# *APPENDIX A:* Cross-country Data Description

### *Table A1:* Variable Definitions

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| --- |
| **Left-side Variables** |
| **Power concentration index.** Measures the extent of power concentration, including both vertical and horizontal dimensions. Generated via principal components analysis (PCA) using 15 separate measures of power concentration (described below): Federalism, Subnational government layers, Subnational elections, Autonomous regions, Revenue decentralization, Government consumption, Separate powers, Divided party control, Decentralized parties, Judicial review, Bicameralism, Legislative fractionalization, Political constraints, Checks & balances, and Capital city. The variable comprises the first component of the PCA, averaged across 20 imputed data sets.Rescaled from 0-1. *PCA\_index* |
| **Federalism.** An institutionalized division or sharing of responsibilities between a national authority and semiautonomous regional units, usually codified in a constitution. 0=nonfederal (regional governments, if they exist, are granted minimal policy-making power), 1=semifederal (there are elective governments at the regional level but constitutional sovereignty is reserved to the national government), 2=federal (elective regional governments plus constitutional recognition of subnational authority). Rescaled from 0-1. Source: Gerring & Thacker (2008: 88). *federalism\_GT* |
| **Subnational gov layers.** Comprised of two variables measuring whether local and regional governments exist, as coded by research assistants and regional experts enlisted by V-Dem. These are added together to form a three-level index: 0=none, 1=one level, or 2=both levels. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *subnational\_layers* |
| **Subnational elections.** Measures the existence (=1) or non-existence (=0) of elections at subnational levels, as coded by country experts enlisted by the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms the binary variable into an interval variable. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *v2elffelrbin* |
| **Autonomous regions.** Measures the existence (=1) or nonexistence (=0) of regions enjoying substantial autonomy from the national government. Rescaled from 0-1. Source: DPI (Beck et al. 2001). *e\_dpi\_auton* |
| **Revenue decentralization.** Subnational revenue as share of total public revenue. Rescaled from 0-1. Source: GFS, as compiled by Enikolopov & Zhuravskaya (2007). *Decentraliz\_rev\_EZ* |
| **Government consumption.** Central government current expenditures for purchases of goods and services, including payment of employees and most expenditures on national defense and security (but not those considered part of government capital formation), as a share of GDP. Rescaled from 0-1. Source: WDI (World Bank 20??). |
| **Separate powers.** 1=the dominant executive (either the head of state or head of government) is directly elected, 0=otherwise. Coding by research assistants and regional experts enlisted by the V-Dem project. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *prez\_JG2* |
| **Divided party control.** The extent to which a single party or coalition controls both the executive and legislative branches of national government, based on coding by country experts enlisted by the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms this ordinal variable into an interval variable. (The nominal V-Dem variable is reordered to reflect an ordinal scale.) Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *Natparmms* |
| **Decentralized parties.** Measures how centralized the process of candidate selection for the national legislature is – specifically, the extent to which national party leaders control the process or share power with constituents and local and regional party actors, as judged by country experts enlisted by the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms this ordinal variable into an interval variable. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *v2pscnslnl* |
| **Judicial review.** Measures whether any court in the judiciary has the legal authority to invalidate governmental policies (e.g. statutes, regulations, decrees, administrative actions) on the grounds that they violate a constitutional provision, as coded by country experts enlisted for the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms this ordinal variable into an interval variable. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *v2jureview* |
| **Bicameralism.** Measures the existence of two chambers in the national legislature and – if they exist – how closely matched their powers are, based on the coding of country experts enlisted by the V-Dem project. Multiple ratings aggregated by a Bayesian IRT measurement model, which transforms this ordinal variable into an interval variable. Rescaled from 0-1. Source: V-Dem (Coppedge et al. 2015). *Legbalance* |
| **Legislative fractionalization.** Measures the probability that two randomly drawn representatives from the lower (or unicameral) chamber of the legislature will be from different parties. Rescaled from 0-1. Source: PolCon (Henisz 2002). *Legfralower* |
| **Political constraints.** “The extent to which a change in the preferences of any one actor may lead to a change in government policy,” taking into account the number of independent branches of government and the preferences of each of these branches. Rescaled from 0-1. Source: PolCon (Henisz 2002: 363), where it is referred to as *PolConIII*. *polconiii* |
| **Checks & balances.** “The number of veto players in a political system, adjusting for whether these veto players are independent of each other, as determined by the level of electoral competitiveness in a system, their respective party affiliations, and the electoral rules.” Rescaled from 0-1. Source: DPI (Beck et al. 2001), where it is referred to as *Checks1*. *Checks\_DPI* |
| **Capital city.** Population of capital city as a share of total population, transformed by the natural logarithm. Calculated by authors. Rescaled from 0-1. Sources for capital city population: UN (2014), supplemented by other sources. *capital\_pop\_share\_ln* |
| **Right-side Variables** |
| **Population**. Official population of a country, counting only those acknowledged as citizens. This is based on data from the Maddison Project (Bolt & van Zanden 2014), supplemented by estimates from Broadberry/Klein (2012), Gleditsch (2002), Singer et al. (1972), and WDI (World Bank 2016), which are combined in a dynamic, three-dimensional latent trait model. *Source:* Fariss et al. (2017). *Maddison\_pop\_estimate\_ln* |
| **GDP per cap**. Gross domestic product per capita in constant 1990 dollars. This is based on data from the Maddison Project (Bolt & van Zanden 2014), supplemented by estimates from Bairoch (1976), Broadberry (2015), Broadberry/Klein (2012), Gleditsch (2002), and the WDI (World Bank 2016), which are combined in a dynamic, three-dimensional latent trait model. *Source:* Fariss et al. (2017). *Scale:* logarithmic. *Maddison\_gdppc\_1990\_estimate\_ln* |
| **Urbanization.** Shareof total population living in cities, missing data within a time-series interpolated. Missing data interpolated within a time-series. Sources:Clio Infra (clio-infra.eu) based on a variety of underlying sources. *e\_urbaniz* |
| **English legal origin.** Dummy variable indicating English legal origin. Source: La Porta et al (1999). *English\_legal\_origin* |
| **French legal origin.** Dummy variable indicating French legal origin. Source: La Porta et al (1999). *French\_legal\_origin* |
| **German legal origin.** Dummy variable indicating German legal origin. Source: La Porta et al (1999). *German\_legal\_origin* |
| **Scandinavian legal origin.** Dummy variable indicating Scandinavian legal origin. Source: La Porta et al (1999). *Scandinavian\_legal\_origin* |
| **Socialist legal origin.** Dummy variable indicating Socialist legal origin. Source: La Porta et al (1999). *Socialist\_legal\_origin* |
| **Latitude (ln).** Distance from equator, transformed by natural logarithm. *Latitude\_ln* |
| **Lexical index of electoral democracy.** A 7-level ordinal scale measuring the electoral components of democracy in a cumulative fashion. Source: Skaaning, Gerring & Bartusevičius (2015). *lexical\_scale* |
| **Muslim.** Percent Muslim. Source: CIA WorldFactbook (on-line). *Muslim* |
| **Protestant.** Percent Protestant. Source: CIA WorldFactbook (on-line). *Protestant* |
| **OPEC.** Dummy variable indicating membership in the Organization of Petroleum Exporting Countries. *OPEC* |
| **Ethnolinguistic fractionalization.** Probability of two randomly chosen individuals being members of the same ethnolinguistic group. Source: Easterly & Levine (1997), missing data imputed from other sources.*Ethnolinguistic\_fract\_imp* |
| **Territory.** Land area, square kilometers, transformed by the natural logarithm. Source: WDI (World Bank 2007). *wdi\_area\_extended\_ln* |
| **Arable land.** Percent of state’s territory that is arable land in 1960. Source: WDI (World Bank 2005). *Land\_use\_arable\_ext\_1960* |
| **Internal armed conflict.** Coded 1 if the country suffered in an internal armed conflict in a given year, 0 otherwise. The original source codebook (Brecke 2001) states that no war is coded as 0 and war is coded as 1. However, the data contains only 1’s along with missing data (no 0’s). Following the authors’ instructions (personal communication), we re-code missing observations as non-conflict (0) for countries where at least one year in the original times series (which runs from 1500 until present) was coded as 1. *Sources:* Clio Infra (clio-infra.eu), drawing on Brecke (2001), compiled by V-Dem. *e\_miinterc* |
| **External armed conflict.** Coded 1 if the country participated in an international armed conflict in a given year, 0 otherwise. The original source codebook (Brecke 2001) states that no war is coded as 0 and war is coded as 1. However, the data contains only 1’s along with missing data (no 0’s). Following the authors’ instructions (personal communication), we re-code missing observations as non-conflict (0) for countries where at least one year in the original times series (which runs from 1500 until present) was coded as 1. *Sources:* Clio Infra (clio-infra.eu), drawing on Brecke (2001), compiled by V-Dem. *e\_miinteco* |

### *Table A2:* Descriptive Statistics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Left-side variables** | **Obs** | **Mean** | **SD** | **Min** | **Max** |
| Power concentration index | 19,208 | 0.561 | 0.202 | 0 | 1 |
| Federalism | 6,354 | 0.191 | 0.374 | 0 | 1 |
| Subnational government layers | 16,181 | 0.931 | 0.176 | 0 | 1 |
| Subnational elections | 16,212 | 0.638 | 0.291 | 0 | 1 |
| Autonomous regions | 6,139 | 0.122 | 0.327 | 0 | 1 |
| Revenue decentralization | 1,398 | 0.282 | 0.241 | 0 | 1 |
| Government consumption | 6,638 | 0.188 | 0.092 | 0 | 1 |
| Separate powers | 16,477 | 0.232 | 0.422 | 0 | 1 |
| Divided party control | 16,106 | 0.549 | 0.266 | 0 | 1 |
| Decentralized parties | 16,281 | 0.339 | 0.199 | 0 | 1 |
| Judicial review | 16,403 | 0.543 | 0.293 | 0 | 1 |
| Bicameralism | 17,547 | 0.344 | 0.328 | 0 | 1 |
| Legislative fractionalization | 8,504 | 0.477 | 0.289 | 0 | 1 |
| Political constraints | 14,808 | 0.220 | 0.290 | 0 | 1 |
| Checks & balances | 6,004 | 0.246 | 0.229 | 0 | 1 |
| Capital city | 37,954 | 0.450 | 0.117 | 0 | 1 |
| **Right-side variables** |  |  |  |  |  |
| Population (logged) | 25,913 | 15.03 | 1.942 | 7.372 | 21.38 |
| GDP per capita (logged) | 25,913 | 7.639 | 1.159 | 3.868 | 14.40 |
| Urbanization | 39,879 | 0.234 | 0.233 | 0.002 | 1 |
| English legal origin | 40,821 | 0.333 | 0.471 | 0 | 1 |
| French legal origin | 40,821 | 0.423 | 0.494 | 0 | 1 |
| German legal origin | 40,821 | 0.037 | 0.189 | 0 | 1 |
| Scandinavian legal origin | 40,821 | 0.021 | 0.144 | 0 | 1 |
| Socialist legal origin | 40,821 | 0.186 | 0.389 | 0 | 1 |
| Latitude (logged) | 40,205 | -1.596 | 0.950 | -4.500 | -0.341 |
| Muslim | 40,850 | 23.26 | 35.89 | 0 | 99.90 |
| Protestant | 41,252 | 12.70 | 22.87 | 0 | 98 |
| OPEC | 41,065 | 0.058 | 0.233 | 0 | 1 |
| Lexical index of electoral democracy | 17,248 | 2.820 | 2.363 | 0 | 6 |
| Ethnolinguistic fractionalization | 40,641 | 0.342 | 0.282 | -0.072 | 1 |
| Territory (logged) | 33,176 | 2.913 | 1.998 | -5.900 | 8.164 |
| Arable land | 38,164 | 14.05 | 14.12 | 0.043 | 66.25 |
| Internal armed conflict | 12,932 | 0.098 | 0.297 | 0 | 1 |
| External armed conflict | 16,612 | 0.075 | 0.264 | 0 | 1 |

Sample constrained to 1800- period.

### *Table A3:* Inter-Correlation among Measures of Power Concentration

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **\*** | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** | **8.** | **9.** | **10.** | **11.** | **12.** | **13.** | **14.** |
| \* Power concentration index | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Federalism | -0.434 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Subnational gov layers | -0.078 | 0.159 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Subnational elections | -0.622 | 0.261 | 0.104 | 1 |  |  |  |  |  |  |  |  |  |  |  |
| 4. Autonomous regions | -0.206 | 0.073 | 0.04 | 0.085 | 1 |  |  |  |  |  |  |  |  |  |  |
| 5. Revenue decentraliz | -0.537 | 0.549 | 0.16 | 0.249 | 0.138 | 1 |  |  |  |  |  |  |  |  |  |
| 6. Govt consumption | 0.012 | -0.036 | -0.042 | -0.013 | 0.012 | 0.138 | 1 |  |  |  |  |  |  |  |  |
| 7. Separate powers | -0.302 | -0.02 | 0.095 | 0.214 | 0.015 | -0.054 | -0.207 | 1 |  |  |  |  |  |  |  |
| 8. Divided party control | -0.128 | 0.014 | 0.068 | 0.035 | 0.039 | 0.166 | -0.044 | 0.006 | 1 |  |  |  |  |  |  |
| 9. Decentralized parties | -0.699 | 0.278 | -0.083 | 0.378 | 0.083 | 0.462 | 0.162 | 0.091 | 0.015 | 1 |  |  |  |  |  |
| 10. Judicial review | -0.638 | 0.203 | 0.044 | 0.255 | 0.088 | 0.21 | 0.032 | 0.285 | 0.076 | 0.291 | 1 |  |  |  |  |
| 11. Bicameralism | -0.646 | 0.323 | 0.085 | 0.402 | 0.048 | 0.263 | -0.094 | 0.266 | 0.019 | 0.341 | 0.34 | 1 |  |  |  |
| 12. Leg. fractionalization | -0.792 | 0.051 | -0.075 | 0.286 | 0.087 | 0.184 | 0.028 | -0.097 | 0.248 | 0.439 | 0.392 | 0.256 | 1 |  |  |
| 13. Political constraints | -0.834 | 0.148 | -0.137 | 0.423 | 0.108 | 0.247 | 0.077 | -0.002 | 0.082 | 0.549 | 0.447 | 0.301 | 0.734 | 1 |  |
| 14. Checks & balances | -0.854 | 0.182 | -0.089 | 0.391 | 0.146 | 0.291 | 0.008 | 0.03 | 0.123 | 0.486 | 0.56 | 0.338 | 0.685 | 0.729 | 1 |
| 15. Capital city | 0.086 | -0.365 | -0.198 | -0.107 | -0.15 | -0.328 | 0.206 | 0.059 | -0.078 | -0.001 | 0.039 | -0.103 | 0.08 | -0.043 | 0.006 |

Includes all outcome variables listed in Table 2.

### *Table A4:* Principal Components Analysis of Measures of Power Concentration

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component** | **Eigenvalue** | **Difference** | **Proportion** | **Cumulative** |
| **1** | 3.978 | 2.395 | 0.265 | 0.265 |
| **2** | 1.584 | 0.277 | 0.106 | 0.371 |
| **3** | 1.306 | 0.234 | 0.087 | 0.458 |
| **4** | 1.073 | 0.084 | 0.072 | 0.529 |
| **5** | 0.989 | 0.078 | 0.066 | 0.595 |
| **6** | 0.910 | 0.040 | 0.061 | 0.656 |
| **7** | 0.870 | 0.081 | 0.058 | 0.714 |
| **8** | 0.789 | 0.050 | 0.053 | 0.767 |
| **9** | 0.739 | 0.113 | 0.049 | 0.816 |
| **10** | 0.626 | 0.041 | 0.042 | 0.858 |
| **11** | 0.585 | 0.055 | 0.039 | 0.897 |
| **12** | 0.530 | 0.043 | 0.035 | 0.932 |
| **13** | 0.487 | 0.192 | 0.033 | 0.964 |
| **14** | 0.295 | 0.055 | 0.020 | 0.984 |
| **15** | 0.240 | . | 0.016 | 1.000 |

|  |  |  |
| --- | --- | --- |
| **Variable** | **Component 1** | **Unexplained** |
| Federalism | 0.143 | 0.919 |
| Subnational government layers | 0.049 | 0.990 |
| Subnational elections | 0.305 | 0.631 |
| Autonomous regions | 0.097 | 0.963 |
| Revenue decentralization | 0.149 | 0.911 |
| Government consumption | -0.013 | 0.999 |
| Separate powers | 0.145 | 0.916 |
| Divided party control | 0.063 | 0.985 |
| Decentralized parties | 0.338 | 0.546 |
| Judicial review | 0.319 | 0.594 |
| Bicameralism | 0.309 | 0.620 |
| Legislative fractionalization | 0.404 | 0.352 |
| Political constraints | 0.417 | 0.309 |
| Checks & balances | 0.421 | 0.296 |
| Capital city | -0.048 | 0.991 |

Principal components analysis (un-rotated), retaining the first component. The results displayed above are based on the first of twenty imputed data sets generated by the Amelia II program. *N* = 19,208. *Rho* = 0.2652.

