

Cash Transfers and Mayoral Elections: The Case of Sao Paulo's Renda Mínima*

Diego Sanches Corrêa

Universidade de São Paulo, Brazil

Several recently published studies analyze the effects of national conditional cash transfer (CCT) programs, such as the Brazilian *Bolsa Família* and the Mexican *Oportunidades*, on presidential elections. Most of them show that these programs boost incumbents' electoral support among the poor. This research note is the first scholarly attempt to investigate this phenomenon at a lower-level unit of a federal state, by assessing the impact of a municipal cash transfer program on a mayoral election. Specifically, it investigates whether *Renda Mínima*, the cash transfer program of the city of Sao Paulo, affected beneficiaries' electoral behavior in favor of the incumbent candidate in the 2004 mayoral election. This note analyzes survey data from CEBRAP/IBOPE and shows that cash transfers did, indeed, affect beneficiaries' behavior in the predicted direction, but only in cases where they did not benefit from any other CCT program, such as the federal *Bolsa Família* or the São Paulo state *Renda Cidadã*. These results suggest that the pro-incumbent effect of CCT programs may be diluted by similar programs launched by governments at other tiers of a federation, even if they are led by the same party.

Keywords: Renda Mínima; mayoral election; individual attitudes; income redistribution, cash transfers.

(*) <http://dx.doi.org/10.1590/1981-38212014000200013>

For replication, see bpsr.org.br/files/arquivos/Dataset_Correa.html

I thank Professor Renata Bichir for kindly sending me the data and patiently answering all my questions, as well as the journal's anonymous reviewers for their careful reading and insightful critiques. I also thank Fernando Bizzarro and participants of the Encontro de Grupos: Polbras/CESOP-Unicamp e NECI-USP, held at Unicamp, Campinas in March 2015 for valuable feedback. This research was supported by a FAPESP post-doctoral fellowship (Process 2013/02954-1). The usual disclaimer applies.

Universal means-tested programs are an important component of welfare systems in many countries. Their defining characteristic is that all individuals whose income falls below a legal threshold are eligible to receive the benefits, which makes them an effective instrument to reduce poverty and income inequality. This concept of income redistribution is relatively old in developed countries, but it has only recently become prominent in developing ones where levels of poverty and income inequality are higher and, as a consequence, welfare programs are bound to cover a much larger proportion of the population.

The most widely adopted means-tested programs in Latin America are conditional cash transfers (CCTs). They deliver a predetermined amount of cash to eligible families and impose education and/or health conditionalities on their children. If these conditionalities are not met by recipients, the benefits may be discontinued¹. In Brazil, in 1995, the municipality of Campinas and the Federal District were the first subnational units to launch such programs, both named *Bolsa Escola*. In the following years, similar programs were launched all across the country by state and municipal administrations, and the federal government also implemented a national *Bolsa Escola* program in 2001. This program, along with other social policies, gave origin to the widely known *Bolsa Família* in 2003, and the Brazilian experience has prompted other Latin American countries to also adopt CCTs.

Conditional cash transfers are highly visible social policies with important political consequences. Scholars claim that they positively affect electoral support among the poor for incumbent candidates (DE LA O, 2013; DÍAZ-CAYEROS, ESTEVES and MAGALONI, 2009; HUNTER and POWER, 2007; LICIO, RENNÓ and CASTRO, 2009; MANACORDA, MIGUEL and VIGORITO, 2011; NICOLAU and PEIXOTO, 2007; NUPIA, 2011; QUEIROLO, 2010; ZUCCO, 2008, 2013). Supporting evidence comes primarily from studies of national programs and presidential elections taking place in a few Latin American countries, such as Brazil, Mexico, Uruguay and Colombia. To date, almost no attention has been paid to similar

¹ In most countries, the benefits are not automatically discontinued after the beneficiaries' first failure to meet the program's conditionalities, as a long process of following up with them normally ensues.

phenomena at lower-level units of a federation, or to possible overlapping effects of competing programs managed by different jurisdictions. Do municipal programs affect mayoral elections in the same way federal programs affect presidential elections? Do municipal programs affect the behavior of individuals who already benefit from state and federal cash transfers in the same way they may affect the behavior of other individuals? Brazil is probably the best laboratory for studying these and other related research questions, as it has many conditional and unconditional cash transfer programs managed at different levels of the federation and by administrations led by different parties.

