## **Online Appendix**

# Do Reelection Incentives Improve Policy Implementation? Accountability vs. Political Targeting

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#### A DETAILS ON THE DATA CONSTRUCTION PROCESS

CadUnico The raw data from CadUnico contains the answers from each household to an extensive questionnaire that can be found at: http://goo.gl/27b9OG. I excluded all households with invalid entries for the dates of their last update or enrollment (i.e. whenever they had invalid years of update, or the last update happened before enrollment), and missing some relevant information as declared income, monthly expenses with food and electricity, and basic information about the conditions of the family dwelling (such as the existence of a Bathroom, or public water service). Finally, I use only households with reported income below the registry threshold of R\$311 in 2012. Around 8% of all households had reported income above this value. This could have been caused by registration errors, or the fact that some households can be enrolled in CadUnico with higher income under special circumstances.<sup>1</sup>

For all households that entered CadUnico in 2009-2012, I only observe the reported income valid in Dec 2012. For some households that updated their information at least once after enrollment, this income could have changed from the amount reported at the time of registration. I do not see this as a threat to the analysis, given that any manipulation of reported income within that period would have been done under the same set of reelection incentives for all municipalities. For example, if a household first enrolled with income of R\$145 in Aug 09 (not eligible to BF), and then updated the income to R\$139 (eligible) a few months later, I only observe the R\$139. Both the enrollment and the update were still conducted by the same municipal administration, with the same reelection prospects.

**Census** As for the income declaration measure constructed using census data, I use the sample of the Census 2010. The sample was conducted with a questionnaire for  $\sim$ 11% of the Brazilian households, and the aggregation of households within each municipality considers the sample weights determined by the IBGE in order to closely reflect the income distribution in each location.

**Party Membership Rolls** Party membership rolls were downloaded from the TSE website. I only considered the party members as of Dec 2008 (i.e. pre-treatment), which had their status recorded as active in the list. Any duplicated entries were eliminated, keeping the most recent party enrollment in case the same voter appeared to be enrolled in two or more different parties.

<sup>&</sup>lt;sup>1</sup>The income threshold can be waived for households with total monthly income below three times the minimum wage.

Other Data The Ministry of Social Development (MDS) provides monthly data on municipal CCT coverage. This was used to compute the number of benefits in both December 2012 and June 2013, after the round of audits by MDS. MDS also provides an estimate of households that are BF-eligible and CadUnico-eligible in each municipality. These numbers are used as non-binding targets for the number of registries and benefits provided for each municipality. Their sum is the (binding) cap of benefits provided to the population. Election data comes from the Superior Electoral Authority (TSE), for both the 2008 and 2012 municipal elections. It has biographical data on the candidates, and the number of votes at the voting machine level, for each municipality. Finally, whenever I categorize parties in the left-right spectrum, I use the DALP survey produced by Duke University. A score of 4 or less indicates a leftist party (in the 0 to 10 scale).

**Construction of Variables** The construction of the outcome variables is always described in the main text. The construction of the covariates is described in the footnotes of Table A.IV in this appendix.

#### B COMPETENCE AND EXPERIENCE BIASES

This paper uses a sample of Brazilian municipalities where incumbent mayors ran against challengers with previous mayoral experience. I call this the *experienced* sample. This design aims to avoid potential bias in the treatment effects coming from differences in experience and proven competence between newly elected challengers and reelected incumbents, which occur by design in municipalities where incumbents ran against inexperienced challengers in 2008 (the *inexperienced* sample). I emphasize that any differences in treatment effects between the inexperienced and experienced samples could come from two sources. The first is the bias discussed above. The second is potentially heterogeneous treatment effects. In other words, if municipalities in the two samples are fundamentally different from each other, this could lead to different effects of reelection incentives as well.<sup>2</sup>

Although these two sources of differences in effects cannot be disentangled within the scope of the present analysis, this section provides suggestive evidence that the effects of reelection incentives on negative screening should be relatively weaker in the experienced sample, based on observed differences between the control groups of these two samples. Interestingly enough, this is not the case. These findings therefore suggest that the experience and ability biases might play a relevant role in determining the behavior of first-term mayors in BF screening. The remaining of the section describes both the empirical exercise and the findings in more detail.

I first show the estimated effect of reelection incentives for the *inexperienced* sample. I then compare the BF outcomes and the pre-determined covariates across experienced and inexperienced municipalities. The comparison is restricted to the control group because all mayors in these municipalities are reelected incumbents. This means that biases coming from differences in competence and experience do not play a role in the BF outcomes observed across samples (they should only reflect differences in observed or unobserved traits of experienced and inexperienced municipalities).<sup>3</sup> I use this comparison to provide insights on the potential nature of heterogeneous treatment effects, and consequently, the relative importance of the experience and ability biases.