### *Table A5:* Power Concentration Index by Country

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Mean | Min | Max | Years |
| Korea, North | 0.850 | 0.655 | 1.000 | 113 |
| Angola | 0.838 | 0.568 | 0.932 | 113 |
| Swaziland | 0.816 | 0.641 | 0.941 | 113 |
| Tunisia | 0.809 | 0.483 | 0.959 | 115 |
| Togo | 0.800 | 0.492 | 0.967 | 98 |
| Bahrain | 0.799 | 0.660 | 0.944 | 113 |
| Djibouti | 0.797 | 0.622 | 0.894 | 113 |
| Bhutan | 0.796 | 0.535 | 0.880 | 113 |
| Qatar | 0.782 | 0.669 | 0.849 | 114 |
| Somalia | 0.777 | 0.341 | 0.963 | 113 |
| Congo, Democratic Republic | 0.773 | 0.249 | 0.934 | 114 |
| Lesotho | 0.772 | 0.443 | 0.868 | 113 |
| Saudi Arabia | 0.772 | 0.693 | 0.950 | 114 |
| Guinea-Bissau | 0.766 | 0.442 | 0.854 | 114 |
| Sao Tome And Principe | 0.765 | 0.429 | 0.898 | 114 |
| South Yemen | 0.761 | 0.682 | 0.840 | 113 |
| Seychelles | 0.759 | 0.517 | 0.882 | 111 |
| German Democratic Republic | 0.753 | 0.687 | 0.847 | 91 |
| Oman | 0.743 | 0.654 | 0.820 | 113 |
| Cape Verde | 0.738 | 0.453 | 0.854 | 115 |
| Brunei | 0.735 | 0.666 | 0.856 | 113 |
| Ivory Coast | 0.734 | 0.284 | 0.931 | 114 |
| Laos | 0.733 | 0.620 | 0.810 | 113 |
| Rwanda | 0.733 | 0.457 | 0.900 | 97 |
| Tonga | 0.731 | 0.458 | 0.799 | 37 |
| Gabon | 0.728 | 0.422 | 0.882 | 104 |
| Chad | 0.728 | 0.492 | 0.881 | 93 |
| Kuwait | 0.724 | 0.423 | 0.933 | 113 |
| East Timor | 0.724 | 0.498 | 0.807 | 115 |
| Equatorial Guinea | 0.721 | 0.627 | 0.809 | 45 |
| Albania | 0.719 | 0.331 | 0.876 | 102 |
| Maldives | 0.719 | 0.332 | 0.810 | 115 |
| Burundi | 0.716 | 0.434 | 0.816 | 98 |
| Nepal | 0.713 | 0.331 | 0.877 | 115 |
| Ethiopia | 0.708 | 0.386 | 0.809 | 113 |
| Iran | 0.708 | 0.478 | 0.885 | 114 |
| Mauritania | 0.707 | 0.320 | 0.864 | 109 |
| Comoros | 0.706 | 0.370 | 0.916 | 114 |
| Liechtenstein | 0.705 | 0.644 | 0.775 | 103 |
| Palestine\_British\_Mandate | 0.697 | 0.647 | 0.731 | 31 |
| Cambodia | 0.696 | 0.455 | 0.843 | 113 |
| Indonesia | 0.696 | 0.219 | 0.849 | 115 |
| Palestine, West Bank | 0.694 | 0.472 | 0.927 | 67 |
| Yemen | 0.685 | 0.447 | 0.798 | 114 |
| Mongolia | 0.684 | 0.323 | 0.889 | 104 |
| Namibia | 0.682 | 0.412 | 0.828 | 115 |
| Taiwan | 0.682 | 0.234 | 0.983 | 113 |
| Vietnam, Democratic Republic | 0.682 | 0.570 | 0.728 | 68 |
| Malawi | 0.681 | 0.311 | 0.822 | 115 |
| Singapore | 0.680 | 0.464 | 0.868 | 113 |
| Sudan | 0.678 | 0.402 | 0.827 | 113 |
| United Arab Emirates | 0.678 | 0.644 | 0.731 | 42 |
| Afghanistan | 0.677 | 0.508 | 0.793 | 113 |
| Benin | 0.677 | 0.301 | 0.819 | 115 |
| Central African Republic | 0.676 | 0.386 | 0.850 | 94 |
| Libya | 0.674 | 0.459 | 0.906 | 81 |
| Eritrea | 0.669 | 0.527 | 0.754 | 113 |
| Zanzibar | 0.664 | 0.622 | 0.685 | 11 |
| Vietnam, Republic | 0.661 | 0.411 | 0.768 | 76 |
| Burma (Myanmar) | 0.660 | 0.256 | 0.790 | 115 |
| Jordan | 0.660 | 0.454 | 0.801 | 91 |
| China | 0.658 | 0.539 | 0.794 | 115 |
| Guinea | 0.658 | 0.344 | 0.757 | 114 |
| Tanzania | 0.656 | 0.349 | 0.866 | 115 |
| Morocco | 0.655 | 0.277 | 0.851 | 115 |
| Syria | 0.653 | 0.554 | 0.748 | 96 |
| Hungary | 0.652 | 0.300 | 0.799 | 114 |
| Mozambique | 0.651 | 0.371 | 0.736 | 115 |
| Burkina Faso | 0.650 | 0.411 | 0.839 | 95 |
| Congo, Republic | 0.648 | 0.179 | 0.809 | 110 |
| Turkmenistan | 0.644 | 0.593 | 0.735 | 24 |
| Madagascar | 0.642 | 0.282 | 0.802 | 113 |
| Suriname | 0.640 | 0.440 | 0.754 | 115 |
| Dominica | 0.632 | 0.456 | 0.796 | 113 |
| Zambia | 0.631 | 0.320 | 0.850 | 113 |
| Botswana | 0.631 | 0.340 | 0.827 | 115 |
| Senegal | 0.628 | 0.200 | 0.867 | 113 |
| Mali | 0.624 | 0.314 | 0.741 | 113 |
| Palestine Gaza | 0.624 | 0.558 | 0.743 | 67 |
| Ghana | 0.621 | 0.291 | 0.762 | 113 |
| Gambia | 0.620 | 0.437 | 0.737 | 113 |
| Bulgaria | 0.619 | 0.323 | 0.771 | 115 |
| Iraq | 0.618 | 0.369 | 0.768 | 94 |
| Algeria | 0.616 | 0.268 | 0.758 | 113 |
| Lebanon | 0.616 | 0.504 | 0.748 | 97 |
| Serbia | 0.612 | 0.290 | 0.774 | 114 |
| Niger | 0.610 | 0.275 | 0.795 | 92 |
| Korea, South | 0.609 | 0.263 | 0.822 | 115 |
| Egypt | 0.601 | 0.384 | 0.775 | 115 |
| Uganda | 0.597 | 0.233 | 0.790 | 113 |
| Monaco | 0.595 | 0.559 | 0.642 | 9 |
| Somaliland | 0.590 | 0.333 | 0.692 | 113 |
| Montenegro | 0.587 | 0.427 | 0.794 | 114 |
| Hong Kong | 0.585 | 0.490 | 0.639 | 113 |
| Portugal | 0.581 | 0.327 | 0.820 | 115 |
| Zimbabwe | 0.577 | 0.264 | 0.723 | 113 |
| Fiji | 0.576 | 0.366 | 0.735 | 115 |
| Sierra Leone | 0.576 | 0.337 | 0.744 | 113 |
| Romania | 0.574 | 0.240 | 0.796 | 114 |
| Kenya | 0.571 | 0.215 | 0.751 | 113 |
| Thailand | 0.570 | 0.287 | 0.752 | 113 |
| San Marino | 0.567 | 0.400 | 0.682 | 103 |
| Samoa | 0.567 | 0.399 | 0.762 | 51 |
| Cameroon | 0.560 | 0.447 | 0.654 | 53 |
| Haiti | 0.558 | 0.215 | 0.713 | 113 |
| Cuba | 0.557 | 0.351 | 0.762 | 114 |
| Antigua and Barbuda | 0.555 | 0.431 | 0.620 | 29 |
| Uzbekistan | 0.553 | 0.446 | 0.708 | 24 |
| Azerbaijan | 0.553 | 0.467 | 0.678 | 24 |
| Kiribati | 0.551 | 0.520 | 0.601 | 24 |
| El Salvador | 0.551 | 0.312 | 0.714 | 113 |
| Paraguay | 0.547 | 0.242 | 0.734 | 115 |
| Poland | 0.542 | 0.219 | 0.744 | 96 |
| Turkey | 0.539 | 0.219 | 0.871 | 114 |
| Vanuatu | 0.539 | 0.228 | 0.715 | 115 |
| Guatemala | 0.536 | 0.283 | 0.739 | 114 |
| Kyrgyzstan | 0.535 | 0.353 | 0.693 | 25 |
| Dominican Republic | 0.535 | 0.212 | 0.765 | 115 |
| Honduras | 0.530 | 0.300 | 0.709 | 113 |
| Grenada | 0.530 | 0.397 | 0.809 | 113 |
| Kazakhstan | 0.529 | 0.457 | 0.681 | 23 |
| Bangladesh | 0.528 | 0.364 | 0.728 | 44 |
| Liberia | 0.528 | 0.290 | 0.724 | 114 |
| Belize | 0.526 | 0.420 | 0.617 | 113 |
| Belarus | 0.525 | 0.372 | 0.633 | 23 |
| Trinidad and Tobago | 0.525 | 0.339 | 0.690 | 113 |
| Guyana | 0.522 | 0.452 | 0.642 | 114 |
| Nicaragua | 0.520 | 0.273 | 0.739 | 113 |
| Lithuania | 0.516 | 0.269 | 0.813 | 96 |
| Cyprus | 0.512 | 0.233 | 0.703 | 114 |
| Czech Republic | 0.508 | 0.150 | 0.786 | 96 |
| Palau | 0.505 | 0.470 | 0.542 | 8 |
| Solomon Islands | 0.501 | 0.228 | 0.628 | 115 |
| Saint Vincent and the Grenadines | 0.497 | 0.451 | 0.577 | 33 |
| Kosovo | 0.494 | 0.451 | 0.556 | 14 |
| Spain | 0.491 | 0.245 | 0.738 | 115 |
| Croatia | 0.486 | 0.332 | 0.755 | 73 |
| South Sudan | 0.483 | 0.453 | 0.513 | 2 |
| Nauru | 0.483 | 0.449 | 0.535 | 31 |
| Marshall Islands | 0.476 | 0.433 | 0.519 | 11 |
| Barbados | 0.473 | 0.287 | 0.631 | 115 |
| Peru | 0.471 | 0.218 | 0.732 | 115 |
| Malaysia | 0.468 | 0.226 | 0.634 | 113 |
| Mauritius | 0.465 | 0.360 | 0.579 | 115 |
| Costa Rica | 0.463 | 0.284 | 0.666 | 115 |
| Panama | 0.463 | 0.264 | 0.725 | 115 |
| Malta | 0.462 | 0.379 | 0.576 | 114 |
| Bolivia | 0.458 | 0.141 | 0.771 | 115 |
| Pakistan | 0.455 | 0.167 | 0.653 | 68 |
| Moldova | 0.455 | 0.337 | 0.686 | 25 |
| Micronesia, Federated States | 0.455 | 0.414 | 0.474 | 17 |
| Greece | 0.452 | 0.264 | 0.715 | 114 |
| Sri Lanka | 0.451 | 0.250 | 0.644 | 115 |
| Philippines | 0.450 | 0.174 | 0.721 | 115 |
| Chile | 0.447 | 0.240 | 0.735 | 115 |
| South Africa | 0.443 | 0.291 | 0.566 | 115 |
| Georgia | 0.443 | 0.349 | 0.653 | 25 |
| Papua New Guinea | 0.442 | 0.144 | 0.614 | 115 |
| Nigeria | 0.439 | 0.152 | 0.574 | 99 |
| Andorra | 0.438 | 0.412 | 0.460 | 10 |
| Saint Lucia | 0.433 | 0.399 | 0.497 | 34 |
| Jamaica | 0.429 | 0.328 | 0.576 | 113 |
| Armenia | 0.429 | 0.329 | 0.584 | 23 |
| Russia | 0.429 | 0.144 | 0.656 | 114 |
| Saint Kitts and Nevis | 0.424 | 0.380 | 0.475 | 33 |
| New Zealand | 0.422 | 0.341 | 0.512 | 114 |
| Slovakia | 0.413 | 0.221 | 0.730 | 96 |
| Ecuador | 0.410 | 0.235 | 0.640 | 114 |
| Mexico | 0.405 | 0.170 | 0.663 | 115 |
| Venezuela | 0.402 | 0.167 | 0.705 | 113 |
| Macedonia | 0.401 | 0.351 | 0.454 | 23 |
| Tajikistan | 0.399 | 0.234 | 0.566 | 23 |
| Latvia | 0.396 | 0.258 | 0.676 | 108 |
| Colombia | 0.392 | 0.198 | 0.705 | 113 |
| Luxembourg | 0.390 | 0.281 | 0.508 | 113 |
| India | 0.381 | 0.120 | 0.626 | 115 |
| Bahamas | 0.370 | 0.324 | 0.434 | 40 |
| Uruguay | 0.357 | 0.153 | 0.654 | 115 |
| Italy | 0.351 | 0.119 | 0.707 | 113 |
| Netherlands | 0.333 | 0.203 | 0.436 | 115 |
| Slovenia | 0.331 | 0.281 | 0.408 | 25 |
| Austria | 0.326 | 0.205 | 0.675 | 114 |
| Bosnia and Herzegovina | 0.320 | 0.159 | 0.554 | 23 |
| Ukraine | 0.318 | 0.181 | 0.567 | 24 |
| United Kingdom | 0.318 | 0.254 | 0.365 | 113 |
| Estonia | 0.313 | 0.228 | 0.581 | 97 |
| Israel | 0.309 | 0.134 | 0.452 | 66 |
| Sweden | 0.295 | 0.204 | 0.373 | 115 |
| Japan | 0.287 | 0.141 | 0.458 | 115 |
| Ireland | 0.280 | 0.186 | 0.491 | 95 |
| Argentina | 0.278 | 0.089 | 0.588 | 113 |
| Germany | 0.275 | 0.118 | 0.782 | 115 |
| Finland | 0.260 | 0.189 | 0.477 | 115 |
| France | 0.257 | 0.156 | 0.680 | 114 |
| Belgium | 0.254 | 0.165 | 0.382 | 115 |
| Brazil | 0.249 | 0.016 | 0.603 | 113 |
| Denmark | 0.237 | 0.170 | 0.428 | 115 |
| Norway | 0.226 | 0.157 | 0.392 | 115 |
| Iceland | 0.221 | 0.101 | 0.315 | 114 |
| Australia | 0.196 | 0.117 | 0.457 | 115 |
| Canada | 0.191 | 0.132 | 0.245 | 115 |
| Switzerland | 0.147 | 0.093 | 0.226 | 115 |
| United States | 0.051 | 0.000 | 0.119 | 114 |

### *Figure A1:* Histogram of Population (ln)



### *Figure A2:* Histogram of Power Concentration Index



### Table A6: Cross-country Tests of Power Concentration

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Analysis*** | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| ***Pop (ln) at*** | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| ***Sample*** | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **VERTICAL** | | |  |  |  |  |  |  |  |  |
| 1.Federalism | 0.390\*\*\* | 0.825\*\*\* | 1.319\*\*\* | 0.885\*\*\* | 0.839\*\* | 1.138\*\* | 0.430\*\*\* | 0.852\*\*\* | 0.646\*\*\* | 0.390\*\*\* |
| [0.132] | [0.214] | [0.370] | [0.292] | [0.348] | [0.506] | [0.089] | [0.236] | [0.107] | [0.132] |
| 2.Subnational  gov layers | 0.670\*\*\* | 0.571\*\*\* | 0.701 | 0.592\*\* | 0.554 | 5.761\*\* | 0.379\*\*\* | 0.560\*\*\* | 0.032\*\*\* | 0.670\*\*\* |
| [0.154] | [0.210] | [0.495] | [0.272] | [0.490] | [2.924] | [0.105] | [0.213] | [0.010] | [0.154] |
| 3.Subnational  elections | 0.033\*\*\* | 0.036\*\*\* | 0.052\*\*\* | 0.026\*\*\* | 0.027\*\*\* | 0.026\*\* | 0.030\*\*\* | 0.024\*\* | 0.003\*\*\* | 0.042\*\*\* |
| [0.010] | [0.009] | [0.010] | [0.009] | [0.010] | [0.012] | [0.007] | [0.010] | [0.001] | [0.011] |
| 4.Autonomous  regions | 0.516\*\*\* | 0.651\*\*\* | 0.562 | 0.599\*\*\* | 0.543 | 1.290 | 0.640\*\*\* | 0.656\*\*\* | 0.236\* | 0.516\*\*\* |
| [0.149] | [0.239] | [0.362] | [0.224] | [0.355] | [0.893] | [0.168] | [0.246] | [0.123] | [0.149] |
| 5.Revenue  decentraliz. | 0.046\*\*\* | 0.056\*\*\* | 0.077\*\*\* | 0.071\*\*\* | 0.053\*\*\* | 0.051\*\* | 0.023\*\*\* | 0.054\*\*\* | 0.004\*\* | 0.097\*\*\* |
| [0.015] | [0.013] | [0.014] | [0.016] | [0.018] | [0.024] | [0.006] | [0.013] | [0.002] | [0.021] |
| 6.Government  consumpt. | -0.014\*\*\* | -0.011\*\*\* | -0.013\*\*\* | -0.005 | -0.002 | 0.001 | -0.011\*\*\* | -0.006\*\* | -0.001\*\* | -0.011\*\*\* |
| [0.002] | [0.003] | [0.004] | [0.003] | [0.004] | [0.005] | [0.002] | [0.003] | [0.000] | [0.004] |
| **HORIZONTAL** | | |  |  |  |  |  |  |  |  |
| 7.Sep. powers | 0.050 | 0.232\* | 0.236 | 0.292\*\* | 0.268 | 0.692\*\* | 0.092 | 0.348 | 0.048 | 0.050 |
| [0.079] | [0.134] | [0.200] | [0.140] | [0.193] | [0.326] | [0.087] | [0.212] | [0.086] | [0.079] |
| 8.Divided  party control | 0.021\*\*\* | 0.023\*\* | 0.032\*\*\* | 0.028\*\*\* | 0.018 | 0.050 | 0.020\*\* | 0.020\* | 0.002\*\* | 0.024\* |
| [0.007] | [0.009] | [0.012] | [0.009] | [0.011] | [0.030] | [0.008] | [0.010] | [0.001] | [0.013] |
| 9.Decentraliz  parties | 0.016 | 0.016\* | 0.030\*\*\* | 0.019\* | 0.021\* | 0.008 | 0.019\*\*\* | 0.019\*\* | 0.008 | 0.016 |
| [0.010] | [0.008] | [0.011] | [0.010] | [0.012] | [0.015] | [0.006] | [0.009] | [0.011] | [0.010] |
| 10.Judicial  review | 0.003 | 0.018 | 0.011 | 0.006 | 0.011 | 0.020 | 0.020\*\* | 0.017 | 0.026\* | 0.003 |
| [0.012] | [0.011] | [0.016] | [0.012] | [0.015] | [0.016] | [0.008] | [0.012] | [0.013] | [0.012] |
| 11.Bicameral-  ism | 0.041\*\*\* | 0.055\*\*\* | 0.067\*\*\* | 0.056\*\*\* | 0.070\*\*\* | 0.091\*\*\* | 0.202\*\*\* | 0.071\*\*\* | 0.004\*\*\* | 0.042\*\*\* |
| [0.012] | [0.010] | [0.018] | [0.013] | [0.015] | [0.020] | [0.030] | [0.012] | [0.001] | [0.012] |
| 12.Legislative  fractionaliz | 0.019 | 0.016 | 0.010 | 0.024\*\* | 0.019\* | 0.036\*\* | 0.029\*\*\* | 0.010 | 0.001 | 0.001 |
| [0.017] | [0.011] | [0.009] | [0.010] | [0.011] | [0.015] | [0.006] | [0.010] | [0.001] | [0.011] |
| 13.Political  constraints | 0.068\*\* | 0.044\*\*\* | 0.022\*\* | 0.035\*\* | 0.021 | 0.033\* | 0.029\*\*\* | 0.028\*\* | 0.002\*\*\* | 0.005 |
| [0.030] | [0.016] | [0.011] | [0.016] | [0.017] | [0.018] | [0.006] | [0.011] | [0.001] | [0.012] |
| 14.Checks &  balances | 0.008 | 0.024\*\*\* | 0.019\*\*\* | 0.029\*\*\* | 0.030\*\*\* | 0.040\*\*\* | 0.027\*\*\* | 0.018\*\*\* | 0.003\*\*\* | 0.028\*\*\* |
| [0.009] | [0.007] | [0.007] | [0.007] | [0.008] | [0.011] | [0.005] | [0.007] | [0.001] | [0.009] |
| **Vertical/Horizontal** | |  |  |  |  |  |  |  |  |  |
| 15.Capital  city | -0.030\*\*\* | -0.030\*\*\* | -0.024\*\*\* | -0.026\*\*\* | -0.025\*\*\* | -0.017\*\*\* | -0.031\*\*\* | -0.030\*\*\* | -0.000\* | -0.036\*\*\* |
| [0.002] | [0.002] | [0.005] | [0.003] | [0.003] | [0.004] | [0.003] | [0.003] | [0.000] | [0.003] |
| \* Power conc. | -0.026\*\*\* | -0.039\*\*\* | -0.040\*\*\* | -0.039\*\*\* | -0.044\*\*\* | -0.053\*\*\* | -0.034\*\*\* | -0.042\*\*\* | -0.002\*\*\* | -0.032\*\*\* |
| index | [0.006] | [0.004] | [0.005] | [0.006] | [0.006] | [0.007] | (0.004) | [0.005] | [0.000] | [0.006] |
| **Covariates** |  |  |  |  |  |  |  |  |  |  |
| Basic | ✓ |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Additional |  |  | ✓ |  |  |  |  |  |  |  |
| *Yt-1* |  |  |  |  |  |  |  |  | ✓ |  |

Outcome measures of power concentration (re-scaled from 0-1) regressed against population (logged) and selected covariates. Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. *Basic covariates:* per capita GDP (logged), Urbanization, Legal origin dummies, Latitude, Muslim, Protestant, OPEC dummy, Region dummies, Year dummies. (Year dummies are excluded from CCP outcomes – Constitution Length, Scope, Rigidity – because of collinearity.) *Additional covariates:* Lexical index of electoral democracy, Ethnolinguistic fractionalization. *Yt-1*: lagged outcome. Electoral system dummies included in tests of Divided party control (row 8) only. Coefficients and standard errors shown for population. *Estimators:* ordinary least squares (for continuous outcomes), tobit (for left-censored outcomes), ordered logit (for ordinal outcomes), logit (for binary outcomes), random effects (for panel estimation in Model 9). Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01 Model 7: datasets imputed with Amelia. Model 8: country-years in which multiparty elections are on course (Lexical>2). Model 9: panel analysis, conducted only with continuous outcomes that show substantial temporal variation. Model 10: second-stage results of a two-stage analysis, where land area (logged) and arable land (%) serve as instruments for population. Complete results displayed in Appendix B.