In this research note, I inquire about the effects of *Renda Mínima*, the municipal cash transfer program of the city of Sao Paulo, on the mayoral election of 2004. I also investigate if these effects occurred independently of the effects of competing state and federal cash transfer programs. The data were gathered using a survey conducted in the municipality of Sao Paulo by researchers of the *Centro Brasileiro de Análise e Planejamento* (CEBRAP). My results show that *Renda Mínima* had a strong and substantial effect on voting decisions, but with an interesting caveat: the program significantly enhanced support for the incumbent mayoral candidate (and reduced support for the main challenger) only among those who did not benefit from any other cash transfer program, such as the federal *Bolsa Escola* and *Bolsa Família*, and the state *Renda Cidadã*. The next section presents the data and the analysis demonstrating the occurrence of these effects. The final section discusses the major implications of these findings for the literature.

Data, methodology and results

In 2004, a team of researchers at CEBRAP led by Professors Argelina Figueiredo and Haroldo Torres conducted a survey in the municipality of Sao Paulo. It was part of a research project called *Condições e Determinantes de Acesso a Políticas Sociais por Parte da População de Baixa Renda em São Paulo* (Conditions and Determinants of Access to Social Policies by Sao Paulo's Low-Income Population). The survey targeted the 40% poorest citizens and, based on data from the 2002 *Pesquisa por Amostra de Domicílios* (PNAD), the personal income cutoff was set at R\$1,100.00 (value in 2004). The sample consisted of 1,500 respondents and was geographically stratified by three macro-regions. These macro-regions were defined according to

residents' predominant social class, and were labeled peripheral (predominantly inhabited by the poor), intermediate (predominantly inhabited by the middle class), and central (predominantly inhabited by the rich). A quota sampling method was applied in each stratum, so that 40% earned less R\$520,00 (lower income bracket) and 60% earned between R\$520 and R\$1,100.00 (upper income bracket); 50% were male and 50% female; 30% were between 18 and 29 years old, 45% were between 30 and 49, and 25% were older than 50. The researchers estimated the total population for each combination of quotas and strata and calculated expansion factors for each unit of analysis. All interviews were conducted in November 2004, a month after the mayoral election².

The researchers' intention was to evaluate the access of low-income citizens to different kinds of social policies, including cash transfer programs. At the time of the survey, Sao Paulo citizens could potentially benefit from four programs, managed at different tiers: *Renda Mínima* (city of São Paulo), *Renda Cidadã* (state government), *Bolsa Escola* (federal government) and *Bolsa Família* (federal government). The first of them was implemented in May 2001, a few months after mayor Marta Suplicy took office. The second one was implemented in September 2001, during the administration of governor Geraldo Alckmin. The third one was launched in April 2001 by president Cardoso, but it was in the process of being replaced by the fourth one, launched by president Lula in October 2003. It is important to note that mayor Marta Suplicy and president Lula belonged to the same party, the *Partido dos Trabalhadores* (PT), which is the traditional rival of the *Partido da Social Democracia Brasileira* (PSDB), the party of governor Alckmin and former president Cardoso.

During the campaigns preceding the 2004 mayoral election, incumbent candidate Marta Suplicy largely advertised the launching and expansion of *Renda Mínima* as one of the most important achievements of her administration. She also sought to associate her image with Lula's, the charismatic co-partisan president who had implemented *Bolsa Família* in the previous year. Her efforts were to no avail, as she lost the runoff election to challenger José Serra (PSDB). The main goal of this research note is to assess whether, despite the incumbent's defeat, investments in the municipal cash transfer program paid off electorally; that is, if recipients voted for the incumbent at higher rates than non-recipient voters. If this is the case, then Sao

² See Bichir (2011) for details on the questionnaire and sampling method of the survey.

