**Codebook for the Quality of Government 2022 data**

**January 2023**

This version of the dataset was cleaned up and shortened for the purposes of the ‘Q-Step Introductory Quantitative Methods’. The raw data is available at [this link](https://www.gu.se/en/quality-government/qog-data/data-downloads/basic-dataset). The original codebook is available at [this link](https://www.qogdata.pol.gu.se/data/codebook_bas_jan22.pdf)..

If you use the dataset in your work, cite:

1. the Quality of Government dataset:

Dahlberg, Stefan, Aksel Sundström, Sören Holmberg, Bo Rothstein, Natalia Alvarado Pachon & Cem Mert Dalli. 2022. The Quality of Government Basic Dataset, version jan22. University of Gothenburg: The Quality of Government Institute, https://www.gu.se/en/quality-government doi:10.18157/qogbasjan22

1. the sources of each individual variables you may want to use. The suggested references are detailed in this codebook.

When a source provides more than one variable, the variables are coded in the format source\_variablename: for instance, the average years of schooling for females (aysf) from the Barro-Lee (bl) dataset will be called bl\_aysf. The citation for the source (e.g. the Barro-Lee dataset) is provided at the start of the list of variables extracted from it. You can consult the QoG codebook or head directly the original source for any doubt about the coding of variables.

When a variable from the original QoG dataset has been recoded or added for the purposes of the course, it is noted in bold in the description of the variable. Some variables in the original QoG dataset have been removed.

A detailed variable description follows the list of variables.

