# Vote Brokers Replication Paper

#### Cristopher Patvakanian

#### Contents

1	Introduction	1
2	Literature Review	1
3	Paper Overview	1
4	What I was able to replicate	2
5	Extension	2
6	$\operatorname{GitHub}$	5
7	References	6
8	Appendix	7
	8.1 Regressions with Imputed Data	13

## 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 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 stil likely to vote differently, and more corruption generally induces people to vote more, which I think is to expected.

## 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.

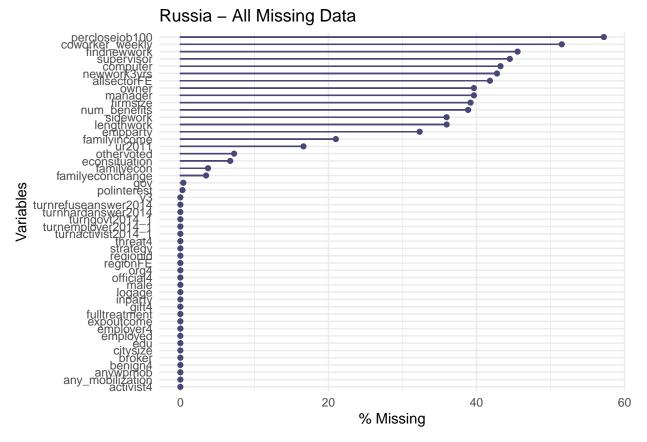
The goal is basically to understand how are monitors pressured by upper management in order to carry out clientelism and skew the voting. To understand this, the authors use a few models, such as difference of means between the different type of brokers and methods of leveraging, in both Russia and Venezuela. 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

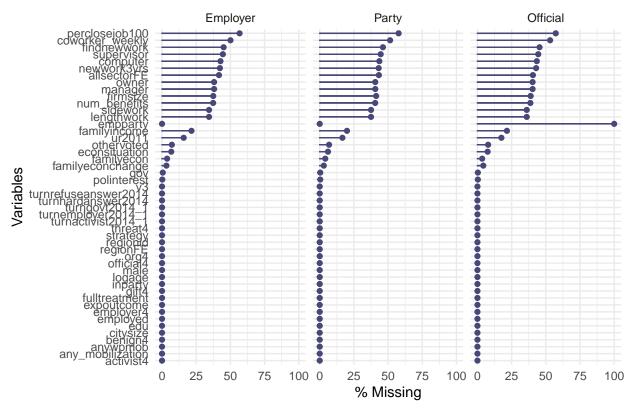
In this paper for the most part I was able to replicate all of the graphics. The tables I couldn't use the old code to make so I hand made them, which I think is not a good idea... I also had an issue combining some of the graphs to have the same legend. I also messed up some of the footnotes on the 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 missing data in the data sets and impute data for the regressions used in table 3. Looking at the tables below, I was able to

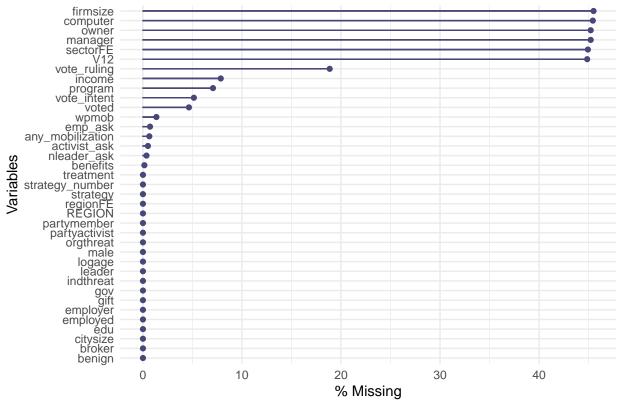


Russia - Missing Data by Broker

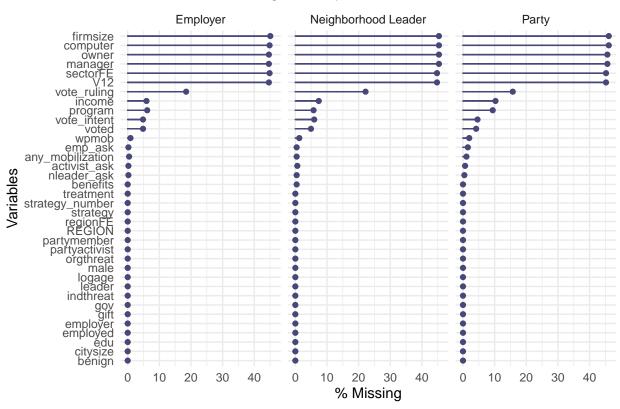


We see that for Russia, there is a lot of data missing for percentclose job, cowoerker\_weekly, and findnewwork variables. When we further example data missing by broker, there generally seems to be the same variables missing with the exception being emphasized for official, which is missing for 100% of the data.

### Venezuela - All Missing Data



## Venezuela - Missing Data by Broker



We see that for Venezuela, there is a lot of data missing for firmsize, computer, manager, and sector variables. When we further example data missing by broker, there generally seems to be the same variables missing for all of the brokers.

Given that the regression for table 3 uses only data from Russia, I decided to impute the missing values using the mice(), function and re-run the regressions, which can be found in Table 2 of the appendix. When I compare my results with the imputed data and compare it to the original study, I find the same significance and sign of the coefficients, however the magnitude of the coefficients appears to be smaller in general. I think that this just shows the original study is valid and robust, and by being able to not only replicate the data but get very similar results to the original after imputing data, I feel even more confident in the authors' findings.

