

Vote Brokers Replication Paper

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1 Introduction

I am replicating “Vote Brokers, Clientelist Appeals, and Voter Turnout: Evidence from Russia and Venezuela” by Timothy Frye, Ora John Reuter and David Szakonyi.

2 GitHub

All analysis for this paper be found in the original paper (<https://www.cambridge.org/core/journals/world-politics/article/vote-brokers-clientelist-appeals-and-voter-turnout-evidence-from-russia-and-venezuela/45FE0BE1216FCD8744B02A82919B328A>) and data verse (<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/YSVMS2>) My Github repo for this project is located under my username,

cpatvakanian. [¹]

3 Paper Overview

For my final replication project, I decided to look at Vote Brokers, Clientelist Appeals, and Voter Turnout: Evidence from Russia and Venezuela, a paper by Timothy Frye, Ora John Reuter and David Szakonyi. The paper looks at two countries, Russia and Venezuela, to what factors, if any, in clientelist exchange. The authors specifically look at the role of brokers and leverage in these two cases. The study uses survey data to explore Russian and Venezuelan brokers and how they perform in monitoring voting.

The goal is basically to understand how are monitors pressured by upper management in order to carry out clientelism and skew the voting. To understand this, the authors use a few models, such as difference of means between the different type of brokers and methods of leveraging, in both Russia and Venezuela. They also run fixed effect linear regressions to see what influence the skewing of the voting turnout for a couple of different scenarios, but actually include very few variables in their regression which is strange. The paper also has very specific demographics of the type of individuals they are looking at, which is good because it is specific but might also be a drawback because it limits the scope of the study. This paper ultimately finds that in Russia and Venezuela, different types of brokers and methods can influence voter turnout differently, which seems to be expected.

4 What I was able to replicate

In this paper for the most part I was able to replicate all of the graphics. The tables I couldn't use the old code to make so I hand made them, which I think is not a good idea... I also had an issue combining some of the graphs to have the same legend. I also messed up some of the footnotes on the graphics, and instead used captions. On the regression, the variable order isn't like the original, which I couldn't figure out. Also, I had a lot of trouble getting the exact format from R things like GT to Latex/PDF, so that's why I had to resort to manually doing some things.

5 Extension

For my extension, I decided to look at data structure and missing data.

```
##      anywpmob      turnemployer2014_1 turnactivist2014_1 turngovt2014_1
## Min.      :0.0000   Min.      :0.00000   Min.      :0.00000   Min.      :0.00000
```

```

## 1st Qu.:0.0000 1st Qu.:0.00000 1st Qu.:0.00000 1st Qu.:0.00000
## Median :0.0000 Median :0.00000 Median :0.00000 Median :0.00000
## Mean :0.3361 Mean :0.02973 Mean :0.04567 Mean :0.01832
## 3rd Qu.:1.0000 3rd Qu.:0.00000 3rd Qu.:0.00000 3rd Qu.:0.00000
## Max. :1.0000 Max. :1.00000 Max. :1.00000 Max. :1.00000
##
## citysize econsituation familyeconchange familyincome
## Min. :1.000 Min. :1.000 Min. :1.000 Min. : 1.000
## 1st Qu.:2.000 1st Qu.:3.000 1st Qu.:3.000 1st Qu.: 4.000
## Median :3.000 Median :3.000 Median :3.000 Median : 6.000
## Mean :2.757 Mean :3.029 Mean :2.964 Mean : 5.931
## 3rd Qu.:4.000 3rd Qu.:3.000 3rd Qu.:3.000 3rd Qu.: 8.000
## Max. :5.000 Max. :5.000 Max. :5.000 Max. :14.000
## NA's :283 NA's :146 NA's :883
## male logage edu employed
## Min. :0.0000 Min. :2.890 Min. :1.000 Min. :0.0000
## 1st Qu.:0.0000 1st Qu.:3.401 1st Qu.:4.000 1st Qu.:0.0000
## Median :0.0000 Median :3.761 Median :6.000 Median :1.0000
## Mean :0.4481 Mean :3.714 Mean :5.546 Mean :0.6403
## 3rd Qu.:1.0000 3rd Qu.:4.025 3rd Qu.:8.000 3rd Qu.:1.0000
## Max. :1.0000 Max. :4.500 Max. :8.000 Max. :1.0000
##
## gov firmsize owner manager
## Min. :0.0000 Min. :1.000 Min. :0.0000 Min. :0.0000
## 1st Qu.:0.0000 1st Qu.:2.000 1st Qu.:0.0000 1st Qu.:0.0000
## Median :0.0000 Median :2.000 Median :0.0000 Median :0.0000
## Mean :0.1923 Mean :2.727 Mean :0.0457 Mean :0.0788
## 3rd Qu.:0.0000 3rd Qu.:4.000 3rd Qu.:0.0000 3rd Qu.:0.0000
## Max. :1.0000 Max. :5.000 Max. :1.0000 Max. :1.0000
## NA's :17 NA's :1648 NA's :1667 NA's :1667
## computer newwork3yrs sidework polinterest
## Min. :1.00 Min. :0.0000 Min. :0.000 Min. :1.000
## 1st Qu.:1.00 1st Qu.:0.0000 1st Qu.:0.000 1st Qu.:2.000