Paulo's 2004 mayoral election would attest that the widely reported pro-incumbent effect of cash transfer programs on presidential elections also applies to electoral contests at lower levels of a federation. It would also serve as evidence that voters living in federal countries are capable of identifying and rewarding the right political agent for improving their living conditions.

To test this hypothesis, I analyzed data from the survey described above. Among the 1,500 respondents, 234 (15.6% of the sample) declared they had received grants from at least one cash transfer program, and 42 of those 234 benefitted from more than one. Among the cash transfer recipients, 157 benefitted from *Renda Mínima*, 16 from *Renda Cidadã*, 27 from *Bolsa Escola*, and 76 from *Bolsa Família*. The most common case of double benefits involved *Renda Mínima* and *Bolsa Família* (33 cases). An important analytical advantage of using this survey to assess differences in the behavior of *Renda Mínima* beneficiaries and non-beneficiaries is that it was applied only to the 40% poorest citizens, which reduces considerably the socio-economic differences among them. Still, the composition of the two groups was different in several aspects, as can be seen in Table 01, and these differences could potentially explain the variation in their electoral behavior. Therefore, all of the models estimated below include binary variables indicating these characteristics as controls.

Table 01. Characteristics of *Renda Mínima* beneficiaries and non-beneficiaries

Characteristic	Beneficiaries	Non-beneficiaries	Difference
Upper Income Bracket	41.4%	61.9%	-20.5pp
Employed	43.3%	49.1%	-5.8pp
<i>Negro</i> (black/brown)	59.2%	48.6%	-10.6pp
Male	31.2%	51.7%	-20.5pp
Lives in Peripheral Areas	45.2%	31.9%	13.3pp
Lives in Intermediate Areas	28.0%	34.0%	-16.0pp

Source: Survey "*Acesso da população mais pobre de São Paulo a serviços públicos*", CEM-CEBRAP/IBOPE, 2004.

The results of two groups of models, all of them using sampling weights, are reported below. The first group of models predicts the vote for the incumbent candidate Marta Suplicy and is displayed on Table 02; the second group of models predicts the vote for the main challenger, José Serra, and is displayed on Table 04. About 22% of respondents (334 out of 1,500) were dropped from the sample, either because they were registered to vote in another municipality or because they did not

register at all. The main explanatory variable is a dummy indicating that the respondent is a *Renda Mínima* beneficiary. Dummies were also included for beneficiaries of other cash transfer programs, as well as interactions between them and the main explanatory variable, in order to evaluate whether the electoral effect of *Renda Mínima* was conditional on participation in other CCTs. Table 02 reports results of four models predicting the vote for the incumbent candidate.

Table 02. Logit models: dependent variable is vote for incumbent (1st round)

Variable	Model 1	Model 2	Model 3	Model 4
<i>Renda Mínima</i>	1.13***	1.15***	1.23***	1.25***
Any other CCT	0.29		0.46	
<i>Bolsa Família</i>		0.20		0.53
<i>Renda Mínima</i> × Any other CCT			-0.52	
<i>Renda Mínima</i> × <i>Bolsa Família</i>				-0.76
Employed	0.21	0.22	0.22	0.22
Upper Income Bracket	-0.11	-0.12	-0.11	-0.11
Male	-0.15	-0.16	-0.15	-0.15
<i>Negro</i>	0.42***	0.43***	0.42***	0.42***
Peripheral Region	0.31*	0.31*	0.31*	0.31*
Intermediate Region	-0.29*	-0.30*	-0.29*	-0.30*
Constant	-0.69***	-0.68***	-0.70***	-0.69***
N	1166	1166	1166	1166
Wald χ^2	56.17***	56.25***	58.13***	58.29***

Note: Significance levels: *** < 0.01; ** < 0.05; * < 0.1

Source: Survey “Acesso da população mais pobre de São Paulo a serviços públicos”, CEM-CEBRAP/IBOPE, 2004.