# *APPENDIX B:* Cross-country Tests, Full Reports

### *Table B1:* Federalism

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled |
| *Estimator* | O.logit | O.logit | O.logit | O.logit | O.logit | O.logit | O.logit | O.logit | O.logit |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **10** |
| **Population (log)** | 0.390\*\*\* | 0.825\*\*\* | 1.319\*\*\* | 0.885\*\*\* | 0.839\*\* | 1.138\*\* | 0.430\*\*\* | 0.852\*\*\* | 0.646\*\*\* |
|  | [0.132] | [0.214] | [0.370] | [0.292] | [0.348] | [0.506] | [0.089] | [0.236] | [0.107] |
| Urbanization |  | 0.132 | 2.644 | -1.556 | 1.257 | 9.099\*\* | 0.401 | -0.232 | 0.484 |
|  |  | [1.425] | [2.185] | [3.249] | [1.623] | [3.765] | [0.635] | [1.561] | [1.110] |
| GDPpc (logged) |  | 0.718\*\* | 1.641\*\* | 0.335 | 1.169\*\* | -0.023 | 0.234\*\* | 0.677\* | 0.635\*\*\* |
|  |  | [0.359] | [0.755] | [0.378] | [0.511] | [0.785] | [0.106] | [0.382] | [0.232] |
| English legal origin |  | 3.193\* | 4.550\*\* | 3.786\* | 3.780\* | 12.796\*\*\* | -0.121 | 3.780\*\* | 0.838 |
|  |  | [1.904] | [2.228] | [2.170] | [2.153] | [1.905] | [0.638] | [1.863] | [0.930] |
| French legal origin |  | 1.143 | 0.927 | 1.094 | 1.309 | 11.679\*\*\* | -0.813 | 1.805 | -0.187 |
|  |  | [1.556] | [1.679] | [1.678] | [1.622] | [1.850] | [0.617] | [1.506] | [0.793] |
| German legal origin |  | [omitted] | [omitted] | [omitted] | [omitted] | [omitted] | [omitted] | [omitted] | [omitted] |
|  |  |  |  |  |  |  |  |  |  |
| Scandinavian legal origin |  | [omitted] | [omitted] | [omitted] | [omitted] | [omitted] | [omitted] | [omitted] | [omitted] |
|  |  |  |  |  |  |  |  |  |  |
| Latitude (logged) |  | -0.227 | -0.650 | 0.008 | -0.078 | -0.145 | -0.165 | -0.206 | -0.320 |
|  |  | [0.365] | [0.552] | [0.595] | [0.510] | [0.530] | [0.167] | [0.382] | [0.207] |
| Muslim |  | 0.020 | 0.065 | 0.046\* | 0.070\*\* | 0.020 | 0.016\*\*\* | 0.016 | 0.014\* |
|  |  | [0.017] | [0.109] | [0.026] | [0.032] | [0.066] | [0.006] | [0.018] | [0.008] |
| OPEC |  | 2.558\* | 2.725 | 2.840 | 1.928 | -0.372 | 0.750 | 3.228\* | 0.676 |
|  |  | [1.484] | [1.713] | [2.066] | [1.543] | [1.988] | [0.743] | [1.688] | [0.800] |
| Protestant |  | 0.007 | -0.025 | 0.007 | 0.005 | 0.008 | 0.010 | 0.009 | -0.004 |
|  |  | [0.016] | [0.030] | [0.027] | [0.031] | [0.032] | [0.009] | [0.017] | [0.011] |
| Democracy (lexical scale) |  |  | 0.222\* |  |  |  |  |  |  |
|  |  |  | [0.134] |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 5.517\*\* |  |  |  |  |  |  |
|  |  |  | [2.391] |  |  |  |  |  |  |
| Internal armed conflict |  |  | -1.423\*\*\* |  |  |  |  |  |  |
|  |  |  | [0.548] |  |  |  |  |  |  |
| External armed conflict |  |  | -2.370\*\*\* |  |  |  |  |  |  |
|  |  |  | [0.834] |  |  |  |  |  |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |
| Observations | 6265 | 5982 | 4230 | 4702 | 4493 | 72 | 18165 | 5226 | 4151 |
| Countries | 159 | 152 | 92 | 123 | 78 | 72 | 201 | 148 | 111 |
| Years | 103 | 103 | 102 | 103 | 101 | 1 | 114 | 103 | 103 |
| R2 (pseudo) | 0.0671 | 0.345 | 0.474 | 0.365 | 0.384 | 0.416 |  | 0.349 |  |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B1:* Federalism



Predictive margins for population (logged), holding other variables at their means, using Model 1 in Table B1.

Federalism: min = 1; max = 1; mean = 0.191; SD = 0.374; values = {0, 0.5, 1}.

### *Table B2:* Subnational Government Layers

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled |
| *Estimator* | O.logit | O.logit | O.logit | O.logit | O.logit | O.logit | O.logit | O.logit | O.logit |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **10** |
| **Population (log)** | 0.670\*\*\* | 0.571\*\*\* | 0.701 | 0.592\*\* | 0.554 | 5.761\*\* | 0.379\*\*\* | 0.560\*\*\* | 0.032\*\*\* |
|  | [0.154] | [0.210] | [0.495] | [0.272] | [0.490] | [2.924] | [0.105] | [0.213] | [0.010] |
| Urbanization |  | 0.304 | -4.002 | -4.294 | -2.069 | 40.571 | 1.395 | 1.044 | 0.019 |
|  |  | [1.992] | [3.291] | [2.885] | [2.487] | [25.292] | [1.076] | [1.990] | [0.096] |
| GDPpc (logged) |  | -0.861\*\* | 0.219 | 0.084 | -0.534 | -11.315\* | -0.341\* | -1.015\*\*\* | -0.035\*\* |
|  |  | [0.368] | [0.576] | [0.308] | [0.388] | [6.567] | [0.199] | [0.355] | [0.016] |
| English legal origin |  | -17.336 | -19.806\*\*\* | -18.205\*\*\* | -18.597\*\*\* | -1.916 | -1.904\*\* | -16.689\*\*\* | -0.059 |
|  |  | [.] | [3.576] | [0.705] | [1.679] | [6.237] | [0.933] | [2.964] | [0.045] |
| French legal origin |  | -16.343\*\*\* | -17.270\*\*\* | -16.183\*\*\* | -16.351 | -7.512\*\* | -1.134 | -15.610\*\*\* | 0.008 |
|  |  | [1.461] | [1.581] | [1.277] | [.] | [3.012] | [0.928] | [2.747] | [0.032] |
| German legal origin |  | 2.449 | 0.592 | 1.258 | 1.230 | -3.370 | 0.816 | 2.898 | 0.096\*\* |
|  |  | [2.106] | [1.162] | [1.637] | [0.814] | [6.746] | [1.168] | [3.058] | [0.038] |
| Scandinavian legal origin |  | 2.015 | -6.435 | -1.754 | -2.862 | -41.457 | 2.485 | 1.661 | 0.048 |
|  |  | [.] | [4.339] | [1.636] | [.] | [38.165] | [1.813] | [4.518] | [0.059] |
| Latitude (logged) |  | -0.480 | -2.377 | -0.506 | -0.743 | -16.798\*\* | -0.017 | -0.632 | -0.017 |
|  |  | [0.458] | [1.621] | [0.613] | [0.944] | [7.729] | [0.237] | [0.581] | [0.015] |
| Muslim |  | -0.012 | -0.015 | -0.006 | -0.001 | 0.178 | -0.004 | -0.012 | -0.001\* |
|  |  | [0.008] | [0.022] | [0.011] | [0.019] | [0.172] | [0.007] | [0.008] | [0.000] |
| OPEC |  | 0.163 | 16.245\*\*\* | -0.130 | 0.447 | -20.747\* | 0.515 | 0.787 | 0.005 |
|  |  | [1.430] | [2.067] | [1.570] | [2.113] | [11.799] | [0.785] | [1.362] | [0.053] |
| Protestant |  | 0.015 | 0.112\*\* | 0.054\*\*\* | 0.072\*\*\* | 0.724 | 0.002 | 0.020 | 0.001 |
|  |  | [0.016] | [0.046] | [0.019] | [0.023] | [0.516] | [0.011] | [0.015] | [0.001] |
| Democracy (lexical scale) |  |  | -0.051 |  |  |  |  |  |  |
|  |  |  | [0.093] |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | -1.199 |  |  |  |  |  |  |
|  |  |  | [2.109] |  |  |  |  |  |  |
| Internal armed conflict |  |  | 0.983 |  |  |  |  |  |  |
|  |  |  | [1.228] |  |  |  |  |  |  |
| External armed conflict |  |  | -1.027\*\* |  |  |  |  |  |  |
|  |  |  | [0.476] |  |  |  |  |  |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |
| Observations | 13381 | 12414 | 8121 | 9778 | 8540 | 81 | 18165 | 8252 | 12016 |
| Countries | 167 | 155 | 104 | 154 | 81 | 81 | 201 | 152 | 152 |
| Years | 115 | 112 | 111 | 115 | 110 | 1 | 114 | 112 | 112 |
| R2 (pseudo) | 0.134 | 0.284 | 0.429 | 0.336 | 0.387 | 0.775 |  | 0.314 | 0.202 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B2:* Subnational Government Layers



Predictive margins for population (logged), holding other variables at their means, using Model 1 in Table B2.

Subnational government layers: min = 0; max = 1; mean = 0.931; SD = 0.176; values = {0, 0.5, 1}.

### *Table B3:* Subnational Elections

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| *Estimator* | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | RE | OLS |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population (log)** | 0.033\*\*\* | 0.036\*\*\* | 0.052\*\*\* | 0.026\*\*\* | 0.027\*\*\* | 0.026\*\* | 0.030\*\*\* | 0.024\*\* | 0.003\*\*\* | 0.042\*\*\* |
|  | [0.010] | [0.009] | [0.010] | [0.009] | [0.010] | [0.012] | [0.007] | [0.010] | [0.001] | [0.011] |
| Urbanization |  | 0.079 | -0.113 | -0.124 | -0.062 | -0.175 | 0.042 | 0.056 | 0.007 | 0.068 |
|  |  | [0.111] | [0.094] | [0.114] | [0.105] | [0.163] | [0.085] | [0.114] | [0.009] | [0.100] |
| GDPpc (logged) |  | 0.030 | 0.058\*\*\* | 0.014 | 0.050\*\* | 0.093\*\* | 0.005 | 0.013 | 0.001 | 0.025 |
|  |  | [0.021] | [0.020] | [0.026] | [0.023] | [0.039] | [0.016] | [0.026] | [0.002] | [0.021] |
| English legal origin |  | 0.026 | -0.086 | 0.090 | 0.055 | 0.111 | -0.004 | 0.103 | 0.006 | 0.046 |
|  |  | [0.061] | [0.074] | [0.061] | [0.071] | [0.174] | [0.061] | [0.073] | [0.004] | [0.063] |
| French legal origin |  | -0.072 | -0.157\*\* | 0.002 | 0.002 | 0.181 | -0.090 | -0.033 | -0.004 | -0.061 |
|  |  | [0.060] | [0.060] | [0.053] | [0.051] | [0.168] | [0.059] | [0.076] | [0.004] | [0.062] |
| German legal origin |  | 0.139\*\* | 0.056 | 0.183\*\*\* | 0.147\*\* | 0.163 | 0.032 | 0.135\* | 0.015\*\*\* | 0.188\*\*\* |
|  |  | [0.062] | [0.078] | [0.060] | [0.059] | [0.153] | [0.076] | [0.078] | [0.005] | [0.070] |
| Scandinavian legal origin |  | -0.131 | -0.206\*\* | -0.137 | -0.176\* | -0.173 | -0.224\*\* | -0.081 | -0.005 | -0.109 |
|  |  | [0.091] | [0.099] | [0.091] | [0.096] | [0.179] | [0.093] | [0.100] | [0.007] | [0.094] |
| Latitude (logged) |  | 0.006 | -0.020 | 0.009 | 0.004 | -0.095\*\* | 0.017 | 0.018 | -0.001 | 0.002 |
|  |  | [0.021] | [0.021] | [0.029] | [0.037] | [0.038] | [0.020] | [0.020] | [0.002] | [0.020] |
| Muslim |  | 0.000 | 0.000 | -0.000 | -0.001 | -0.003\*\* | 0.000 | -0.000 | 0.000 | 0.000 |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.000] | [0.001] |
| OPEC |  | -0.043 | -0.107\* | -0.030 | -0.044 | -0.025 | -0.020 | 0.057 | -0.003 | -0.046 |
|  |  | [0.079] | [0.063] | [0.078] | [0.083] | [0.082] | [0.070] | [0.109] | [0.006] | [0.080] |
| Protestant |  | 0.001 | 0.000 | 0.002 | 0.002\* | 0.002\* | 0.001 | -0.000 | 0.000 | 0.001 |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.000] | [0.001] |
| Democracy (lexical scale) |  |  | 0.030\*\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.006] |  |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 0.119 |  |  |  |  |  |  |  |
|  |  |  | [0.090] |  |  |  |  |  |  |  |
| Internal armed conflict |  |  | -0.056\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.023] |  |  |  |  |  |  |  |
| External armed conflict |  |  | -0.027 |  |  |  |  |  |  |  |
|  |  |  | [0.025] |  |  |  |  |  |  |  |
| Lagged DV |  |  |  |  |  |  |  |  | 0.921\*\*\* |  |
|  |  |  |  |  |  |  |  |  | [0.015] |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |
| Observations | 13478 | 12512 | 8268 | 9924 | 8687 | 82 | 18165 | 8328 | 12402 | 12114 |
| Countries | 168 | 155 | 105 | 155 | 82 | 82 | 201 | 152 | 155 | 152 |
| Years | 115 | 112 | 111 | 115 | 110 | 1 | 114 | 112 | 111 | 112 |
| R2 | 0.041 | 0.323 | 0.397 | 0.334 | 0.370 | 0.489 | 0.337 | 0.342 | 0.899 | 0.335 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B3:* Subnational Elections



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B3.

Subnational elections: min = 0; max = 1; mean = 0.638; SD = 0.291.

### *Table B4:* Autonomous Regions

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled |
| *Estimator* | Logit | Logit | Logit | Logit | Logit | Logit | Logit | Logit | Logit |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **10** |
| **Population (log)** | 0.516\*\*\* | 0.651\*\*\* | 0.562 | 0.599\*\*\* | 0.543 | 1.290 | 0.640\*\*\* | 0.656\*\*\* | 0.236\* |
|  | [0.149] | [0.239] | [0.362] | [0.224] | [0.355] | [0.893] | [0.168] | [0.246] | [0.123] |
| Urbanization |  | -1.765 | 0.122 | -2.012 | 0.292 | -1.050 | -0.274 | -2.843 | -0.893 |
|  |  | [2.628] | [2.913] | [2.065] | [3.060] | [3.637] | [1.531] | [2.518] | [1.168] |
| GDPpc (logged) |  | 0.251 | -0.283 | 0.264 | -0.322 | -4.301 | -0.369 | 0.514 | 0.279 |
|  |  | [1.210] | [1.358] | [0.394] | [1.227] | [3.274] | [0.478] | [1.157] | [0.127] |
| English legal origin |  | 15.690\*\*\* | 15.815\*\*\* | 16.021\*\*\* | 17.046\*\*\* | 20.511\*\*\* | 0.900 | 14.985\*\*\* | 5.036\*\*\* |
|  |  | [1.815] | [2.316] | [0.258] | [4.752] | [5.207] | [0.879] | [2.039] | [0.447] |
| French legal origin |  | 16.407\*\*\* | 15.798\*\*\* | 16.492\*\*\* | 17.433\*\*\* | 21.073\*\*\* | 1.122 | 16.002\*\*\* | 5.506\*\*\* |
|  |  | [1.573] | [1.821] | [1.664] | [3.856] | [4.375] | [0.819] | [2.312] | [0.439] |
| German legal origin |  | -2.285 | -2.086 | -2.546 | -18.622\*\*\* |  | -1.406 | -0.808 |  |
|  |  | [2.679] | [2.820] | [1.627] | [2.860] |  | [1.172] | [1.749] |  |
| Scandinavian legal origin |  | 18.666\*\*\* | 19.995\*\*\* | 18.610\*\*\* | 19.807\*\*\* | 23.648\*\*\* | 3.774\*\* | 17.917\*\*\* | 6.603\*\*\* |
|  |  | [2.438] | [3.107] | [1.970] | [3.789] | [6.743] | [1.655] | [2.665] | [0.756] |
| Latitude (logged) |  | 0.899 | 0.747 | 0.544 | 0.131 | 0.185 | 0.294 | 0.704 | 0.445 |
|  |  | [0.867] | [0.960] | [0.745] | [0.672] | [0.661] | [0.507] | [0.626] | [0.098] |
| Muslim |  | 0.015 | 0.025 | 0.019\* | -0.025 | 0.090 | 0.017\* | 0.015 | 0.006 |
|  |  | [0.010] | [0.019] | [0.011] | [0.029] | [0.063] | [0.009] | [0.010] | [0.003] |
| OPEC |  | 0.772 | 0.388 | 0.721 | 1.355 | 3.881 | 0.604 | -0.666 | 0.522 |
|  |  | [1.171] | [1.213] | [1.217] | [1.335] | [3.089] | [0.998] | [1.210] | [0.259] |
| Protestant |  | -0.024 | -0.038\*\* | -0.023 | -0.024 | -0.014 | -0.024\*\* | -0.020 | -0.014 |
|  |  | [0.015] | [0.019] | [0.014] | [0.017] | [0.020] | [0.012] | [0.016] | [0.005] |
| Democracy (lexical scale) |  |  | 0.088 |  |  |  |  |  |  |
|  |  |  | [0.099] |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 1.763 |  |  |  |  |  |  |
|  |  |  | [1.395] |  |  |  |  |  |  |
| Internal armed conflict |  |  | 0.681 |  |  |  |  |  |  |
|  |  |  | [0.613] |  |  |  |  |  |  |
| External armed conflict |  |  | 1.211 |  |  |  |  |  |  |
|  |  |  | [0.862] |  |  |  |  |  |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |
| Observations | 6139 | 5394 | 3702 | 3975 | 2844 | 66 | 6872 | 3409 | 4833 |
| Countries | 176 | 158 | 106 | 157 | 78 | 66 | 199 | 139 | 143 |
| Years | 38 | 37 | 37 | 38 | 37 | 1 | 39 | 37 | 37 |
| R2 (pseudo) | 0.102 | 0.315 | 0.375 | 0.309 | 0.324 | 0.485 |  | 0.284 |  |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B4:* Autonomous Regions



Predictive margins for population (logged), holding other variables at their means, using Model 1 in Table B4.

