#### Chasing Votes with the Public Budget

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#### Motivation

 Countries with weak institutions allow politicians to make decisions regarding the allocation of government expenditure without significant control.

 The ambition to achieve power leads politicians to make promises about redistribution to regions that are of strategic importance in elections.

 The distribution of governmental resources among the regions of a country has been a constant concern in political economy literature and several papers agree that political interests drive the distribution of resources.



# What does this paper do?

- This paper examines the tactical redistribution of public resources by an incumbent seeking re-election.
- Analyses the factors that drive differences between the decisions on redistribution of:cash transfers and public goods
- using:
  - A model where politicians diversify expenditure to persuade different groups of voters at the same time.
  - A unique data set on promises the president of Colombia made directly to different regions he visited.
- The results show:
  - An incumbent running for re-election will make more promises and actual redistribution when electoral competition is more intense.
  - Cash transfers are a good tool to persuade voters, since they are easy and quick to distribute and while public goods reward supporters.

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# Roadmap

- Background
- Model

- Empirical Strategy and Results
- Conclusions



# Town-Hall Meetings

- In 2002, Alvaro Uribe Velez won the presidential election in the first round. He managed to stay in power for a second period by changing the Constitution, supported by his steady high rates of popularity.
- He also sought a third term, but near the elections the Court blocked the attempt.
- In summary, He governed while being in campaign in both periods (t:2002,2006).
- A key to Uribe's popularity was his communication strategy in town-hall meetings with people throughout the country.
  - For eight years, President Uribe conducted over 300 town-hall meetings and made around 9000 promises to the municipalities he visited, as well as surrounding ones.
  - The information on town-hall meetings was compiled on the website of the presidency, where anyone could access information on the details of each promise

#### Town-Hall Meetings

"This government does not stay in the nation's capital on Saturdays and Sundays, at gatherings dedicated to drinking whiskey, gossiping about people [and] slandering political opponents. The gatherings of this government are with the people, talking with them and finding ways to vindicate the poor and to build a fair country".

Alvaro Uribe Velez



# Example of the Promises on the Web Site

| Date Municipality |                         | Task Summary  | Institution<br>Responsible  | Monitoring report  | State of<br>Task |
|-------------------|-------------------------|---|---|--|------------------|
| 7/5<br>2003       | Antioquia -<br>Envigado | GCC 31 (05)ul03<br>Envigado, Ant):<br>The Ministry of Social<br>Protection will study<br>the possibility of<br>providing an<br>ambulance to the<br>municipality of Don<br>Matias (Emergency)  | Ministry of Social<br>Protection  | Jun/14/05. Ministry of Social Protection. The<br>ambulance was delivered. The number of the<br>Resolution is 3750 dated 9 November 2004.   | Done             |
| 3/19<br>2005      | Córdoba -<br>Montería   | GCC 90 (19Mar05<br>Monteria, Cor):<br>Peromote, at the<br>regional fairs in<br>Cordoba, rural loans<br>for farmers. The<br>ministry is obliged to<br>give advice on how to<br>draw up and present<br>projects for such<br>loans.  | Ministry of<br>Agriculture and<br>Rural Development   | June 13 of 2005. The Ministry of<br>Agriculture and Rural Development is already<br>promoting loans in the department. Around 30<br>requests for loans were processed and a total<br>of \$492 million pesos in loans were granted.   | Done             |
| 7/5<br>2003       | Antioquia -<br>Envigado | GCC 31 (05]ul03<br>Euwigado, Ant):<br>Co-financing, the<br>second stage of<br>refurbshing Gro<br>Mendia School in the<br>municipality of<br>Caldas, with<br>international<br>cooperation resources,<br>under the condition<br>that the school enroll<br>displaced children. | Presidential Agency<br>for Social Action<br>and International<br>Cooperation, and<br>the Ministry of<br>Education | 10Sept2007 Presidential Agency for Social Action and International Cooperation The mayor of the municipality reports that Giro Mendia is a private school. On the other hand, the displaced fulldern in the community are attending the local municipal schools. TASK CLOSED | Closed           |



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#### Model

- Let us consider an incumbent labeled I competing against the opposition, labeled O
- Two municipalities j: x, y, each has three groups of voters
   i: 1.followers, 2.moderates and 3.opponents.
- The number of persons in each group and municipality is giving by  $N_{i,j}$  for group i = 1, 2, 3 and municipality j = x, y
- let  $\sigma_i$  denote the relative preference for the opposition.  $\sigma_i$  is uniformly distributed over the interval  $\left[-\frac{i}{2\phi_i} + \bar{\sigma}_i, \frac{1}{2\phi_i} + \bar{\sigma}_i\right]$ 
  - $\bullet$  For the followers:  $\bar{\sigma_1}<0$
  - For the moderates:  $\bar{\sigma_2} = 0$
  - For the opponents:  $\bar{\sigma_3} > 0$
  - $\phi_i$  is the the density of each group and it shows how responsive the voters are to economic policy