Table A.I below shows that reelection incentives have no significant effect on BF screening, expansion or management, for the inexperienced group, i.e., challengers that were not mayors before were less

<sup>&</sup>lt;sup>2</sup>This latter source of differentiation does not threaten the RDD identification strategy as the bias does, it just indicates that the results should be interpreted accordingly.

<sup>&</sup>lt;sup>3</sup>This is not the case for treatment municipalities, where the elected challengers in the experienced sample are different from the ones in the inexperienced sample, by design.

likely to engage in the type of negative program screening observed in the experienced group.

Table A.I: RD effects for the inexperienced sample

Outcome Variable:	BF	New	Eligible	BF
	screening	enrolled	share	yield
RD effect (Reelection Incentives) S.E. C.I.	1.588	-0.133	-1.967	2.693
	(1.980)	(2.028)	(2.527)	(2.886)
	[-2.10,5.66]	[-4.22,3.73]	[-7.14,2.76]	[-2.78,8.54]
Pre-treatment mean	-7.051	27.701	78.804	70.062
Bandwidth	8.6	7.9	8.3	8.9
Observations	779	712	754	794

Robust standard errors in parenthesis and 95% confidence intervals in brackets. The RD uses a linear polynomial and optimal bandwidths. The pre-treatment mean is calculated for the control group at the discontinuity.

Table A.II shows the balance of covariates between the treatment and control groups. Even though most covariates are balanced, the treatment group has mayors that are significantly younger (by 5 years). This is not surprising, given that this sample compares newcomers to reelected incumbents.

Table A.II: Balance of covariates in the inexperienced sample

Dependent Variable:	Coeff.	S.E.	C.I.	Band.	Obs.
Mayor's Age	-4.853	1.697	[-8.250,-1.600]	8.9	791
Mayor's Gender	0.004	0.060	[-0.120,0.110]	8.6	781
Mayor's Education	-0.051	0.080	[-0.210,0.100]	9.4	825
M. Background: Public Sector	-0.022	0.045	[-0.110,0.070]	12.3	1036
M. Background: High-Skilled	0.118	0.078	[-0.030,0.270]	8.0	721
Mayor's Party: PT	0.060	0.056	[-0.050,0.170]	8.4	756
Mayor's Party: PMDB	0.057	0.071	[-0.080,0.200]	8.6	766
Mayor's Party: PSDB	0.034	0.059	[-0.080,0.150]	9.6	847
Mayor's Party: Left	0.007	0.077	[-0.150,0.150]	7.3	676
Turnout, 2008	-0.015	0.906	[-1.690,1.860]	8.4	757
Gini Coefficient, 2000	0.018	0.014	[-0.010,0.050]	7.8	705
Per Capita GDP, 2008	0.134	0.104	[-0.060,0.340]	8.6	778
Poverty Rate, 2008	0.007	0.026	[-0.040,0.060]	8.8	787
BF Coverage, 2008	0.005	0.034	[-0.060,0.070]	9.0	797
SS Employees, 2009	-0.064	0.189	[-0.440,0.300]	8.6	770
Visits per Family, 2006-08	0.209	0.189	[-0.140,0.600]	6.0	536

Coefficient is the treatment effect of reelection incentives. Robust standard errors in parenthesis and 95% confidence intervals in brackets, and bandwidths are optimal for a linear polynomial.

I now compare the control groups of the experienced and inexperienced samples, as follows:

$$y_m = \beta_0 + \beta_1 M_m + \beta_2 M V_m + \beta_3 M_m M V_m + \xi_m \tag{1}$$

where  $M_m$  indicates whether the incumbent won the 2008 election over an experienced challenger, i.e., it takes value one for the experienced sample.<sup>4</sup> Table A.III shows the estimation results.

The coefficient  $\beta_1$  here does not identify a causal effect of mayoral experience, but rather shows the average difference between these two samples, at the discontinuity.