The first model includes an indicator of respondents benefitting from other CCT programs (*Bolsa Família*, *Bolsa Escola* or *Renda Cidadã*); the second model includes an indicator of participation in the *Bolsa Família*; and the third and fourth models include interactions between these indicators and participation in the *Renda Mínima*. All of these models systematically suggest a strong effect of the municipal cash transfer program, which is substantially greater than the effect of any other variable. The models also suggest that race and area of residence had a significant effect on voters' choices, but to a much lower degree than *Renda Mínima*. None of the interactions are significant but, as insightfully explained by Brambor, Clark and Golder (2006), this does not mean the absence of conditional effects. Models 03 and 04 allow us to estimate the effect of *Renda Mínima* among those who did not benefit from other programs and among those who did. This can be done by adding the coefficients and

recalculating the standard errors for these sums. For example, according to model 03, the effect of *Renda Mínima* among beneficiaries of other programs is the sum of the coefficients for "*Renda Mínima*" and "*Renda Mínima* × Any other CCT". The effect among those who did not benefit from any other program is just the coefficient for "*Renda Mínima*" because the interaction equals zero. Therefore, the fact that the coefficients for the interactions included in models 03 and 04 are negative suggests that the pro-incumbent effect of *Renda Mínima* is considerably lower among those who benefitted from the state or federal cash transfer programs.

In logit models, the association between independent and dependent variables is assumed to be non-linear and to depend on the values of all other variables included in the model. Thus, the interpretation of coefficients is not straightforward, as it is in linear regression models. One of the most common approaches to interpreting the results of logit models is to calculate average marginal effects (AME); that is, the mean effect of the explanatory variable for all possible combinations of values of the control variables. I followed the standard practice and calculated AMEs of *Renda Mínima* for beneficiaries and non-beneficiaries of other cash transfer programs, based on results of models 03 and 04. The results are reported in Table 03.

Table 03. Average marginal effects of *Renda Mínima*

Model	Category	AME	N
03	Beneficiaries of other CCTs	0.16	92
03	Non-beneficiaries of other CCTs	0.28***	1074
04	Beneficiaries of <i>Bolsa Família</i>	0.11	59
04	Non-beneficiaries of <i>Bolsa Família</i>	0.29***	1107

Note. Significance levels: *** < 0.01; ** < 0.05; * < 0.1

Source: Survey "Acesso da população mais pobre de São Paulo a serviços públicos", CEM-CEBRAP/IBOPE, 2004.

The table shows that those beneficiaries of *Renda Mínima* who did not benefit from any other CCT program were almost thirty percentage points more likely to vote for the incumbent candidate than were other respondents. This effect considerably decreases and loses statistical significance among respondents who were already benefitting from other programs. Models for the runoff election (omitted here) lead to the exact same conclusions. This important finding suggests that the potential for social policies to boost electoral support for the chief executive at one level of

government decreases, and perhaps disappears, if eligible recipients benefit from programs implemented by overlapping administrations at other levels. This is true even for situations in which the administration of the other tier is led by a co-partisan chief executive, as attested by the non-significance of *Renda Mínima* among *Bolsa Família* recipients³.

I also estimated models predicting the vote for both the main challenger and the winner of that election, José Serra. These models are analogous to the ones reported above, with one exception: model 02 includes an indicator of participation in *Renda Cidadã*, the CCT program implemented by the governor of the state of Sao Paulo, who was Serra's co-partisan. Since only two *Renda Cidadã* recipients also benefitted from *Renda Mínima*, I did not include an interaction between them on model 04, but did include one between *Renda Mínima* and *Bolsa Família*, as I did before. The results are reported below.

Table 04. Logit models: dependent variable is vote for main challenger (1st round)

Variable	Model 1	Model 2	Model 3	Model 4
<i>Renda Mínima</i>	-1.08***	-1.15***	-1.05***	-1.07***
Any other CCT	-0.38		-0.32	
<i>Renda Cidadã</i>		-0.06		
<i>Bolsa Família</i>				-0.28
<i>Renda Mínima</i> × Any other CCT			-0.23	
<i>Renda Mínima</i> × <i>Bolsa Família</i>				-0.23
Employed	0.00	-0.01	0.00	0.00
Upper Income Bracket	0.18	0.19	0.18	0.19
Male	-0.20	-0.19	-0.20	-0.20
<i>Negro</i>	-0.56***	-0.56***	-0.56***	-0.56***
Peripheral Region	-0.09	-0.10	-0.10	-0.10
Intermediate Region	0.10	0.10	0.10	0.10
Constant	-0.33	-0.35*	-0.33	-0.35*
N	1166	1166	1166	1166
Wald χ^2	35.02***	34.00***	34.46***	33.93***