**List of Variables**

1. Country name (cname)
2. Country code (ccodealp)
3. Region (region)
4. Global Militarization Index (bicc\_gmi)
5. Average Schooling Years, Female (bl\_asyf)
6. Average Schooling Years, Male (bl\_asym)
7. Average Schooling Years, Female (bl\_asymf)
8. Dichotomous democracy measure (bmr\_dem)
9. Consecutive years of current regime type (bmr\_demdur)
10. Associational/Assembly Rights (bti\_aar)
11. Anti-Corruption Policy (bti\_acp)
12. Approval of Democracy (bti\_aod)
13. Commitment to Democratic Institutions (bti\_cdi)
14. Conflict Intensity (bti\_ci)
15. Monetary and fiscal stability (bti\_cps)
16. Civil Rights (bti\_cr)
17. Democracy Status (bti\_ds)
18. Equal Opportunity (bti\_eo)
19. Economic Output Strength (bti\_eos)
20. Economic Performance (bti\_ep)
21. Free and Fair Elections (bti\_ffe)
22. Freedom of Expression (bti\_foe)
23. Independent Judiciary (bti\_ij)
24. Economy Status (bti\_mes)
25. Monopoly on the Use of Force (bti\_muf)
26. Performance of Democratic Institutions (bti\_pdi)
27. Political Participation (bti\_pp)
28. Private Property (bti\_prp)
29. Party System (bti\_ps)
30. Rule of Law (bti\_rol)
31. Stability of Democratic Institutions (bti\_sdi)
32. Socio-Economic Barriers (bti\_seb)
33. Socio-Economic Level (bti\_sel)
34. Separation of Powers (bti\_sop)
35. Social Safety Nets (bti\_ssn)
36. Sustainability (bti\_su)
37. Welfare Regime (bti\_wr)
38. Corruption Commission Present in Constitution (ccp\_cc)
39. Limits on Child Work in Constitution (ccp\_childwrk)
40. Equality Before the Law Mentioned in Constitution (ccp\_equal)
41. Freedom of Religion in Constitution (ccp\_freerel)
42. Status of Slavery in Constitution (ccp\_slave)
43. Right to Strike in Constitution (ccp\_strike)
44. State Fragility Index (cspf\_sfi) from the Center of Systemic Peace
45. Economic Globalization (dr\_eg)
46. Index of Globalization (dr\_ig)
47. Political Globalization (dr\_pg)
48. Social Globalization (dr\_sg)
49. Total Ecological Footprint of Consumption (GHA per person) (ef\_ef)
50. E-Government Index (egov\_egov)
51. Environmental Health (0-100) (epi\_eh)
52. Environmental Performance Index (0-100) (epi\_epi)
53. Associational and Organizational Rights (fh\_aor)
54. Civil Liberties (fh\_cl)
55. Electoral Process (fh\_ep)
56. Freedom of Expression and Belief (fh\_feb)
57. Functioning of Government (fh\_fog)
58. Level of Democracy (Freedom House/Imputed Polity) (fh\_ipolity2)
59. Personal Autonomy and Individual Rights (fh\_pair)
60. Political Rights (fh\_pr)
61. Rule of Law (fh\_rol)
62. Freedom Status (fh\_status)
63. Freedom on the Net: Score (fhn\_fotnsc)
64. Freedom on the Net: Status (fhn\_fotnst)
65. Freedom of the Press, Score (2001-2016) (fhp\_score5)
66. Freedom of the Press, Status (2001-2016) (fhp\_status5)
67. Freedom to Trade Internationally (current) (fi\_ftradeint)
68. Economic Freedom of the World Index (current) (fi\_index)
69. Total bribery rate, total population (gcb\_br)
70. Fight against corruption: Well (% respondents) (gcb\_fcwell)
71. Feel personally obliged to report corruption: agree (% respondents) (gcb\_orcag)
72. Corruption Perception-Business Executives: Most (% respondents) (gcb\_pcbmost)
73. Corruption Perception-Judges: Most (% respondents) (gcb\_pcjmost)
74. Corruption Perception-Local Gov Council: Most (% respondents) (gcb\_pclgcmost)
75. Corruption Perception-Legislature: Most (% respondents) (gcb\_pclmost)
76. Corruption Perception Change: Increase (% respondents) (gcb\_pcori)
77. Corruption Perception-Head of State: Most (% respondents) (gcb\_pcpmost)
78. Corruption Perception-Police: Most (% respondents) (gcb\_pcpolmost)
79. Corruption Perception-Religious Leaders: Most (% respondents) (gcb\_pcrmost)
80. Corruption Perception-Tax officers: Most (% respondents) (gcb\_pctaxmost)
81. Can people fight against corruption: agree (% respondents) (gcb\_pfcaag)
82. Is socially acceptable to report corruption: agree (% respondents) (gcb\_sarcag)
83. Would spend a whole day in court to give evidence: agree (% respondents) (gcb\_wsdag)
84. Political Terror Scale - Amnesty International (gd\_ptsa)
85. Political Terror Scale - Human Rights Watch (gd\_ptsh)
86. Gender Inequality Index (0 to 1 higher disparity) (gii\_gii)
87. Effective Number of Electoral Parties (gol\_enep)
88. Electoral System Type-3 classes (gol\_est)
89. Electoral System Type-11 classes (gol\_est\_spec)
90. Electoral Formula used in an Electoral Tier (gol\_pr)
91. Global Peace Index (1-5 Less peaceful) (gpi\_gpi)
92. Independent Judiciary from the Political Constraint Index (POLCON) Dataset (h\_j)
93. Colonial Origin (ht\_colonial)
94. The Region of the Country (ht\_region)
95. Open Budget Index (ibp\_obi)