Autonomous regions: min = 0; max = 1; mean = 0.122; SD = 0.327; values = {0, 1}.

### *Table B5:* Revenue Decentralization

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| *Estimator* | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | RE | OLS |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population (log)** | 0.046\*\*\* | 0.056\*\*\* | 0.077\*\*\* | 0.071\*\*\* | 0.053\*\*\* | 0.051\*\* | 0.023\*\*\* | 0.054\*\*\* | 0.004\*\* | 0.097\*\*\* |
|  | [0.015] | [0.013] | [0.014] | [0.016] | [0.018] | [0.024] | [0.006] | [0.013] | [0.002] | [0.021] |
| Urbanization |  | 0.265 | 0.095 | -0.140 | 0.125 | 0.633\*\* | 0.101\* | 0.247 | 0.006 | 0.245 |
|  |  | [0.176] | [0.176] | [0.162] | [0.205] | [0.305] | [0.052] | [0.200] | [0.014] | [0.188] |
| GDPpc (logged) |  | 0.017 | 0.048 | 0.091 | 0.041 | -0.122 | 0.007 | 0.009 | 0.007\* | 0.018 |
|  |  | [0.039] | [0.042] | [0.061] | [0.060] | [0.084] | [0.012] | [0.045] | [0.004] | [0.043] |
| English legal origin |  | -0.785\*\*\* | -0.625\*\*\* | -0.459\*\*\* | -0.657\*\*\* | 0.296 | -0.152\*\*\* | -0.085 | -0.052\*\*\* | -0.514\*\*\* |
|  |  | [0.159] | [0.133] | [0.144] | [0.205] | [0.219] | [0.054] | [0.142] | [0.017] | [0.146] |
| French legal origin |  | -0.900\*\*\* | -0.813\*\*\* | -0.652\*\*\* | -0.827\*\*\* | 0.001 | -0.164\*\*\* | -0.265\* | -0.057\*\*\* | -0.671\*\*\* |
|  |  | [0.149] | [0.103] | [0.113] | [0.185] | [0.249] | [0.052] | [0.147] | [0.017] | [0.130] |
| German legal origin |  | -0.459\*\*\* | -0.319\*\*\* | -0.198\*\* | -0.433\*\*\* | 0.544 | 0.067 | 0.203 | -0.036\*\*\* | -0.171\*\* |
|  |  | [0.103] | [0.095] | [0.080] | [0.119] | [0.328] | [0.098] | [0.193] | [0.010] | [0.085] |
| Scandinavian legal origin |  | -0.677\*\*\* | -0.434\*\*\* | -0.344\*\* | -0.607\*\* | 0.362 | -0.007 | -0.003 | -0.047\*\*\* | -0.353\* |
|  |  | [0.185] | [0.148] | [0.154] | [0.236] | [0.393] | [0.099] | [0.232] | [0.017] | [0.184] |
| Latitude (logged) |  | -0.013 | -0.008 | -0.026 | -0.015 | 0.027 | -0.012 | 0.011 | 0.004\* | -0.017 |
|  |  | [0.030] | [0.036] | [0.049] | [0.054] | [0.077] | [0.013] | [0.039] | [0.002] | [0.036] |
| Muslim |  | 0.002\*\* | 0.002\*\*\* | 0.001 | 0.002 | 0.003 | 0.001\*\* | 0.002\*\* | 0.000 | 0.003\*\*\* |
|  |  | [0.001] | [0.001] | [0.001] | [0.002] | [0.004] | [0.000] | [0.001] | [0.000] | [0.001] |
| OPEC |  | -0.160\*\* | -0.268\*\*\* | -0.192\*\*\* | -0.183\*\*\* | -0.178\* | -0.057 | -0.137\*\* | -0.012\* | -0.233\*\*\* |
|  |  | [0.063] | [0.060] | [0.058] | [0.069] | [0.105] | [0.038] | [0.066] | [0.006] | [0.064] |
| Protestant |  | 0.002 | 0.001 | 0.001 | 0.002 | 0.001 | 0.001\*\* | 0.001 | 0.000 | 0.001 |
|  |  | [0.002] | [0.001] | [0.002] | [0.002] | [0.003] | [0.001] | [0.002] | [0.000] | [0.002] |
| Democracy (lexical scale) |  |  | 0.006 |  |  |  |  |  |  |  |
|  |  |  | [0.007] |  |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 0.463\*\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.142] |  |  |  |  |  |  |  |
| Internal armed conflict |  |  | -0.113\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.046] |  |  |  |  |  |  |  |
| External armed conflict |  |  | 0.007 |  |  |  |  |  |  |  |
|  |  |  | [0.030] |  |  |  |  |  |  |  |
| Lagged DV |  |  |  |  |  |  |  |  | 0.943\*\*\* |  |
|  |  |  |  |  |  |  |  |  | [0.016] |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |
| Observations | 1398 | 1350 | 1047 | 1054 | 1014 | 49 | 7366 | 1108 | 1223 | 1295 |
| Countries | 103 | 99 | 71 | 76 | 63 | 49 | 200 | 86 | 96 | 96 |
| Years | 29 | 29 | 29 | 29 | 29 | 1 | 42 | 29 | 28 | 29 |
| R2 | 0.102 | 0.560 | 0.697 | 0.603 | 0.580 | 0.649 | 0.200 | 0.593 | 0.980 | 0.528 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B5:* Revenue Decentralization



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B5.

Revenue decentralization: min = 0; max = 1; mean = 0.282; SD = 0.241.

### *Table B6:* Government Consumption

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| *Estimator* | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | RE | OLS |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population (log)** | -0.014\*\*\* | -0.011\*\*\* | -0.013\*\*\* | -0.005 | -0.002 | 0.001 | -0.011\*\*\* | -0.006\*\* | -0.001\*\* | -0.011\*\*\* |
|  | [0.002] | [0.003] | [0.004] | [0.003] | [0.004] | [0.005] | [0.002] | [0.003] | [0.000] | [0.004] |
| Urbanization |  | 0.069\* | 0.102\*\* | 0.083\*\* | 0.093\*\* | 0.132\*\* | 0.048 | 0.049 | 0.003 | 0.076\* |
|  |  | [0.035] | [0.046] | [0.039] | [0.037] | [0.051] | [0.030] | [0.035] | [0.004] | [0.039] |
| GDPpc (logged) |  | 0.005 | 0.008 | -0.008 | 0.011 | 0.023\* | 0.007 | 0.004 | 0.001 | 0.017\* |
|  |  | [0.008] | [0.011] | [0.008] | [0.009] | [0.013] | [0.006] | [0.008] | [0.001] | [0.009] |
| English legal origin |  | -0.076 | -0.055 | -0.053 | -0.109\* | -0.098 | -0.030 | 0.042\* | -0.007 | -0.075 |
|  |  | [0.064] | [0.062] | [0.067] | [0.064] | [0.068] | [0.044] | [0.025] | [0.005] | [0.065] |
| French legal origin |  | -0.091 | -0.078 | -0.081 | -0.121\* | -0.108\* | -0.033 | 0.024 | -0.009\* | -0.092 |
|  |  | [0.065] | [0.064] | [0.070] | [0.063] | [0.065] | [0.048] | [0.020] | [0.005] | [0.067] |
| German legal origin |  | -0.104\* | -0.108\*\* | -0.083 | -0.123\*\* | -0.132\*\* | -0.047 | -0.013 | -0.010\*\* | -0.119\*\* |
|  |  | [0.054] | [0.053] | [0.059] | [0.056] | [0.058] | [0.039] | [0.043] | [0.005] | [0.058] |
| Scandinavian legal origin |  | -0.039 | -0.025 | -0.017 | -0.064 | -0.016 | 0.001 | 0.075\*\* | -0.003 | -0.039 |
|  |  | [0.067] | [0.067] | [0.068] | [0.069] | [0.071] | [0.049] | [0.034] | [0.006] | [0.068] |
| Latitude (logged) |  | 0.000 | 0.002 | 0.005 | 0.001 | 0.002 | 0.002 | -0.001 | 0.000 | 0.004 |
|  |  | [0.007] | [0.007] | [0.007] | [0.008] | [0.012] | [0.008] | [0.009] | [0.001] | [0.007] |
| Muslim |  | -0.000 | -0.000 | -0.000 | 0.001\*\* | 0.000 | 0.000 | -0.000\* | -0.000 | 0.000 |
|  |  | [0.000] | [0.000] | [0.000] | [0.000] | [0.001] | [0.000] | [0.000] | [0.000] | [0.000] |
| OPEC |  | -0.002 | -0.001 | 0.009 | -0.009 | 0.004 | -0.011 | 0.001 | -0.001 | -0.004 |
|  |  | [0.017] | [0.016] | [0.017] | [0.018] | [0.027] | [0.018] | [0.017] | [0.002] | [0.017] |
| Protestant |  | 0.000 | 0.000 | 0.000 | 0.000 | -0.000 | 0.000 | 0.000 | 0.000 | -0.000 |
|  |  | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| Democracy (lexical scale) |  |  | -0.001 |  |  |  |  |  |  |  |
|  |  |  | [0.002] |  |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | -0.003 |  |  |  |  |  |  |  |
|  |  |  | [0.019] |  |  |  |  |  |  |  |
| Internal armed conflict |  |  | 0.005 |  |  |  |  |  |  |  |
|  |  |  | [0.009] |  |  |  |  |  |  |  |
| External armed conflict |  |  | 0.035\* |  |  |  |  |  |  |  |
|  |  |  | [0.019] |  |  |  |  |  |  |  |
| Lagged DV |  |  |  |  |  |  |  |  | 0.918\*\*\* |  |
|  |  |  |  |  |  |  |  |  | [0.009] |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |
| Observations | 6638 | 6449 | 4192 | 4357 | 3584 | 80 | 9132 | 4408 | 6265 | 5827 |
| Countries | 176 | 169 | 102 | 159 | 82 | 80 | 200 | 154 | 169 | 151 |
| Years | 51 | 51 | 51 | 51 | 51 | 1 | 53 | 51 | 50 | 51 |
| R2 | 0.0853 | 0.285 | 0.369 | 0.360 | 0.466 | 0.621 | 0.203 | 0.382 | 0.894 | 0.319 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B6:* Government Consumption



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B6.

Government consumption: min = 0; max = 1; mean = 0.188; SD = 0.092.

### *Table B7:* Separate Powers

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled |
| *Estimator* | Logit | Logit | Logit | Logit | Logit | Logit | Logit | Logit | Logit |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **10** |
| **Population (log)** | 0.050 | 0.232\* | 0.236 | 0.292\*\* | 0.268 | 0.692\*\* | 0.092 | 0.348 | 0.048 |
|  | [0.079] | [0.134] | [0.200] | [0.140] | [0.193] | [0.326] | [0.087] | [0.212] | [0.086] |
| Urbanization |  | 0.389 | -0.628 | -1.833 | 0.130 | 1.221 | 1.336\*\* | 1.362 | 0.191 |
|  |  | [0.766] | [1.025] | [1.478] | [1.188] | [2.493] | [0.544] | [1.132] | [0.451] |
| GDPpc (logged) |  | -0.139 | -0.091 | 0.142 | -0.257 | -0.740 | -0.260\*\* | -0.762\*\* | -0.110 |
|  |  | [0.215] | [0.343] | [0.212] | [0.280] | [0.856] | [0.131] | [0.306] | [0.103] |
| English legal origin |  | 2.043\*\* | 1.109 | 1.402\* | 1.618 | 30.295\*\*\* | 1.170\*\* | 1.025 | 1.058\*\*\* |
|  |  | [0.833] | [0.852] | [0.845] | [1.045] | [3.687] | [0.491] | [1.023] | [0.414] |
| French legal origin |  | 2.184\*\*\* | 1.423\*\* | 1.949\*\* | 2.198\*\*\* | 33.005\*\*\* | 1.195\*\* | 0.693 | 1.171\*\*\* |
|  |  | [0.751] | [0.710] | [0.810] | [0.837] | [3.086] | [0.499] | [1.000] | [0.419] |
| German legal origin |  | 1.583 | 0.629 | 1.204 | 1.608 | 18.689\*\*\* | 0.253 | -1.334 |  |
|  |  | [0.988] | [1.090] | [1.022] | [1.107] | [2.961] | [0.792] | [1.430] |  |
| Scandinavian legal origin |  | 2.476 | 1.305 | 1.464 | 1.799 |  | 1.264 | 1.771 | 1.256 |
|  |  | [1.730] | [1.707] | [1.853] | [1.859] |  | [1.539] | [1.859] | [0.768] |
| Latitude (logged) |  | -0.465\*\* | -0.470\* | -0.409 | -0.425 | -2.613\*\* | -0.307\*\* | -0.369 | -0.237\*\* |
|  |  | [0.198] | [0.256] | [0.258] | [0.360] | [1.207] | [0.141] | [0.260] | [0.094] |
| Muslim |  | 0.016\*\*\* | 0.011 | 0.012 | -0.006 | -0.029 | 0.013\*\*\* | 0.014\*\* | 0.009\*\*\* |
|  |  | [0.006] | [0.008] | [0.008] | [0.009] | [0.023] | [0.004] | [0.006] | [0.002] |
| OPEC |  | -1.283\*\*\* | -1.032\* | -1.064\*\* | -0.932 | -0.081 | -1.065\*\* | -0.767 | -0.678\*\* |
|  |  | [0.491] | [0.610] | [0.505] | [0.573] | [1.188] | [0.415] | [0.760] | [0.255] |
| Protestant |  | 0.007 | 0.020 | 0.020 | 0.020 | 0.035 | 0.003 | -0.001 | 0.003 |
|  |  | [0.013] | [0.015] | [0.015] | [0.016] | [0.022] | [0.008] | [0.015] | [0.005] |
| Democracy (lexical scale) |  |  | 0.389 |  |  |  |  |  |  |
|  |  |  | [0.766] |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | -0.139 |  |  |  |  |  |  |
|  |  |  | [0.215] |  |  |  |  |  |  |
| Internal armed conflict |  |  | 2.043\*\* |  |  |  |  |  |  |
|  |  |  | [0.833] |  |  |  |  |  |  |
| External armed conflict |  |  | 2.184\*\*\* |  |  |  |  |  |  |
|  |  |  | [0.751] |  |  |  |  |  |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |
| Observations | 13650 | 12442 | 8313 | 9984 | 8,716 | 78 | 19005 | 8076 | 11620 |
| Countries | 169 | 153 | 105 | 152 | 82 | 78 | 203 | 149 | 146 |
| Years | 115 | 112 | 111 | 115 | 110 | 1 | 114 | 112 | 112 |
| R2 (pseudo) | 0.001 | 0.314 | 0.361 | 0.359 | 0.364 | 0.505 |  | 0.444 |  |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B7:* Separate Powers



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B7.

Separate powers: min = 0; max = 1; mean = 0.232; SD = 0.422; values = {0, 1}.