Table A.III: Differences between experienced and inexperienced control groups

Dependent Variable:	Coeff.	S.E.	C.I.	Band.	Obs.
Outcome Variables					
Bf Drop 1, 2013	5.018	(3.013)	[-0.77,11.04]	9.2	649
Bf Drop 2, 2013	3.789	(2.557)	[-1.10,8.92]	9.4	659
New enrolled, 2013	9.100	(3.146)	[3.53,15.86]	6.3	446
Eligible share, 2012	2.045	(3.213)	[-4.22,8.38]	9.0	632
New benefits, 2012	-0.760	(3.152)	[-7.13,5.23]	11.3	764
BF yield, 2012	-2.286	(3.770)	[-9.81,4.97]	10.8	740
IGD index, 2012	-0.005	(0.014)	[-0.03,0.02]	10.8	742
Pre-determined covariates					
Mayor's Age	0.649	(1.894)	[-3.07,4.36]	10.0	693
Mayor's Gender	0.004	(0.052)	[-0.10,0.11]	15.5	1003
Mayor's Education	-0.019	(0.113)	[-0.24,0.20]	9.5	662
M. Background: Public Sector	-0.056	(0.054)	[-0.17,0.05]	10.9	746
M. Background: High-Skilled	0.135	(0.118)	[-0.08,0.38]	8.6	609
Mayor's Party: PT	0.066	(0.080)	[-0.08,0.23]	9.6	675
Mayor's Party: PMDB	-0.072	(0.098)	[-0.28,0.11]	7.2	517
Mayor's Party: PSDB	0.038	(0.077)	[-0.11,0.20]	12.5	848
Mayor's Party: Left	0.221	(0.116)	[0.01,0.46]	9.0	633
Turnout, 2008	-0.633	(1.274)	[-3.13,1.86]	9.9	688
Gini Coefficient, 2000	-0.003	(0.014)	[-0.03,0.02]	12.3	831
Per Capita GDP, 2008	0.053	(0.134)	[-0.20,0.32]	10.7	731
Poverty Rate, 2008	0.001	(0.034)	[-0.07,0.07]	10.8	744
BF Coverage, 2008	0.005	(0.044)	[-0.08,0.09]	8.7	617
SS Employees, 2009	0.763	(0.332)	[0.16,1.46]	6.7	475
Visits per Family, 2006-08	-0.213	(0.145)	[-0.50,0.07]	8.1	549

The coefficient shows the effect of having a lame duck mayor that won against an experienced challenger (vs. having a lame duck mayor that won against an inexperienced challenger). Robust standard errors in parenthesis and 95% confidence intervals in brackets, and bandwidths are optimal for a linear polynomial.

Not surprisingly, mayoral characteristics are similar across groups. This is also the case of most municipal covariates and 2009-12 outcomes in terms of BF screening and management. However, two remarkable differences provide some insight on the potential heterogeneity of treatment effects. First, municipalities in the experienced sample have a higher number of SS employees. Second, the 2009-12 increase in CadUnico enrollment is also higher for this sample.

The AIBF survey results discussed in this paper suggest a strong association between CadUnico

enrollment and the local SS bureaucracy. Thus, it is possible that municipalities in the experienced sample have, as a whole, better channels for disseminating enrollment information than their counterparts in the inexperienced sample. The main results in this paper also suggest that, in areas with such characteristics, reelection incentives are less likely to cause negative screening (Table ??). All in, these findings here imply that the treatment effects of reelection incentives in the experienced sample should be lower than the ones in the inexperienced sample. They are, however, stronger. This indicates that the experience and competence biases play a significant role in determining the willingness and capacity of first-term mayors to take electoral advantage of political targeting of BF.

#### C ADDITIONAL TABLES AND FIGURES

Table A.IV: Covariate balance at the discontinuity

Dependent Variable:	Coeff.	S.E.	C.I.	Band.	Obs.
Mayor's Age	4.306	(2.289)	[-0.200,8.770]	13.2	404
Mayor's Gender	-0.054	0.071	[-0.190,0.090]	10.9	348
Mayor's Education	-0.129	0.180	[-0.500,0.210]	6.7	223
M. Background: Public Sector	0.032	0.075	[-0.110,0.190]	7.9	261
M. Background: High-Skilled	-0.211	0.161	[-0.540,0.090]	6.8	225
Mayor's Party: PT	-0.119	0.088	[-0.300,0.040]	9.3	310
Mayor's Party: PMDB	0.127	0.115	[-0.080,0.370]	8.2	275
Mayor's Party: PSDB	0.003	0.115	[-0.240,0.220]	9.8	326
Mayor's Party: Left	-0.206	0.150	[-0.520,0.070]	8.5	288
Turnout, 2008	2.017	1.789	[-1.360,5.650]	8.8	297
Gini Coefficient, 2000	-0.007	0.024	[-0.050,0.040]	9.4	313
Per Capita GDP, 2008	0.103	0.191	[-0.270,0.470]	8.6	290
Poverty Rate, 2008	-0.006	0.050	[-0.100,0.090]	8.1	266
BF Coverage, 2008	-0.001	0.058	[-0.110,0.120]	9.3	309
SS Employees, 2009	-0.606	0.338	[-1.310,0.010]	8.0	262
Visits per Family, 2006-08	0.011	0.185	[-0.350,0.370]	6.8	216

The treatment effect is having a mayor with reelection incentives. Robust standard errors in parenthesis and 95% confidence intervals in brackets for optimal bandwidths and for a linear polynomial (?).

Mayor's Age: Age of elected mayor, as of 2008.

Mayor's Gender: Binary variable that assumes one if the elected mayor is a female.