96. Parliamentary Election: Voter Turnout (ideavt\_legvt)
97. Presidential Election: Voter Turnout (ideavt\_presvt)
98. Share of Women (Lower and Single Houses) (ipu\_l\_sw)
99. Share of Women (Upper House) (ipu\_u\_sw)
100. Number of COVID-19 cases reported (jht\_ccc)
101. Number of COVID-19 deaths reported (jht\_ccd)
102. Latitude (lp\_lat\_abst)
103. Legal Origin (lp\_legor)
104. Real GDP per Capita (mad\_gdppc)
105. Real GDP per Capita (year 1900) (mad\_gdppc1900)
106. Regime Durability (p\_durable)
107. Revised Combined Polity Score (p\_polity2)
108. Electoral Integrity Rating (pei\_eir)
109. Perception of Electoral Integrity Index (pei\_peii)
110. Human capital index (pwt\_hci)
111. Population (in millions) (pwt\_pop)
112. Corruption Perceptions Index (ti\_cpi) from Transparency International
113. Top 10% income share (top\_top10\_income\_share)
114. Top 1% income share (top\_top1\_income\_share)
115. Human Development Index (undp\_hdi)
116. Vanhanen’s Index of Democratization (van\_index)
117. Political corruption index (vdem\_corr)
118. Deliberative democracy index (vdem\_delibdem)
119. Egalitarian democracy index (vdem\_egaldem)
120. Women political empowerment index (vdem\_gender)
121. Liberal democracy index (vdem\_libdem)
122. Media corrupt (vdem\_mecorrpt)
123. Participatory democracy index (vdem\_partipdem)
124. Electoral democracy index (vdem\_polyarchy)
125. Global Terrorism Index (voh\_gti)
126. Control of Corruption, Estimate (wbgi\_cce)
127. Government Effectiveness, Estimate (wbgi\_gee)
128. Political Stability and Absence of Violence/Terrorism, Estimate (wbgi\_pve)
129. Rule of Law, Estimate (wbgi\_rle)
130. Access to electricity (% of population) (wdi\_acel)
131. Access to electricity, rural (% of rural population) (wdi\_acelr)
132. Access to electricity, urban (% of urban population) (wdi\_acelu)
133. Armed forces personnel (% of total labor force) (wdi\_afp)
134. Age dependency ratio (% of working-age pop.) (wdi\_agedr)
135. Alternative and nuclear energy (% of total energy use) (wdi\_ane)
136. Arable land (% of land area) (wdi\_araland)
137. Land area (sq. km) (wdi\_area)
138. Arms exports (SIPRI trend indicator values) (wdi\_armexp)
139. Arms imports (SIPRI trend indicator values) (wdi\_armimp)
140. Birth rate, crude (per 1,000 people) (wdi\_birth)
141. Bribery incidence (% of firms experiencing at least one bribe request) (wdi\_bribfirm)
142. Fixed broadband subscriptions (per 100 people) (wdi\_broadb)
143. New business density (new registrations per 1,000 people ages 15-64) (wdi\_busden)
144. CO2 emissions (metric tons per capita) (wdi\_co2)
145. Death rate, crude (per 1,000 people) (wdi\_death)
146. Central government debt, total (% of GDP) (wdi\_debt)
147. School enrollment, primary, private (% of total primary) (wdi\_eduprp)
148. School enrollment, secondary, private (% of total secondary) (wdi\_eduprs)
149. Renewable electricity output (% of total electricity output) (wdi\_elerenew)
150. Electricity production from coal sources (% of total) (wdi\_elprodcoal)
151. Electricity production from natural gas sources (% of total) (wdi\_elprodgas)
152. Electricity production from hydroelectric sources (% of total) (wdi\_elprodhyd)
153. Electricity production from nuclear sources (% of total) (wdi\_elprodnuc)
154. Electricity production from oil sources (% of total) (wdi\_elprodoil)
155. Employers, total (% of total employment) (modeled ILO) (wdi\_emp)
156. Employment in agriculture (% of total employment) (modeled ILO) (wdi\_empagr)
157. Employment in agriculture, female (% female employment) (modeled ILO) (wdi\_empagrf)
158. Employment in agriculture, male (% male employment) (modeled ILO) (wdi\_empagrm)
159. Employment in industry (% of total employment) (modeled ILO) (wdi\_empind)
160. Employment in industry, female (% female employment) (modeled ILO) (wdi\_empindf)
161. Employment in industry, male (% of male employment) (modeled ILO) (wdi\_empindm)
162. Employment in services (% of total employment) (modeled ILO) (wdi\_empser)
163. Employment in services, female (% of female employment) (modeled ILO) (wdi\_empserf)
164. Employment in services, male (% of male employment) (modeled ILO) (wdi\_empserm)
165. Energy imports, net (% of energy use) (wdi\_eneimp)
166. Ease of doing business index (1=most business-friendly regulations) (wdi\_eodb)
167. Government expenditure on education, total (% of GDP) (wdi\_expedu)
168. Government expenditure on education, total (% of government expenditure) (wdi\_expeduge)
169. Expenditure on primary education (% of government expenditure on edu.) (wdi\_expedup)
170. Expenditure on secondary education (% of government expenditure on edu.) (wdi\_expedus)
171. Expenditure on tertiary education (% of government expenditure on edu.) (wdi\_expedut)
