Territorial Inequalities: A Note on State Discontinuity

March 12, 2025

# Appendix

# List of Tables

Table A. 1. Indicators for the construction of the State Density Index

|  |  |  |
| --- | --- | --- |
| Dimension | Indicator | Source |
| Service delivery | Households with piped water, per cent | IPUMS |
|  | Households with electricity, per cent | IPUMS |
| Education | Literate people in the region,1 per cent | IPUMS |
| Health | Children alive, per 1,000 live births | IPUMS |
| Security | Number of days in the year without episodes of violence | ACLED |

1 A person is typically considered literate if he or she can both read and write. All other persons are illiterate, including those who can either read or write but cannot do both

Table A. 2. Countries included in the analysis, and respective data year

|  |  |  |
| --- | --- | --- |
| World Region | Country | year |
| East Asia and Pacific | Cambodia | 2013 |
|  | Lao PDR | 2005 |
| Europe and Central Asia | Armenia | 2001 |
| Latin America and the Caribbean | Bolivia | 2012 |
|  | Brazil | 2010 |
|  | Colombia | 2005 |
|  | Costa Rica | 2011 |
|  | Dominican Republic | 2010 |
|  | Ecuador | 2010 |
|  | El Salvador | 2007 |
|  | Guatemala | 2002 |
|  | Haiti | 2003 |
|  | Honduras | 2001 |
|  | Mexico | 2015 |
|  | Nicaragua | 2005 |
|  | Peru | 2007 |
|  | Venezuela | 2001 |
| Middle East and North Africa | Iran | 2006 |
| South Asia | Nepal | 2011 |
| Sub-Saharan Africa | Benin | 2013 |
|  | Ghana | 2010 |
|  | Lesotho | 2006 |
|  | Liberia | 2008 |
|  | Mali | 2009 |
|  | Mozambique | 2007 |
|  | Rwanda | 2002 |
|  | Senegal | 2002 |
|  | Sierra Leone | 2015 |
|  | Sudan | 2008 |
|  | Tanzania | 2012 |
|  | Togo | 2010 |
|  | Zambia | 2000 |

Table A. 3. Discontinuity index, for different values of parameter , and different specifications of State interventions