Mayor's Education: Binary variable that assumes one if the elected mayor has a college education.

M. Background: Public Sector: Binary variable that assumes one if the elected mayor had a previous career as a civil servant

M. Background: High-Skilled: Binary variable that assumes one if the elected had a previous career in a high-skilled profession in the private sector.

Mayor's Party: PT: Binary variable that assumes one if the elected mayor belongs to PT.

Mayor's Party: PMDB: Binary variable that assumes one if the elected mayor belongs to PMDB.

Mayor's Party: PSDB: Binary variable that assumes one if the elected mayor belongs to PSDB.

Turnout, 2008: Turnout in the 2008 municipal election, in %.

Gini Coefficient, 2000: Index calculated with data from the 2000 census survey.

Per Capita GDP, 2008: annual per capita GDP in the municipality for 2008, in log(R\$ '000).

Poverty Rate, 2008: The number of households that should be eligible to BF benefits, estimated by the MDS in 2006, divided by the number of households in the municipality, from 2008 (IBGE).

BF Coverage, 2008: The ratio of households covered by BF benefits in 2008, divided by the local MDS coverage target.

SS Employees, 2009: The size of the social service bureaucracy in the municipality in 2009 (IBGE), in  $\log(\text{variable})$ .

This is the only variable here that is measured slightly after the 2008 election.

Visits per Family, 2006-08: The average ratio of annual health care visits per family in the period. Includes all families covered by the public health system.

Table A.V: Reelection incentives lead to negative screening (Robustness)

Dependent Variable: screening	(1)	(2)	(3)	(4)
Includes Covariates				
RD effect (Reelection incentives)	-7.348	-8.216	-8.307	-8.938
S.E.	(2.842)	(3.439)	(3.659)	(3.481)
C.I.	[-13.12,-1.98]	[-15.07,-1.59]	[-15.51,-1.17]	[-15.98,-2.33]
Bandwidth	7.4	10.5	16.2	3.7
Observations	248	338	461	120
Alternative Outcome Specification				
RD effect (Reelection incentives)	-5.177	-6.430	-6.765	-6.611
S.E.	(2.407)	(3.215)	(3.518)	(3.345)
C.I.	[-10.09,-0.66]	[-12.73,-0.12]	[-13.74,0.05]	[-13.47,-0.36]
Bandwidth	9.7	11.4	14.9	4.9
Observations	325	358	431	152
Bandwidth rules	optimal	optimal	optimal	1/2 optimal
Polynomial	linear	quadratic	cubic	linear

Robust standard errors in parenthesis and 95% confidence intervals in brackets, all calculated according to ?. The first set of results includes all the first 14 covariates from Table A.IV. The remaining two variables are not included because they are available only for a subset of the main sample. These results are, however, robust to their inclusion, and available upon request. The alternative outcome specification is described in text, page ??.

Table A.VI: Expansion and management quality of BF in 2009-2012 (Robustness)

Outcome Variable:	New enrolled	Eligible share	New benefits	BF yield	IGD index		
Quadratic Polynomial, O	ptimal Bandwidtl	1					
RD effect (R. incentives)	0.099	-2.268	0.654	2.847	0.025		
S.E.	(6.339)	(5.454)	(5.551)	(6.732)	(0.028)		
C.I.	[-12.75,12.10]	[-13.09,8.29]	[-9.97,11.79]	[-9.90,16.49]	[-0.03,0.08]		
Bandwidth	11.5	11.3	11.2	11.0	11.3		
Observations	359	357	354	352	355		
Cubic Polynomial, Optimal Bandwidth							
RD effect (R. incentives)	0.301	-3.030	1.245	3.243	0.030		
S.E.	(7.432)	(6.363)	(6.497)	(7.321)	(0.029)		
C.I.	[-14.50,14.63]	[-15.59,9.35]	[-11.39,14.07]	[-10.83,17.87]	[-0.03,0.09]		
Bandwidth	14.9	14.0	14.2	16.6	17.6		
Observations	431	422	423	467	481		
Linear Polynomial, Optimal Bandwidth, Includes Covariates							
RD effect (R. incentives)	1.616	-1.751	0.979	1.478	0.003		
S.E.	(4.489)	(3.016)	(3.872)	(4.138)	(0.016)		
C.I.	[-7.60,10.00]	[-7.92,3.90]	[-6.10,9.08]	[-6.12,10.10]	[-0.03,0.03]		
Bandwidth	8.3	7.0	7.8	9.7	10.2		
Observations	283	235	258	325	332		

Robust standard errors in parenthesis and 95% confidence intervals in brackets, all calculated according to ?. The last set of results includes all the first 14 covariates from Table A.IV. The remaining two covariates are not included because they are available only for a subset of the main sample. These results are, however, robust to their inclusion, and available upon request.