172. Military expenditure (% of GDP) (wdi\_expmil)
173. Foreign direct investment, net inflows (% of GDP) (wdi\_fdiin)
174. Foreign direct investment, net outflows (% of GDP) (wdi\_fdiout)
175. Fertility rate, total (births per woman) (wdi\_fertility)
176. Firms with female top manager (% of firms) (wdi\_firftopm)
177. Firms expected to give gifts in meetings w. tax officials (% of firms) (wdi\_firgifttax)
178. Forest area (% of land area) (wdi\_forest)
179. Fossil fuel energy consumption (% of total) (wdi\_fossil)
180. Agriculture, forestry, and fishing, value added (% of GDP) (wdi\_gdpagr)
181. GDP per capita (constant 2010 US dollar) (wdi\_gdpcapcon2010)
182. Industry (including construction), value added (% of GDP) (wdi\_gdpind)
183. School enrollment, primary (% gross) (wdi\_gerp)
184. School enrollment, preprimary (% gross) (wdi\_gerpp)
185. School enrollment, secondary (% gross) (wdi\_gers)
186. School enrollment, tertiary (% gross) (wdi\_gert)
187. Gini index (World Bank estimate) (wdi\_gini)
188. Intentional homicides (per 100,000 people) (wdi\_homicides)
189. Internally displaced persons, new displacement-disasters (number) (wdi\_idpdis)
190. Internally displaced persons, new displacement-conflict and violence (number) (wdi\_idpvc)
191. Internally displaced persons, total displaced by conflict-violence (number) (wdi\_idpvp)
192. International migrant stock (% of population) (wdi\_imig)
193. Informal payments to public officials (% of firms) (wdi\_infpay)
194. Individuals using the Internet (% of population) (wdi\_internet)
195. Labor force, female (% of total labor force) (wdi\_lfpf)
196. Life expectancy at birth, total (years) (wdi\_lifexp)
197. Life expectancy at birth, female (years) (wdi\_lifexpf)
198. Life expectancy at birth, male (years) (wdi\_lifexpm)
199. Literacy rate, adult total (% of people ages 15 and above) (wdi\_litrad)
200. Literacy rate, adult female (% of females ages 15 and above) (wdi\_litradf)
201. Literacy rate, adult male (% of males ages 15 and above) (wdi\_litradm)
202. Literacy rate, youth total (% of people ages 15-24) (wdi\_litry)
203. Net migration (wdi\_migration)
204. School enrollment, primary (% net) (wdi\_nerp)
205. School enrollment, secondary (% net) (wdi\_ners)
206. Population, total (wdi\_pop)
207. Population ages 0-14 (% of total population) (wdi\_pop14)
208. Population ages 15-64 (% of total population) (wdi\_pop1564)
209. Population ages 65 and above (% of total population) (wdi\_pop65)
210. Population density (people per sq. km of land area) (wdi\_popden)
211. Rural population (% of total population) (wdi\_poprul)
212. Urban population (% of total population) (wdi\_popurb)
213. Poverty gap at USD 1.90 a day (2011 PPP) (%) (wdi\_povgap190)
214. Refugee population by country or territory of asylum (wdi\_refasy)
215. Refugee population by country or territory of origin (wdi\_refori)
216. Self-employed, total (% of total employment) (modeled ILO) (wdi\_semp)
217. Smoking prevalence, females (% of adults) (wdi\_smokf)
218. Smoking prevalence, males (% of adults) (wdi\_smokm)
219. CPIA social protection rating (1=low to 6=high) (wdi\_spr)
220. CPIA transparency-accountability-corruption in public sector rating (1-6) (wdi\_tacpsr)
221. Tax revenue (% of GDP) (wdi\_taxrev)
222. Fixed telephone subscriptions (per 100 people) (wdi\_tele)
223. Trade (% of GDP) (wdi\_trade)
224. Unemployment, female (% of female labor force) (modeled ILO) (wdi\_unempfilo)
225. Unemployment, total (% of total labor force) (modeled ILO) (wdi\_unempilo)
226. Unemployment, male (% of male labor force) (modeled ILO) (wdi\_unempmilo)
227. Unemployment, youth female (% of female labor force 15-24) (modeled ILO) (wdi\_unempyfilo)
228. Unemployment, youth total (% of total labor force 15-24) (modeled ILO) (wdi\_unempyilo)
229. Unemployment, youth male (% of male labor force 15-24) (modeled ILO) (wdi\_unempymilo)
230. Proportion of seats held by women in national parliaments (%) (wdi\_wip)
231. Innovation capability. 0-100 (best) (wef\_ci)
232. Electricity. 0-100 (best) (wef\_elec)
233. Global Competitiveness Index 4.0. 0-100 (best) (wef\_gci)
234. Mobile-cellular telephone subscriptions/100 pop. (wef\_mobile)
235. Organized crime. 1-7 (best) (wef\_oc)
236. Property rights. 1-7 (best) (wef\_pr)
237. Transport infrastructure. 0-100 (best) (wef\_qoi)
238. Ratio of wage and salaried female workers to male workers (wef\_wlf)
239. Healthy Life Expectancy, Total (Years) (who\_halet)
240. Total population using basic sanitation services (%) (who\_sanittot)
241. National-level average scores for subjective well-being (whr\_hap)
242. Youth Representation Index (35 years or younger) (yri\_yri35)