#### Model

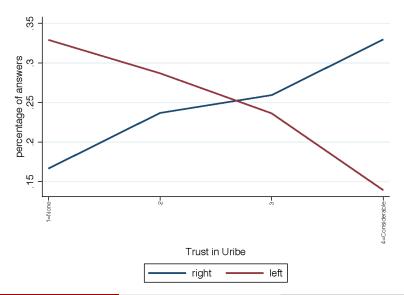
- Politicians make promises of redistribution in the form of cash,  $c_{ij}^p$ , and public goods,  $g_i^p$ .
- Individuals have a utility function for cash transfers and public goods.

$$U(c_{ij},g_j) = U^i(c_{ij}^p) + \beta_i U^i(g_i^p)$$
 (1)

- $\beta_i$  is a probability that promised public goods actually will be delivered.
  - where  $\beta_i = \kappa \bar{\sigma}_i$  and  $0 \le \kappa \bar{\sigma}_i \le 1$ .
  - The lower  $\bar{\sigma}_i$ , the more their trust.



# Relation between Trust and Ideological Closeness





#### Model

 The decisions on promises by the incumbent are based on maximization of the vote share, subject to budget constraints.

$$\max_{c,g} \sum_{j} \sum_{i} \Pi_{ij}^{I} N_{ij} \quad \text{s.t} \quad \sum_{j} \sum_{i} c_{ij}^{I} N_{ij} + \sum_{j} g_{j}^{I} N_{j} = 1$$
 (2)

 The problem yields to the following first order condition for the incumbent,

$$\left(c_{ij}^{I}\right): \quad \phi_{i}U^{i'}(c_{ij}^{I}) = \lambda$$
 (3)

$$\left(g_{j}^{I}\right): \sum_{i} \frac{N_{ij}}{N} \phi_{i}(\kappa - \bar{\sigma}_{i}) U^{i'}(g_{j}^{I}) = \lambda \tag{4}$$

- Remark 1: With cash transfers, the incumbent targets swing voters.
- Remark 2: Municipalities with larger groups of core voters will receive more public goods.

## Vote Share as a Measure of Popularity

- The election of the Colombian president is under direct vote.
   However, when president Uribe decided where to make promises, he had to choose between municipalities.
  - The incumbent wants to find municipalities with high proportion of people, but he needs to know how popular he is in those areas.
  - The variable that can give some indication of the popularity or ideological alignment in a municipality is the proportion of votes he obtained.

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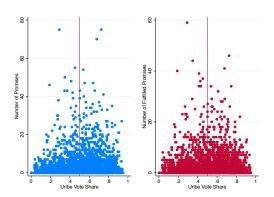
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# Relationship between the Number of Promises and Transfers and the Vote Share for Uribe

"A government that is not in campaign dies."

Alvaro Uribe Velez



## Testing Tactical Redistribution

• I estimate the following equation to test the swing voter hypothesis.

$$T_{it} = m_i + t_t + \beta_1 \text{closeness}_{i,t-1} + \beta_2 N_{i,t-1} + \epsilon_{i,t}$$
 (5)

- $T_{it}$  represents either the amount of promises or the fulfilled promises for municipality i in election term (period) t.
- I use three measures to capture the closeness of the election, *Closeness*:
  - A quadratic function of Uribe's vote share in the previous election for each municipality
  - The distance to the 50-50 vote for Uribe in the last election
  - The standard deviation of the vote share for the rightwing candidate over the preceding years, starting with 1990 when the constitution was changed.
- ullet  $N_{i,t-1}$  measures the turnout in municipality i in period t-1
- **Test:**  $\beta_1 > 0$  and  $\beta_2 > 0$ .



# Results: Swing Voter Hypothesis

|  |                      | Number of           |                      | Number of           |                     | Number of           |
|--|----------------------|---------------------|----------------------|---------------------|---------------------|---------------------|
|  | Number of            | Fulfilled           | Number of            | Fulfilled           | Number of           | Fulfilled           |
|  | Promises<br>(1)      | Promises<br>(2)     | Promises<br>(3)      | Promises<br>(4)     | Promises<br>(5)     | Promises<br>(6)     |
| Uribe Vote Share   | 10.11***<br>[3.092]  | 4.957***<br>[2.046] |                      |                     |                     |                     |
| Uribe Vote share Square                                    | -9.145***<br>[2.796] | -3.467*<br>[1.896]  |                      |                     |                     |                     |
| Uribe Vote share Square-0.5                                | [=++]                | [=:***]             | -4.064***<br>[1.203] | -1.766**<br>[0.827] |                     |                     |
| Standard Deviation of Vote<br>for the Right Wing Candidate |                      |                     |                      |                     | .0365***<br>[.0144] | .0355***<br>[.0101] |
| Turnout  | 3.654***<br>[1.400]  | 1.518***<br>[0.487] | 3.667***<br>[1.412]  | 1.518***<br>[0.492] | 3.666***<br>[1.389] | 1.597***<br>[0.489] |
| Municipality Fixed Effect                                  | Yes                  | Yes                 | Yes                  | Yes                 | Yes                 | Yes                 |
| Time Fixed Effect  | Yes                  | Yes                 | Yes                  | Yes                 | Yes                 | Yes                 |
| Observations   | 2,214                | 2,214               | 2,214                | 2,199               | 2,199               |                     |
| R - squared  | 0.127                | 0.018               | 0.127                | 0.016               | 0.125               | 0.022               |

