

Stealing Elections: An Analysis of Electoral Manipulation Strategies

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A year and some months ago in Yopal, Colombia...



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- ▶ 2011 reported cases: vote buying (10), biased polling place staff (4), voter registration fraud (1), threats to abstain (1)
- ▶ 2010 reported cases: vote buying (0), biased polling place staff (0), voter registration fraud (0), threats to abstain (1)

Varieties of manipulation

What are the factors that explain the variation in use of particular methods of electoral manipulation?

What the paper does

New hypotheses on the incidence of particular methods

- ▶ Aggregation levels of electoral results
- ▶ Electorate size
- ▶ Armed groups involved in politics

Data

- ▶ Number of citizens' reports of crimes by type per municipality (2002-2011)
 - ▶ Vote Buying
 - ▶ Restrictions on turnout
 - ▶ Fraud
- ▶ Reports filed in General Attorney local offices
- ▶ Number of election monitors' reports of crimes by type per municipality (2006-2011)

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 - ▶ 77.1% of respondents think that elections are not clean and fair (Latinbarómetro 1996-2010)

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 - ▶ 77.1% of respondents think that elections are not clean and fair (Latinbarómetro 1996-2010)
- ▶ Good quality data at the sub-national level

The Literature

- ▶ Mobilization and persuasion: Gans-Morse, Mazzuca and Nichter (2009), Morgan and Vardy (2012)
- ▶ Violence and vote buying: Collier Vicente (2012), Bratton (2008)
- ▶ Vote buying: Stokes (2005), Brusco, Nazareno and Stokes (2004), Nichter (2008)

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Theoretical work has concentrated on the impact of institutional changes on the choice of manipulation methods

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Empirical work has studied the determinants of one method or has not tested hypotheses on their relative incidence at the micro level

Group monitoring and aggregation of electoral results

- ▶ Bribed voters want to ensure the continuation of bribes
- ▶ Brokers set thresholds of votes for their candidate that determine whether or not to continue bribing the same people
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H2: Vote buying is more responsive to electorate size than other methods

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H3: Municipalities where armed groups involved in politics operate should have less vote buying

Number of reports models (Negative Binomial regression)

Dep. Variable:	Vote Buying (1)	Turnout Restrictions (2)	Fraud (3)
Voting Pop./Poll. Places	-0.002***	-0.001	-0.002***
Log-Likelihood	-2589.99	-1226.89	-1026.84
Observations	2,555	1,025	967
Municipalities	439	178	166

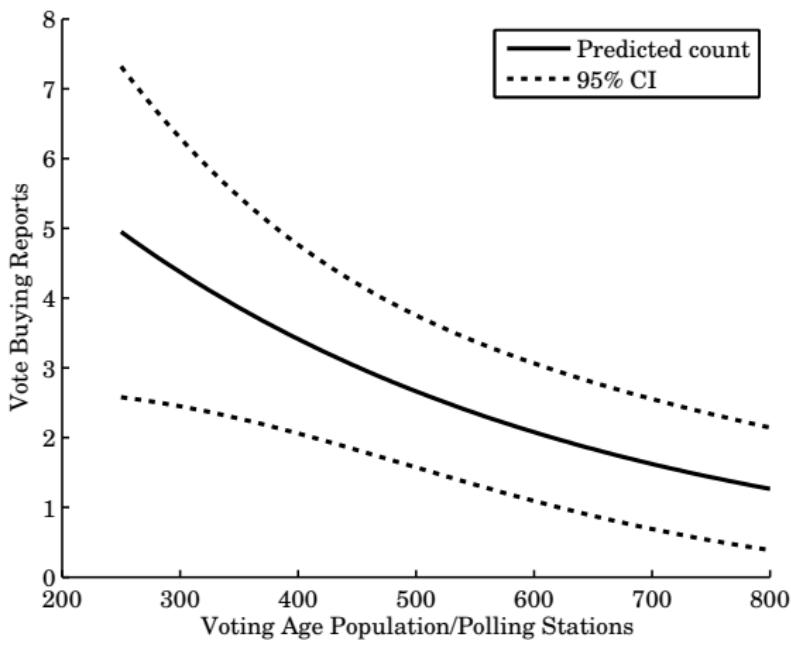
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Dep. Variable:	Vote Buying (1)	Turnout Restrictions (2)	Fraud (3)
Voting Pop./Poll. Places	-0.002***	-0.001	-0.002***
Armed Group	-0.321***	-0.027	-0.280*
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Armed Group	-0.321***	-0.027	-0.280*
log(Electorate Size)	-0.162***	-0.061***	-0.033
Log-Likelihood	-2589.99	-1226.89	-1026.84
Observations	2,555	1,025	967
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Aggregation level of results (H1)



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 - ▶ Do poor people are less likely to report?
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 - ▶ Do more competitive elections lead to overreporting?
- ▶ Election monitors' reports
- ▶ Modeling misreporting

Preliminary results summary

1. Level of aggregation of electoral results negatively affects the incidence of vote buying
2. Regions where armed groups operate have fewer reports of vote buying
3. Large electorates reduce the number of reports of all crimes, but vote buying is more responsive to that variable

So what?

1. Resources destined to monitor elections are scarce
2. Concentrating in monitoring fraud in general elections
3. Publishing results at higher levels of aggregation

Thank you!

Empirical strategy

$$y_{i,t} = v_{i,t} \alpha + s_{i,t} \beta + a_{i,t} \gamma + x_{i,t} \delta + u_{i,t},$$

- ▶ i municipality, t year
- ▶ $y_{i,t}$ count of reports of particular crime
- ▶ $v_{i,t}$ voting age population per polling place
- ▶ $s_{i,t}$ average valid votes of elections in previous election
- ▶ $a_{i,t}$ armed group presence
- ▶ $x_{i,t}$ control variables

Repeated interactions and vote buying

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- ▶ Learning of political preferences
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H4: The number of vote buying cases should have strong time persistence

Dynamic models

$$y_{i,t} = c_i + y_{i,t-1}\eta + \mathbf{x}_{i,t} \xi + u_{i,t},$$

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Controls in count models:

- ▶ Log current population
- ▶ Average margin of victory in previous election year
- ▶ Unsatisfied basic needs index
- ▶ Share local revenue in total revenue

Misreporting 1

Results with different dataset on election monitors' reports

Pros:

- ▶ Misreporting by election monitors less likely to be correlated with explanatory variables

Cons:

- ▶ Coverage begins 2006
- ▶ Not all municipalities are covered in all elections
- ▶ Coverage is not random

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Find support for H1 and H3

Misreporting 2

Modeling misreporting (Li, Trivedi, Gu 2003)

$$y_{i,t}^* \sim NegBin \left[\exp(\mathbf{x}'_{i,t}\beta), \exp(\mathbf{x}'_{i,t}\beta)(1 + \alpha \exp(\mathbf{x}'_{i,t}\beta)) \right],$$

$$y_{i,t}|y_{i,t}^* = 0 \sim Poisson \left[\exp(\mathbf{z}'_{i,t}\delta) \right],$$

$$y_{i,t}|y_{i,t}^* > 0 \sim Poisson \left[y_{i,t}^* \exp(\mathbf{z}'_{i,t}\theta) \right],$$

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- ▶ Expression for the log likelihood of the model not amenable to conventional MLE estimation
- ▶ I apply a Maximum Simulated Likelihood Estimator