**Variable Description**

* **Country name (cname)**

country name

* **Country code (ccodealp)**

A three-letter country code based on the ISO-3166-1 alpha3 standard. Harmonised with country codes in the other country-level datasets for the course.

* **Region (region)**

United Nations region name (= continent). **not in original dataset**

* **Global Militarization Index (bicc\_gmi)**

Mutschler, Max. M and Marius Bales. (2020). Global Militarization Index 2020. Bonn International Center for Conversion BICC. <https://gmi.bicc.de/>

Compiled by BICC, the Global Militarization Index (GMI) presents on an annual basis the relative weight and importance of a country’s military apparatus in relation to its society as a whole. The GMI covers 151 states and is based on the latest available figures (up to 2019). The index project is financially supported by Germany’s Federal Ministry for Economic Cooperation and Development.

The Global Militarization Index is divided into three overarching categories: expenditure, personnel and heavy weapons. (See variables bicc\_milexp, bicc\_milper, and bicc\_hw).

In order to increase the compatibility between different indicators and preventing extreme values from crating distortions when normalizing data, in a first step every indicator was represented in a logarithm with the factor 10. Second, all data was normalized using the formula x=(y-min)/(maxmin), with min and max representing, respectively, the lowest and the highest value of the logarithm. In a third step, every indicator was weighted in accordance to a subjective factor, reflecting the relative importance attributed to it by BICC researchers. In order to calculate the final score, the weighted indicators were added together and then normalized one last time on a scale ranging from 0 to 1,000. For better comparison of individual years, all years were finally normalized.

Weighting Factors used:

Military expenditures as percentage of GDP - 5

Military expenditures in relation to health spending - 3

Military and paramilitary personnel in relation to population - 4

Military reservers in relation to population - 2

Military and paramilitary personnel in relation to physicians - 2

Heavy weapons in relation to population - 4

***Barro-Lee dataset variables***  
Barro, R. J., & Lee, J. W. (2013). A new data set of educational attainment in the world, 1950–2010. Journal of Development Economics, 104, 184–198

* **Average Schooling Years, Female (bl\_asyf)**

Average schooling years, females between 15 and 64 years old.