### *Table B8:* Divided Party Control

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| *Estimator* | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | RE | OLS |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population (log)** | 0.021\*\*\* | 0.023\*\* | 0.032\*\*\* | 0.028\*\*\* | 0.018 | 0.050 | 0.020\*\* | 0.020\* | 0.002\*\* | 0.024\* |
|  | [0.007] | [0.009] | [0.012] | [0.009] | [0.011] | [0.030] | [0.008] | [0.010] | [0.001] | [0.013] |
| Urbanization |  | -0.065 | -0.081 | -0.121 | -0.018 | -0.259 | -0.027 | -0.038 | -0.014 | -0.041 |
|  |  | [0.101] | [0.134] | [0.136] | [0.129] | [0.328] | [0.089] | [0.114] | [0.010] | [0.099] |
| GDPpc (logged) |  | 0.004 | -0.018 | 0.036 | 0.037 | 0.094 | -0.006 | 0.004 | 0.001 | 0.001 |
|  |  | [0.022] | [0.027] | [0.036] | [0.026] | [0.083] | [0.019] | [0.023] | [0.002] | [0.023] |
| English legal origin |  | -0.072 | -0.135\* | -0.045 | -0.140\* | 0.128 | -0.017 | -0.221\*\*\* | 0.002 | -0.060 |
|  |  | [0.060] | [0.071] | [0.109] | [0.076] | [0.263] | [0.054] | [0.063] | [0.007] | [0.065] |
| French legal origin |  | -0.024 | -0.108 | 0.035 | -0.025 | 0.150 | 0.004 | -0.126\*\* | 0.003 | -0.020 |
|  |  | [0.050] | [0.067] | [0.108] | [0.066] | [0.250] | [0.047] | [0.052] | [0.006] | [0.057] |
| German legal origin |  | 0.076 | 0.028 | 0.113 | 0.057 | 0.263 | 0.109\* | -0.024 | 0.007 | 0.099 |
|  |  | [0.066] | [0.079] | [0.111] | [0.104] | [0.304] | [0.062] | [0.091] | [0.008] | [0.098] |
| Scandinavian legal origin |  | 0.069 | 0.092 | 0.179 | 0.034 | 0.301 | 0.110 | -0.051 | 0.020\* | 0.078 |
|  |  | [0.095] | [0.119] | [0.133] | [0.110] | [0.290] | [0.095] | [0.100] | [0.010] | [0.099] |
| Latitude (logged) |  | -0.004 | -0.015 | -0.008 | -0.040 | 0.012 | -0.017 | -0.015 | -0.002 | -0.003 |
|  |  | [0.024] | [0.025] | [0.030] | [0.035] | [0.078] | [0.022] | [0.025] | [0.002] | [0.024] |
| Muslim |  | 0.000 | -0.000 | 0.001 | -0.002 | -0.003 | 0.000 | 0.000 | 0.000 | 0.000 |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.004] | [0.001] | [0.001] | [0.000] | [0.001] |
| OPEC |  | -0.022 | -0.054 | -0.169\*\* | -0.039 | -0.131 | -0.025 | -0.113 | 0.006 | -0.037 |
|  |  | [0.078] | [0.067] | [0.077] | [0.095] | [0.112] | [0.075] | [0.068] | [0.006] | [0.079] |
| Protestant |  | 0.001 | 0.000 | 0.000 | 0.001\* | 0.001 | 0.001 | 0.001 | 0.000 | 0.001 |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.002] | [0.001] | [0.001] | [0.000] | [0.001] |
| Democracy (lexical scale) |  |  | 0.021\*\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.008] |  |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 0.169\* |  |  |  |  |  |  |  |
|  |  |  | [0.100] |  |  |  |  |  |  |  |
| Internal armed conflict |  |  | -0.073\*\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.026] |  |  |  |  |  |  |  |
| External armed conflict |  |  | -0.010 |  |  |  |  |  |  |  |
|  |  |  | [0.028] |  |  |  |  |  |  |  |
| Lagged DV |  |  |  |  |  |  |  |  | 0.896\*\*\* |  |
|  |  |  |  |  |  |  |  |  | [0.010] |  |
| Electoral system FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |
| Observations | 9210 | 8530 | 6219 | 4009 | 5886 | 76 | 9644 | 6448 | 12359 | 8264 |
| Countries | 164 | 153 | 102 | 123 | 80 | 76 | 182 | 148 | 157 | 150 |
| Years | 114 | 111 | 111 | 75 | 110 | 1 | 114 | 111 | 111 | 111 |
| R2 | 0.039 | 0.117 | 0.152 | 0.196 | 0.142 | 0.291 | 0.119 | 0.131 | 0.822 | 0.079 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B8:* Divided Party Control



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B8.

Divided party control: min = 0; max = 1; mean = 0.549; SD = 0.266.

### *Table B9:* Decentralized Parties

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled |
| *Estimator* | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **10** |
| **Population (log)** | 0.016 | 0.016\* | 0.030\*\*\* | 0.019\* | 0.021\* | 0.008 | 0.019\*\*\* | 0.019\*\* | 0.008 |
|  | [0.010] | [0.008] | [0.011] | [0.010] | [0.012] | [0.015] | [0.006] | [0.009] | [0.011] |
| Urbanization |  | 0.173\*\* | 0.121 | 0.073 | 0.222\*\* | 0.064 | 0.173\*\*\* | 0.240\*\*\* | 0.215\*\*\* |
|  |  | [0.081] | [0.079] | [0.107] | [0.089] | [0.135] | [0.048] | [0.085] | [0.078] |
| GDPpc (logged) |  | 0.015 | 0.002 | -0.013 | -0.014 | -0.035 | 0.001 | 0.004 | 0.003 |
|  |  | [0.017] | [0.015] | [0.018] | [0.020] | [0.038] | [0.010] | [0.020] | [0.016] |
| English legal origin |  | 0.043 | 0.036 | 0.084 | 0.062 | 0.264\*\* | 0.047 | -0.018 | 0.055 |
|  |  | [0.046] | [0.053] | [0.054] | [0.064] | [0.107] | [0.044] | [0.042] | [0.043] |
| French legal origin |  | -0.070\* | -0.095\*\* | -0.030 | -0.048 | 0.160\* | -0.068 | -0.175\*\*\* | -0.059 |
|  |  | [0.042] | [0.044] | [0.042] | [0.045] | [0.081] | [0.043] | [0.038] | [0.039] |
| German legal origin |  | 0.090 | 0.083 | 0.126 | 0.092 | 0.246\*\* | 0.046 | -0.044 | 0.106 |
|  |  | [0.081] | [0.077] | [0.077] | [0.089] | [0.117] | [0.073] | [0.107] | [0.086] |
| Scandinavian legal origin |  | 0.010 | -0.093 | -0.004 | -0.017 | 0.214 | 0.055 | -0.046 | 0.009 |
|  |  | [0.093] | [0.097] | [0.106] | [0.116] | [0.159] | [0.085] | [0.094] | [0.094] |
| Latitude (logged) |  | 0.004 | -0.000 | 0.029 | 0.037\* | 0.027 | -0.006 | 0.009 | 0.005 |
|  |  | [0.015] | [0.016] | [0.018] | [0.022] | [0.026] | [0.015] | [0.014] | [0.015] |
| Muslim |  | 0.000 | 0.002\*\* | 0.000 | 0.001 | 0.000 | 0.001 | -0.000 | 0.000 |
|  |  | [0.000] | [0.001] | [0.001] | [0.001] | [0.001] | [0.000] | [0.000] | [0.000] |
| OPEC |  | -0.000 | -0.058\*\* | 0.024 | 0.011 | 0.047 | 0.003 | -0.012 | 0.007 |
|  |  | [0.036] | [0.026] | [0.042] | [0.042] | [0.074] | [0.032] | [0.031] | [0.034] |
| Protestant |  | 0.002\*\* | 0.003\*\* | 0.003\*\* | 0.003\*\* | 0.002 | 0.001\*\* | 0.001 | 0.002\*\* |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] |
| Democracy (lexical scale) |  |  | 0.024\*\*\* |  |  |  |  |  |  |
|  |  |  | [0.003] |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 0.033 |  |  |  |  |  |  |
|  |  |  | [0.051] |  |  |  |  |  |  |
| Internal armed conflict |  |  | 0.024 |  |  |  |  |  |  |
|  |  |  | [0.016] |  |  |  |  |  |  |
| External armed conflict |  |  | -0.005 |  |  |  |  |  |  |
|  |  |  | [0.014] |  |  |  |  |  |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |
| Observations | 13509 | 12539 | 8216 | 9870 | 8621 | 82 | 18165 | 8338 | 12141 |
| Countries | 169 | 157 | 105 | 156 | 82 | 82 | 201 | 154 | 154 |
| Years | 115 | 112 | 111 | 115 | 110 | 1 | 114 | 112 | 112 |
| R2 | 0.017 | 0.489 | 0.620 | 0.533 | 0.562 | 0.529 | 0.435 | 0.569 | 0.499 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B9:* Decentralized Parties



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B9.

Decentralized parties: min = 0; max = 1; mean = 0.339; SD = 0.199.

### *Table B10:* Judicial Review

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled |
| *Estimator* | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **10** |
| **Population (log)** | 0.003 | 0.018 | 0.011 | 0.006 | 0.011 | 0.020 | 0.020\*\* | 0.017 | 0.026\* |
|  | [0.012] | [0.011] | [0.016] | [0.012] | [0.015] | [0.016] | [0.008] | [0.012] | [0.013] |
| Urbanization |  | 0.187\* | 0.228\*\* | 0.392\*\*\* | 0.311\*\* | 0.043 | 0.169\*\*\* | 0.215\*\* | 0.188\*\* |
|  |  | [0.096] | [0.104] | [0.142] | [0.119] | [0.156] | [0.060] | [0.100] | [0.096] |
| GDPpc (logged) |  | 0.006 | -0.036 | -0.000 | 0.021 | -0.007 | 0.014 | 0.000 | 0.002 |
|  |  | [0.023] | [0.033] | [0.024] | [0.025] | [0.042] | [0.015] | [0.025] | [0.023] |
| English legal origin |  | 0.321\*\*\* | 0.314\*\*\* | 0.239\*\*\* | 0.161\* | 0.760\*\*\* | 0.240\*\*\* | 0.122 | 0.298\*\*\* |
|  |  | [0.100] | [0.112] | [0.086] | [0.092] | [0.158] | [0.071] | [0.129] | [0.102] |
| French legal origin |  | 0.234\*\* | 0.196\* | 0.212\*\* | 0.182\* | 0.743\*\*\* | 0.165\*\* | -0.002 | 0.210\* |
|  |  | [0.108] | [0.115] | [0.097] | [0.099] | [0.143] | [0.077] | [0.146] | [0.111] |
| German legal origin |  | 0.341\*\*\* | 0.294\*\*\* | 0.270\*\*\* | 0.218\*\* | 0.697\*\*\* | 0.223\*\*\* | 0.016 | 0.293\*\* |
|  |  | [0.096] | [0.110] | [0.088] | [0.097] | [0.157] | [0.081] | [0.162] | [0.114] |
| Scandinavian legal origin |  | 0.535\*\*\* | 0.535\*\*\* | 0.493\*\*\* | 0.447\*\*\* | 0.962\*\*\* | 0.432\*\*\* | 0.341\*\* | 0.517\*\*\* |
|  |  | [0.143] | [0.155] | [0.145] | [0.142] | [0.200] | [0.123] | [0.167] | [0.144] |
| Latitude (logged) |  | -0.032 | -0.072\*\* | -0.066\*\* | -0.095\*\* | 0.006 | -0.028 | -0.024 | -0.034 |
|  |  | [0.025] | [0.034] | [0.032] | [0.043] | [0.038] | [0.021] | [0.026] | [0.025] |
| Muslim |  | -0.000 | 0.000 | -0.001 | -0.002 | -0.002 | -0.000 | -0.001 | -0.000 |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] |
| OPEC |  | -0.134 | -0.074 | -0.112 | -0.131 | -0.262\*\* | -0.097 | -0.116 | -0.138 |
|  |  | [0.088] | [0.089] | [0.088] | [0.093] | [0.122] | [0.074] | [0.102] | [0.087] |
| Protestant |  | -0.003\*\*\* | -0.004\*\*\* | -0.003\*\* | -0.003\* | -0.004\*\*\* | -0.003\*\*\* | -0.004\*\*\* | -0.003\*\*\* |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] |
| Democracy (lexical scale) |  |  | 0.047\*\*\* |  |  |  |  |  |  |
|  |  |  | [0.008] |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 0.092 |  |  |  |  |  |  |
|  |  |  | [0.083] |  |  |  |  |  |  |
| Internal armed conflict |  |  | 0.024 |  |  |  |  |  |  |
|  |  |  | [0.028] |  |  |  |  |  |  |
| External armed conflict |  |  | -0.084\*\*\* |  |  |  |  |  |  |
|  |  |  | [0.030] |  |  |  |  |  |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |
| Observations | 13605 | 12659 | 8318 | 9977 | 8722 | 82 | 18165 | 8397 | 12261 |
| Countries | 169 | 157 | 105 | 156 | 82 | 82 | 201 | 154 | 154 |
| Years | 115 | 112 | 111 | 115 | 110 | 1 | 114 | 112 | 112 |
| R2 | 0.0002 | 0.307 | 0.428 | 0.339 | 0.344 | 0.637 | 0.321 | 0.343 | 0.297 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B10:* Judicial Review



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B10.

Judicial review: min = 0; max = 1; mean = 0.543; SD = 0.293.

### *Table B11:* Bicameralism

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| *Estimator* | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | RE | OLS |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population (log)** | 0.041\*\*\* | 0.055\*\*\* | 0.067\*\*\* | 0.056\*\*\* | 0.070\*\*\* | 0.091\*\*\* | 0.202\*\*\* | 0.071\*\*\* | 0.004\*\*\* | 0.042\*\*\* |
|  | [0.012] | [0.010] | [0.018] | [0.013] | [0.015] | [0.020] | [0.030] | [0.012] | [0.001] | [0.012] |
| Urbanization |  | 0.260\*\* | 0.491\*\*\* | 0.343\*\* | 0.444\*\*\* | 0.151 | 0.665\*\* | 0.362\*\*\* | 0.016\* | 0.376\*\*\* |
|  |  | [0.100] | [0.154] | [0.146] | [0.134] | [0.240] | [0.313] | [0.116] | [0.009] | [0.125] |
| GDPpc (logged) |  | 0.022 | 0.025 | -0.054\*\* | -0.004 | -0.009 | 0.095 | 0.009 | 0.001 | 0.005 |
|  |  | [0.020] | [0.030] | [0.025] | [0.027] | [0.076] | [0.060] | [0.022] | [0.002] | [0.023] |
| English legal origin |  | 0.040 | -0.129 | 0.088 | 0.059 | 0.346 | 0.118 | -0.025 | 0.000 | 0.114 |
|  |  | [0.073] | [0.080] | [0.079] | [0.081] | [0.210] | [0.199] | [0.122] | [0.006] | [0.074] |
| French legal origin |  | 0.032 | -0.076 | 0.091 | 0.072 | 0.298\* | 0.020 | -0.029 | -0.001 | 0.096 |
|  |  | [0.085] | [0.081] | [0.095] | [0.092] | [0.172] | [0.241] | [0.143] | [0.007] | [0.083] |
| German legal origin |  | 0.250\* | 0.120 | 0.325\*\* | 0.294\* | 0.475\*\* | 0.641\* | 0.247 | 0.014 | 0.376\*\* |
|  |  | [0.128] | [0.130] | [0.157] | [0.173] | [0.221] | [0.366] | [0.227] | [0.010] | [0.150] |
| Scandinavian legal origin |  | -0.044 | -0.197 | -0.020 | 0.008 | 0.132 | -0.350 | -0.113 | -0.008 | 0.027 |
|  |  | [0.139] | [0.149] | [0.148] | [0.153] | [0.271] | [0.509] | [0.171] | [0.011] | [0.136] |
| Latitude (logged) |  | 0.008 | -0.034 | -0.003 | -0.008 | 0.074 | 0.036 | 0.017 | 0.000 | 0.008 |
|  |  | [0.020] | [0.021] | [0.033] | [0.040] | [0.066] | [0.059] | [0.026] | [0.002] | [0.021] |
| Muslim |  | -0.000 | 0.001 | -0.000 | -0.001 | -0.004\*\* | 0.000 | -0.000 | 0.000 | -0.000 |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.002] | [0.002] | [0.001] | [0.000] | [0.001] |
| OPEC |  | -0.033 | -0.046 | -0.005 | -0.045 | -0.185 | -0.147 | -0.035 | -0.003 | -0.032 |
|  |  | [0.059] | [0.069] | [0.069] | [0.067] | [0.131] | [0.203] | [0.087] | [0.004] | [0.061] |
| Protestant |  | 0.001 | -0.000 | 0.001 | 0.001 | 0.001 | 0.005 | 0.001 | 0.000 | 0.001 |
|  |  | [0.001] | [0.002] | [0.001] | [0.002] | [0.002] | [0.004] | [0.001] | [0.000] | [0.001] |
| Democracy (lexical scale) |  |  | 0.039\*\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.008] |  |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 0.034 |  |  |  |  |  |  |  |
|  |  |  | [0.100] |  |  |  |  |  |  |  |
| Internal armed conflict |  |  | -0.012 |  |  |  |  |  |  |  |
|  |  |  | [0.028] |  |  |  |  |  |  |  |
| External armed conflict |  |  | -0.054 |  |  |  |  |  |  |  |
|  |  |  | [0.034] |  |  |  |  |  |  |  |
| Lagged DV |  |  |  |  |  |  |  |  | 0.926\*\*\* |  |
|  |  |  |  |  |  |  |  |  | [0.008] |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |
| Observations | 14110 | 13051 | 8271 | 10189 | 8903 | 83 | 18165 | 8725 | 12907 | 12196 |
| Countries | 178 | 165 | 105 | 161 | 84 | 83 | 201 | 163 | 165 | 154 |
| Years | 115 | 112 | 111 | 115 | 110 | 1 | 114 | 112 | 111 | 112 |
| R2 | 0.044 | 0.281 | 0.337 | 0.246 | 0.278 | 0.390 | 0.327 | 0.403 | 0.895 | 0.279 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B11:* Bicameralism



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B11.

Bicameralism: min = 0; max = 1; mean = 0.344; SD = 0.328.