```

```

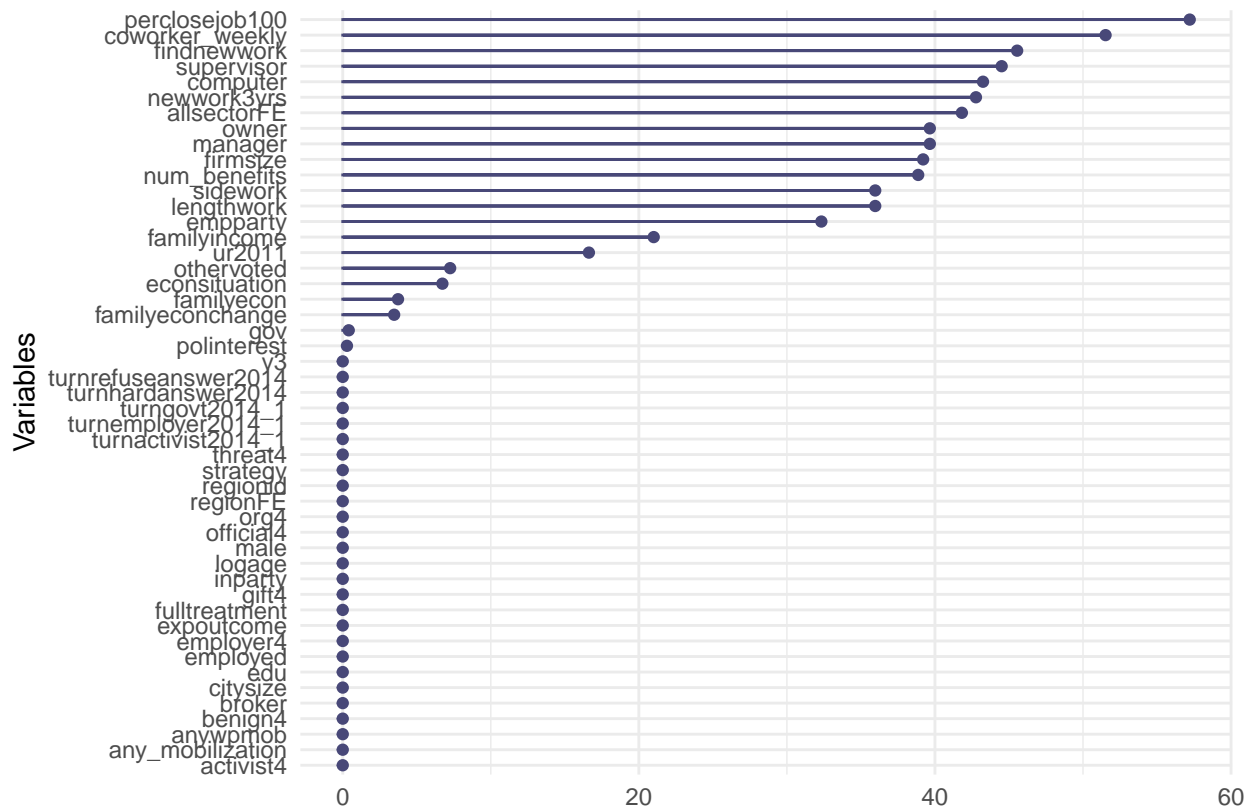
## Median :2.00 Median :0.0000 Median :0.000 Median :3.000
## Mean :2.34 Mean :0.1999 Mean :0.065 Mean :2.755
## 3rd Qu.:4.00 3rd Qu.:0.0000 3rd Qu.:0.000 3rd Qu.:3.000
## Max. :4.00 Max. :1.0000 Max. :1.000 Max. :4.000
## NA's :1818 NA's :1798 NA's :1512 NA's :12
## inparty percclosejob100 findnewwork num_benefits
## Min. :1.000 Min. :0.0000 Min. :1.000 Min. :0.0000
## 1st Qu.:1.000 1st Qu.:0.0000 1st Qu.:2.000 1st Qu.:0.0000
## Median :1.000 Median :0.1000 Median :3.000 Median :0.0000
## Mean :1.031 Mean :0.2399 Mean :2.831 Mean :0.9728
## 3rd Qu.:1.000 3rd Qu.:0.5000 3rd Qu.:4.000 3rd Qu.:2.0000
## Max. :3.000 Max. :1.0000 Max. :5.000 Max. :6.0000
## NA's :2405 NA's :1915 NA's :1634
## supervisor lengthwork coworker_weekly any_mobilization
## Min. :1.000 Min. : 0.500 Min. :0.0000 Min. :0.00000
## 1st Qu.:1.000 1st Qu.: 2.000 1st Qu.:0.0000 1st Qu.:0.00000
## Median :1.000 Median : 5.000 Median :1.0000 Median :0.00000
## Mean :1.664 Mean : 8.072 Mean :0.6786 Mean :0.08183
## 3rd Qu.:2.000 3rd Qu.:10.000 3rd Qu.:1.0000 3rd Qu.:0.00000
## Max. :3.000 Max. :50.000 Max. :2.0000 Max. :1.00000
## NA's :1871 NA's :1512 NA's :2166
## regionFE regionid allsectorFE turnrefuseanswer2014
## 41 : 553 Min. : 4.00 3 : 386 Min. :0.000000
## 55 : 551 1st Qu.:41.00 10 : 264 1st Qu.:0.000000
## 50 : 550 Median :50.00 7 : 237 Median :0.000000
## 63 : 550 Mean :45.88 6 : 227 Mean :0.001189
## 4 : 125 3rd Qu.:55.00 21 : 176 3rd Qu.:0.000000
## 5 : 125 Max. :75.00 (Other):1156 Max. :1.000000
## (Other):1750 NA's :1758
## turnhardanswer2014 expoutcome strategy broker employer4
## Min. :0.000000 Min. :1.000 0:1019 Employer:1434 Min. :0.0000
## 1st Qu.:0.000000 1st Qu.:2.000 1:1065 Party :1411 1st Qu.:0.0000
## Median :0.000000 Median :3.000 2:1086 Official:1359 Median :0.0000