* **Average Schooling Years, Male (bl\_asym)**

Average schooling years, males between 15 and 64 years old.

* **Average Schooling Years, Female (bl\_asymf)**

Average schooling years, females and males between 15 and 64 years old.

***Boix-Miller-Rosato Dichotomous Coding of Democracy variables***

Boix, C., Miller, M. K., & Rosato, S. (2022). Boix-miller-rosato dichotomous coding of democracy, 1800-2020 [UNF:6:6u8JNSHqP+yYKbLzrgFDug== [fileUNF]]. Harvard Dataverse, V1. <https://doi.org/https://doi.org/10.7910/DVN/FENWWR>

See also: Boix, C., Miller, M. K., & Rosato, S. (2013). A complete data set of political regimes, 1800-2007. *Comparative Political Studies*, *46*(12), 1523–54

This data set provides a dichotomous coding of democracy from 1800 until 2020, however QoG data contains information from 1946 onwards. Authors define a country as democratic if it satisfies conditions for both contestation and participation. Specifically, democracies feature political leaders chosen through free and fair elections and satisfy a threshold value of suffrage.

* **Dichotomous democracy measure (bmr\_dem)**

Dichotomous democracy measure. 0 = non-democracy; 1 = democracy

* **Consecutive years of current regime type (bmr\_demdur)**

Consecutive years of current regime type.

***Bertelsmann Transformation Index (​​Bertelsmann Stiftung) variables***  
Donner, S., Hartmann, H., & Schwarz, R. (2020). Transformation Index of the Bertelsmann Stiftung 2020. Bertelsmann Stiftung. http://www.bti-project.org

The Bertelsmann Stiftung’s Transformation Index (BTI) analyzes and evaluates the quality of democracy, a market economy and political management in 137 developing and transition countries. It measures successes and setbacks on the path toward a democracy based on the rule of law and a socially responsible market economy.

In-depth country reports provide the basis for assessing the state of transformation and persistent challenges, and to evaluate the ability of policymakers to carry out consistent and targeted reforms. The BTI is the first cross-national comparative index that uses self-collected data to comprehensively measure the quality of governance during processes of transition.

* **Associational/Assembly Rights (bti\_aar)**

To what extent can individuals form and join independent political or civic groups? To what extent can these groups operate and assemble freely? 1-10.

1. Association and assembly rights are denied. Independent civic groups do not exist or are prohibited.

4. Association and assembly rights are severely limited. Oppositional political groups with any relevance are prohibited or systematically disabled. Independent civic groups can operate and assemble if they support the regime or are not outspokenly critical of it.

7. Association and assembly rights are partially limited, but generally there are no outright prohibitions of independent political or civic groups.

10. Association and assembly rights are unrestricted for individuals and independent political or civic groups within the basic democratic order.

* **Anti-Corruption Policy (bti\_acp)**

To what extent does the government successfully contain corruption? 1-10.

1. The government fails to contain corruption, and there are no integrity mechanisms in place.

4. The government is only partly willing and able to contain corruption, while the few integrity mechanisms implemented are mostly ineffective.

7. The government is often successful in containing corruption. Most integrity mechanisms are in place, but some are functioning only with limited effectiveness.

10. The government is successful in containing corruption, and all integrity mechanisms are in place and effective.

* **Approval of Democracy (bti\_aod)**

How strong is the citizens’ approval of democratic norms and procedures? 1-10.

1. Approval of democratic norms and procedures is very low.

4. Approval of democratic norms and procedures is fairly low.

7. Approval of democratic norms and procedures is fairly high.

10. Approval of democratic norms and procedures is very high.

* **Commitment to Democratic Institutions (bti\_cdi)**

To what extent are democratic institutions accepted as legitimate by the relevant actors? 1-10.

