-0.017 (0.018)	-0.015 (0.019)	-0.017 (0.022)	-0.030 (0.022)
Ran on SMD Ballot	0.044*** (0.009)	0.045*** (0.008)	0.112*** (0.021)	0.096*** (0.022)
Currently in Office	-0.085*** (0.018)	-0.086*** (0.018)	-0.079*** (0.018)	
Firm Director (self-described)	0.019** (0.008)			
Private Firm Director (with SPARK data)		0.020** (0.009)	0.022** (0.010)	
SOE Director (with SPARK data)		-0.011 (0.015)	-0.008 (0.018)	
SMD Vote Share			-0.134*** (0.042)	-0.167*** (0.040)
Ran on Closed PR List			-0.015 (0.012)	-0.035*** (0.011)
Low Ranked on Closed PR List			0.002 (0.001)	0.002* (0.001)
Won Seat as Independent Previously			0.029*** (0.010)	0.021* (0.011)
Government Employee				-0.024** (0.010)
Private Sector Employee				-0.027 (0.018)
Social Organization Employee				-0.005 (0.015)
Political Party Employee				-0.063** (0.025)
Professional Regional Legislator				-0.009 (0.012)
Unemployed				0.112* (0.058)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes
Observations	4,239	4,239	4,118	4,117

This table examines individual-level covariates. Firm Director (self-described) is a dummy for whether the candidates indicated they were part of a private firm's upper management; Private Firm Director and SOE Director add further information from the SPARK database. The reference category for the three firm-related variables is all other non-businessperson candidates. Likewise the reference category for the occupation dummies is all businesspeople. All models use OLS with repeat election year and region fixed effects and cluster standard errors on region and year. The sample is restricted only candidates whose second election in the electoral sequence occurred between 2007 and 2016.

**TABLE G5: REGIONAL DETERMINANTS OF DEFECTION  
SAMPLE SUBSET TO 2007-2016**

	Dependent Variable: Defected (0/1)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Male	0.012 (0.010)	0.012 (0.010)	0.011 (0.011)	0.010 (0.012)	0.013 (0.012)	0.011 (0.013)	0.012 (0.014)
Age (log)	-0.033 (0.021)	-0.030 (0.022)	-0.035 (0.022)	-0.033 (0.020)	-0.033 (0.022)	-0.031 (0.021)	-0.051** (0.024)
Firm Director (self-described)	0.014** (0.007)	0.013* (0.007)	0.018** (0.007)	0.021*** (0.007)			0.021* (0.011)
Private Firm Director (with SPARK data)					0.015* (0.008)	0.019** (0.007)	
SOE Director (with SPARK data)					-0.009 (0.011)	-0.008 (0.011)	
Ran on SMD Ballot	0.036*** (0.009)	0.035*** (0.009)	0.034*** (0.008)	0.038*** (0.008)	0.036*** (0.008)	0.040*** (0.008)	0.043*** (0.010)
Won Seat as Independent Previously	0.030*** (0.010)	0.030*** (0.010)	0.038*** (0.009)	0.039*** (0.009)	0.037*** (0.009)	0.038*** (0.009)	0.034*** (0.012)
Currently in Office	-0.090*** (0.018)	-0.090*** (0.018)	-0.088*** (0.018)	-0.097*** (0.022)	-0.088*** (0.018)	-0.097*** (0.022)	-0.097*** (0.023)
UR Regional Vote - Election #1	-0.069*** (0.026)	-0.059** (0.029)	-0.014 (0.032)	-0.059* (0.035)	-0.014 (0.031)	-0.059* (0.035)	-0.016 (0.044)
Growth (1-year Lag)		-0.004*** (0.001)	-0.004*** (0.001)	-0.003*** (0.001)	-0.004*** (0.001)	-0.003*** (0.001)	-0.004** (0.001)
Chg. in Profitability: UR Firms				-0.137*** (0.044)		-0.138*** (0.042)	
UR Leadership Share			-0.110*** (0.036)	-0.116*** (0.033)	-0.109*** (0.035)	-0.116*** (0.032)	-0.117 (0.075)
Chief Executive from Ethnic Minority			0.023*** (0.004)	0.036** (0.017)	0.024*** (0.005)	0.037** (0.018)	
Personalized Appts. (%)							0.068** (0.031)
Democracy Score	0.0003 (0.001)	0.0004 (0.001)	0.002* (0.001)	0.001** (0.0005)	0.002* (0.001)	0.001** (0.001)	0.001 (0.001)
Change in Governor Type	0.025*** (0.008)	0.022*** (0.007)	0.023*** (0.006)	0.025*** (0.006)	0.022*** (0.006)	0.025*** (0.006)	0.025*** (0.009)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,149	4,149	3,862	3,638	3,862	3,638	2,836