```

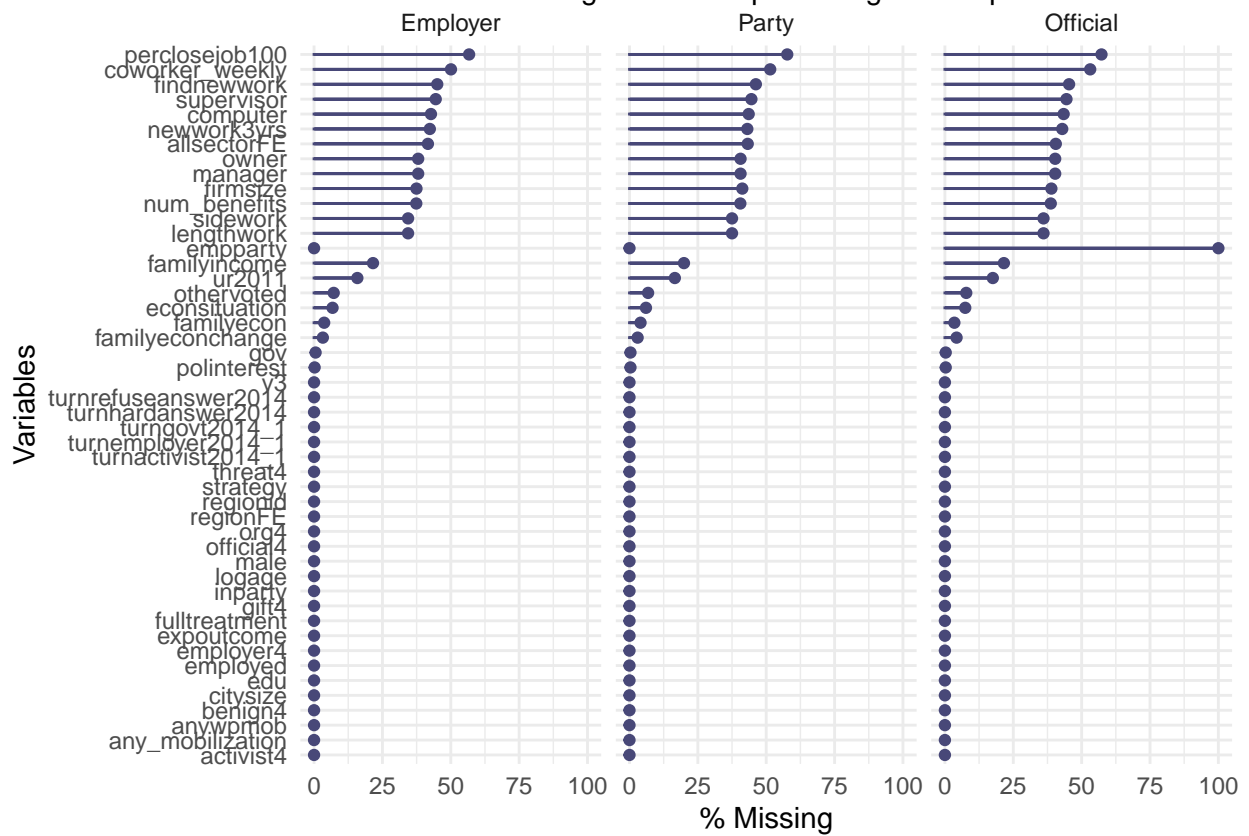
```

## Mean      :0.001665   Mean      :2.661   3:1034           Mean      :0.3411
## 3rd Qu.:0.000000   3rd Qu.:3.000           3rd Qu.:1.0000
## Max.      :1.000000   Max.      :5.000           Max.      :1.0000
##
##   activist4      official4      gift4      threat4
## Min.      :0.0000   Min.      :0.0000   Min.      :0.0000   Min.      :0.000
## 1st Qu.:0.0000   1st Qu.:0.0000   1st Qu.:0.0000   1st Qu.:0.000
## Median :0.0000   Median :0.0000   Median :0.0000   Median :0.000
## Mean      :0.3356   Mean      :0.3233   Mean      :0.2583   Mean      :0.246
## 3rd Qu.:1.0000   3rd Qu.:1.0000   3rd Qu.:1.0000   3rd Qu.:0.000
## Max.      :1.0000   Max.      :1.0000   Max.      :1.0000   Max.      :1.000
##
##   benign4      org4      empparty      fulltreatment
## Min.      :0.0000   Min.      :0.0000   Min.      :0.000   employer_gift: 374
## 1st Qu.:0.0000   1st Qu.:0.0000   1st Qu.:0.000   employer_org  : 372
## Median :0.0000   Median :0.0000   Median :1.000   party_org     : 362
## Mean      :0.2424   Mean      :0.2533   Mean      :0.504   party_gift    : 360
## 3rd Qu.:0.0000   3rd Qu.:1.0000   3rd Qu.:1.000   party_threat  : 353
## Max.      :1.0000   Max.      :1.0000   Max.      :1.000   official_gift: 352
##                                     NA's      :1359   (Other)      :2031
##   ur2011      othervoted      v3      familyecon
## Min.      :0.0000   Min.      :0.000   Min.      :1.000   Min.      :1.000
## 1st Qu.:0.0000   1st Qu.:0.000   1st Qu.:1.000   1st Qu.:3.000
## Median :1.0000   Median :1.000   Median :1.000   Median :3.000
## Mean      :0.5361   Mean      :0.555   Mean      :1.258   Mean      :3.181
## 3rd Qu.:1.0000   3rd Qu.:1.000   3rd Qu.:1.000   3rd Qu.:4.000
## Max.      :1.0000   Max.      :1.000   Max.      :3.000   Max.      :6.000
## NA's      :699     NA's      :305           NA's      :157