Table A.VII: Heterogeneity of effects of reelection incentives by other variables

	Value of the variable used to split the sample			
	High	Low	Difference	
Sample split by radio ownership in	2010			
RD effect (Reelection incentives)	-7.186	-4.540	2.646	
S.E.	(2.753)	(2.754)	(3.894)	
C.I.	[-12.85,-2.06]	[-10.20,0.59]	[-4.99,10.28]	
Bandwidth	10.2	10.2	10.2	
Observations	168	164	332	
Sample split by the poverty rate in 2008				
RD effect (Reelection incentives)	-6.709	-6.142	0.567	
S.E.	(2.738)	(2.737)	(3.871)	
C.I.	[-12.40,-1.67]	[-11.83,-1.10]	[-7.02,8.15]	
Bandwidth	10.2	10.2	10.2	
Observations	169	163	332	
Sample split by the gini coefficient	in 2000			
RD effect (Reelection incentives)	-5.582	-6.963	-1.381	
S.E.	(2.811)	(2.811)	(3.975)	
C.I.	[-11.41,-0.39]	[-12.79,-1.77]	[-9.17,6.41]	
Bandwidth	10.2	10.2	10.2	
Observations	167	165	332	

Robust standard errors in parenthesis and 95% confidence intervals in brackets, all calculated according to ? for a linear polynomial and optimal bandwidths. The RD effect corresponds to  $\beta_1$  in equation 1.

Table A.VIII: Anomalous income reporting patterns (Robustness)

Dependent Variable:				
Just eligible	(1)	(2)	(3)	(4)
$\pm$ R\$5 range around the threshold,	includes covaria	tes		
RD effect (Reelection Incentives)	17.452	25.447	35.553	29.717
S.E.	(6.740)	(9.519)	(14.158)	(11.944)
C.I.	[5.08,31.50]	[7.44,44.75]	[8.58,64.08]	[7.98,54.80]
Bandwidth	9.2	12.4	12.6	4.6
Observations	282	349	355	134
$\pm R\$7$ range around the threshold				
RD effect (Reelection incentives)	15.266	17.756	31.761	27.393
S.E.	(6.922)	(7.954)	(12.668)	(11.509)
C.I.	[2.16,29.29]	[2.37,33.55]	[7.64,57.29]	[7.40,52.52]
Bandwidth	9.0	14.7	12.8	4.5
Observations	288	408	374	136
$\pm$ R\$10 range around the threshold	I			
RD effect (Reelection incentives)	8.824	14.478	18.787	15.520
S.E.	(4.865)	(6.233)	(8.384)	(7.705)
C.I.	[-0.59,18.48]	[2.66,27.09]	[2.81,35.68]	[2.10,32.30]
Bandwidth	8.6	11.4	12.6	4.3
Observations	283	345	373	135
Dependent Variable: Share of total	income declarat	ions that fall wit	hin $\pm$ R\$5 of the	threshold
RD effect (Reelection incentives)	0.135	0.578	0.625	0.228
S.E.	(0.772)	(1.052)	(1.140)	(1.028)
C.I.	[-1.40,1.62]	[-1.45,2.68]	[-1.58,2.89]	[-1.73,2.30]
Bandwidth	10.2	10.1	14.0	5.1
Observations	333	330	422	163
Bandwidth rules	optimal	optimal	optimal	1/2 optimal
Polynomial	linear	quadratic	cubic	linear

Robust standard errors in parenthesis and 95% confidence intervals in brackets, all calculated according to ?. The RD effect corresponds to  $\beta_1$  in equation 1.

Table A.IX: Anomalous income reporting patterns (Placebo Tests)

Dependent Variable:							
Just eligible	(1)	(2)	(3)	(4)			
$\pm$ R\$5 range around a placebo lev	el equal to the eli	gibility threshold	+R\$20 (R\$160)	)			
RD effect (Reelection incentives)	2.538	1.963	1.568	-1.978			
S.E.	(10.091)	(12.774)	(13.870)	(13.783)			
C.I.	[-16.81,22.74]	[-23.04,27.04]	[-25.47,28.90]	[-29.33,24.70]			
Pre-treatment mean	66.540	67.812	69.156	72.969			
Bandwidth	9.7	11.9	16.8	4.9			
Observations	255	283	368	123			
$\pm$ R\$5 range around a placebo level equal to the eligibility threshold -R\$20 (R\$120)							
RD effect (Reelection incentives)	6.884	7.322	7.761	5.765			
S.E.	(7.697)	(9.288)	(10.593)	(10.981)			
C.I.	[-7.62,22.55]	[-10.98,25.43]	[-13.20,28.33]	[-15.34,27.70]			
Pre-treatment mean	69.060	68.724	68.298	70.081			
Bandwidth	8.6	12.3	16.1	4.3			
Observations	277	354	437	131			
$\pm R$ \$5 range around the original F	R\$140 eligibility tl	nreshold, data fro	om the 2010 cen	sus survey			
RD effect (Reelection incentives)	5.132	5.294	4.520	5.238			
S.E.	(7.747)	(10.537)	(11.157)	(11.768)			
C.I.	[-10.91,19.45]	[-15.62,25.68]	[-17.47,26.26]	[-17.61,28.52]			
Pre-treatment mean	61.883	58.248	58.446	58.205			
Bandwidth	8.8	10.9	16.8	4.4			
Observations	276	321	431	131			
Bandwidth rules	optimal	optimal	optimal	1/2 optimal			
Polynomial	linear	quadratic	cubic	linear			