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | excluding: | | | | | | excluding: | | | | | excluding: | | | | |
|  | security | water | | electricity | education | health | security | water | electricity | education | health | security | water | electricity | education | health |
| Armenia | 0.015 | 0.012 | 0.019 | | 0.019 | 0.015 | 0.014 | 0.012 | 0.018 | 0.019 | 0.015 | 0.013 | 0.011 | 0.017 | 0.018 | 0.014 |
| Benin | 0.222 | 0.131 | 0.169 | | 0.150 | 0.209 | 0.199 | 0.111 | 0.137 | 0.125 | 0.176 | 0.162 | 0.086 | 0.099 | 0.095 | 0.125 |
| Bolivia | 0.060 | 0.045 | 0.040 | | 0.052 | 0.035 | 0.054 | 0.037 | 0.033 | 0.045 | 0.032 | 0.047 | 0.027 | 0.024 | 0.035 | 0.027 |
| Brazil | 0.041 | 0.131 | 0.137 | | 0.129 | 0.128 | 0.040 | 0.074 | 0.081 | 0.072 | 0.071 | 0.038 | 0.044 | 0.056 | 0.042 | 0.042 |
| Cambodia | 0.177 | 0.084 | 0.108 | | 0.138 | 0.156 | 0.138 | 0.071 | 0.064 | 0.090 | 0.108 | 0.108 | 0.051 | 0.037 | 0.053 | 0.063 |
| Colombia | 0.065 | 0.079 | 0.087 | | 0.087 | 0.095 | 0.063 | 0.067 | 0.075 | 0.075 | 0.082 | 0.061 | 0.057 | 0.064 | 0.064 | 0.071 |
| Costa Rica | 0.011 | 0.008 | 0.010 | | 0.009 | 0.008 | 0.011 | 0.008 | 0.009 | 0.009 | 0.008 | 0.011 | 0.008 | 0.009 | 0.009 | 0.008 |
| Dominican Republic | 0.042 | 0.029 | 0.032 | | 0.032 | 0.037 | 0.040 | 0.028 | 0.029 | 0.030 | 0.034 | 0.038 | 0.025 | 0.025 | 0.026 | 0.029 |
| Ecuador | 0.042 | 0.016 | 0.032 | | 0.037 | 0.039 | 0.041 | 0.016 | 0.030 | 0.035 | 0.036 | 0.038 | 0.015 | 0.025 | 0.031 | 0.031 |
| El Salvador | 0.040 | 0.024 | 0.029 | | 0.026 | 0.036 | 0.040 | 0.023 | 0.027 | 0.025 | 0.034 | 0.040 | 0.021 | 0.024 | 0.023 | 0.030 |
| Ghana | 0.185 | 0.121 | 0.119 | | 0.119 | 0.146 | 0.183 | 0.107 | 0.101 | 0.102 | 0.126 | 0.177 | 0.079 | 0.069 | 0.069 | 0.087 |
| Guatemala | 0.070 | 0.049 | 0.043 | | 0.052 | 0.062 | 0.069 | 0.044 | 0.039 | 0.047 | 0.056 | 0.068 | 0.036 | 0.033 | 0.041 | 0.048 |
| Haiti | 0.198 | 0.074 | 0.081 | | 0.085 | 0.087 | 0.149 | 0.042 | 0.059 | 0.052 | 0.050 | 0.117 | 0.040 | 0.052 | 0.059 | 0.049 |
| Honduras | 0.114 | 0.074 | 0.039 | | 0.076 | 0.092 | 0.101 | 0.061 | 0.035 | 0.060 | 0.076 | 0.082 | 0.047 | 0.028 | 0.039 | 0.054 |
| Iran, Islamic Rep | 0.036 | 0.034 | 0.040 | | 0.034 | 0.026 | 0.032 | 0.030 | 0.037 | 0.030 | 0.025 | 0.027 | 0.024 | 0.032 | 0.025 | 0.024 |
| Lao PDR | 0.139 | 0.096 | 0.063 | | 0.094 | 0.124 | 0.126 | 0.080 | 0.054 | 0.070 | 0.103 | 0.102 | 0.056 | 0.041 | 0.045 | 0.067 |
| Lesotho | 0.076 | 0.060 | 0.028 | | 0.059 | 0.068 | 0.052 | 0.036 | 0.026 | 0.035 | 0.040 | 0.041 | 0.024 | 0.022 | 0.022 | 0.025 |
| Liberia | 0.166 | 0.094 | 0.099 | | 0.095 | 0.129 | 0.143 | 0.067 | 0.078 | 0.064 | 0.087 | 0.123 | 0.038 | 0.047 | 0.037 | 0.041 |
| Mali | 0.335 | 0.371 | 0.357 | | 0.340 | 0.460 | 0.273 | 0.308 | 0.298 | 0.299 | 0.430 | 0.215 | 0.245 | 0.240 | 0.247 | 0.406 |
| Mexico | 0.018 | 0.115 | 0.118 | | 0.114 | 0.112 | 0.018 | 0.070 | 0.074 | 0.069 | 0.067 | 0.017 | 0.041 | 0.046 | 0.040 | 0.039 |
| Mozambique | 0.365 | 0.227 | 0.235 | | 0.242 | 0.311 | 0.326 | 0.180 | 0.192 | 0.182 | 0.240 | 0.268 | 0.123 | 0.135 | 0.120 | 0.150 |
| Nepal | 0.094 | 0.055 | 0.073 | | 0.068 | 0.087 | 0.088 | 0.051 | 0.064 | 0.061 | 0.079 | 0.080 | 0.045 | 0.052 | 0.050 | 0.065 |
| Nicaragua | 0.147 | 0.090 | 0.085 | | 0.110 | 0.130 | 0.143 | 0.082 | 0.076 | 0.098 | 0.118 | 0.135 | 0.066 | 0.059 | 0.076 | 0.092 |
| Peru | 0.089 | 0.052 | 0.058 | | 0.074 | 0.071 | 0.086 | 0.049 | 0.053 | 0.069 | 0.064 | 0.080 | 0.043 | 0.044 | 0.057 | 0.053 |
| Rwanda | 0.398 | 0.236 | 0.183 | | 0.286 | 0.197 | 0.296 | 0.114 | 0.116 | 0.145 | 0.126 | 0.226 | 0.048 | 0.059 | 0.048 | 0.060 |
| Senegal | 0.221 | 0.115 | 0.122 | | 0.168 | 0.160 | 0.204 | 0.089 | 0.096 | 0.132 | 0.121 | 0.178 | 0.051 | 0.057 | 0.078 | 0.066 |
| Sierra Leone | 0.276 | 0.158 | 0.123 | | 0.173 | 0.203 | 0.238 | 0.097 | 0.091 | 0.101 | 0.124 | 0.211 | 0.043 | 0.043 | 0.038 | 0.048 |
| Sudan | 0.277 | 0.183 | 0.203 | | 0.245 | 0.295 | 0.235 | 0.152 | 0.164 | 0.193 | 0.261 | 0.177 | 0.116 | 0.123 | 0.131 | 0.215 |
| Tanzania | 0.176 | 0.088 | 0.105 | | 0.135 | 0.146 | 0.157 | 0.068 | 0.085 | 0.101 | 0.112 | 0.133 | 0.044 | 0.056 | 0.057 | 0.065 |
| Togo | 0.289 | 0.176 | 0.171 | | 0.200 | 0.222 | 0.277 | 0.147 | 0.140 | 0.160 | 0.177 | 0.255 | 0.096 | 0.088 | 0.098 | 0.104 |
| Venezuela, RB | 0.029 | 0.018 | 0.024 | | 0.022 | 0.026 | 0.029 | 0.018 | 0.024 | 0.021 | 0.025 | 0.028 | 0.017 | 0.022 | 0.020 | 0.024 |
| Zambia | 0.363 | 0.184 | 0.193 | | 0.264 | 0.259 | 0.321 | 0.123 | 0.142 | 0.171 | 0.167 | 0.268 | 0.055 | 0.072 | 0.069 | 0.070 |