```



Viewing in terms of percentages is helpful



##	wpmob	emp_ask	activist_ask	nleader_ask
##	Min. :0.0000	Min. :0.0000	Min. :0.0000	Min. :0.0000
##	1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:0.0000
##	Median :0.0000	Median :0.0000	Median :0.0000	Median :0.0000
##	Mean :0.2773	Mean :0.2324	Mean :0.2556	Mean :0.2989
##	3rd Qu.:1.0000	3rd Qu.:0.0000	3rd Qu.:1.0000	3rd Qu.:1.0000
##	Max. :1.0000	Max. :1.0000	Max. :1.0000	Max. :1.0000
##	NA's :19	NA's :10	NA's :7	NA's :5
##	citysize	income	male	logage
##	Min. :1.00	Min. :1.000	Min. :0.0000	Min. :2.890
##	1st Qu.:2.00	1st Qu.:3.000	1st Qu.:0.0000	1st Qu.:3.332
##	Median :5.00	Median :4.000	Median :1.0000	Median :3.584
##	Mean :4.53	Mean :3.977	Mean :0.5136	Mean :3.574
##	3rd Qu.:7.00	3rd Qu.:5.000	3rd Qu.:1.0000	3rd Qu.:3.807
##	Max. :7.00	Max. :9.000	Max. :1.0000	Max. :4.419
##		NA's :110		
##	edu	employed	gov	firmsize
##	Min. :1.000	Min. :0.0000	Min. :0.0000	Min. :1.00
##	1st Qu.:3.000	1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:1.00
##	Median :3.000	Median :1.0000	Median :0.0000	Median :2.00
##	Mean :3.422	Mean :0.5514	Mean :0.1943	Mean :2.14
##	3rd Qu.:4.000	3rd Qu.:1.0000	3rd Qu.:0.0000	3rd Qu.:3.00
##	Max. :5.000	Max. :1.0000	Max. :1.0000	Max. :5.00
##				NA's :637
##	owner	manager	computer	partymember
##	Min. :0.0000	Min. :0.0000	Min. :1.000	Min. :0.000
##	1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:1.000	1st Qu.:0.000
##	Median :0.0000	Median :0.0000	Median :1.000	Median :0.000
##	Mean :0.0326	Mean :0.2581	Mean :1.864	Mean :0.165
##	3rd Qu.:0.0000	3rd Qu.:0.0000	3rd Qu.:3.000	3rd Qu.:0.000
##	Max. :1.0000	Max. :2.0000	Max. :4.000	Max. :1.000
##	NA's :633	NA's :633	NA's :636	
##	benefits	any_mobilization	treatment	vote_intent

```