This table examines both individual- and region-level covariates. The reference category for the three firm director variables is all non-businessperson candidates. All models use OLS with repeat election year fixed effects and cluster standard errors on region and year. The sample is restricted only candidates whose second election in the electoral sequence occurred between 2007 and 2016.

## H Empirical Extensions

### H.1 Multinomial Results on Candidate Political Trajectories

- Table H1 presents the results of the multinomial logit models that disaggregate the party choice of defectors. These results are discussed in the main text.
- Table H2 presents the results of multinomial logit models that examine a larger set of candidate decisions. In the main text, we examine the behavior of United Russia candidates who have run in two consecutive elections. In Table H2, we examine all UR candidates and model their decisions at the time of the next election cycle. The biggest group, in Column 1, consists of those who simply did not run for electoral office again. The second group, Column 2, is those candidates who stayed in UR, but ran for office at a lower level (local or municipal). The third column is those regional UR candidates who did not run again for the regional legislature but ran at a lower level from an opposition party or as an independent. The fourth column is the same as our group of regional legislative defectors in the main paper (i.e. includes those UR candidates who ran again for regional legislative office and defected from UR), but it also includes 46 cases in which the candidate ran for election at a higher level (State Duma or Governor) and defected from UR. The reference category for the models is the 4,014 deputies who were repeat runners from UR in regional elections or ran from UR in a regional election and then ran at a higher level from UR.<sup>10</sup>
- The results are of some interest, but must be interpreted with caution. We do not have strong theoretical expectations about why candidates might leave electoral politics, so we hesitate to interpret the results in the first column. Moreover, it does not make sense to treat these observations as defections. A few of these candidates may have left formal politics, joined the ranks of the non-system opposition, and worked to challenge the regime on the streets or through informal channels. But we expect that this is quite rare; most of these cases are instances of candidates simply leaving electoral politics.
- We also not have a theory for why UR candidates might choose to abandon regional politics for local politics (Column 2). Column 3 indicates that several of the factors that predicted defections at the regional level also predict the decision to enter local politics *and* defect. But several others do not. This is not surprising, given that two separate decisions are being conflated in this column—the decision to defect from UR and the decision to enter politics at the local level. In the main paper, we focus on defections at the regional level because they are more consequential and more threatening to the regime. Moreover, defections to lower levels must be interpreted with caution because, until very recently, partisan penetration of local and municipal elections was very low. Thus, even pro-regime candidates usually ran

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<sup>10</sup>We lack career background information on the full set of candidates, so the model specifications in Table H2 are approximate, but are not identical to the model specifications in Table 1.

as independents. Indeed, 90% of defectors at local and municipal levels became independents, compared to less than 50% of defectors at the regional level. The last column indicates that most predictors of defection perform similarly well when including defections at higher levels alongside regional defections.

- Table [H3](#) shows the results from a model that uses a more aggregated coding scheme. Here the second column is any type of defection by regional UR candidates—whether at the municipal, regional, or federal level. The reference category is remaining in UR at any level. Results are very similar to those in the main text.

**TABLE H1: DEFECTION AND PARTY CHOICE**

	Became Independent (1)	Joined Opposition (2)
Male	0.441 (0.348)	-0.004 (0.212)
Age (log)	-0.439 (0.595)	-0.570 (0.418)
Firm Director (self-described)	0.482** (0.223)	0.175 (0.204)
Ran on SMD Ballot	0.712*** (0.254)	0.327 (0.210)
Won Seat as Independent Previously	0.538** (0.267)	0.661*** (0.256)
Currently in Office	-1.057*** (0.245)	-1.415*** (0.190)
UR Regional Vote	0.404 (1.090)	-1.008 (0.895)
UR Leadership Share	-0.550 (0.785)	-2.011*** (0.556)
Growth (1-year Lag)	-0.022 (0.027)	-0.104*** (0.028)
Chief Executive from Ethnic Minority	0.242 (0.357)	0.582* (0.302)
Democracy Score	0.043* (0.023)	0.026 (0.022)
Change in Governor Type	0.280 (0.213)	0.391** (0.163)
Repair Election Year Fixed Effects	Yes	Yes
Defections in Group	128	151
Total Observations	3,883	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1 This table runs a multinomial regression that disaggregates the defection choice modeled in the Main Text. *Became Independent* indicates that the defecting UR candidate ran as an independent in the second election of the sequence. *Joined Opposition* indicates that the defecting candidate ran as a member of a non-ruling party. The reference category is No Switch, i.e. the United Russia candidate did not defect in subsequent elections. Cell entries are multinomial logit coefficients. Standard errors are clustered at the region level with fixed effects included for the year of the second election when the UR candidate ran for regional office.