1. There are no democratic institutions as such (authoritarian regime).

4. Only individual institutions are accepted, while influential actors hold vetoes. Acceptance remains unstable over time.

7. Most democratic institutions are accepted as legitimate by most relevant actors.

10. All democratic institutions are accepted as legitimate by all relevant actors.

* **Conflict Intensity (bti\_ci)**

How serious are social, ethnic and religious conflicts? 1-10.

1. There are no violent incidents based on social, ethnic or religious differences.

4. There are only few violent incidents. Radical political actors have limited success in mobilizing along existing cleavages. Society and the political elite, however, are divided along social, ethnic or religious lines.

7. There are violent incidents. Mobilized groups and protest movements dominate politics. Society and the political elite are deeply split into social classes, ethnic or religious communities.

10. There is civil war or a widespread violent conflict based on social, ethnic or religious differences.

* **Monetary and fiscal stability (bti\_cps)**

There are institutional or political precautions to achieve monetary and fiscal stability. Including “To what extend does the monetary authority pursue and communicate a consistent monetary stabilization policy?” and “To what extent do the government’s budgetary policies support fiscal stability?”

* **Civil Rights (bti\_cr)**

To what extent are civil rights guaranteed and protected, and to what extent can citizens seek redress for violations of these rights? 1-10.

1. Civil rights are not guaranteed and frequently violated. There are no mechanisms and institutions to protect citizens against violations of their rights.

4. Civil rights are guaranteed only within limited enclaves or are violated over protracted periods of time. Some mechanisms and institutions to prosecute, punish and redress violations of civil rights are established formally, but do not function.

7. Civil rights are guaranteed, but are partially or temporarily violated or are not protected in some parts of the country. Mechanisms and institutions to prosecute, punish and redress violations of civil rights are in place, but often prove to be ineffective.

10. Civil rights are guaranteed by the constitution and respected by all state institutions. Infringements present an extreme exception. Citizens are effectively protected by mechanisms and institutions established to prosecute, punish and redress violations of their rights.

* **Democracy Status (bti\_ds)**

Democracy Status: The state of democracy is measured in terms of five criteria; including stateness, political participation, rule of law, stability of the democratic institutions, and political and social integration 1-10.

* **Equal Opportunity (bti\_eo)**

To what extent does equality of opportunity exist? 1-10.

1. Equality of opportunity is not achieved. Women and/or members of ethnic or religious groups have only very limited access to education, public office and employment. There are no legal provisions against discrimination.

4.Equality of opportunity is only partially achieved. Women and/or members of ethnic, religious and other groups have limited access to education, public office and employment. There are some legal provisions against discrimination, but their implementation is highly deficient.

7. Equality of opportunity is largely achieved. Women and members of ethnic or religious groups have near-equal access to education, public office and employment. There are a number of legal provisions against discrimination, but their implementation is at times insufficient.

10. Equality of opportunity is achieved. Women and members of ethnic or religious groups have equal access to education, public office and employment. There is a comprehensive and effective legal and institutional framework for the protection against discrimination.

* **Economic Output Strength (bti\_eos)**

How does the economy, as measured in quantitative indicators, perform? 1-10.

1. The economic performance is very poor. Strongly negative macroeconomic data may include negative GDP growth rates, very high unemployment levels, high inflation, large budget deficits, unreasonably high debt and an increasingly unsustainable current account position.

4. The economic performance is poor. Continuing negative macroeconomic data may include stagnant GDP levels, relatively high unemployment levels, low price stability, an unbalanced budget, rising debt and a volatile current account position.

7. The economic performance is good. Moderately positive macroeconomic data may include low GDP growth rates, only moderate unemployment levels, relative price stability, a slightly unbalanced budget, a tendency toward debt and a manageable current account position.

10. The economic performance is very good. Positive macroeconomic data may include relatively high GDP growth rates, relatively high employment levels, price stability, balanced budget, reasonable debt and a sustainable current account position.