## Min.      :0.0000  Min.      :0.0000  7      :133  Min.      :1.000
## 1st Qu.:0.0000  1st Qu.:0.0000  3      :132  1st Qu.:2.000
## Median :0.0000  Median :0.0000  9      :125  Median :3.000
## Mean    :0.1803  Mean    :0.4903  12     :124  Mean    :3.233
## 3rd Qu.:0.0000  3rd Qu.:1.0000  10     :120  3rd Qu.:5.000
## Max.     :1.0000  Max.     :1.0000  8      :118  Max.     :5.000
## NA's     :2      NA's      :9      (Other):648  NA's     :72

## broker      strategy_number      strategy      employer
## Length:1400  Length:1400      Length:1400      Min.      :0.000
## Class :character  Class :character  Class :character  1st Qu.:0.000
## Mode  :character  Mode  :character  Mode  :character  Median :0.000
##                                     Mean    :0.325
##                                     3rd Qu.:1.000
##                                     Max.     :1.000
##

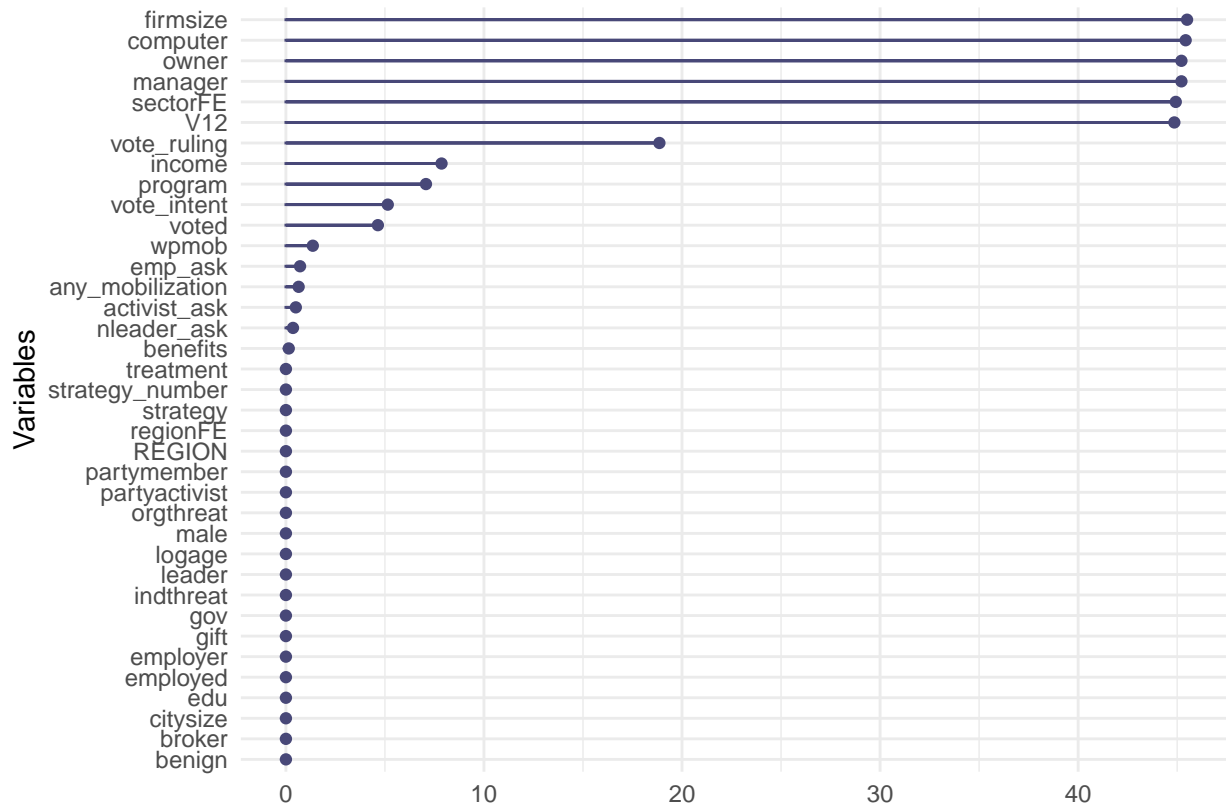
## partyactivist  leader      gift      benign
## Min.      :0.0000  Min.      :0.0000  Min.      :0.0000  Min.      :0.000
## 1st Qu.:0.0000  1st Qu.:0.0000  1st Qu.:0.0000  1st Qu.:0.000
## Median :0.0000  Median :0.0000  Median :0.0000  Median :0.000
## Mean    :0.3271  Mean    :0.3479  Mean    :0.2471  Mean    :0.225
## 3rd Qu.:1.0000  3rd Qu.:1.0000  3rd Qu.:0.0000  3rd Qu.:0.000
## Max.     :1.0000  Max.     :1.0000  Max.     :1.0000  Max.     :1.000
##

## orgthreat      REGION      program      V12
## Min.      :0.0000  Min.      :1.000  Min.      :0.0000  Min.      : 1.000
## 1st Qu.:0.0000  1st Qu.:2.000  1st Qu.:0.0000  1st Qu.: 1.000
## Median :0.0000  Median :4.000  Median :1.0000  Median : 2.000
## Mean    :0.2543  Mean    :4.127  Mean    :0.6718  Mean    : 3.269
## 3rd Qu.:1.0000  3rd Qu.:6.000  3rd Qu.:1.0000  3rd Qu.: 3.000
## Max.     :1.0000  Max.     :9.000  Max.     :1.0000  Max.     :99.000
##                                     NA's      :99      NA's      :628

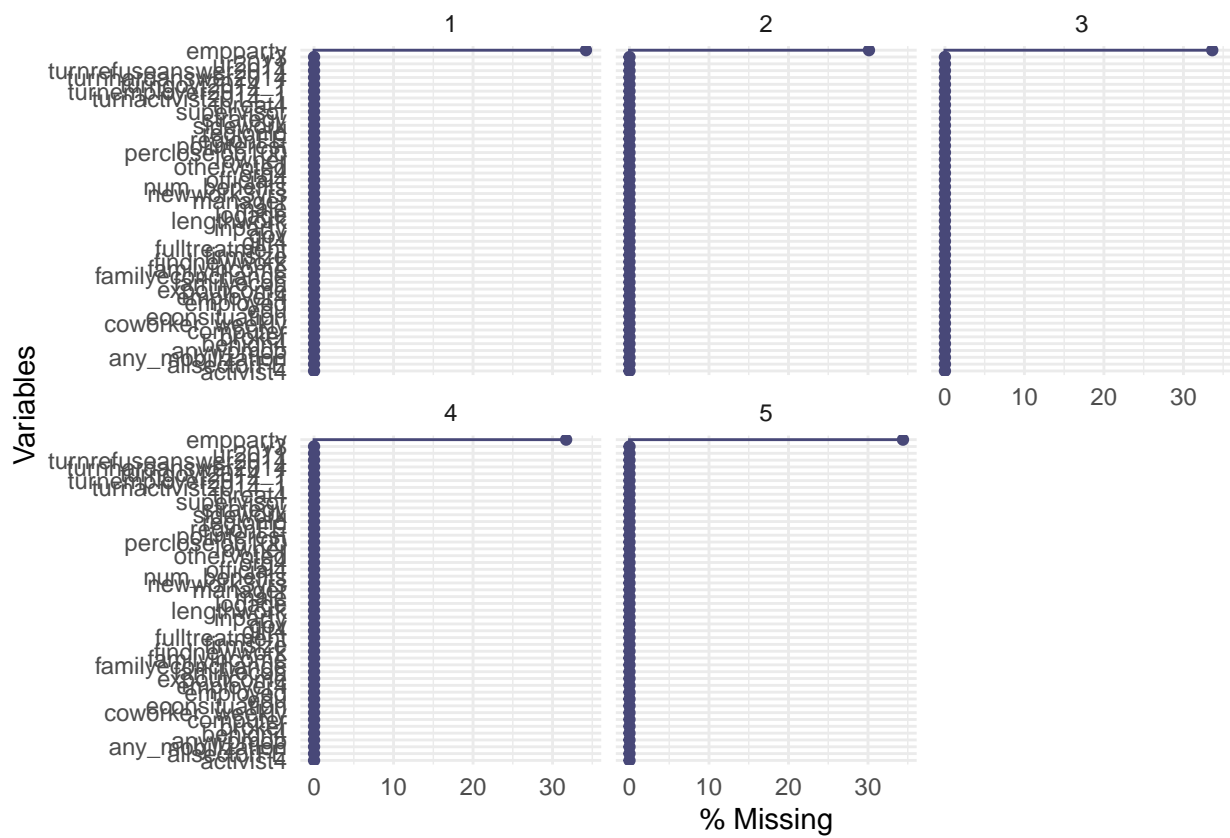
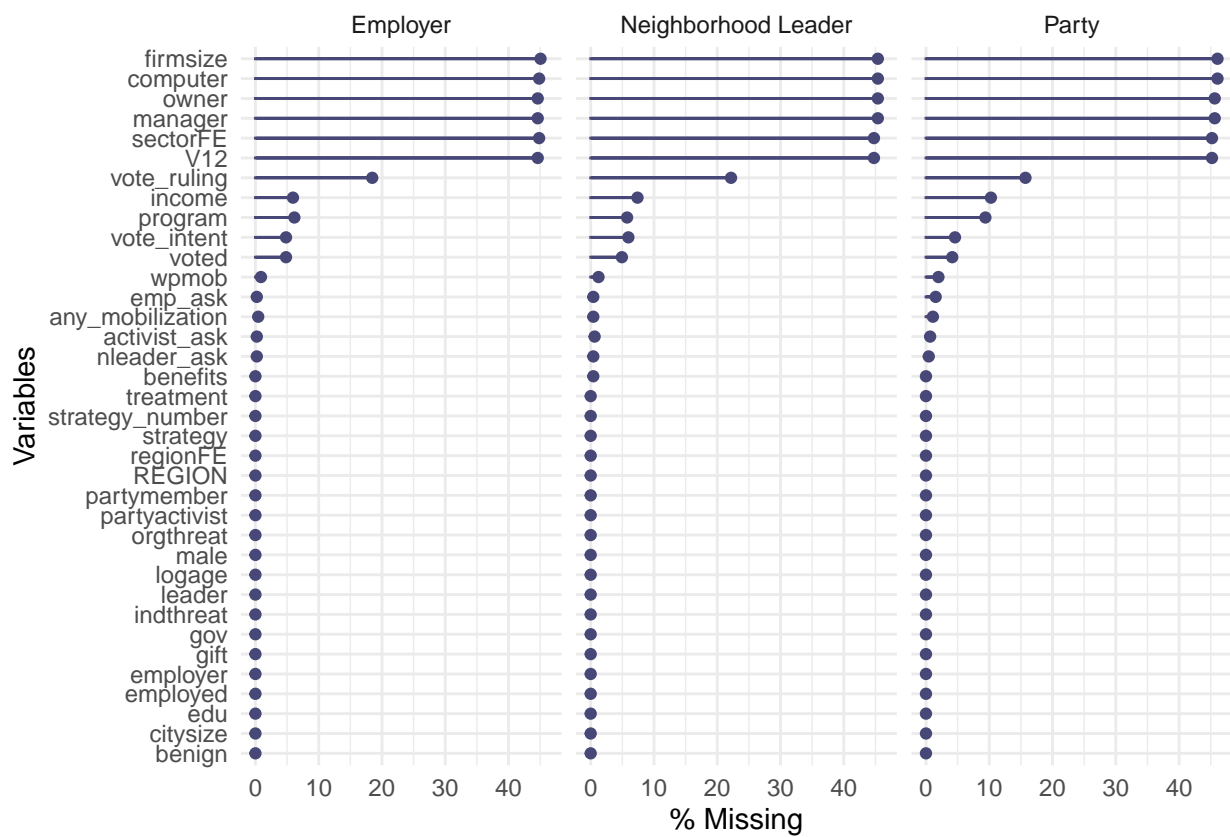
## vote_ruling      regionFE      voted      indthreat      sectorFE
## Min.      :0.0000  1      :266  Min.      :0.0000  Min.      :0.0000  7      :195

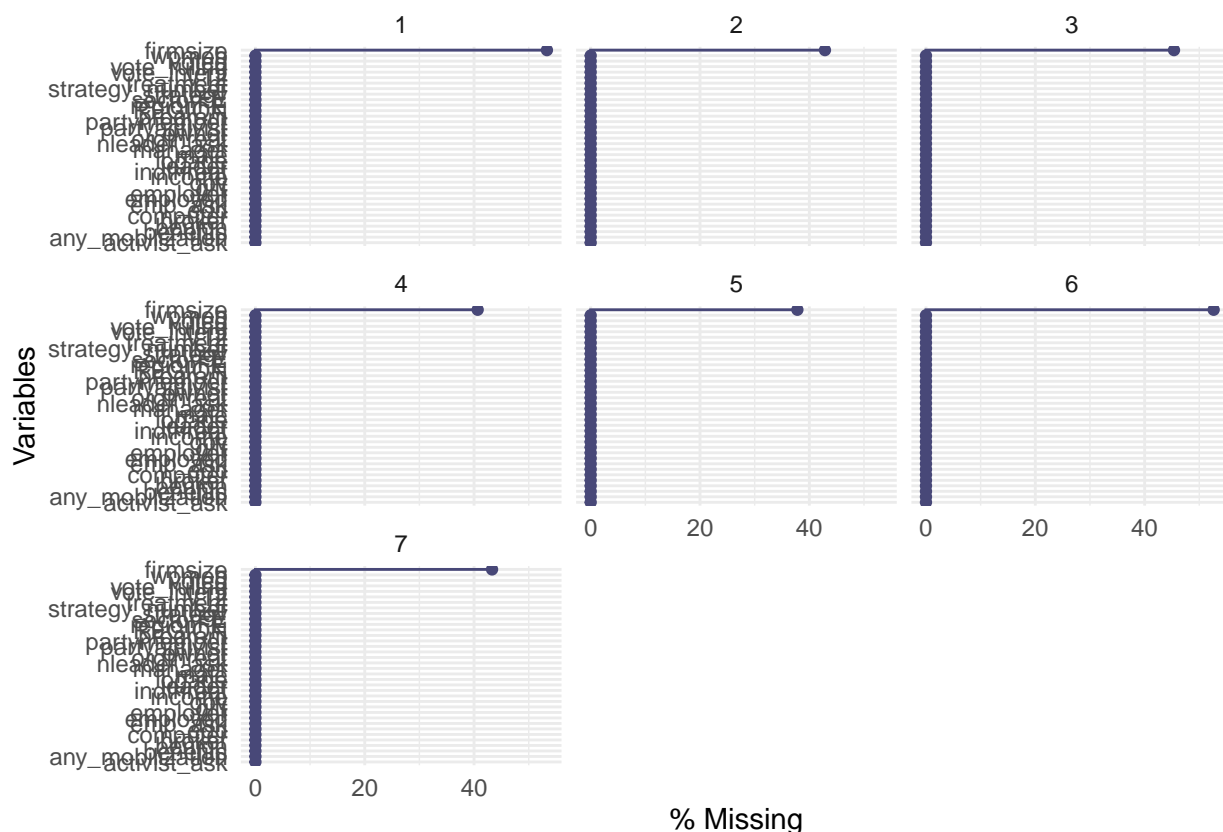
```


