

Supplementary Materials: The Autonomy-Representation Dilemma

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A1 RDD estimation strategy

The empirical strategy involves the estimation of a Local Average Treatment Effect (LATE), or $\widehat{\tau_{LATE}}$, which estimates a difference in means at the cutpoint. Equation (1) states the central estimand of interest, τ_{LATE} .

$$\tau_{LATE} = E(Y_{i,j}(1)|X_i = 0) - E(Y_{i,j}(0)|X_i = 0) \quad (1)$$

In this case, $Y_{i,j}$ represents an index of reported water problems for a community j in municipality i . Lower values of the index thus indicate more desirable outcomes. $Y_{i,j}(1)$ gives the values of the water problems index given a community-member mayor, and $Y_{i,j}(0)$ is the index value given a non-community-member mayor. X_i represents the margin of victory for a community-member candidate and is negative when a community-member candidate loses and positive when a community-member candidate wins.

As long as potential outcomes are continuous across the cutpoint, Equation (1) is equivalent to $\lim_{x \uparrow 0} E(Y_i|X_i = x) - \lim_{x \downarrow 0} E(Y_i|X_i = x)$. The estimation of τ_{LATE} involves fitting a polynomial regression of order, p , to points on either side of the cutpoint. A kernel weighting function $K(\cdot)$, which is here triangular, assigns higher weight to units closer to the cutpoint.¹ Given the identifying assumption (i.e. continuity of potential outcomes across the cutpoint), the differences in intercepts in the two lines provides an unbiased estimate of the LATE, τ_{LATE} . The estimator, $\widehat{\tau_{LATE}}$, can thus be defined:

$$\widehat{\tau_{LATE}} = \widehat{\beta_{0,+}} - \widehat{\beta_{0,-}}. \quad (2)$$

In equation (2), $\widehat{\beta_{0,+}} = \bar{Y} - \sum_{k=1}^p \widehat{\beta_{k,+}}(\bar{X})^k$ and $\widehat{\beta_{0,-}} = \bar{Y} - \sum_{k=1}^p \widehat{\beta_{k,-}}(\bar{X})^j$, where $\widehat{\beta_{k,+}}$ and $\widehat{\beta_{k,-}}$ are fitted regression coefficients from a regression of the outcome on the running variable with polynomial order, p . The directional sign in the subscript of the coefficients indicates the subset of data used in the estimation. A positive sign indicates that the equation was

estimated using data left of the cutpoint while a negative sign indicates that the equation was estimated using data right of the cutpoint. Different values of p in the proceeding analyses illustrate the robustness of the results to different polynomial-order specifications. For both transparency and simplicity of interpretation, I rely primarily on a local linear ($p = 1$) polynomial specification (Cattaneo et al. 2019). Standard errors are clustered at the municipal level because this is the level at which treatment (community-member mayor vs. not) is assigned.

