

CODEBOOK: POLITICAL INSTITUTIONS AND COVID-19 MORTALITY

[data v.2.1.a]

Elvis Kim | Last Modified: April 10, 2023

I. IDENTIFICATION VARIABLES

country

Country Name

Short English name of coded country based on ISO 3166 and convention.

ccode

Country Code

Latest ISO 3166 alpha-3 code designated for each country. Following the World Bank, Kosovo is coded as XKX.

rcode

Region Code

Regions of coded country defined by the International IDEA.

- 1: Africa
- 2: Latin America/Caribbean
- 3: North America
- 4: Asia/Pacific
- 5: Middle East
- 6: Europe

srcode

Subregion Code

Subregions of coded country defined by the International IDEA. The country groupings primarily follow a geographical logic, but also take account of cultural and historical links.

- 1: East Africa
- 2: Central Africa
- 3: Southern Africa
- 4: West Africa
- 5: North Africa
- 6: Caribbean
- 7: Central America
- 8: South America
- 9: North America
- 10: Central Asia
- 11: East Asia
- 12: South Asia
- 13: South-East Asia
- 14: Oceania
- 15: Middle East
- 16: East-Central Europe
- 17: Eastern Europe
- 18: North/Western Europe
- 19: Southern Europe

cow

COW Country Code

Correlates of War numeric country code based on COW *State System Membership* v.2016 data.

II. COVID-19

xdth

Excess deaths per 100,000 population, 2020-2022.

Source(s): Economist

vax

Total doses of Covid vaccines administered per 100 population.

Source(s): WHO/OWID

III. POLITICAL INSTITUTIONS

libdem

Liberal Democracy Index

To what extent is the ideal of liberal democracy achieved?

v2x_libdem*100

Interval, from low to high (0~100)

NA: Not available

Source(s): V-Dem (v2x_libdem).

cpi

Corruption Perceptions Index

Aggregates data from a number of different sources that provide perceptions by business people and country experts of the level of corruption in the public sector.

Scale: 0-100 where a 0 equals the highest level of perceived corruption and 100 equals the lowest level of perceived corruption.

Source(s): Transparency International.

stfail

State Failure

1: State failure

0: No state failure

NA: Not available

Constructed by author. Source(s): Polity* (sf, polity, fragment); BTI (Stateness, Failed state); IDEA (v_42_06); CSP's State Fragility Index and Matrix 2018; CSP's PITF *Consolidated Problem Set* version 2018; Global Conflict Tracker from Council on Foreign Relations; Global Peace Index 2021; miscellaneous¹.

polity5

Combined Polity Score

Ordinal variable ranging from -10 (strongly autocratic) to 10 (strongly democratic).

-66: Interruption periods: termination of the polity due to foreign occupation/intervention or short-lived attempts at the creation of ethnic, religious, or regional federations.

-77: Interregnum periods: collapse, or failure, of central state authority, resulting in anarchy.

-88: Transition periods: periods during which new institutions are planned, legally constituted, and put into effect.

NA: Not available

Source(s): CSP Polity5 (polity)

regime

¹ For instance: <https://www.longwarjournal.org/mapping-taliban-control-in-afghanistan>.

Regime Type

- 3: Liberal democracy ($v2x_libdem \geq 0.6$)
- 2: Defective democracy ($0.35 \leq v2x_libdem < 0.6$; OR $v2x_libdem < 0.35$ & $v2x_polyarchy \geq 0.5$)
- 1: Autocracy ($v2x_libdem < 0.35$ and $v2x_polyarchy < 0.5$)
- 0: Anarchy ($stfail = 1$)
- NA: Not available

Constructed by author. *Source(s)*: V-Dem* ($v2x_polyarchy$, $v2x_libdem$); Polity ($polity$); BTI (Democracy Status Category); BR (DD Regime; Electoral).

polsys**Political System**

- 2: parliamentary
- 1: semi-presidential
- 0: presidential
- NA: not available or not applicable

Constructed by author. *Source(s)*: DPI (system); Gerring & Thacker 2008 (Parl); IPU* (Political System); BR (DD Regime); DD* (regime); DES (regime); Derbyshire & Derbyshire 1996²; Britannica website; EIU country profiles; CIA World Factbook.

fed**Territorial Sovereignty: Federalism**

- 2: federal
- 1: semifederal
- 0: unitary
- NA: not available or not applicable

Constructed by author. *Source(s)*: DPI ("Federalism" variables); RAI ($n_selfrule$, $n_sharedrule$, n_RAI); Gerring & Thacker 2008 (Unit2); IAEP (govstruct, regstruct); Derbyshire & Derbyshire 1996; Dardanelli 2018³ (see supplemental file); Watts 2008⁴; CIA World Factbook; Constitute Project.

elesys**Electoral System**

- 2: closed-list PR (including mixed-member proportional)
- 1: mixed-member majority (parallel) or party block vote
- 0: majoritarian or "strong" preferential vote (STV, AV, SNTV, "open-list" PR, block vote, etc.)
- NA: not available or not applicable

Constructed by author. *Source(s)*: DPI ("Electoral Rules" variables); IPU (Electoral System, Electoral System Sub-Categories); IDEA* (Electoral system family, Electoral system for national legislature); Gerring & Thacker 2008 (PR); BR (Proportional Voting, Election System); DES (legislative_type, elecrule); IAEP (elecsystem); Political Data of the Americas; Gender Equality Observatory for Latin America and the Caribbean; PARLINE database on national parliaments⁵; The Electoral Knowledge Network; IFES Election Guide; Election Passport; Miljan & Alchin 2018⁶.

parorg**Party Organization: Internal Centralization**

Continuous variable ranges from 0 (decentralized, weakly disciplined) to 2 (centralized, strongly disciplined). 1 approximates the mean of all samples.