##	1st Qu.:	0.0000	2	:	210	1st Qu.:	1.0000	1st Qu.:	0.0000	2	:	97
##	Median	:	0.0000	5	:	182	Median	:	1.0000	Median	:	0.0000
##	Mean	:	0.3715	4	:	170	Mean	:	0.8509	Mean	:	0.2736
##	3rd Qu.:	1.0000	3	:	154	3rd Qu.:	1.0000	3rd Qu.:	1.0000	6	:	50
##	Max.	:	1.0000	6	:	138	Max.	:	1.0000	Max.	:	1.0000
##	NA's	:	264		(Other):	280	NA's	:	65		(Other):	268
##	NA's	:	264		(Other):	280	NA's	:	65		(Other):	268
##	NA's	:	264		(Other):	280	NA's	:	65		(Other):	268



Viewing in terms of percentages is helpful





6 Literature Review

For this paper I looked at a few papers on voting structure in Russia, as I was able to find less on Venezuela. In “How Capitalism was Built”, by Anders Aslund, the literature suggests that in many post soviet countries, voting patterns were heavily influenced by the transition to democracy in institutions built. In Russia, the case was that there was not enough a big push to transform after communism, and thus the country had to face more difficulties in long term in ensuring fair and free elections. Additionally, in Olga Popova’s “Corruption, Voting and Employment Status: Evidence from Russian Parliamentary Elections”, Popova finds that controlling for different employment statuses and corruption, people are still likely to vote differently, and more corruption generally induces people to vote more, which I think is to be expected.

7 References

I make use of Aslund (2012), Popova (2010), and Frye, Reuter, and Szakonyi (2019).

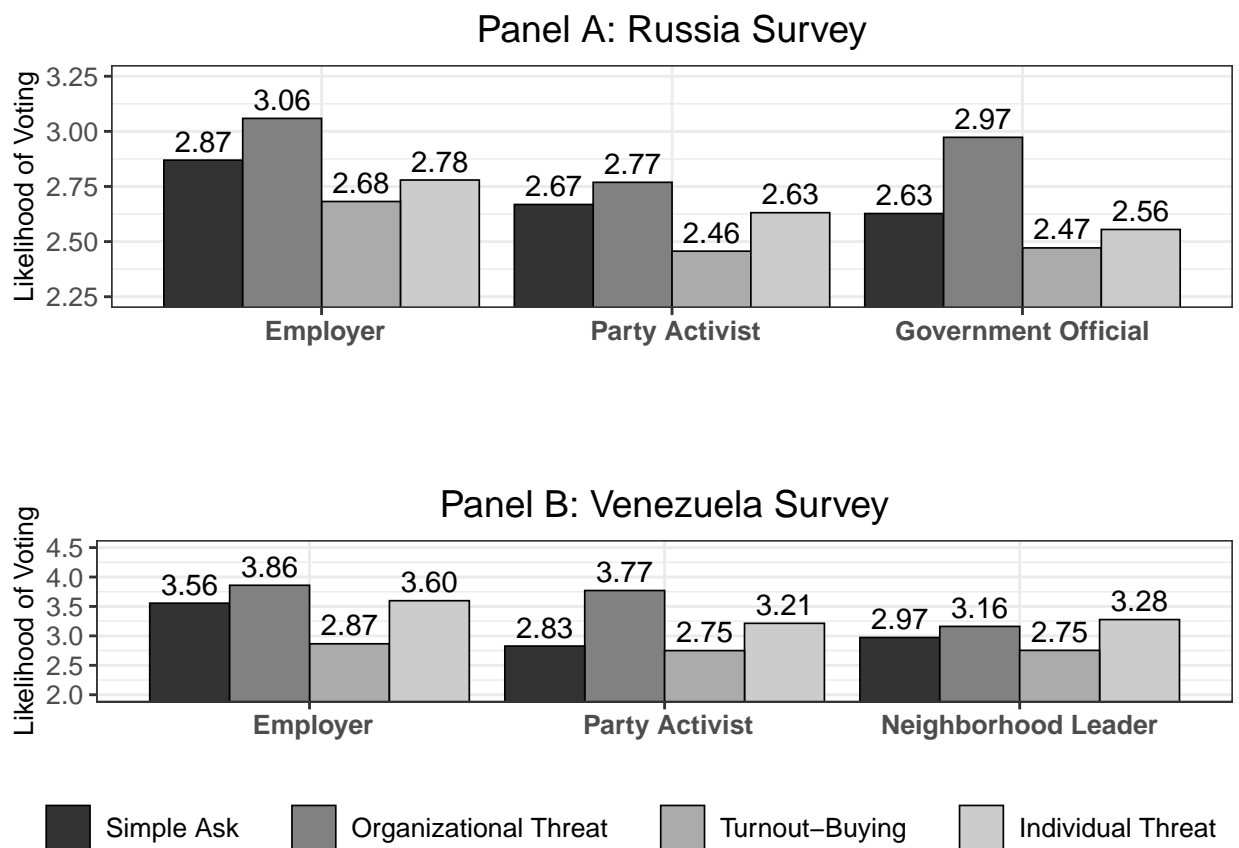
Aslund, Anders. 2012. *How Capitalism Was Built: The Transformation of Central and Eastern Europe, Russia, the Caucasus, and Central Asia*. 2nd ed. Cambridge University Press. <https://doi.org/10.1017/>