**TABLE H2: POLITICAL TRAJECTORIES FOR UR CANDIDATES AFTER REGIONAL ELECTIONS  
MODERATELY AGGREGATED CODING SCHEME**

	Left Politics (1)	Remained in UR (Lower Level) (2)	Defected (Lower Level) (3)	Defected (Reg/Fed Level) (4)
Male	-0.105 (0.068)	0.188 (0.115)	0.442** (0.208)	0.419** (0.194)
Age (log)	0.168* (0.100)	0.110 (0.159)	0.078 (0.249)	-0.838*** (0.293)
Ran on SMD Ballot	-0.102 (0.072)	-0.221 (0.157)	0.169 (0.194)	0.610*** (0.143)
Won Seat as Independent Previously	-0.108* (0.065)	-0.480*** (0.136)	-0.177 (0.223)	0.649*** (0.170)
Currently in Office	-1.609*** (0.078)	-3.047*** (0.172)	-2.931*** (0.213)	-1.194*** (0.173)
UR Regional Vote	1.942 (45.532)	18.021 (70.935)	-172.713* (96.211)	-66.617 (96.525)
UR Leadership Share	-0.027 (0.217)	-0.228 (0.376)	-1.131** (0.449)	-1.488*** (0.396)
Growth (1-year Lag)	-0.020** (0.009)	-0.025 (0.015)	-0.021 (0.022)	-0.016 (0.018)
Chief Executive from Ethnic Minority	0.265* (0.137)	-0.293 (0.205)	0.129 (0.387)	0.508** (0.251)
Democracy Score	-0.010 (0.008)	-0.012 (0.010)	-0.024 (0.016)	0.007 (0.017)
Constant	2.644** (1.211)	1.958 (1.912)	2.247 (2.960)	3.587 (2.260)
Initial Election Year Fixed Effects	Yes	Yes	Yes	Yes
Observations in Group	4,958	1,198	370	355
Total Observations	10,877			

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1 This table runs a multinomial regression using as the outcome the political decision that United Russia candidates made in the period after running for a regional legislature. Left Politics indicates that the UR candidate did not run for elected office at any level (local, regional or federal) within six years after initially running for a regional legislature as a member of UR. Defected (Lower Level) indicates that the UR candidate ran as a member of a non-ruling party or as an independent for a local or municipal election within six years. Defected (Reg/Fed Level) indicates that the UR candidate ran as a member of an opposition party or as an independent in a regional legislative or higher-level (gubernatorial or federal) election within six years. Remained with UR (Lower Level) indicates the United Russia candidate ran in a local or municipal election as a member of the UR party. The reference category is Remained with UR (Reg/Fed Level), i.e. the United Russia candidate ran in a regional or federal election, but continued to run as a member of the UR party. Cell entries are multinomial logit coefficients. Standard errors are clustered at the region level with fixed effects included for the year of the initial election the UR candidate ran for regional office.