### *Table B12:* Legislative Fractionalization

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| *Estimator* | Tobit | Tobit | Tobit | Tobit | Tobit | Tobit | Tobit | Tobit | RE | Tobit |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population (log)** | 0.019 | 0.016 | 0.010 | 0.024\*\* | 0.019\* | 0.036\*\* | 0.029\*\*\* | 0.010 | 0.001 | 0.001 |
|  | [0.017] | [0.011] | [0.009] | [0.010] | [0.011] | [0.015] | [0.006] | [0.010] | [0.001] | [0.011] |
| Urbanization |  | 0.059 | 0.134 | -0.079 | -0.055 | -0.351\* | 0.175\*\* | -0.013 | 0.008 | 0.136 |
|  |  | [0.113] | [0.087] | [0.145] | [0.124] | [0.177] | [0.077] | [0.087] | [0.010] | [0.084] |
| GDPpc (logged) |  | 0.015 | -0.024 | 0.062\*\* | 0.048\* | 0.111\*\* | -0.005 | 0.010 | -0.003 | 0.024 |
|  |  | [0.025] | [0.023] | [0.026] | [0.025] | [0.043] | [0.010] | [0.017] | [0.002] | [0.021] |
| English legal origin |  | 0.666\*\*\* | 0.393\*\*\* | 0.556\*\*\* | 0.569\*\*\* | 0.417\*\*\* | 0.174\*\*\* | -0.093 | 0.036\*\*\* | 0.451\*\*\* |
|  |  | [0.115] | [0.088] | [0.122] | [0.134] | [0.156] | [0.060] | [0.127] | [0.008] | [0.068] |
| French legal origin |  | 0.659\*\*\* | 0.419\*\*\* | 0.624\*\*\* | 0.642\*\*\* | 0.612\*\*\* | 0.165\*\*\* | -0.033 | 0.036\*\*\* | 0.450\*\*\* |
|  |  | [0.116] | [0.095] | [0.120] | [0.132] | [0.142] | [0.061] | [0.121] | [0.007] | [0.067] |
| German legal origin |  | 0.765\*\*\* | 0.539\*\*\* | 0.685\*\*\* | 0.696\*\*\* | 0.642\*\*\* | 0.259\*\*\* | -0.009 | 0.043\*\*\* | 0.536\*\*\* |
|  |  | [0.113] | [0.094] | [0.120] | [0.135] | [0.148] | [0.067] | [0.130] | [0.008] | [0.068] |
| Scandinavian legal origin |  | 0.813\*\*\* | 0.610\*\*\* | 0.731\*\*\* | 0.746\*\*\* | 0.540\*\*\* | 0.283\*\*\* | 0.034 | 0.047\*\*\* | 0.598\*\*\* |
|  |  | [0.131] | [0.110] | [0.134] | [0.143] | [0.170] | [0.084] | [0.141] | [0.010] | [0.093] |
| Latitude (logged) |  | 0.028 | -0.005 | 0.018 | 0.012 | 0.008 | -0.002 | 0.005 | 0.001 | -0.003 |
|  |  | [0.024] | [0.014] | [0.027] | [0.038] | [0.046] | [0.016] | [0.021] | [0.002] | [0.017] |
| Muslim |  | -0.003\*\*\* | -0.002\*\* | -0.002\*\* | -0.004\*\* | -0.002 | -0.001\*\*\* | -0.002\*\*\* | -0.000\*\*\* | -0.002\*\*\* |
|  |  | [0.001] | [0.001] | [0.001] | [0.002] | [0.004] | [0.000] | [0.000] | [0.000] | [0.001] |
| OPEC |  | -0.043 | -0.067 | -0.077 | -0.066 | -0.075 | -0.043 | 0.123\*\*\* | -0.002 | -0.036 |
|  |  | [0.095] | [0.071] | [0.087] | [0.095] | [0.125] | [0.049] | [0.045] | [0.006] | [0.076] |
| Protestant |  | -0.001 | -0.001 | -0.000 | -0.000 | 0.002\* | 0.000 | -0.000 | -0.000 | -0.001 |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.000] | [0.001] |
| Democracy (lexical scale) |  |  | 0.082\*\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.008] |  |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 0.019 |  |  |  |  |  |  |  |
|  |  |  | [0.067] |  |  |  |  |  |  |  |
| Internal armed conflict |  |  | 0.038 |  |  |  |  |  |  |  |
|  |  |  | [0.028] |  |  |  |  |  |  |  |
| External armed conflict |  |  | 0.051\* |  |  |  |  |  |  |  |
|  |  |  | [0.028] |  |  |  |  |  |  |  |
| Lagged DV |  |  |  |  |  |  |  |  | 0.922\*\*\* |  |
|  |  |  |  |  |  |  |  |  | [0.006] |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |
| Observations | 8466 | 7995 | 5554 | 6455 | 5115 | 79 | 21889 | 6023 | 7727 | 7634 |
| Countries | 156 | 149 | 105 | 146 | 82 | 79 | 201 | 141 | 149 | 142 |
| Years | 212 | 211 | 111 | 163 | 110 | 1 | 214 | 211 | 211 | 199 |
| R2 (pseudo) | 0.006 | 0.608 | 0.968 | 0.762 | 0.851 | 14.15 | 0.389 | -4.830 | 0.923 |  |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B12:* Legislative Fractionalization



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B12.

Legislative fractionalization: min = 0; max = 1; mean = 0.477; SD = 0.289.

### *Table B13:* Political Constraints

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| *Estimator* | Tobit | Tobit | Tobit | Tobit | Tobit | Tobit | Tobit | Tobit | RE | Tobit |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population (log)** | 0.068\*\* | 0.044\*\*\* | 0.022\*\* | 0.035\*\* | 0.021 | 0.033\* | 0.029\*\*\* | 0.028\*\* | 0.002\*\*\* | 0.005 |
|  | [0.030] | [0.016] | [0.011] | [0.016] | [0.017] | [0.018] | [0.006] | [0.011] | [0.001] | [0.012] |
| Urbanization |  | 0.249 | 0.143 | 0.153 | 0.113 | -0.664\*\*\* | 0.148\*\* | 0.150 | 0.007 | 0.172\* |
|  |  | [0.174] | [0.124] | [0.184] | [0.182] | [0.188] | [0.068] | [0.154] | [0.010] | [0.100] |
| GDPpc (logged) |  | 0.046 | -0.000 | 0.029 | 0.114\*\*\* | 0.176\*\*\* | 0.028\*\*\* | -0.004 | 0.003\*\* | 0.042\*\*\* |
|  |  | [0.033] | [0.027] | [0.034] | [0.041] | [0.047] | [0.010] | [0.029] | [0.001] | [0.016] |
| English legal origin |  | 0.676\*\*\* | 0.281\*\*\* | 0.603\*\*\* | 0.507\*\*\* | 0.498\*\*\* | 0.112\*\* | 0.336\*\* | 0.024\*\*\* | 0.225\*\*\* |
|  |  | [0.141] | [0.105] | [0.131] | [0.151] | [0.182] | [0.051] | [0.165] | [0.005] | [0.044] |
| French legal origin |  | 0.608\*\*\* | 0.270\*\*\* | 0.618\*\*\* | 0.553\*\*\* | 0.692\*\*\* | 0.107\*\* | 0.321\*\* | 0.024\*\*\* | 0.203\*\*\* |
|  |  | [0.134] | [0.104] | [0.121] | [0.128] | [0.158] | [0.053] | [0.159] | [0.005] | [0.041] |
| German legal origin |  | 0.785\*\*\* | 0.445\*\*\* | 0.813\*\*\* | 0.684\*\*\* | 0.737\*\*\* | 0.158\*\* | 0.437\*\* | 0.031\*\*\* | 0.285\*\*\* |
|  |  | [0.158] | [0.123] | [0.150] | [0.148] | [0.162] | [0.073] | [0.177] | [0.006] | [0.059] |
| Scandinavian legal origin |  | 0.600\*\*\* | 0.339\*\* | 0.535\*\*\* | 0.520\*\*\* | 0.439\*\* | 0.115 | 0.329\* | 0.021\*\* | 0.215\*\* |
|  |  | [0.172] | [0.142] | [0.162] | [0.177] | [0.218] | [0.089] | [0.191] | [0.009] | [0.097] |
| Latitude (logged) |  | 0.062\* | 0.022 | 0.031 | 0.009 | 0.051 | 0.023\* | 0.048\* | 0.002 | 0.014 |
|  |  | [0.034] | [0.024] | [0.039] | [0.049] | [0.053] | [0.012] | [0.027] | [0.002] | [0.016] |
| Muslim |  | -0.003\*\*\* | -0.001\* | -0.003\*\*\* | -0.005\*\*\* | -0.006\*\*\* | -0.001\*\*\* | -0.003\*\*\* | -0.000\*\*\* | -0.001\*\* |
|  |  | [0.001] | [0.001] | [0.001] | [0.002] | [0.002] | [0.000] | [0.001] | [0.000] | [0.000] |
| OPEC |  | -0.269\*\*\* | -0.160\*\* | -0.199\*\* | -0.257\*\* | -0.063 | -0.081\*\* | -0.033 | -0.009\*\* | -0.093\*\* |
|  |  | [0.104] | [0.076] | [0.101] | [0.107] | [0.146] | [0.035] | [0.083] | [0.004] | [0.043] |
| Protestant |  | 0.002 | 0.000 | 0.004\*\* | 0.003 | 0.002 | 0.001\* | 0.001 | 0.000\* | 0.001 |
|  |  | [0.002] | [0.001] | [0.002] | [0.002] | [0.001] | [0.001] | [0.001] | [0.000] | [0.001] |
| Democracy (lexical scale) |  |  | 0.249 |  |  |  |  |  |  |  |
|  |  |  | [0.174] |  |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | 0.046 |  |  |  |  |  |  |  |
|  |  |  | [0.033] |  |  |  |  |  |  |  |
| Internal armed conflict |  |  | 0.676\*\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.141] |  |  |  |  |  |  |  |
| External armed conflict |  |  | 0.608\*\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.134] |  |  |  |  |  |  |  |
| Lagged DV |  |  |  |  |  |  |  |  | 0.903\*\*\* |  |
|  |  |  |  |  |  |  |  |  | [0.007] |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |
| Observations | 14389 | 13587 | 7975 | 10070 | 7416 | 85 | 21889 | 7226 | 13380 | 12807 |
| Countries | 164 | 156 | 107 | 155 | 85 | 85 | 201 | 152 | 156 | 147 |
| Years | 212 | 211 | 111 | 163 | 110 | 1 | 214 | 211 | 211 | 199 |
| R2 (pseudo) | 0.018 | 0.454 | 0.713 | 0.457 | 0.471 | 1.008 | 0.468 | 0.477 | 0.908 |  |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B13:* Political Constraints



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B13.

Political constraints: min = 0; max = 1; mean = 0.220; SD = 0.290.

### *Table B14:* Checks & Balances

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| *Estimator* | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | RE | OLS |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population (log)** | 0.008 | 0.024\*\*\* | 0.019\*\*\* | 0.029\*\*\* | 0.030\*\*\* | 0.040\*\*\* | 0.027\*\*\* | 0.018\*\*\* | 0.003\*\*\* | 0.028\*\*\* |
|  | [0.009] | [0.007] | [0.007] | [0.007] | [0.008] | [0.011] | [0.005] | [0.007] | [0.001] | [0.009] |
| Urbanization |  | 0.031 | 0.103\* | -0.012 | -0.074 | -0.111 | 0.110\*\* | 0.025 | 0.010 | 0.044 |
|  |  | [0.060] | [0.062] | [0.070] | [0.068] | [0.107] | [0.047] | [0.069] | [0.009] | [0.065] |
| GDPpc (logged) |  | 0.034\*\* | -0.002 | 0.029\* | 0.042\*\* | 0.055\* | 0.009 | 0.025 | 0.001 | 0.043\*\* |
|  |  | [0.016] | [0.015] | [0.016] | [0.017] | [0.033] | [0.012] | [0.019] | [0.002] | [0.018] |
| English legal origin |  | 0.335\*\*\* | 0.134\*\*\* | 0.363\*\*\* | 0.347\*\*\* | 0.422\*\*\* | 0.239\*\*\* | 0.321\*\*\* | 0.052\*\*\* | 0.351\*\*\* |
|  |  | [0.038] | [0.036] | [0.037] | [0.047] | [0.073] | [0.047] | [0.065] | [0.007] | [0.037] |
| French legal origin |  | 0.277\*\*\* | 0.055\* | 0.289\*\*\* | 0.282\*\*\* | 0.422\*\*\* | 0.188\*\*\* | 0.249\*\*\* | 0.044\*\*\* | 0.282\*\*\* |
|  |  | [0.034] | [0.033] | [0.032] | [0.033] | [0.043] | [0.046] | [0.064] | [0.006] | [0.034] |
| German legal origin |  | 0.270\*\*\* | 0.061\* | 0.308\*\*\* | 0.275\*\*\* | 0.409\*\*\* | 0.221\*\*\* | 0.245\*\*\* | 0.043\*\*\* | 0.306\*\*\* |
|  |  | [0.042] | [0.034] | [0.038] | [0.052] | [0.071] | [0.050] | [0.069] | [0.006] | [0.041] |
| Scandinavian legal origin |  | 0.386\*\*\* | 0.244\*\*\* | 0.473\*\*\* | 0.419\*\*\* | 0.546\*\*\* | 0.308\*\*\* | 0.369\*\*\* | 0.063\*\*\* | 0.436\*\*\* |
|  |  | [0.060] | [0.073] | [0.059] | [0.069] | [0.109] | [0.066] | [0.076] | [0.009] | [0.061] |
| Latitude (logged) |  | 0.015 | -0.027\*\* | -0.017 | -0.026\* | -0.011 | 0.001 | 0.008 | 0.000 | 0.004 |
|  |  | [0.012] | [0.012] | [0.013] | [0.015] | [0.024] | [0.011] | [0.016] | [0.002] | [0.011] |
| Muslim |  | -0.001\*\* | 0.000 | -0.001\*\*\* | -0.002\*\*\* | -0.002\* | -0.001\*\*\* | -0.001\* | -0.000\*\*\* | -0.001\*\* |
|  |  | [0.000] | [0.000] | [0.000] | [0.001] | [0.001] | [0.000] | [0.001] | [0.000] | [0.000] |
| OPEC |  | -0.088\*\* | -0.062\* | -0.071\* | -0.076 | -0.156\*\*\* | -0.080\*\* | -0.032 | -0.009\* | -0.099\*\*\* |
|  |  | [0.036] | [0.036] | [0.042] | [0.046] | [0.059] | [0.032] | [0.059] | [0.005] | [0.038] |
| Protestant |  | -0.001 | -0.002\*\* | -0.001\*\* | -0.001 | 0.000 | -0.001 | -0.001 | -0.000 | -0.001\* |
|  |  | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.001] | [0.000] | [0.001] |
| Democracy (lexical scale) |  |  | 0.064\*\*\* |  |  |  |  |  |  |  |
|  |  |  | [0.003] |  |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | -0.012 |  |  |  |  |  |  |  |
|  |  |  | [0.030] |  |  |  |  |  |  |  |
| Internal armed conflict |  |  | -0.003 |  |  |  |  |  |  |  |
|  |  |  | [0.015] |  |  |  |  |  |  |  |
| External armed conflict |  |  | -0.009 |  |  |  |  |  |  |  |
|  |  |  | [0.016] |  |  |  |  |  |  |  |
| Lagged DV |  |  |  |  |  |  |  |  | 0.872\*\*\* |  |
|  |  |  |  |  |  |  |  |  | [0.009] |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |
| Observations | 6004 | 5622 | 3677 | 4038 | 3048 | 83 | 6872 | 3614 | 5425 | 5086 |
| Countries | 177 | 168 | 107 | 167 | 85 | 83 | 199 | 149 | 168 | 153 |
| Years | 38 | 37 | 37 | 38 | 37 | 1 | 39 | 37 | 36 | 37 |
| R2 | 0.004 | 0.507 | 0.733 | 0.511 | 0.587 | 0.746 | 0.459 | 0.249 | 0.883 | 0.502 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B14:* Checks & Balances



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B14.

Checks & balances: min = 0; max = 1; mean = 0.246; SD = 0.229.

### *Table B15:* Capital City

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Analysis* | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Pooled | Panel | Pooled |
| *Estimator* | OLS | OLS | OLS | OLS | OLS | OLS | OLS | OLS | RE | OLS |
| *Population* | t-1 | t-1 | t-1 | t-50 | 1900 | 1900 | t-1 | t-1 | t-1 | t-1, IV |
| *Sample* | Full | Full | Full | Full | Full | 2000 | Imputed | Electoral | Full | Full |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population (log)** | -0.030\*\*\* | -0.030\*\*\* | -0.024\*\*\* | -0.026\*\*\* | -0.025\*\*\* | -0.017\*\*\* | -0.031\*\*\* | -0.030\*\*\* | -0.000\* | -0.036\*\*\* |
|  | [0.002] | [0.002] | [0.005] | [0.003] | [0.003] | [0.004] | [0.003] | [0.003] | [0.000] | [0.003] |
| Urbanization |  | 0.157\*\*\* | 0.167\*\*\* | 0.169\*\*\* | 0.171\*\*\* | 0.156\*\*\* | 0.134\*\*\* | 0.145\*\*\* | 0.001 | 0.251\*\*\* |
|  |  | [0.026] | [0.031] | [0.033] | [0.027] | [0.027] | [0.026] | [0.029] | [0.001] | [0.032] |
| GDPpc (logged) |  | -0.005 | -0.009 | -0.003 | -0.006 | -0.018\*\* | -0.001 | -0.007 | 0.000 | -0.005 |
|  |  | [0.005] | [0.006] | [0.006] | [0.007] | [0.009] | [0.005] | [0.006] | [0.000] | [0.006] |
| English legal origin |  | 0.025\* | 0.023 | 0.010 | 0.011 | 0.053\*\* | 0.023 | 0.026 | -0.000 | 0.017 |
|  |  | [0.014] | [0.022] | [0.017] | [0.017] | [0.021] | [0.016] | [0.018] | [0.000] | [0.014] |
| French legal origin |  | 0.038\*\*\* | 0.046\*\* | 0.023 | 0.023\* | 0.046\*\* | 0.026\* | 0.039\*\* | 0.000 | 0.024\* |
|  |  | [0.014] | [0.021] | [0.016] | [0.013] | [0.018] | [0.015] | [0.017] | [0.000] | [0.012] |
| German legal origin |  | 0.066\*\*\* | 0.086\*\*\* | 0.066\*\*\* | 0.073\*\*\* | 0.084\*\*\* | 0.046\*\*\* | 0.044\* | 0.001\* | 0.074\*\*\* |
|  |  | [0.018] | [0.022] | [0.019] | [0.021] | [0.030] | [0.016] | [0.023] | [0.000] | [0.020] |
| Scandinavian legal origin |  | 0.037 | 0.106\*\*\* | 0.069\*\* | 0.119\*\*\* | 0.173\*\*\* | 0.059\*\* | 0.039 | 0.000 | 0.039 |
|  |  | [0.023] | [0.040] | [0.033] | [0.036] | [0.041] | [0.026] | [0.028] | [0.000] | [0.028] |
| Latitude (logged) |  | -0.004 | 0.007 | 0.001 | 0.014 | 0.016\*\* | 0.001 | -0.005 | -0.000 | -0.002 |
|  |  | [0.006] | [0.007] | [0.009] | [0.008] | [0.008] | [0.006] | [0.007] | [0.000] | [0.007] |
| Muslim |  | -0.000 | -0.000 | -0.000 | -0.000 | 0.000 | -0.000 | 0.000 | 0.000 | 0.000 |
|  |  | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| OPEC |  | -0.023\* | -0.001 | -0.022 | -0.007 | -0.023 | -0.004 | -0.037\*\*\* | -0.000 | -0.023\* |
|  |  | [0.012] | [0.015] | [0.014] | [0.013] | [0.014] | [0.015] | [0.013] | [0.000] | [0.013] |
| Protestant |  | -0.000 | -0.001\* | -0.001\*\*\* | -0.001\*\*\* | -0.002\*\*\* | -0.001\*\* | -0.000 | -0.000 | -0.001\*\* |
|  |  | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| Democracy (lexical scale) |  |  | -0.001 |  |  |  |  |  |  |  |
|  |  |  | [0.001] |  |  |  |  |  |  |  |
| Ethnolinguistic fract. |  |  | -0.003 |  |  |  |  |  |  |  |
|  |  |  | [0.019] |  |  |  |  |  |  |  |
| Internal armed conflict |  |  | -0.003 |  |  |  |  |  |  |  |
|  |  |  | [0.006] |  |  |  |  |  |  |  |
| External armed conflict |  |  | 0.002 |  |  |  |  |  |  |  |
|  |  |  | [0.007] |  |  |  |  |  |  |  |
| Lagged DV |  |  |  |  |  |  |  |  | 0.985\*\*\* |  |
|  |  |  |  |  |  |  |  |  | [0.005] |  |
| Region FE |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Year FE |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |
| Observations | 22856 | 22311 | 8057 | 13814 | 9166 | 84 | 21889 | 15183 | 22233 | 19402 |
| Countries | 185 | 179 | 105 | 177 | 86 | 84 | 201 | 176 | 179 | 154 |
| Years | 210 | 210 | 110 | 161 | 109 | 1 | 214 | 210 | 209 | 198 |
| R2 | 0.338 | 0.557 | 0.532 | 0.443 | 0.581 | 0.671 | 0.462 | 0.557 | 0.989 | 0.419 |

Right-side variables measured at t-1 except in Model 4, where they are measured at t-50 and Models 5-6, where population is measured in 1900. Standard errors clustered by country except in model 6 where they are robust. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Figure B15:* Capital City



Predictive margins for population (logged), holding other variables at their means, using Model 2 in Table B15.