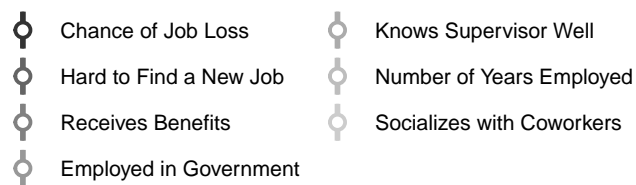
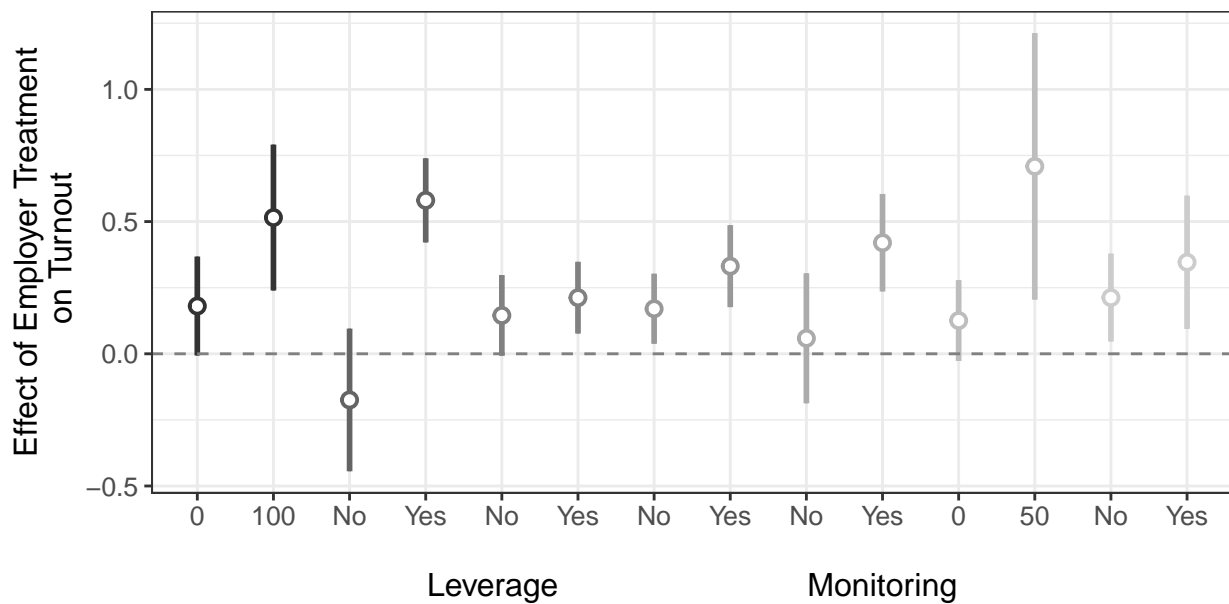
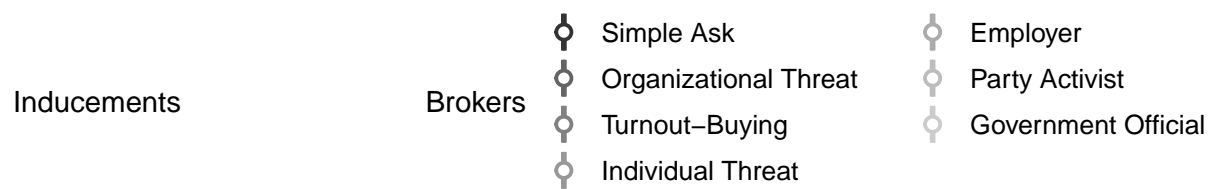
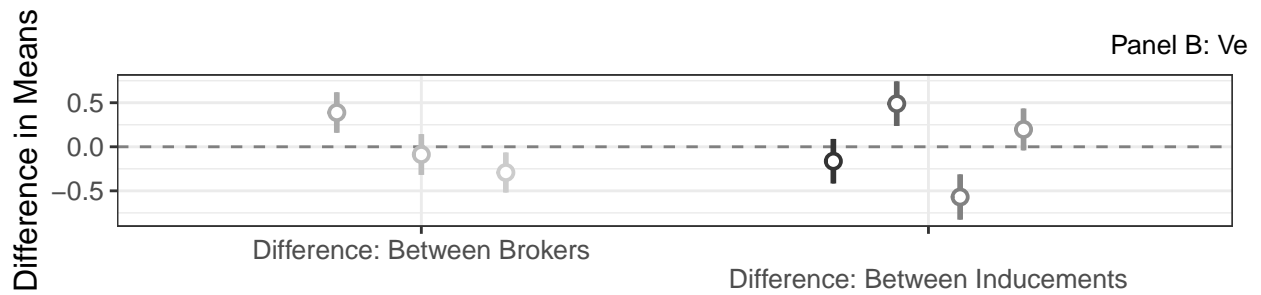
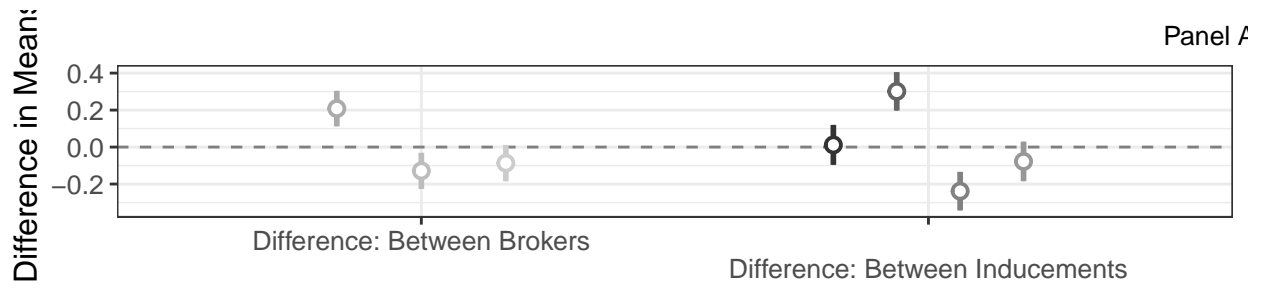
CBO9781139207850.