A2 Supplemental Tables and Figures

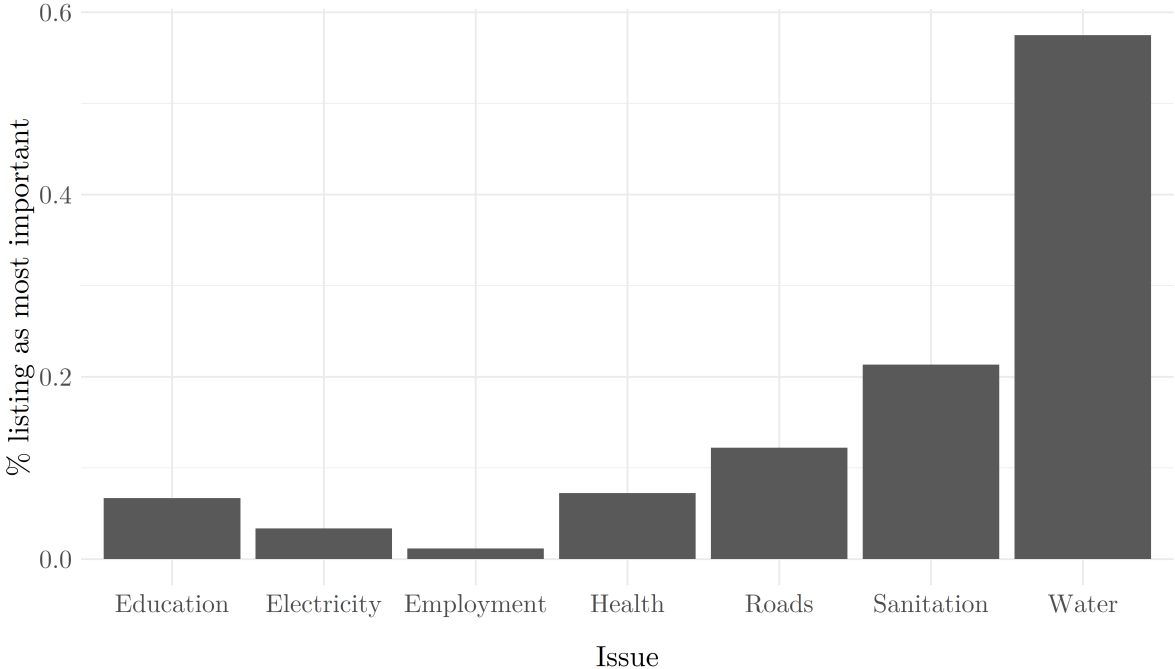


Figure A1. Importance of various issues to indigenous community presidents
Source: Author survey

Country	Electricity Access (% of households)			Sewage Access (% of households)			Piped Water Access (% of households)			Year Measured
	Indigenous	Non- Indigenous	Interethnic Gap	Indigenous	Non- Indigenous	Interethnic Gap	Indigenous	Non- Indigenous	Interethnic Gap	
Bolivia	76	95	0.80	55	76	0.72	69	87	0.79	2012
Brazil	78	99	0.79	36	67	0.54	65	93	0.70	2010
Chile	90	98	0.92	77	92	0.84	86	97	0.89	2002
Colombia	58	94	0.62	–	–	–	41	84	0.49	2005
Costa Rica	81	99	0.82	70	96	0.73	75	97	0.77	2011
Ecuador	84	96	0.88	43	79	0.54	77	84	0.92	2010
El Salvador	62	88	0.70	34	43	0.79	61	76	0.80	2007
Guatemala	–	–	–	–	–	–	69	77	0.90	2002
Mexico	95	99	0.96	69	92	0.75	82	93	0.88	2010
Nicaragua	50	70	0.71	10	26	0.38	39	65	0.60	2005
Panama	40	92	0.43	20	65	0.31	60	94	0.64	2010
Peru	61	80	0.76	40	67	0.60	53	74	0.72	2007
United States	86	98.6	0.87	–	–	–	94.2	99.7	0.94	2000/2019
Venezuela	92	97	0.95	44	86	0.51	61	87	0.70	2001

Table A1. Interethnic inequality in access to local public goods and services

The interethnic gap provides a ratio of the percentage of indigenous citizens with the service to the percentage of non-indigenous citizens. As such, higher values indicate greater equality.

Source: World Bank Group (2015).