Note: Significance levels: *** < 0.01; ** < 0.05; * < 0.1

Source: Survey "Acesso da população mais pobre de São Paulo a serviços públicos", CEM-CEBRAP/IBOPE, 2004.

³ Notice that *Bolsa Família* was launched more than two years after *Renda Mínima*, and that those benefitting from both programs were probably recipients of the municipal program first. In this case, the results suggest that the launching of the federal program diluted the pro-incumbent effect of the municipal program on mayoral elections, even though the president and the mayor were members of the same party. It does not matter which program came first, however, for the kind of analysis and claims I make in this research note.

As expected, *Renda Mínima* reduced considerably the likelihood of a vote for the main challenger in 2004, and this finding is consistent across all models. The only other variable with a statistically significant coefficient was the indicator of race. Table 05 reports average marginal effects of *Renda Mínima* for models 03 and 04.

Table 05. Average marginal effects of *Renda Mínima*

Mode	Category	AME	N
01	Category		
03	Beneficiaries of other CCTs	-0.18*	92
03	Non-beneficiaries of other CCTs	-0.19***	1074
04	Beneficiaries of <i>Bolsa Família</i>	-0.19	59
04	Non-beneficiaries of <i>Bolsa Família</i>	-0.19***	1107

Note. Significance levels: *** < 0.01; ** < 0.05; * < 0.1

Source: Survey “*Acesso da população mais pobre de São Paulo a serviços públicos*”, CEM-CEBRAP/IBOPE, 2004.

The table reveals that *Renda Mínima* decreased the likelihood of a vote for Serra by about twenty percentage points, on average. Substantively, the effect is the same for beneficiaries and non-beneficiaries of other programs, but it did not reach statistical significance among respondents who also benefitted from *Bolsa Família*⁴. This suggests that, in an environment where citizens may benefit from different redistributive programs controlled by competing federal jurisdictions, the dynamics of the "anti-challenger" effect may be interestingly different from the dynamics of the "pro-incumbent" effect of those programs. Whereas the pro-incumbent effect of the municipal program was considerably weaker and insignificant among recipients of other programs, its anti-challenger effect might very well be the same among beneficiaries and non-beneficiaries of other programs, although this hypothesis calls for further inquiry.

Conclusion

The main objective of this research note was to assess whether cash transfer programs increase electoral support for incumbent mayors in the same

⁴ Naturally, it would be premature to draw any conclusions based on this lack of statistical significance without further research, as the magnitude of the effect was the same for *Bolsa Família* beneficiaries and non-beneficiaries. It is very possible that the low number of cases of *Bolsa Família* beneficiaries explains, in part, the higher standard error of the AME for this group and the non-significant p-value of 0.17.

way they are claimed to do so for incumbent presidents. My results strongly suggest that, indeed, beneficiaries vote for incumbent mayoral candidates at higher rates than non-beneficiaries. This effect weakens among recipients of similar programs administered by other jurisdictions, even if led by co-partisan chief executives. This research note is the first study to report such a conditional pro-incumbent effect of a cash transfer program.

Although the great majority of the population did not benefit from any other cash transfer program, investments in *Renda Mínima* did not prevent Marta Suplicy from losing the election. Indeed, the incumbent candidate lost about three percentage points of valid votes between 2000 and 2004. This impels us to be cautious when drawing conclusions from these results. If it is true that beneficiaries voted for her at higher rates than non-beneficiaries, the opposite (i.e., non-beneficiaries voted for her at lower rates) is also true. Comparing the behavior of those two groups of voters in a single electoral contest does not allow us to infer confidently if cash transfers lead to vote gains among beneficiaries or vote losses among non-beneficiaries. It is likely that both counteracting effects are linked to these redistributive policies. After all, non-beneficiaries have good reasons to oppose them: they are excluded from a program funded by their tax money. In a relatively well-developed capital city such as Sao Paulo, upper-class citizens are sufficiently numerous to be able to impose high electoral costs on the incumbent mayor when they switch their support to the opposition.