Frye, Timothy, Ora John Reuter, and David Szakonyi. 2019. "Vote Brokers, Clientelist Appeals, and Voter Turnout: Evidence from Russia and Venezuela." *World Politics* 71 (4). Cambridge University Press: 710–46. <https://doi.org/10.1017/S0043887119000078>.

Popova, Olga. 2010. "Corruption, Voting and Employment Status: Evidence from Russian Parliamentary Elections." *SSRN Electronic Journal*.

8 Appendix





Asked You to Vote		
Your Employer	344	
A Party Activist	336	A Government Official 339
Indicates There Will be Negative Consequences For You If You Do Not Vote		
Your Employer		344
A Party Activist	353	A Government Official 337
Offers You a Gift, Money, or Reward for Voting		
Your Employer		374
A Party Activist	360	A Government Official 352
Tells You That Your Firm or Org. Will Suffer if Turnout Among Employees is Low		
Your Employer		372
A Party Activist	362	A Government Official 331

Broker	Asked You to Vote	Indicates There Will be Negative Consequences For You If You Do Not Vote
Your Employer	344	344
A Party Activist	336	336
A Neighborhood Leader	339	339

Table 1: Survey Coverage

Russian Survey (a)

Broker	Asked You to Vote	Indicates There Will be Negative Consequences For You If You Do Not Vote	Offers You a Gift, Money, or Reward for Voting	Tells You That Your Firm or Org. Will Suffer if Turnout Among Employees is Low
Your Employer	344	344	374	372
A Party Activist	336	353	360	362
A Neighborhood Leader	339	337	352	331

Venezuelan Survey (b)

Broker	Asked You to Vote	Indicates There Will be Negative Consequences For You If You Do Not Vote	Offers You a Gift, Money, or Reward for Voting	Tells You That Your Firm or Org. Will Suffer if Turnout Among Employees is Low
Your Employer	96	132	113	114
A Party Activist	94	133	113	118
A Neighborhood Leader	125	118	120	124

Table 2: Substantive Effects: Predicted Probabilities by Broker Treatment

Probability of Voting (%)

(a)

	Russia	Venezuela
Employer	28.6	54.2
Party Activist	22.5	44.9
Government Official	23.1	
Neighborhood Leader		40.9

Probability of Not Voting (%)

(b)

	Russia	Venezuela
Employer	35.7	24.4
Party Activist	43.5	32.1
Government Official	42.7	
Neighborhood Leader		35.7

Table 1: Table 3

	<i>Dependent variable:</i>						
	Outcome Leverage			Respondent Would Vote Monitoring			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
empparty:gov				0.155** (0.065)			
empparty:perclosesjob100	0.252** (0.126)						
empparty:findnewwork		0.087*** (0.031)					
empparty:num_benefits			0.057* (0.033)				
empparty:supervisor					0.105** (0.051)		
empparty:lengthwork						0.012** (0.006)	
empparty:coworker_weekly							0.042 (0.059)
Observations	10,324	10,647	10,839	10,921	10,682	10,921	10,504

Note:

*p<0.1; **p<0.05; ***p<0.01

The outcome variable is the willingness to turnout outcome (five-point scale) from the survey experiment. The sample includes only respondents who received the employer or political party broker treatment. The employer treatment collapses the data along the inducement treatment arm of the factorial design used in the experiment. The sample is limited to only those who are employed. Chance of job loss measures the probability a respondent believes he or she will lose his or her job in the next twelve months. Hard to find a new job uses a five-point scale to capture the likelihood that if he or she were to lose his or her job, a respondent could find a similar one; higher values indicate more difficulty. Receives benefits captures the number of in-kind benefits (health care, education, transportation subsidies, etc.) respondents received from their employer. Higher values on the three-point scale used in knows supervisor well indicate better familiarity with one's boss. Number of years employed measures the length of time at one's work. Socializes with coworkers captures whether respondents spend time with colleagues outside work. All models include the constituent terms and basic demographic characteristics (gender, age, education, size of settlement, and an indicator for government employment). Models are estimated via ols and cluster errors at the region level.

TABLE 3
EXAMINING MECHANISMS: RUSSIA SURVEY EXPERIMENT^a

	<i>Outcome: Respondent Would Vote</i>						
	<i>Leverage</i>				<i>Monitoring</i>		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Employer treatment *	0.360**						
Chance of job loss	(0.167)						
Employer treatment *		0.156***					
Hard to find a new job		(0.038)					
Employer treatment *			0.070**				
Receives benefits			(0.036)				
Employer treatment *				0.166**			
Employed in government				(0.072)			
Employer treatment *					0.119**		
Knows supervisor well					(0.059)		
Employer treatment *						0.012**	
Number of years employed						(0.006)	
Employer treatment *							0.063
Socializes with coworkers							(0.076)
Constituent terms	yes	yes	yes	yes	yes	yes	yes
Demographics	yes	yes	yes	yes	yes	yes	yes
Observations	1209	1532	1724	1806	1567	1806	1389

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

^aThe outcome variable is the willingness to turnout outcome (five-point scale) from the survey experiment. The sample includes only respondents who received the employer or political party broker treatment. The employer treatment collapses the data along the inducement treatment arm of the factorial design used in the experiment. The sample is limited to only those who are employed. *Chance of job loss* measures the probability a respondent believes he or she will lose his or her job in the next twelve months. *Hard to find a new job* uses a five-point scale to capture the likelihood that if he or she were to lose his or her job, a respondent could find a similar one; higher values indicate more difficulty. *Receives benefits* captures the number of in-kind benefits (health care, education, transportation subsidies, etc.) respondents received from their employer. Higher values on the three-point scale used in *knows supervisor well* indicate better familiarity with one's boss. *Number of years employed* measures the length of time at one's work. *Socializes with coworkers* captures whether respondents spend time with colleagues outside work. All models include the constituent terms and basic demographic characteristics (gender, age, education, size of settlement, and an indicator for government employment). Models are estimated via OLS and cluster errors at the region level.

[¹]: [(https://github.com/cpatvakanian/milestone_6)]