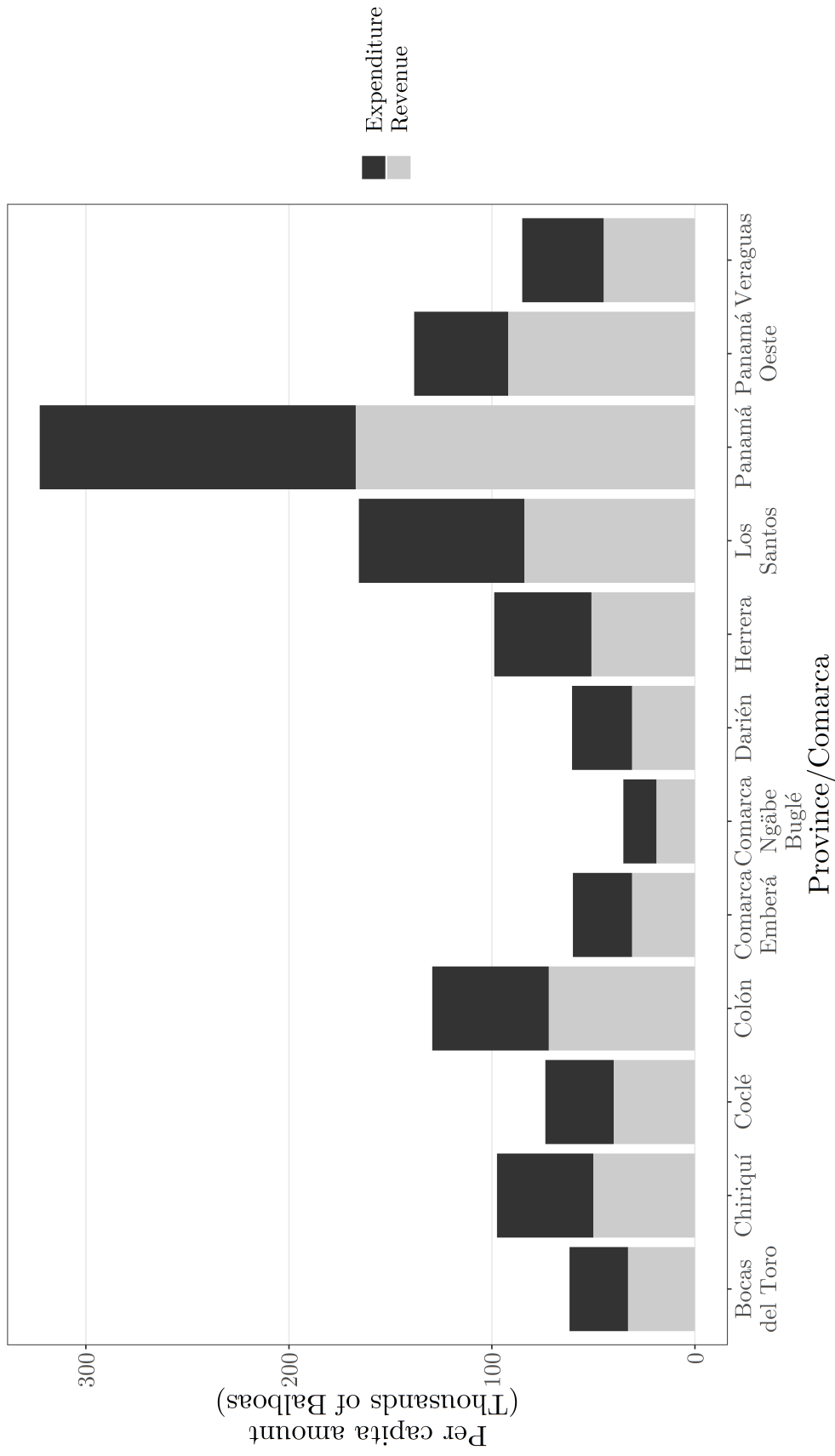


Figure A2. Provincial-level budget data, Panama (2017)
 Source: Contraloría General de la República y Ministerio de Economía y Finanzas (2019).

A3 Supplementary Material References

References

Cattaneo, M. D., Idrobo, N., and Titiunik, R. (2019). *A Practical Introduction to Regression Discontinuity Designs*. Elements in Quantitative and Computational Methods for the Social Sciences. Cambridge University Press.

Contraloría General de la República y Ministerio de Economía y Finanzas (2019). Ingresos y gastos de los municipios de la República, según provincia y comarca indígena: Años 2014-18.

World Bank Group (2015). *Indigenous Latin America in the Twenty-First Century: The First Decade*. Technical Report 98544, The World Bank.

A4 Supplementary Material Endnotes

Notes

¹As is typically true, the choice of a uniform kernel does not change the finding (Cattaneo et al. 2019: 43).