**TABLE H3: POLITICAL TRAJECTORIES FOR UR CANDIDATES AFTER REGIONAL ELECTIONS  
MOST AGGREGATED CODING SCHEME**

	Left Politics (1)	Defected (Any Level) (2)
Male	-0.168*** (0.052)	0.358** (0.145)
Age (log)	0.151 (0.092)	-0.366* (0.195)
Ran on SMD Ballot	-0.060 (0.064)	0.472*** (0.120)
Won Seat as Independent Previously	-0.048 (0.063)	0.393*** (0.146)
Currently in Office	-0.914*** (0.076)	-1.258*** (0.131)
UR Regional Vote	-5.507 (34.330)	-122.360* (72.488)
UR Leadership Share	0.042 (0.217)	-1.210*** (0.316)
Growth (1-year Lag)	-0.013* (0.008)	-0.010 (0.015)
Chief Executive from Ethnic Minority	0.355*** (0.119)	0.375 (0.238)
Democracy Score	-0.006 (0.007)	-0.006 (0.013)
Constant	1.347 (1.047)	2.056 (1.964)
Initial Election Year Fixed Effects	Yes	Yes
Observations in Group	4,958	721
Total Observations	10,877	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1 This table runs a multinomial regression using as the outcome the political decision that United Russia candidates made in the period after running for a regional legislature. Left Politics indicates that the UR candidate did not run for elected office (local, regional or federal) at any level within six years after initially running for a regional legislature as a member of UR. Defected (Any Level) indicates that the UR candidate ran as a member of a non-ruling party or as an independent in an election, at any level—local, regional, or federal—within six years. The reference category is Remained with UR (Any Level), i.e. the United Russia candidate ran in a subsequent election, but continued to run as a member of the UR party. Cell entries are multinomial logit coefficients. Standard errors are clustered at the region level with fixed effects included for the year of the initial election the UR candidate ran for regional office.

## H.2 Differences Between Ballots

- In Table H4, we replicate the results from Table 2 in the text, but split the sample according to ballot structure. Candidates can run either in single-member districts or on party lists (through proportional representation). Columns 1-3 subset just to SMD candidates, Columns 4-6 look only at PR candidates, and Columns 7-9 look at the small number of candidates that ran on both ballots. We see that in general, the main hypotheses hold no matter the type of candidacy analyzed. One exception is the operationalization of the firm director measures, which are only significant for the models subset to SMD candidates. We see a strong interaction effect between SMD candidates and firm directors, as these candidates are more likely to take advantage of their local resources to win their SMD seat, and thus have the most autonomy to leave the party and win on their own.

**TABLE H4: INDIVIDUAL DETERMINANTS OF DEFECTION: BROKEN UP BY BALLOT**

	Dependent Variable: Defected (0/1)								
	Only SMD Candidates			Only PR Candidates			Ran on Both		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Male	0.037*** (0.011)	0.034*** (0.012)	0.036*** (0.011)	-0.0002 (0.023)	0.001 (0.023)	-0.002 (0.022)	-0.002 (0.053)	-0.0004 (0.058)	0.045 (0.088)
Age (log)	0.008 (0.049)	-0.004 (0.048)	-0.011 (0.052)	-0.022 (0.030)	-0.018 (0.037)	-0.026 (0.033)	0.136 (0.090)	0.135* (0.074)	0.125 (0.077)
Currently in Office	-0.193*** (0.050)	-0.164*** (0.041)	-0.163*** (0.042)	-0.074*** (0.017)	-0.067*** (0.015)	-0.071*** (0.014)	-0.213** (0.100)	-0.175* (0.089)	-0.183* (0.102)
Firm Director (self-described)	0.058*** (0.011)			-0.006 (0.012)			-0.047 (0.036)		
Private Firm Director (with SPARK data)		0.061*** (0.011)			-0.008 (0.013)			-0.034 (0.033)	
SOE Director (with SPARK data)		-0.005 (0.029)			-0.014 (0.025)			0.050 (0.062)	
SMD Vote Share		-0.117*** (0.038)	-0.120*** (0.039)					-0.258** (0.129)	-0.265* (0.154)
Ran on Closed PR List					-0.026* (0.014)	-0.021 (0.014)		-0.006 (0.028)	-0.014 (0.037)
Low Ranked on Closed PR List					0.003** (0.001)	0.003** (0.001)		0.0005 (0.004)	0.001 (0.004)
Won as Independent Previously		0.053** (0.024)	0.057** (0.025)		0.020 (0.019)	0.011 (0.017)		0.033 (0.035)	0.037** (0.017)
Government Employee			-0.055*** (0.019)			-0.021 (0.021)			0.011 (0.062)
Private Sector Employee			-0.092*** (0.032)			0.024 (0.038)			0.164 (0.205)
Social Organization Employee			-0.051** (0.022)			0.026** (0.010)			0.095 (0.116)
Political Party Employee			-0.124*** (0.035)			-0.096*** (0.025)			-0.393*** (0.062)
Professional Regional Legislator			-0.056*** (0.018)			0.033* (0.018)			0.064 (0.049)
Unemployed			0.051 (0.077)			0.106 (0.083)			0.415* (0.237)
Repeat Election Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,651	1,628	1,627	1,667	1,663	1,663	324	313	313

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1 This table examines individual-level determinants of defections using subsamples based on which ballot candidates ran on: in single member districts (Columns 1-3), on proportional representation lists (Columns 4-6) or both (Columns 7-9). All models use OLS with repeat election year and region and cluster standard errors region.