Robust standard errors in parenthesis and 95% confidence intervals in brackets, all calculated according to ?. The pre-treatment mean is calculated for the control group (lame duck mayors) at the discontinuity. The RD effect corresponds to  $\beta_1$  in equation 1.

Table A.X: Heterogeneity of effects of reelection incentives effects by the past of the challenger

	Challenger did not run in 2004 due to term limits?			
	No	Yes	Difference	
RD effect (Reelection incentives)	-4.695	-7.858	-3.163	
S.E.	(2.845)	(2.845)	(4.023)	
C.I.	[-10.65,0.50]	[-13.82,-2.66]	[-11.05,4.72]	
Bandwidth	10.3	10.3	10.3	
Observations	127	207	334	

Robust standard errors in parenthesis and 95% confidence intervals in brackets, all calculated according to ?, using optimal bandwidths for a linear polynomial.

Here, I estimate the correlation between *screening* and the variables *new enrolled* and *eligible share*. The intuition is that, if negative screening is simply a spillover of program enrollment and a lax enforcement of eligibility criteria, the value of *screening* should be more negative in the samples where the value of these two variables is higher, at the discontinuity. Accordingly, I split the municipalities in two groups by the median value of *new enrolled* (and *eligible share*). Then, I estimate the difference in screening between these groups, at the discontinuity point where the margin of victory is zero. This estimate is shown in Table A.XI below. The effects estimated with this regression have no causal interpretation, they simply show how much worse is screening for the group of municipalities that had high enrollment (or a more lax enforcement of eligibility). In summary, the correlation between screening and these variables is not statistically significant at the discontinuity. If anything, it is actually positive in magnitude in most specifications, indicating that negative screening is not associated with high CadUnico enrollment and a lax enforcement of BF eligibility criteria in this sample.

Table A.XI: Correlation between screening, enrollment and enforcement of eligibility criteria

Dependent Variable: screening	(1)	(2)	(3)	(4)			
The treatment dummy indicates that the municipality has a HIGH value of new enrolled							
RD effect of high enrollment	-0.659	-0.273	2.137	3.126			
S.E.	(2.839)	(3.214)	(3.854)	(3.655)			
C.I.	[-5.98,5.15]	[-6.49,6.11]	[-5.39,9.72]	[-3.80,10.53]			
Pre-treatment mean	-5.089	-5.560	-7.220	-8.459			
Bandwidth	10.3	16.6	16.5	5.1			
Observations	333	467	467	163			
The treatment dummy indicates t	hat the municipal	ity has a HIGH v	alue of eligible sh	are			
RD effect of lax enforcement	3.361	3.626	3.742	3.924			
S.E.	(2.455)	(3.244)	(3.563)	(3.265)			
C.I.	[-1.57,8.06]	[-2.68,10.03]	[-3.14,10.83]	[-2.39,10.41]			
Pre-treatment mean	-7.645	-7.634	-8.010	-8.052			
Bandwidth	12.2	14.2	15.7	6.1			
Observations	375	423	453	196			
Bandwidth rules	optimal	optimal	optimal	1/2 optimal			
Polynomial	linear	quadratic	cubic	linear			

Robust standard errors in parenthesis and 95% confidence intervals in brackets. Means are calculated for the groups with low value of the splitting variables, at the discontinuity.

Table A.XII: Covariate balance at the discontinuity (Subset 1)