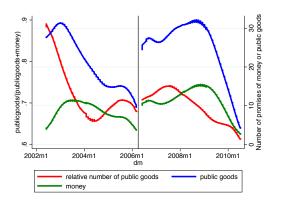
 Promises and fulfilled promises made by the president will target regions that bring extra votes



#### Public Goods vs. Cash Transfers

- I divided fulfilled promises into two categories: public goods and cash transfers.
- Public goods are defined as tangible goods or services intended for the community as a whole.
  - Public goods require time, preliminary studies, labor, coordination and a large investment.
  - Even if promises are made at the beginning of the term, the incumbent is not likely to deliver or even to start projects before elections.
- Cash transfers refer to loans, subsidies and other direct transfer payments of money to eligible people, the municipality or to the entire community in the municipality.
  - cash transfers can be distributed quickly and easy
- My hypothesis, supported by the results of the model, are:
  - The provision of public goods would target core municipalities
  - Cash transfers would target swing municipalities.

# Differences in Timing between Announcements of Public Goods and Cash Transfers



#### Public Goods vs. Cash Transfers

 I estimate the following equation to test the hypothesis that there is a different strategy for when to announce public goods and when to announce cash transfers.

$$T_{i,t} = m_i + t_t + \beta_1 \text{Share}_{i,t-1}^2 + \beta_2 \text{Share}_{i,t-1}^2 + \beta_3 N_{i,t-1} + \epsilon_{i,t}$$
 (6)

- $T_{i,t}$  represents either the amount of money or public goods delivered in municipality i, as announced in election term (period) t.
- Share is the linear term of Uribe's vote share in municipality i in period t-1.
- Share<sup>2</sup> is the quadratic term of Uribe's vote share in the previous election for each municipality.
- $N_{i,t-1}$  measures the turnout in municipality i in period t-1
- Test for Public Goods:  $\beta_1 > 0$ ,  $\beta_2 = 0$  and  $\beta_3 > 0$ .
- Test for Cash:  $\beta_1 > 0$  ,  $\beta_2 < 0$  and  $\beta_3 = 0$ .

## Results: Swing Voter Hypothesis

|                           | Number of    | Number of      |
|---------------------------|--------------|----------------|
|                           | Public Goods | Cash Transfers |
|                           | (1)          | (2)            |
| Uribe Vote Share          | 2.55***      | 2.594***       |
|                           | [1.115]      | [0.660]        |
| Uribe Vote share Square   | -1.169       | -2.157***      |
|                           | [1.058]      | [0.616]        |
| Turnout                   | 0.514***     | -0.0191        |
|                           | [0.257]      | [0.548]        |
| Municipality Fixed Effect | Yes          | Yes            |
| Time Fixed Effect         | Yes          | Yes            |
| Observations              | 2,214        | 2,214          |
| R - squared               | 0.015        | 0.011          |

 It provides evidence that investments in public goods favor core municipalities, while cash transfers favor swing municipalities.

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#### Conclusions

- This paper uses an original dataset to help us understand, in greater detail, the strategy of an incumbent seeking re-election.
  - In Colombia, President Uribe unwittingly revealed his political strategy when he stated: "A government that is not in campaign dies".
  - Government decisions are guided typically by re-election ambitions, rather than exhaustive studies on the most effective way to allocate state resources in the interest of ensuring the general welfare and development of the country.
- The results show an incumbent running for re-election will make:
  - More promises and redistributive transfers when electoral competition is more intense.
  - More promises of redistribution to municipalities where a large number of voters can be persuaded to vote for him.



#### Conclusions

- A look at the details of the data shows the incumbent distributes public goods to some municipalities and cash transfers to others.
  - Cash transfers are easy and quick to distribute and are a good tool to persuade voters
  - Public goods reward supporters.
- My work has implications for public policy, inasmuch as it highlights
  the importance of controlling discretional access to public resources
  on the part of a president seeking re-election, since the incentives of
  campaigning usually prevail over considerations regarding the public's
  welfare.



# Example to Show that with Some Assumptions the Closeness of an Election Could Be Measured with the Winning Block Vote Share

- Johansson (2001) use the share of the winning bloc in the last election as proxy of the density at the cutoff point for a direct election, under the assumption of :
  - A distribution of ideologies symmetric and unimodal: Latinobarometro interviews about ideologies shows this pattern.
  - Two parties competing for power : Colombia elections shows that only two parties were relevant.