This research note has implications for broader research agendas in political science. First, it suggests that voters living in federal countries have some discernment as to which administrative level (federal, state, or municipal) is responsible for improvements in their living conditions. Second, the accountability bonds linking voters and politicians may be diluted when competing federal jurisdictions grant them nearly the same benefits, even though both benefits are additive and improve their well-being considerably. Finally, improvements are needed in the methodological techniques commonly employed by scholars of CCT programs, so that vote gains can be distinguished from vote losses engendered by social policies. Both effects could be driving the results reported here and in other studies based on survey data.

Revised by Viamundi
Submitted in August 2014
Accepted in February 2015

References

- BICHIR, R. M. (2011), Mecanismos federais de coordenação de políticas sociais e capacidades institucionais locais: o caso do Programa Bolsa Família. *PhD Dissertation*. Rio de Janeiro: Instituto de Estudos Sociais e Políticas, Universidade do Estado do Rio de Janeiro.
- BRAMBOR, T.; CLARK, W. R. and GOLDER, M. (2006), Understanding Interaction Models: Improving Empirical Analyses. *Political Analysis*. Vol. 14, N° 01, pp. 63–82.
- DE LA O, A. L. (2013), Do Conditional Cash Transfers Affect Electoral Behavior? Evidence from a Randomized Experiment in Mexico. *American Journal of Political Science*. Vol. 57, N° 01, pp. 01–14.
- DÍAZ-CAYEROS, A.; ESTÉVEZ, F. and MAGALONI, B. (2009), Welfare Benefits, Canvassing, and Campaign Handouts. In: DOMÍNGUEZ, J. I.; LAWSON, C. and MORENO, A. (Eds.). *Consolidating Mexico's Democracy: The 2006 Presidential Campaign in Comparative Perspective*. Baltimore: The Johns Hopkins University Press, pp. 229–245.
- HUNTER, W. and POWER, T. J. (2007), Rewarding Lula: Executive Power, Social Policy, and the Brazilian Elections of 2006. *Latin American Politics & Society*. Vol. 49, N° 01, pp. 01–30.
- LICIO, E. C.; RENNÓ, L. R. and CASTRO, H. C. DE O. (2009), Bolsa Família e voto na eleição presidencial de 2006: em busca do elo perdido. *Opinião Pública*. Vol. 15, N° 01, pp. 31–54, Jun.
- MANACORDA, M.; MIGUEL, E. and VIGORITO, A. (2011), Government Transfers and Political Support. *American Economic Journal: Applied Economics*. Vol. 03, N° 03, pp. 01–28.
- NICOLAU, J. and PEIXOTO, V. (2007), As bases municipais da votação de Lula em 2006. In: *Cadernos Fórum Nacional 6*. Rio de Janeiro: Instituto de Altos Estudos, pp. 15–25.
- NUPIA, O. (2011), *Anti-Poverty Programs and Presidential Election Outcomes: Familias en Acción in Colombia*. Universidad de los Andes - CEDE.
- QUEIROLO, M. R. (2010), El rol de los programas de transferencias monetarias en la reelección del Frente Amplio en 2009. In: BUQUET, D. and JOHNSON, N. (Eds.). *Del Cambio a la Continuidad: Ciclo Electoral 2009-2010 en Uruguay*. Montevideo: Editorial Fin de Siglo, pp. 195–212.

ZUCCO, C. (2008), The President's "New" Constituency: Lula and the Pragmatic Vote in Brazil's 2006 Presidential Elections. *Journal of Latin American Studies*. Vol. 40, N° 01, pp. 29–49.

ZUCCO, C. (2013), When Pay Outs Pay Off: Conditional Cash-Transfers and Voting Behavior in Brazil 2002-2010. *American Journal of Political Science*. Vol. 47, N° 03.