Capital city: min = 0; max = 1; mean = 0.450; SD = 0.117.

### *Table B16:* Countries covered by each measure of power concentration

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***……….………………………………Tables…..…………………………………..*** | | | | | | | | | | | | | | |
| **Countries** | *B1* | *B2* | *B3* | *B4* | *B5* | *B6* | *B7* | *B8* | *B9* | *B10* | *B11* | *B12* | *B13* | *B14* | *B15* |
| Afghanistan |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Albania | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Algeria | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Andorra | Y |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |
| Angola | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Antigua and Barbuda | Y |  |  |  |  | Y |  |  |  |  |  |  |  |  | Y |
| Argentina | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Armenia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Australia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Austria | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Azerbaijan | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Bahamas | Y |  |  | Y |  | Y |  |  |  |  |  |  |  | Y | Y |
| Bahrain |  |  |  | Y | Y | Y |  |  |  |  | Y |  | Y | Y | Y |
| Bangladesh | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Barbados | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y |  |  | Y | Y |
| Belarus | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Belgium | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Belize | Y |  |  | Y |  | Y |  |  |  |  | Y |  |  | Y | Y |
| Benin | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Bhutan |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y |  | Y | Y | Y |
| Bolivia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Bosnia and Herzegovina | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Botswana | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Brazil | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Brunei |  |  |  | Y |  | Y |  |  |  |  | Y |  |  | Y |  |
| Bulgaria | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Burkina Faso |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Burma (Myanmar) | Y | Y | Y | Y |  |  | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Burundi | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Cambodia | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Cameroon | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Canada | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Cape Verde | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y |  |  | Y | Y |
| Central African Republic | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Chad | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Chile | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| China |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Colombia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Comoros | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Congo, Democratic Republic | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Congo, Republic | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Costa Rica | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Croatia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Cuba | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Cyprus | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Czech Republic | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Denmark | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Djibouti |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Dominica | Y |  |  |  |  | Y |  |  |  |  | Y |  |  |  | Y |
| Dominican Republic | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| East Timor |  | Y | Y | Y |  |  | Y | Y | Y | Y | Y |  |  | Y |  |
| Ecuador | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Egypt | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| El Salvador | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Equatorial Guinea | Y |  |  | Y |  | Y |  |  |  |  |  | Y | Y | Y | Y |
| Eritrea |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Estonia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Ethiopia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |  |
| Fiji | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Finland | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| France | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Gabon | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Gambia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Georgia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| German Democratic Republic | Y | Y | Y | Y |  |  | Y | Y | Y | Y | Y | Y | Y | Y |  |
| Germany | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Ghana | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Greece | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |  |
| Grenada | Y |  |  | Y |  | Y |  |  |  |  | Y |  |  | Y | Y |
| Guatemala | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Guinea | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Guinea-Bissau | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Guyana | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Haiti | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Honduras | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Hong Kong |  |  |  |  |  |  |  |  |  |  | Y |  | Y |  | Y |
| Hungary | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Iceland | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| India | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Indonesia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Iran | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Iraq |  | Y | Y | Y |  |  | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Ireland | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Israel | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Italy | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Ivory Coast |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Jamaica | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Japan | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Jordan | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Kazakhstan | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Kenya | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Kiribati | Y |  |  |  |  | Y |  |  |  |  |  |  |  |  | Y |
| Korea, North |  | Y | Y | Y |  |  | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Korea, South | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Kosovo |  | Y | Y |  |  |  | Y | Y | Y | Y | Y |  |  |  |  |
| Kuwait |  |  |  | Y |  | Y |  |  |  |  | Y | Y | Y | Y | Y |
| Kyrgyzstan | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Laos | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Latvia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Leban | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Lesotho | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Liberia | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Libya |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y |  | Y | Y | Y |
| Liechtenstein | Y |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |
| Lithuania | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Luxembourg | Y |  |  | Y | Y | Y |  |  |  |  | Y | Y | Y | Y | Y |
| Macedonia | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Madagascar | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Malawi | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Malaysia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Maldives | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y |  |  | Y | Y |
| Mali | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Malta | Y |  |  | Y |  | Y |  |  |  |  | Y |  |  | Y | Y |
| Marshall Islands | Y |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |
| Mauritania |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Mauritius | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Mexico | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Micronesia, Federated States | Y |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |
| Moldova | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Monaco | Y |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |
| Mongolia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Montenegro |  | Y | Y |  |  | Y | Y | Y | Y | Y | Y |  |  |  |  |
| Morocco |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Mozambique | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Namibia | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Nauru | Y |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |
| Nepal | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Netherlands | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| New Zealand | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Nicaragua | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Niger | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Nigeria | Y | Y | Y | Y |  |  | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Rway | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Oman |  |  |  | Y |  | Y |  |  |  |  |  |  | Y | Y | Y |
| Pakistan | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Palau | Y |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |
| Palestine, British Mandate |  | Y | Y |  |  |  | Y | Y | Y | Y | Y |  |  |  |  |
| Palestine, Gaza |  | Y | Y |  |  |  | Y | Y | Y | Y | Y |  |  |  |  |
| Palestine, West Bank |  | Y | Y |  |  |  | Y | Y | Y | Y | Y |  |  |  |  |
| Panama | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Papua New Guinea | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Paraguay | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Peru | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Philippines | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Poland | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Portugal | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Qatar |  |  |  | Y |  | Y | Y | Y | Y | Y | Y |  | Y | Y | Y |
| Romania | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Russia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Rwanda |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Saint Kitts and Nevis | Y |  |  |  |  | Y |  |  |  |  |  |  |  |  | Y |
| Saint Lucia | Y |  |  | Y |  | Y |  |  |  |  |  |  |  | Y | Y |
| Saint Vincent and Grenadines | Y |  |  |  |  | Y |  |  |  |  |  |  |  |  | Y |
| Samoa | Y |  |  | Y |  |  |  |  |  |  |  |  |  | Y | Y |
| San Mari | Y |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |
| Sao Tome and Principe | Y | Y | Y |  |  |  | Y | Y | Y | Y | Y |  |  |  | Y |
| Saudi Arabia |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y |  | Y | Y | Y |
| Senegal | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Serbia |  | Y | Y |  |  | Y | Y | Y | Y | Y | Y | Y | Y |  |  |
| Seychelles | Y | Y | Y |  |  | Y | Y | Y | Y | Y | Y |  |  |  | Y |
| Sierra Leone | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Singapore | Y |  |  | Y |  | Y |  |  |  |  | Y | Y | Y | Y | Y |
| Slovakia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Slovenia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Solomon Islands | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y |  |  | Y | Y |
| Somalia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Somaliland |  | Y | Y |  |  |  | Y | Y | Y | Y | Y |  |  |  |  |
| South Africa | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| South Sudan |  | Y | Y |  |  |  | Y | Y | Y | Y | Y |  |  | Y |  |
| South Yemen |  | Y | Y | Y |  |  | Y | Y | Y | Y | Y | Y | Y | Y |  |
| Spain | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Sri Lanka | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Sudan | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |  |
| Suriname | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y |  |  | Y | Y |
| Swaziland | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Sweden | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Switzerland | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Syria |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Taiwan | Y | Y | Y | Y |  |  | Y | Y | Y | Y | Y | Y | Y | Y |  |
| Tajikistan |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Tanzania |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Thailand | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Togo | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Tonga |  |  |  |  |  | Y |  |  |  |  |  |  |  |  | Y |
| Trinidad and Tobago | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Tunisia |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Turkey | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Turkmenistan |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Tuvalu |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |
| Uganda |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Ukraine | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| United Arab Emirates |  |  |  | Y |  | Y |  |  |  |  |  |  | Y | Y | Y |
| United Kingdom | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| United States | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Uruguay | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Uzbekistan |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Vanuatu | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y |  |  | Y | Y |
| Venezuela | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Vietnam, Democratic Republic |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Vietnam, Republic |  | Y | Y |  |  |  | Y | Y | Y | Y | Y |  | Y |  |  |
| Yemen |  | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Zambia | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Zanzibar |  |  |  |  |  |  | Y | Y | Y | Y |  |  |  |  |  |
| Zimbabwe | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |

# *APPENDIX C:* Within-country tests

Problems of causal inference often arise when nation-states form the primary units of analysis. For better identification strategies we turn to within-country tests. Institutional forms do not vary as much within countries as across countries, limiting our choice of outcome measures. Nonetheless, there is substantial variation in the degree to which power is concentrated within states, counties, and cities across the United States, and such variation as exists is less subject to confounding.

While many studies have exploited subnational variation in the US to understand the impact of (de)centralization on the quality of governance (e.g., Zax 1989), few have studied the sources of power concentration and only two studies explore the relationship with size. Wallis & Oates (1988) examines revenue decentralization across the fifty states and Clark (1968: 585) briefly reports on community structures across fifty-one localities. Results from these studies provide some support for our thesis, despite limitations in sample size and in the purview of outcomes surveyed.

## Tests

In the analyses that follow, reported in Table C3, we explore institutional variation at state, county, and city levels. Detailed variable definitions are provided in Table C1 and descriptive statistics in Table C2. As previously, all outcomes are re-scaled from 0-1 to facilitate comparisons.

### *Table C1:* Variable Definitions

|  |
| --- |
| **Left-side Variables** |
| **City-county share total expenditures.** Share of state expenditures attributed to cities and counties. Source: 1942-2012 Census of Governments. *state\_localshare\_exp* |
| **City-county share total revenue.** Share of state revenue attributed to cities and counties. Source: 1942-2012 Census of Governments. *state\_localshare\_genrev* |
| **Special purpose governments.** Number of governmental bodies designated as special purpose within the state. Source: 1942-2012 Census of Governments. *state\_spgs* |
| **Independent school districts.** Number of independent school districts operating within the state. Source: 1942-2012 Census of Governments. *state\_indep\_schooldsts* |
| **CSS0 selection.** Chief State School Officeris appointed (=0) or elected (=1) by direct ballot. Source: National Association of State Boards of Education (2016). *state\_selection\_csso* |
| **City share city-county expenditures.** Share of county and local expenditures attributed to cities. Source: 1942-2012 Census of Governments. *county\_cityshare\_exp* |
| **City share city-county revenue.** Share of county and local revenue attributed to cities. Source: 1942-2012 Census of Governments. *county\_cityshare\_rev* |
| **Executive veto.** Chief executive can veto council legislation. Source: ICMA. *city\_mayoral\_veto* |
| **Executive term-limits.** Chief executive is limited to a fixed number of terms in office. Source: ICMA. *city\_term\_limits\_mayor* |
| **Mayor-council government.** City has a mayor-council form of government (=1) rather than a council-manager or commission format (=0). Source: ICMA. *city\_mayor\_council* |
| **Right-side Variables** |
| **Population.** City, county, and state population, transformed by the natural logarithm. Source: U.S. Census.*city\_logpop, state\_logpop2012, county\_logpop2000* |
| **Income per capita.** Income per capita by municipality, county, and state. Source: U.S. Census & ICPSR County Characteristics, 2000-2007. *city\_incomepercapitainterp*, *county\_percapita\_perincome05, state\_ lnincome* |
| **Urbanization.** Urban population as share of total population at state and municipal level. Source: U.S. Census. Rural-Urban Continuum code at county levels. Source: ICPSR County Characteristics, 2000-2007. *state\_percent\_urban, city\_urbanpctpop, county\_RuralurbanContinuumCode* |
| **Democratic vote.** For states, the percentage of votes received by the Democratic presidential candidate for the closest election year. Source: Federal Election Commission. At county-level, percent of voters that cast their ballot for John Kerry in 2004 presidential election. Source: ICPSR County Characteristics, 2000-2007. *county\_PctKerry04state\_pctdemvote* |
| **College.** Percentage of residents with a bachelor’s degree or higher. Source: U.S. Census Bureau, American Community Survey. *state\_bachelorplus* |
| **Unemployment.** Statewide unemployment rate. Source: U.S. Census Bureau, American Community Survey. *state\_unemploymentrate* |
| **Percent minority.** Percent of residents in state or county that are non-white or of Hispanic/Latino origin. Source: U.S. Census. *state\_percent\_minority, county\_Per\_Minority00* |
| **Region.** Dummies for West, Midwest, Northeast, and South. Source: Authors. *state\_region* |
| **Black.** Percentage of municipal residents that identify as black. Source: U.S. Census.*city\_pctblkpopinterp* |
| **Asian.** Percentage of municipal residents that identify as Asian. Source: U.S. Census.*city\_pctasianpopinterp* |
| **Latino.** Percentage of municipal residents that identify as Latino/Hispanic. Source: U.S. Census.*city\_pctlatinopopinterp* |

### *Table C2:* Descriptive Statistics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Left-side variables** | **Obs** | **Mean** | **SD** | **Min** | **Max** |
| City-county share total expenditures | 348 | 0.488 | 0.172 | 0 | 1 |
| City-county share total revenue | 348 | 0.556 | 0.172 | 0 | 1 |
| Special purpose governments | 352 | 0.165 | 0.188 | 0 | 1 |
| Independent school districts | 355 | 0.076 | 0.139 | 0 | 1 |
| CSSO selection | 366 | 0.271 | 0.445 | 0 | 1 |
| City share city-county expenditures | 2,677 | 0.703 | 0.221 | 0 | 1 |
| City share city-county revenue | 2,676 | 0.679 | 0.232 | 0 | 1 |
| Executive veto | 23,559 | 0.291 | 0.454 | 0 | 1 |
| Executive term limits | 24,224 | 0.080 | 0.271 | 0 | 1 |
| Mayor-council form of government | 25,237 | 0.364 | 0.481 | 0 | 1 |
| **Right-side variables** |  |  |  |  |  |
| Population (logged, state) | 356 | 14.771 | 1.085 | 11.192 | 17.453 |
| Population (logged, county) | 3,003 | 10.196 | 1.380 | 4.205 | 16.069 |
| Population (logged, city) | 19,753 | 9.252 | 1.237 | 3.091 | 15.136 |
| Income per capita (logged, state) | 306 | 9.058 | 1.115 | 6.874 | 11.221 |
| Income per capita (logged, county) | 3,086 | 10.192 | 0.218 | 8.546 | 11.444 |
| Income per capita (logged, city) | 19,737 | 10.542 | 2.340 | 8.363 | 23.024 |
| Urbanization (state) | 356 | 65.626 | 17.582 | 19.8 | 100 |
| Urbanization (county) | 3,143 | 5.129 | 1.682 | 1 | 9 |
| Urbanization (city) | 20,270 | 38.729 | 40.521 | 0 | 100 |
| Democratic vote share (state) | 353 | 45.702 | 12.062 | 19.6 | 95.7 |
| Democratic vote share (county) | 3,113 | 38.754 | 12.520 | 7.1 | 89.18 |
| College | 357 | 13.204 | 7.375 | 0 | 39.1 |
| Unemployment | 255 | 5.985 | 2.595 | 2.3 | 34.7 |
| Percent minority (state) | 354 | 16.974 | 15.277 | 0.1 | 77.3 |
| Percent minority (county) | 3,143 | 15.770 | 18.152 | 0.132 | 97.76 |
| Region | 357 | 2.588 | 1.193 | 1 | 4 |
| Black | 19,735 | 0.097 | 0.818 | 0 | 84.4 |
| Asian | 19,735 | 0.027 | 0.415 | 0 | 54.8 |
| Latino | 19,735 | 0.095 | 0.259 | 0 | 22.4 |
| Territory (logged, state) | 357 | 11.481 | 1.466 | 5.063 | 14.221 |
| Territory (logged, county) | 3,140 | 6.492 | 0.908 | 0.688 | 11.891 |
| Territory (logged, city) | 22,026 | 2.598 | 1.141 | -2.302 | 8.918 |

### *Table C3:* Within-Country Tests

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Polities* | **State** | | | | | **County** | | **City** | | |
| *Outcome* | City-county/  total expenditures | City-county/  total revenue | Special purpose governments | Independent  school districts | CSSO  selection | City/total  expenditure | City/total  revenue | Executive  veto | Executive  term limit | Mayor-council |
| *Hypothesis* | + | + | + | + | + | + | + | + | + | + |
| *Estimator* | OLS | OLS | OLS | OLS | Logit | OLS | OLS | Logit | Logit | Logit |
| *Sample* | Full | Full | Full | Full | Full | Full | Full | Full | Full | pop>50k |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population** | 0.104\*\*\* | 0.124\*\*\* | 0.124\*\*\* | 0.028\*\*\* | 1.713\*\* | 0.044\*\*\* | 0.043\*\*\* | 0.212\*\*\* | 0.460\*\*\* | 0.380\*\* |
| **(ln)** | (0.018) | (0.019) | (0.030) | (0.006) | (0.626) | (0.003) | (0.003) | (0.030) | (0.042) | (0.193) |
| *Polities* | 51 | 51 | 51 | 51 | 51 | 3,153 | 3,153 | 7,503 | 7,503 | 2,225 |
| *Years* | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 2000 | 2000 | 1986-2011 | 1986-2011 | 1986-2011 |
| *Obs* | 250 | 250 | 252 | 253 | 200 | 2,642 | 2,641 | 16,955 | 16,439 | 1,903 |
| *R2* | 0.612 | 0.610 | 0.419 | 0.475 | 0.196 | 0.757 | 0.787 | 0.079 | 0.100 | 0.237 |

Data drawn from states, counties, and cities in the United States. Covariates for state-level analyses: Income per capita, urbanization, Democratic vote share, College, Unemployment, Minority (%), Region (dummies). Covariates for county-level analyses: Urbanization, Minority (%), Income per capita, Democratic vote, State (dummies). Covariates for city-level analyses: Urbanization, Black (%), Asian (%), Latino (%), Income per capita, County (dummies). County analyses are cross-sectional. State and city analyses represent a short panel, with standard errors clustered at the state and city level, respectively. \*p<.10 \*\*p<.05 \*\*\*p<.01

At the *state* level, we employ five measures of power concentration: city-county share of expenditures (Model 1), city-county share of revenue (Model 2), the number of special purpose governments (Model 3), the number of independent school districts (Model 4), and the method of selection for the Chief State School Officer (CSSO), which may be either appointive or elective (Model 5). Measures of fiscal decentralization are widely used in crossnational studies (see Table 1) as well as in studies focused on the United States (Wallis and Oates 1988; Xie et al. 1998; Zax 1989). The number of special purpose governments and independent school districts is viewed as a key measure of political concentration in federalist systems (Foster 1993; Hammond et al. 2011; Nelson & Foster 1999). An elective CSSO presumably signals the independence of this official relative to other elected officials. All model specifications include a range of covariates that may affect power concentration, and may (plausibly) serve to block confounders: GDP per capita, urbanization, party control of state government, post-secondary education, unemployment, median household income, percent minority, and regional dummies (South, Northeast, Midwest, West).