### H.3 Placebo Checks: Opposition Parties

- Table H5 shows the results from two placebo tests that help provide additional evidence for the mechanisms behind our findings. Column 1 approximates our findings from Column 3 of Table 2 (we lack information on the career backgrounds of KPRF and LDPR candidates, so the model specifications are not identical to Table 2). Column 2 uses the same set of variables to model defections from the KPRF and Column 3 does the same for the LDPR. While the logic behind some of our hypotheses about the causes of defections from UR should apply to any party, the logic behind others should only apply to defections from UR. If we find evidence that these factors predict defections from UR, but not from opposition parties, it will add evidence to our contention that these findings are driven by concerns over intra-regime spoil distribution. KPRF and LDPR candidates mainly defect from their parties to run as independents or join other smaller parties. An appreciable minority do join UR.
- There is evidence that LDPR candidates who had won seats previously as independents are also more likely to defect. This makes sense as our argument about the impact of autonomous resources on defection is not limited to ruling parties. Interestingly, it appears that sitting KPRF and LDPR deputies are actually more likely to defect. This contrasts with the findings on defections from UR. One plausible explanation for this finding is that high-level opposition figures are targets for cooptation by the ruling party.
- As expected, the regional performance of UR has no statistically significant effect on defections from the KPRF or LDPR. The same is true for *UR Leadership Share* and *Growth (1-year Lag)*. This gives us more confidence in the mechanisms we have posited for these findings. Indeed, interestingly, defections from the LDPR appear slightly more likely when UR holds more leadership positions. This illustrates the flip-side of the logic we present above: opposition politicians see less reason to stay with systemic opposition parties if the regime is not sharing spoils with them.
- One surprising finding is that defections from the LDPR and, to a lesser extent, KPRF are more likely in ethnic republics. This is the same for UR defections. We are unsure of how to interpret this finding, but it could reflect a level of institutional weakness that extends beyond the ruling party in these regions.

**TABLE H5: PLACEBO RESULTS - KPRF AND LDPR**

	Defections from UR (1)	Defections from KPRF (2)	Defections from LDPR (3)
Male	0.015 (0.010)	0.002 (0.017)	0.083*** (0.027)
Age (log)	-0.036 (0.024)	-0.092*** (0.028)	0.026 (0.041)
Ran on SMD Ballot	0.035*** (0.010)	0.124*** (0.024)	0.038 (0.045)
Won Seat as Independent Previously	0.037*** (0.012)	0.082 (0.061)	0.508*** (0.099)
Currently in Office	-0.087*** (0.014)	0.040** (0.019)	0.100*** (0.030)
UR Regional Vote	-0.015 (0.039)	-0.069 (0.078)	-4.882 (11.914)
UR Leadership Share	-0.106*** (0.030)	-0.118 (0.075)	0.105 (0.075)
Growth (1-year Lag)	-0.004** (0.001)	-0.002 (0.003)	-0.002 (0.004)
Chief Executive from Ethnic Minority	0.022* (0.012)	0.081** (0.038)	0.102 (0.071)
Democracy Score	0.002* (0.001)	0.004* (0.002)	0.009*** (0.003)
Change in Governor Type	0.022** (0.010)	0.001 (0.030)	0.002 (0.033)
Repeat Election Year Fixed Effects	Yes	Yes	Yes
Observations	3,883	2,384	1,138

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1 This table compares the determinants of defection from the United Russia party to those of defections from two prominent opposition parties. All columns use the same set of individual and region-level determinants but vary both the population of candidates analyzed and the outcome variable. Column 1 is most similar to the results in the main tables: the population is UR candidates and the outcome measure is a binary indicator if a candidate defected from United Russia in the second election of a regional sequence. Column 2 instead analyzes defections from the Liberal Democratic Party of Russia (LDPR) during the second election of a sequence. Column 3 examines defections from the Communist Party of the Russian Federation (KPRF). Standard errors are clustered at the region level with fixed effects included for the year of the initial election that candidates ran for regional office.

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