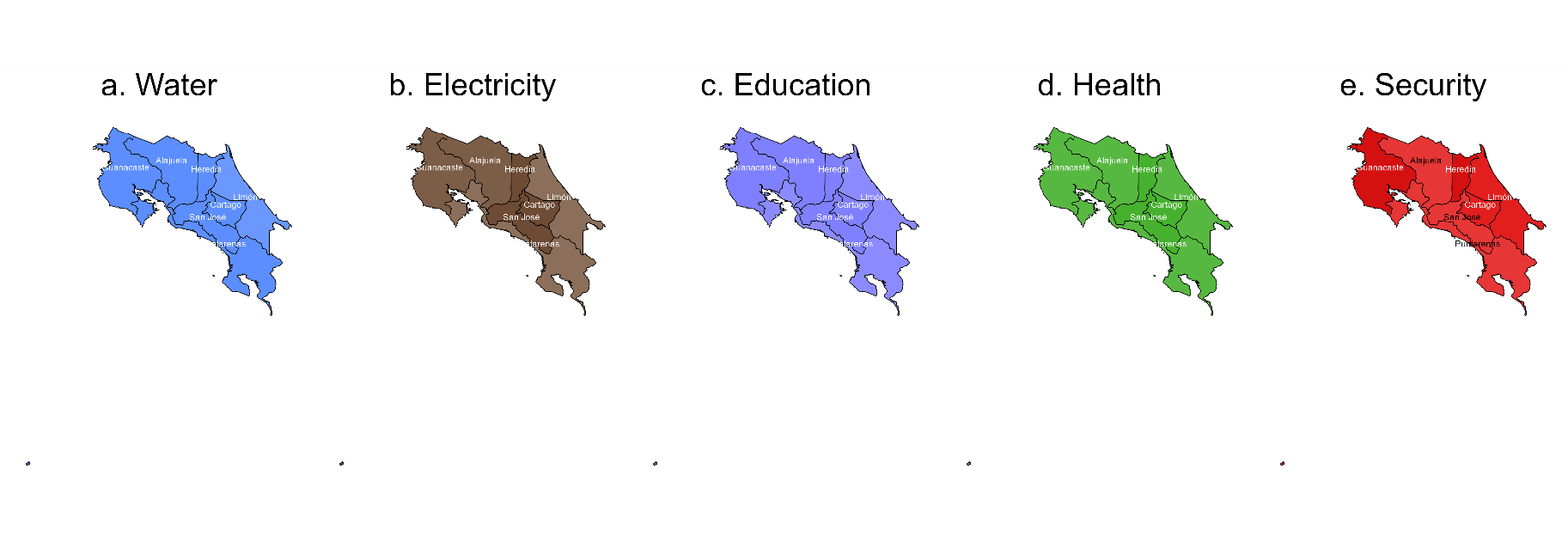
Source: Authors’ elaboration on data from the Minnesota Population Center (2020) via IPUMS International, and Raleigh, Kishi, and Linke (2023) via ACLED.