Dependent Variable:	Coeff.	S.E.	C.I.	Band.	Obs.		
SS Bureaucracy BELOW Median Size							
Mayor's Age	3.542	(5.790)	[-7.560,15.140]	6.8	120		
Mayor's Gender	-0.058	(0.074)	[-0.210,0.080]	7.4	134		
Mayor's Education	0.218	(0.226)	[-0.220,0.670]	7.8	138		
M. Background: Public Sector	0.112	(0.110)	[-0.080,0.350]	4.7	74		
Mayor's Party: PT	-0.027	(0.210)	[-0.420,0.400]	5.9	98		
Mayor's Party: PSDB	-0.326	(0.379)	[-1.110,0.380]	4.2	66		
Mayor's Party: Left	-0.076	(0.287)	[-0.640,0.490]	6.5	110		
Gini Coefficient, 2000	-0.025	(0.030)	[-0.080,0.040]	8.9	162		
Per Capita GDP, 2008	-0.021	(0.318)	[-0.650,0.590]	5.3	86		
Poverty Rate, 2008	0.022	(0.079)	[-0.120,0.190]	6.3	108		
BF Coverage, 2008	-0.013	(0.111)	[-0.240,0.200]	8.0	140		
SS Employees, 2009	0.008	(0.318)	[-0.650,0.600]	5.2	80		
Visits per Family, 2006-08	-0.086	(0.273)	[-0.600,0.470]	5.5	86		
SS Bureaucracy ABOVE Median	Size						
Mayor's Age	5.406	(3.230)	[-0.620,12.040]	10.2	155		
Mayor's Gender	0.026	(0.146)	[-0.250,0.330]	8.9	142		
Mayor's Education	-0.223	(0.248)	[-0.740,0.230]	7.7	119		
M. Background: Public Sector	-0.010	(0.094)	[-0.190,0.180]	7.5	117		
Mayor's Party: PT	-0.147	(0.124)	[-0.410,0.070]	6.0	94		
Mayor's Party: PSDB	0.081	(0.166)	[-0.240,0.410]	9.2	142		
Mayor's Party: Left	-0.300	(0.171)	[-0.660,0.010]	9.8	150		
Gini Coefficient, 2000	0.026	(0.027)	[-0.030,0.080]	11.6	172		
Per Capita GDP, 2008	0.236	(0.352)	[-0.420,0.960]	6.8	104		
Poverty Rate, 2008	0.032	(0.074)	[-0.110,0.170]	7.8	120		
BF Coverage, 2008	0.011	(0.061)	[-0.110,0.130]	8.8	139		
SS Employees, 2009	-0.130	(0.293)	[-0.720,0.430]	9.7	150		
Visits per Family, 2006-08	0.168	(0.276)	[-0.380,0.700]	7.5	113		

The treatment effect is having a mayor with reelection incentives. Robust standard errors in parenthesis and 95% confidence intervals in brackets for optimal bandwidths and for a linear polynomial (?).

Table A.XIII: Covariate balance at the discontinuity (Subset 2)

Dependent Variable:	Coeff.	S.E.	C.I.	Band.	Obs.
Health Visits BELOW Median					
Mayor's Age	1.902	(4.451)	[-6.790,10.660]	6.0	94
Mayor's Gender	-0.025	(0.056)	[-0.130,0.090]	10.7	167
Mayor's Education	0.082	(0.254)	[-0.400,0.590]	7.0	114
M. Background: Public Sector	-0.001	(0.159)	[-0.300,0.320]	7.2	117
Mayor's Party: PT	-0.040	(0.111)	[-0.250,0.190]	6.2	96
Mayor's Party: PSDB	0.196	(0.170)	[-0.160,0.510]	6.8	109
Mayor's Party: Left	-0.239	(0.190)	[-0.620,0.120]	10.7	167
Gini Coefficient, 2000	-0.031	(0.033)	[-0.100,0.030]	9.6	155
Per Capita GDP, 2008	0.257	(0.271)	[-0.250,0.810]	9.2	150
Poverty Rate, 2008	-0.066	(0.068)	[-0.200,0.070]	9.6	155
BF Coverage, 2008	-0.026	(0.098)	[-0.220,0.160]	6.8	109
SS Employees, 2009	-0.913	(0.531)	[-2.080,0.000]	5.1	80
Visits per Family, 2006-08	-0.057	(0.134)	[-0.330,0.190]	10.1	162
Health Visits ABOVE Median					
Mayor's Age	7.864	(4.442)	[-0.310,17.110]	9.2	146
Mayor's Gender	-0.086	(0.160)	[-0.400,0.230]	9.9	153
Mayor's Education	-0.253	(0.272)	[-0.830,0.240]	6.8	104
M. Background: Public Sector	0.000	(0.004)	[0.000, 0.020]	3.7	56
Mayor's Party: PT	-0.142	(0.181)	[-0.510,0.200]	9.4	146
Mayor's Party: PSDB	-0.105	(0.109)	[-0.340,0.090]	6.1	93
Mayor's Party: Left	-0.209	(0.201)	[-0.640,0.150]	6.8	104
Gini Coefficient, 2000	0.017	(0.035)	[-0.050,0.090]	8.0	124
Per Capita GDP, 2008	-0.108	(0.305)	[-0.740,0.450]	7.2	114
Poverty Rate, 2008	0.052	(0.064)	[-0.070,0.180]	7.4	116
BF Coverage, 2008	0.029	(0.074)	[-0.120,0.170]	10.3	159
SS Employees, 2009	-0.323	(0.472)	[-1.260,0.590]	10.4	159
Visits per Family, 2006-08	0.307	(0.204)	[-0.080,0.720]	6.1	95

The treatment effect is having a mayor with reelection incentives. Robust standard errors in parenthesis and 95% confidence intervals in brackets for optimal bandwidths and for a linear polynomial (?).