*County*-level analyses focus on revenue decentralization (Model 6) or expenditure decentralization (Model 7), i.e., fiscal instruments controlled by cities as a share of total city-county revenue or expenditures. These specifications include covariates measuring urbanization, percent minority, income per capita, Democratic presidential vote, and state dummies.

At the *city* level, we are able to test three measures of power concentration. In Model 8 we examine executive veto power – the ability of the top official (usually a mayor) to veto council legislation. In Model 9, we look at executive term limits, i.e., the imposition of any sort of term limit on the chief executive (usually a mayor). In Model 10, we focus on the choice of a mayor-council form of government – as opposed to a council-manager or commission format. Note that because very small cities often cannot afford to hire a city manager they may be constrained to adopt a mayor-council form of government where the mayor serves pro bono or for a nominal salary. This cost-constraint, which hinges on the willingness of elected officials to accept lower remuneration than appointed officials, lies outside the scope of our theory and has no plausible applicability to larger polities such as nation-states. Consequently, we limit the analysis in Model 10 to cities of at least 50,000 citizens. Data for city-level analyses are drawn from municipal surveys conducted by the International City/County Management Association (ICMA) over six years – 1986, 1992, 1996, 2001, 2006, 2011 – generating a short panel. Specifications include covariates measuring urbanization, percent black, Latino, and Asian, income per capita, and county dummies. This means that comparisons are being drawn across cities within the same county. To protect against serial correlation in this short panel standard errors are clustered by city.

Analyses at all three levels support our contention that the size of a polity influences the way its institutions are structured, with larger polities developing less concentrated systems of rule. Judging by the estimated coefficients the effects are sizeable. For example, moving from a state with a population in the 25th percentile to a state with a population in the 75th percentile increases the probability of a directly elected CSSO by nearly 47 percent. Moreover, the impact of population on power concentration is consistent across all measured outcomes, as shown in Table C3. Indeed, population is the only variable among those tested in the foregoing models – including income, education, urbanization, minority share, and partisanship – that consistently predicts these outcomes in within-country analyses, as shown in Appendix C.

For a variety of reasons, which may now be summarized, we are fairly confident that the relationships depicted in Table C3 are causal. First, analyses below the state level enlist very large samples. Instead of 100+ nation-states we are able to draw upon 3,000+ counties and 7,000+ cities. This diminishes the possibility of stochastic error as well as problems of collinearity among right-side variables. Second, the possibility of X:Y endogeneity seems remote. Even if Tiebout sorting occurs, it is unlikely that varying levels of concentration across units have systematic effects on the quality of governance sufficient to stimulate widespread patterns of migration. Third, the borders of subnational units, while by no means random, are unlikely to be affected by the outcome of interest, as they might be at national levels. Fourth, subnational units within a single country share many background characteristics, limiting the number of potential confounders. Ceteris paribus conditions are especially strong when comparing counties within a single state (using state fixed effects) or cities within a single county (using county fixed effects). Indeed, county- and city-level analyses are remarkably stable in the face of changes in specification, reflecting the large sample and the fact that covariates are not highly correlated with the variable of theoretical interest (population). Finally, the possibility of omitted confounders seems remote given that we have been able to measure, and condition on, many factors that might influence – or that might be correlated with factors that influence – institutional choices.

### *Table C4:* State-level Outcomes (US)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Outcomes* | City-county/total expenditure | | City-county/total revenue | | Special purpose governments | | Independent school districts | | CSSO selection | |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population** | 0.104\*\*\*  (0.017) | 0.070\*\*\*  (0.013) | 0.124\*\*\*  (0.019) | 0.082\*\*\*  (0.016) | 0.124\*\*\*  (0.030) | 0.096\*\*\*  (0.024) | 0.028\*\*\*  (0.006) | 0.024\*\*\*  (0.008) | 1.713\*\*\*  (0.626) | -0.095  (0.303) |
| Income per capita | -0.036\*\*  (0.014) |  | -0.029\*  (0.017) |  | 0.008  (0.015) |  | -0.010\*\*\*  (0.004) |  | 0.161  (0.205) |  |
| Urbanization | 0.002  (0.001) |  | 0.002  (0.001) |  | -0.001  (0.001) |  | -0.0002  (0.0004) |  | -0.129\*\*  (0.051) |  |
| College | -0.001  (0.001) |  | -0.001  (0.001) |  | -0.0004  (0.002) |  | -0.0001  (0.0003) |  | -0.042\*  (0.023) |  |
| Unemployment | -0.004  (0.004) |  | -0.007  (0.006) |  | -0.009  (0.011) |  | -0.002  (0.002) |  | -0.320\*\*  (0.130) |  |
| Minority | -0.004\*  (0.002) |  | -0.004\*\*  (0.002) |  | -0.00002  (0.001) |  | 0.0002  (0.0003) |  | 0.009  (0.032) |  |
| Democratic vote | -0.003\*\*  (0.001) |  | -0.001  (0.001) |  | -0.0003  (0.002) |  | -0.00007  (0.0005) |  | -0.077\*\*  (0.035) |  |
| Region |  |  |  |  |  |  |  |  |  |  |
| Midwest | -0.005  (0.034) |  | -0.037  (0.032) |  | -0.024  (0.086) |  | 0.023  (0.015) |  | -3.265\*\*\*  (1.098) |  |
| Northeast | -0.078\*\*  (0.037) |  | -0.090\*\*  (0.043) |  | -0.114\*  (0.063) |  | -0.004  (0.015) |  | \_\_\_\_ |  |
| South | -0.047  (0.031) |  | -0.079\*\*  (0.033) |  | -0.163\*\*  (0.069) |  | -0.031\*  (0.018) |  | -4.281\*\*\*  (1.563) |  |
|  |  |  |  |  |  |  |  |  |  |  |
| *Polities* | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 |
| *Years* | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 2012 |
| *Obs* | 250 | 348 | 250 | 348 | 252 | 352 | 253 | 355 | 200 | 336 |
| *R2* | 0.612 | 0.187 | 0.610 | 0.255 | 0.419 | 0.297 | 0.475 | 0.034 | 0.196 | 0.002 |

Full specifications from Table C3 along with minimal specifications. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Table C5:* County-level Outcomes (US)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Outcomes:* | City/total expenditure | | City/total revenue | |
|  | **1** | **2** | **3** | **4** |
| **Population** | 0.044\*\*\*  (0.003) | 0.033\*\*\*  (0.002) | 0.043\*\*\*  (0.003) | 0.032\*\*\*  (0.002) |
| Income per capita | -0.045\*\*\*  (0.013) |  | -0.054\*\*\*  (0.013) |  |
| Urban | 0.004\*\*\*  (0.001) |  | 0.004\*\*\*  (0.001) |  |
| Minority | 0.0002  (0.0002) |  | -0.000008  (0.0002) |  |
| Democratic vote | -0.001\*\*  (0.0002) |  | -0.004  (0.0002) |  |
| State dummy |  |  |  |  |
| *Polities* | 3,153 | 3,153 | 3,153 | 3,153 |
| *Years* | 2000 | 2000 | 2000 | 2000 |
| *Obs* | 2,642 | 2,677 | 2,641 | 2,676 |
| *R2* | 0.756 | 0.773 | 0.787 | 0.799 |

Full specifications from Table C3 along with minimal specifications. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Table C6:* City-level Outcomes (US)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Outcomes* | Executive veto | | Executive term limits | | Mayor-council government | |
|  | **1** | **4** | **2** | **5** | **3** | **6** |
| **Population** | 0.212\*\*\*  (0.030) | 0.107\*\*\*  (0.024) | 0.460\*\*\*  (0.042) | 0.431\*\*\*  (0.037) | 0.380\*\*  (0.193) | 0.547\*\*\*  (0.170) |
| Income per capita | -0.012\*\*  (0.006) |  | -0.029\*\*  (0.010) |  | 0.007  (0.014) |  |
| Urbanization | 0.003\*\*\*  (0.001) |  | -0.002\*  (0.001) |  | 0.003  (0.004) |  |
| % Black | -0.075  (0.202) |  | -0.668\*  (0.350) |  | 3.797\*\*\*  (0.942) |  |
| % Asian | -3.139\*\*\*  (1.002) |  | 0.981  (0.898) |  | 0.105  (0.917) |  |
| % Latino | -3.381\*\*\*  (0.335) |  | 0.759\*\*\*  (0.292) |  | -0.747  (0.989) |  |
| County dummy |  |  |  |  |  |  |
| *Polities* | 7,503 | 7,503 | 7,503 | 7,503 | 2,225 | 2,225 |
| *Years* | 1986-2011 | 1986-2011 | 1986-2011 | 1986-2011 | 1986-2011 | 1986-2011 |
| *Obs* | 16,955 | 18,345 | 16,439 | 17,866 | 1,903 | 1,944 |
| *R2* | 0.079 | 0.050 | 0.100 | 0.093 | 0.237 | 0.198 |

Full specifications from Table C3 along with minimal specifications. \*p<.10 \*\*p<.05 \*\*\*p<.01

# *APPENDIX D:* People or Territory?

We have operationalized size according to the population of a polity rather than its territory, even though these two features are obviously linked and also highly correlated – at least across nation-states (Pearson’s r=0.79). This is premised on an assumption that population exerts greater – or at any rate, more direct – impact on power concentration than territory.

In previous historical eras, when modes of transport, communication, and control were primitive, and when modes of political control leaned more heavily on coercion, land may have posed a formidable constraint on the shape of political institutions (Stasavage 2010). In the modern era, however, it seems likely the number of people living within a political unit is a more important conditioning factor than the size of the territory they inhabit, for reasons laid out in Section I.

Extant work on the question (as it pertains to the modern era) is mixed, as shown in Table 1. It remains to be seen what picture emerges when a wider set of concentration measures and a broader sample of countries is encompassed.

In Table D1 we replicate benchmark cross-country tests (Model 1 from Table 3), this time including territory as an additional predictor. As previously, we present results only for the variables of interest – population and territory, both transformed by the natural logarithm. These tests confirm the superiority of territory as a predictor of constitutional federalism and revenue decentralization (fiscal federalism), as reported in previous studies. Territory is also correlated with bicameralism, which may be regarded as a by-product of federalism. However, for other outcomes population is generally a more successful predictor. While the estimated coefficient for territory is statistically significant in the expected direction in only four out of nineteen tests, the estimated coefficient for population is statistically significant (p<.10) in the hypothesized direction in fourteen tests.

In Table D2 we replicate within-country tests (from Table C3) with the addition of territory. Again, we present results only for the variables of theoretical interest. Here, results are stark. The estimated coefficient for population is correctly signed in all eight tests and statistically significant (p<.05) in seven. By contrast, territory is incorrectly signed in five tests and is never statistically significant in the expected direction.

It would seem that population is more strongly related to measures of power concentration than territory, at least in the modern era. Of course, this does not rule out the possibility that territory might affect some outcomes (e.g., constitutional federalism and fiscal federalism) but not others, or that it might have a small impact on all outcomes that is not detectable in our tests by reason of sample size, measurement error, or specification errors. However, if one is inclined to regard power concentration as a coherent theoretical outcome, and hence subject to similar causes, the evidence suggests that population trumps territory.

In our view, the impact of territory is best conceptualized as a prior cause – one that affects population but has little or no direct impact on most outcomes of theoretical interest to us here. This is the rationale for our choice of instruments in the two-stage analysis presented in Table 3 (Model 10). We exclude territory from other models in previous tests because of potential problems of collinearity and also, more fundamentally, because the interpretation of both variables changes when the other is included in a model. (Controlling for territory, population becomes a measure of population density.)

### *Table D1:* Cross-country Tests of Population and Territory

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **POPULATION** | | **TERRITORY** | |  |  |  |
| **Model** | **Outcome** | ***H*** | ***β/SE*** | ***C*** | ***β/SE*** | ***C*** | **Countries** | **Obs** | **R2 (pseudo)** |
| **\*** | Power concentration index | + | -0.031 [0.007] \*\*\* | ✓ | -0.003 [0.005] |  | 156 | 12768 | 0.615 |
| **1** | Federalism | + | 0.260 [0.245] |  | 1.014 [0.317] \*\*\* | ✓ | 132 | 5327 | (0.470) |
| **2** | Subnational gov layers | + | 0.238 [0.332] |  | 0.378 [0.166] \*\* | ✓ | 153 | 12128 | (0.315) |
| **3** | Subnational elections | + | 0.024 [0.010] \*\* | ✓ | 0.013 [0.009] |  | 153 | 12226 | 0.341 |
| **4** | Autonomous regions | + | 1.027 [0.306] \*\*\* | ✓ | -0.470 [0.252] \* |  | 143 | 4833 | (0.310) |
| **5** | Revenue decentraliz | + | -0.017 [0.016] |  | 0.085 [0.017] \*\*\* | ✓ | 96 | 1295 | 0.694 |
| **6** | Govt consumption | – | -0.018 [0.005] \*\*\* | ✓ | 0.005 [0.004] |  | 151 | 5827 | 0.325 |
| **7** | Separate powers | + | 0.349 [0.146] \*\* | ✓ | -0.124 [0.087] |  | 151 | 12156 | (0.321) |
| **8** | Divided party control | + | 0.017 [0.013] |  | 0.007 [0.011] |  | 8327 | 8327 | 0.118 |
| **9** | Decentralized parties | + | 0.009 [0.010] |  | 0.006 [0.009] |  | 155 | 12253 | 0.498 |
| **10** | Judicial review | + | 0.020 [0.014] |  | -0.004 [0.012] |  | 155 | 12373 | 0.300 |
| **11** | Bicameralism | + | 0.035 [0.013] \*\*\* | ✓ | 0.017 [0.011] |  | 155 | 12308 | 0.281 |
| **12** | Leg. Fractionalization | + | 0.030 [0.014] \*\* | ✓ | -0.018 [0.009] \*\* |  | 143 | 7685 | (0.631) |
| **13** | Political constraints | + | 0.077 [0.021] \*\*\* | ✓ | -0.044 [0.017] \*\*\* |  | 148 | 13037 | (0.463) |
| **14** | Checks & balances | + | 0.036 [0.009] \*\*\* | ✓ | -0.012 [0.006] \* |  | 154 | 5123 | 0.504 |
| **15** | Capital city | – | -0.031 [0.003] \*\*\* | ✓ | -0.001 [0.003] |  | 154 | 19974 | 0.547 |

Replication of benchmark models in Table A5 (Model 2) with the addition of Territory (square kilometers, logged). *H:* hypothesized relationship. *C:* hypothesis corroborated. Outcome measures of power concentration (re-scaled to 0-1 scale) regressed against key variables and “basic” covariates: per capita GDP (logged), Urbanization, Legal origin dummies, Latitude, Muslim, Protestant, OPEC dummy, Region dummies, Year dummies. Electoral system dummies included in tests of Divided party control (row 8) only. Right-side variables measured at t-1. *Estimators:* ordinary least squares (for continuous outcomes), tobit (for left-censored outcomes), ordered logit (for ordinal outcomes), logit (for binary outcomes). Estimated coefficients and standard errors (clustered by country) shown for variables of theoretical interest. \*p<.10 \*\*p<.05 \*\*\*p<.01

### *Table D2:* Within-Country Tests of Population and Territory

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Polities* | **State** | | | | | **County** | | **City** | | |
| *Outcome* | City-county/  total expenditures | City-county/  total revenue | Special purpose governments | Independent school districts | CSSO selection | City/total  expenditure | City/total  revenue | Executive  veto | Executive  term limit | Mayor-  council |
| *Hypothesis* | + | + | + | + | + | + | + | + | + | + |
| *Estimator* | OLS | OLS | OLS | OLS | Logit | OLS | OLS | Logit | Logit | Logit |
| *Sample* | Full | Full | Full | Full | Full | Full | Full | Full | Full | pop>50k |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Population** | 0.077\*\*\* | 0.103\*\*\* | 0.118\*\*\* | 0.021\*\* | 1.749\*\*\* | 0.043\*\*\* | 0.043\*\*\* | 0.516\*\*\* | 0.412\*\*\* | 1.331\*\*\* |
|  | (0.023) | (0.028) | (0.037) | (0.008) | (0.620) | (0.003) | (0.003) | (0.050) | (0.077) | (0.325) |
| **Territory** | 0.040\*  (0.024) | 0.032  (0.028) | 0.007  (0.028) | 0.009  (0.008) | -0.432  (0.499) | 0.0002  (0.005) | -0.003  (0.005) | -0.340\*\*\*  (0.047) | 0.058  (0.081) | -0.821\*\*\*  (0.245) |
| *Polities* | 51 | 51 | 51 | 51 | 51 | 3,153 | 3,153 | 7,503 | 7,503 | 2,225 |
| *Years* | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 1942-2012 | 2000 | 2000 | 1986-2011 | 1986-2011 | 1986-2011 |
| *Obs* | 250 | 250 | 252 | 253 | 200 | 2,642 | 2,641 | 16,872 | 16,362 | 1,859 |
| *R2* | 0.638 | 0.625 | 0.420 | 0.490 | 0.202 | 0.756 | 0.787 | 0.087 | 0.099 | 0.270 |

Replication of models in Table C3 with the addition of Territory (square kilometers, logged). Data drawn from states, counties, and cities in the United States. Covariates for state-level analyses: Income per capita, urbanization, Democratic vote share, College, Unemployment, Minority (%), Region (dummies). Covariates for county-level analyses: Urbanization, Minority (%), Income per capita, Democratic vote, State (dummies). Covariates for city-level analyses: Urbanization, Black (%), Asian (%), Latino (%), Income per capita, County (dummies). County analyses are cross-sectional. State and city analyses represent a short panel, with standard errors clustered at the state and city level, respectively. \*p<.10 \*\*p<.05 \*\*\*p<.01

# *APPENDIX E:* Municipal Sovereignty

### *Table E1:* Municipal Sovereignty

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Outcome:* | Charter | Home rule  (any type) | Home rule  structural | Home rule  functional | Home rule  fiscal |
|  | **1** | **2** | **3** | **4** | **5** |
| **Population** | 0.155\*\*\* | 0.290\*\*\* | 0.195\*\*\* | 0.172\*\*\* | 0.106\*\*\* |
|  | (0.031) | (0.048) | (0.043) | (0.036) | (0.034) |
| *Polities* | 7,503 | 7,503 | 7,503 | 7,503 | 7,503 |
| *Years* | 1986-2011 | 1986-2011 | 1986-2011 | 1986-2011 | 1986-2011 |
| *Obs* | 8,204 | 17,273 | 17,493 | 17,273 | 17,119 |
| *R2* | 0.072 | 0.138 | 0.135 | 0.098 | 0.118 |

Measures of municipal sovereignty regressed on Population (logged) and additional covariates (not shown): Urbanization, Black (%), Asian (%), Latino (%), Income per capita, and County (dummies). Logistic regression, standard errors clustered by city. \*p<.10 \*\*p<.05 \*\*\*p<.01