### 6 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]

#### 7 References

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

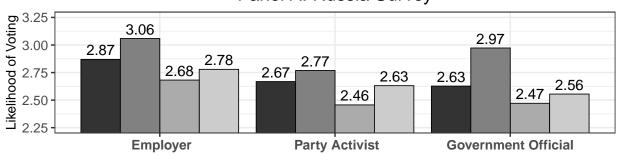
Aslund, Anders. 2012. How Capitalism Was Built: The Transformation of Central and Eastern Europe, Russia, the Caucasus, and Central Asia. 2nd ed. Cambridge University Press. https://doi.org/10.1017/CBO9781139207850.

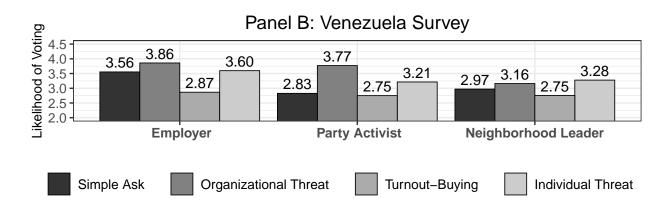
Frye, Timothy, Ora John Reuter, and David Szakonyi. 2019. "Vote Brokers, Clientelist Appeals, and Voter Turnout: Evidence from Russia and Venezuela." World Politics 71 (4). Cambridge University Press: 710–46. https://doi.org/10.1017/S0043887119000078.

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

## 8 Appendix

Panel A: Russia Survey





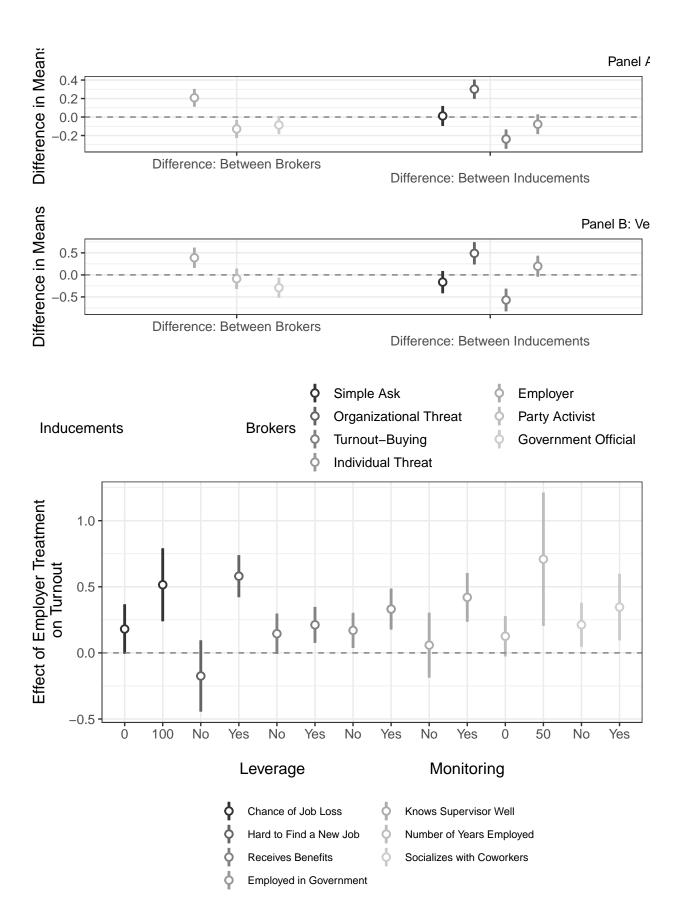


Table 1: Survey Coverage

## Russian Survey (a)

Broker	Asked You to Vote	Indicates There	Offers You a Gift,	Tells You That
		Will be Negative	Money, or Reward	Your Firm or Org.
		Consequences For	for Voting	Will Suffer if
		You If You Do Not		Turnout Among
		Vote		Employees is Low
Your Employer	344	344	374	372
A Party Activist	336	353	360	362
A Neighborhood	339	337	352	331
Leader				
		Venezuelan Survey (b)	)	
Broker	Asked You to Vote	Indicates There	Offers You a Gift,	Tells You That
		Will be Negative	Money, or Reward	Your Firm or Org.
		Consequences For	for Voting	Will Suffer if
		You If You Do Not		Turnout Among
		Vote		Employees is Low
Your Employer	96	132	113	114
A Party Activist	94	133	113	118
A Neighborhood	125	118	120	124
Leader				

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

			Dep	pendent v	variable:			
	Outcome Respondent Would Vote							
		Leve	erage			Monitoring		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
empparty:gov				0.166** (0.072)				
empparty:perclosejob100	0.360** (0.167)							
empparty:findnewwork		0.156*** (0.038)						
empparty:num_benefits			0.070** (0.036)					
empparty:supervisor					0.119** (0.059)			
empparty:lengthwork						0.012** (0.006)		
empparty:coworker_weekly							0.063 $(0.076)$	
Observations	1,209	1,532	1,724	1,806	1,567	1,806	1,389	

Note:

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

The outcome variable is the willingness to turnout outcome (fivepoint 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 sub-sidies, 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 2

_			Dep	pendent v	variable:							
	Outcome Respondent Would Vote											
		Leve	rage			Monitoring						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)					
empparty:gov				0.155** (0.065)								
empparty:perclosejob100	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 (fivepoint 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 sub-sidies, 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 <sup>a</sup>

	Outcome: Respondent Would Vote								
	Leverage				Monitoring				
	(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		

<sup>\*\*\*</sup>p < 0.01, \*\*p < 0.05, \*p < 0.1

a 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.

[^1]: [(https://github.com/cpatvakanian/milestone\_7)]