Table A.XIV: Loss of benefit when registered by a partisan of the opposition with just eligible income

		Dependent Variable:				
	Eligible	Just eligible	Change in benefit			
	(1)	(2)	(3)	(4)		
Partisan	0.004	-0.003	-0.005	-0.006		
S.E.	(0.008)	(0.005)	(0.008)	(0.008)		
Just eligible			-0.012	-0.012		
S.E.			(0.007)	(0.007)		
Partisan x Just eligible				0.013		
S.E.				(0.042)		
Observations	116436	116436	116436	116436		

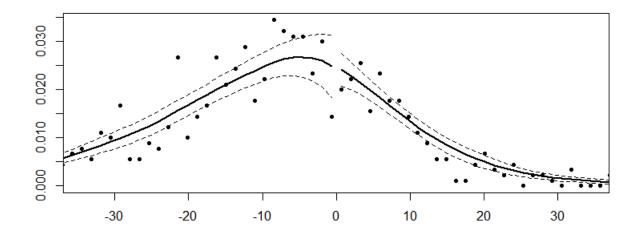
Cluster-robust standard errors by both municipality in parenthesis. All regressions include fixed effects by municipality and by quarter-year of enrollment (time trends), and the household-level covariates described in the text.

Table A.XV: Loss of benefit when registered by a partisan of a lame duck mayor with just eligible income

		Dependent Variable:			
	Eligible	Eligible Just eligible Change in		in benefit	
	(1)	(2)	(3)	(4)	
Partisan	-0.002	0.002	-0.002	-0.002	
S.E.	(0.007)	(0.003)	(0.007)	(0.008)	
Just eligible			-0.005	-0.005	
S.E.			(0.005)	(0.005)	
Partisan x Just eligible				0.002	
S.E.				(0.037)	
Observations	305258	305258	305258	305258	

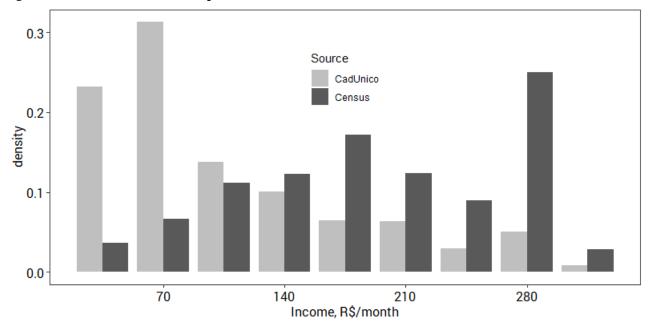
Cluster-robust standard errors by both municipality in parenthesis. All regressions include fixed effects by municipality and by quarter-year of enrollment (time trends), and the household-level covariates described in the text.

Figure A.I: McCrary test of the manipulation of the running variable



The p-statistic equals 0.96.

Figure A.II: Distribution of the reported income: CadUnico vs. Census



Data from the sample of the 2010 Census, and CadUnico updated as of Dec 2012. For presentation purposes, it excludes the households that reported zero income, which are similar in both registries.

0.03

0.01

0.00

50

100

Coverage, %

Figure A.III: Distribution of the pre-existing BF coverage in the sample (2008), by municipality

Coverage is calculated as the number of local BF benefits divided by the coverage target set by MDS for the municipality. For presentation purposes, the plot excludes one outlier with coverage of 217%..

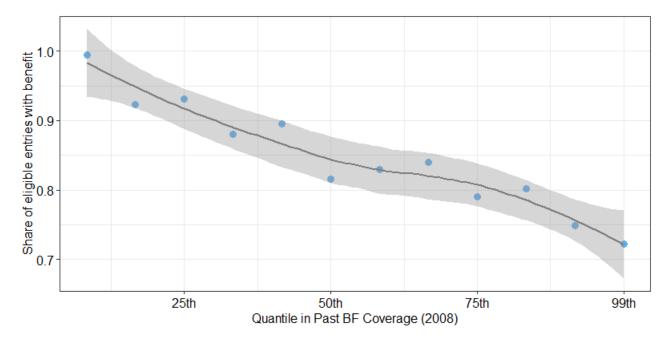


Figure A.IV: Less benefits are approved for eligible families in high-coverage municipalities

The y-axis contains the share of eligible entrants in CadUnico, in 2009-12, that had the benefit approved before Dec 2012. The x-axis aggregates municipalities according to their pre-existing coverage levels.