Table A. 4. Correlation matrix for our covariates

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variables | Area | Foreign | Indigenous | Population | Urban |
| Area | 1.000 |  |  |  |  |
|  |  |  |  |  |  |
| Foreign | -0.102 | 1.000 |  |  |  |
|  | (0.172) |  |  |  |  |
| Indigenous | -0.132 | -0.105 | 1.000 |  |  |
|  | (0.076) | (0.161) |  |  |  |
| Population | -0.038 | -0.006 | -0.028 | 1.000 |  |
|  | (0.608) | (0.938) | (0.708) |  |  |
| Urban | 0.260 | 0.060 | -0.316 | 0.153 | 1.000 |
|  | (0.000) | (0.419) | (0.000) | (0.040) |  |
| Source: Authors’ elaboration on data from the Minnesota Population Center (2020) via IPUMS International. Notes: p-values in parentheses. | | | | | |

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Figure A. 1. Normalized Effectiveness in different State Domains, Costa Rica



Source: Authors’ elaboration on data from the Minnesota Population Center (2020) via IPUMS International, and Raleigh, Kishi, and Linke (2023) via ACLED. Notes: Darker colors indicate higher normalized effectiveness.

Figure A. 2. Normalized Effectiveness in different State Domains, Mali

A group of different colored maps

Description automatically generated

Source: Authors’ elaboration on data from the Minnesota Population Center (2020) via IPUMS International, and Raleigh, Kishi, and Linke (2023) via ACLED. Notes: Darker colors indicate higher normalized effectiveness.

Figure A. 3. Normalized Effectiveness in different State Domains, Mozambique

A group of maps with dots

Description automatically generated with medium confidence

Source: Authors’ elaboration on data from the Minnesota Population Center (2020) via IPUMS International, and Raleigh, Kishi, and Linke (2023) via ACLED. Notes: Darker colors indicate higher normalized effectiveness.

Figure A. 4. Normalized Effectiveness in different State Domains, Armenia

A screenshot of a computer screen

Description automatically generated

Source: Authors’ elaboration on data from the Minnesota Population Center (2020) via IPUMS International, and Raleigh, Kishi, and Linke (2023) via ACLED. Notes: Darker colors indicate higher normalized effectiveness.

Figure A. 5. Normalized Effectiveness in different State Domains, Brazil

A group of colored maps

Description automatically generated

Source: Authors’ elaboration on data from the Minnesota Population Center (2020) via IPUMS International, and Raleigh, Kishi, and Linke (2023) via ACLED. Notes: Darker colors indicate higher normalized effectiveness.

Figure A. 6. Density of the State,

A map of different countries/regions

AI-generated content may be incorrect.

Source: Authors’ elaboration on data from the Minnesota Population Center (2020) via IPUMS International, and Raleigh, Kishi, and Linke (2023) via ACLED. Notes: Darker colors indicate higher normalized effectiveness.