² Derbyshire, J. Denis, and Ian Derbyshire. *Political Systems of the World*. Helicon, 1996.

³ Dardanelli, Paolo. "Conceptualizing, measuring, and mapping state structures—With an application to Western Europe, 1950–2015." *Publius: The Journal of Federalism* 49, no. 2 (2019): 271–298.

⁴ Watts, Ronald Lampman. *Comparing federal systems*. Institute of Intergovernmental, 2008.

⁵ <http://archive.ipu.org/parline-e/parlinesearch.asp>

⁶ Miljan, Lydia, and Geoffrey Alchin. *Proportional Representation in Practice: An International Comparison of Ballots and Voting Rules*. Fraser Institute, 2018.

Source(s): V-Dem (v2pscnslnl, v2pscohesv).

ctp

Centripetal Score

If regime = 2 or 3, then $ctp = polys + (2 - fed) + elesys + parorg - 4$

If regime = 0 or 1, then NA

Scale: ordinal from -4 (maximal democratic decentralism) to 4 (maximal democratic centripetalism).

ctp1

Adjusted Centripetal Score

If ctp is not NA, then $ctp1 = ctp * cpi$

If ctp is NA, then NA

Scale: interval from -400 (maximal democratic decentralism) to 400 (maximal democratic centripetalism).

ctp2

Expanded Adjusted Centripetal Score

$ctp2 = ctp * (polys + (2 - fed) + elesys + parorg - 4)$, with expanded criteria of inclusion (adding regime=1 & polity>0).

Scale: interval from -400 (maximal democratic decentralism) to 400 (maximal democratic centripetalism).

mog

Model of Governance

Centripetal ($ctp2 \geq 0$)

Decentralized ($ctp2 < 0$)

Centralized (regime = 1)

Anarchic (regime = 0)

mog6

Model of Governance With Six Categories

Centripetal ($ctp2 \geq 50$)

Somewhat centripetal ($0 \leq ctp2 < 50$)

Somewhat decentralized ($-50 \leq ctp2 < 0$)

Decentralized ($ctp2 < -50$)

Centralized (regime = 1)

Anarchic (regime = 0)

goveff

Government Effectiveness

Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

Scale: -2.5 (weak performance) to 2.5 (strong performance).

Source(s): The World Governance Indicators.

IV. PUBLIC HEALTH

sarsmers

Prior Experience of SARS or MERS Outbreak

An outbreak is defined by at least 1 confirmed death or 20 confirmed cases.

2: Yes: over 20 deaths

1: Yes: less than 20 deaths

0: No

Source(s): WHO (1 November 2002–7 August 2003); ECDC (April 2012–24 August 2018).

airpm

SEV for ambient PM pollution

Summary exposure value (SEV) is a measure of a population's exposure to a risk factor that takes into account the extent of exposure by risk level and the severity of that risk's contribution to disease burden. SEV takes the value 0 when no excess risk for a population exists and the value 1 when the population is at the highest level of risk; IHME reports SEV on a scale from 0% to 100% to emphasize that it is risk-weighted prevalence. SEV is age standardized and is timed by 100. PM refers to particular matter.

Source(s): IHME.

smoke

Prevalence of smoking

Prevalence is a measure of the proportion of people in a population who are a case of a disease, injury or sequela at a designated time. Prevalence is age-standardized.

Source(s): IHME.

sbpsev

SEV for high SBP

Age-standardized SEV for high systolic blood pressure (SBP) timed by 100.

Source(s): IHME.

prev509

Prevalence of chronic obstructive pulmonary disease

Age-standardized prevalence of chronic obstructive pulmonary disease.

Source(s): IHME.

hspbed

Hospital beds per 1000 people

Hospital beds per 1000 people.

Source(s): IHME.

age65

Percentage of population over 65

Percentage of the population over age 65.

Source(s): IHME.

hlthsys

Robustness of health system

Sufficient and robust health system to treat the sick and protect health workers: Indicators in this category assess health capacity in clinics, hospitals, and community care centers; supply chain for health system and healthcare workers; medical countermeasures and personnel deployment; healthcare access; communications with healthcare workers during a public health emergency; infection control practices, and capacity to test and approve new countermeasures.

Note: Taiwan data is missing from the GHSI data set; a value is assigned by author based on Taiwan's relative capacity in terms of hospital beds per 1000, universal health coverage, Healthcare Access and Quality Index, etc.

Source(s): GHSI (Category 4).

V. OTHER COVARIATES

gdppc

GDP per capita by PPP (constant 2017 international \$)

GDP per capita based on purchasing power parity (PPP). PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the country plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2017 international dollars.

Source(s): World Bank (NY.GDP.PCAP.PP.KD, International Comparison Program, World Bank | World Development Indicators database, World Bank | Eurostat-OECD).

agr

Agriculture, forestry, and fishing, value added as % of GDP

Agriculture, forestry, and fishing corresponds to ISIC divisions 1-3 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 4. Note: For VAB countries, gross value added at factor cost is used as the denominator.

Note: The latest available data on Canada and Vanuatu is from 2018; Venezuela, 2014.

Source(s): World Bank (NV.AGR.TOTL.ZS, World Bank national accounts data, and OECD National Accounts data files); CIA World Factbook (pre-2019 estimates for Eritrea and Somalia).

temp

Mean temperature

Population-weighted mean temperature.

Source(s): IHME.

ppl

Populist Leadership

Socioeconomic or cultural populist leadership

1: Yes

0: No

Source(s): Tony Blair Institute for Global Change.