* **Economic Performance (bti\_ep)**

Economic Performance: The economy’s performance points to solid development 1-10.

* **Free and Fair Elections (bti\_ffe)**

To what extent are political representatives determined by general, free and fair elections? 1-10.

1. There are no elections on free and fair elections.

4. General, multi-party elections are held, conducted properly and accepted as the means of filling political posts. However, there are some constraints on the fairness of the elections with regard to registration, campaigning or media access.

7. General elections are held, but serious irregularities during voting process and ballot count occur. The rights to vote, campaign and run for office are restricted, and elections have de facto only limited influence over who governs.

10. National elections, if held at all, are entirely unfree and unfair.

* **Freedom of Expression (bti\_foe)**

To what extent can citizens, organizations and the mass media express opinions freely? 1-10.

1. Freedom of expression is denied. Independent media do not exist or are prohibited.

4. Freedom of expression is often subject to interference or government restrictions. Distortion and manipulation shape matters of public debate.

7. Freedom of expression is occasionally subject to interference or government restrictions, but there are generally no incidents of blatant intrusions like outright state censorship or media shutdowns.

10. Freedom of expression is guaranteed against interference or government restrictions. Individuals, groups and the press can fully exercise these rights.

* **Independent Judiciary (bti\_ij)**

To what extent does an independent judiciary exist? 1-10.

1. The judiciary is not independent and not institutionally differentiated.

4. The independence of the judiciary is heavily impaired by political authorities and high levels of corruption. It is to some extent institutionally differentiated, but severely restricted by functional deficits, insufficient territorial operability and scarce resources.

7. The judiciary is largely independent, even though occasionally its decisions are subordinated to political authorities or influenced by corruption. It is institutionally differentiated, but partially restricted by insufficient territorial or functional operability.

10. The judiciary is independent and free both from unconstitutional intervention by other institutions and from corruption. It is institutionally differentiated, and there are mechanisms for judicial review of legislative or executive acts.

* **Economy Status (bti\_mes)**

Economy Status: It groups the scores of the level of socioeconomic development, the organization of the market and competition, currency and price stability, private property, the welfare regime, the economic performance, and sustainability 1-10. Higher scores reflect advanced economy status.

* **Monopoly on the Use of Force (bti\_muf)**

To what extent does the state’s monopoly on the use of force cover the entire territory of the country? 1-10.

1. There is no state monopoly on the use of force.

4. The state’s monopoly on the use of force is established only in key parts of the country. Large areas of the country are controlled by guerrillas, paramilitaries or clans.

7. The state’s monopoly on the use of force is established nationwide in principle, but it is challenged by guerrillas, mafias or clans in territorial enclaves.

10. There is no competition with the state’s monopoly on the use of force throughout the entire territory.

* **Performance of Democratic Institutions (bti\_pdi)**

Are democratic institutions capable of performing? 1-10.

1. There are no democratic institutions as such (authoritarian regime).

4. Democratic institutions exist, but they are unstable and ineffective.

7. Democratic institutions perform their functions in principle, but often are inefficient due to friction between institutions.

10. The ensemble of democratic institutions is effective and efficient. As a rule, political decisions are prepared, made, implemented and reviewed in legitimate procedures by the appropriate authorities.

* **Political Participation (bti\_pp)**

Political Participation: The populace decides who rules, and it has other political freedoms 1-10. Higher scores refer better conditions of political participation and other political freedoms.

* **Private Property (bti\_prp)**

There are adequate conditions to support a functional private sector. Including “To what extent do government authorities ensure well-defined rights of private property and regulate the acquisition, benefits, use and sale of property?” and “To what extent are private companies permitted and protected? Are privatization processes conducted in a manner consistent with market principles?”.

* **Party System (bti\_ps)**

To what extent is there a stable and socially rooted party system able to articulate and aggregate societal interests? 1-10.

1. There is no party system to articulate and aggregate societal interest.

4. The party system is unstable with shallow roots in society: high fragmentation, high voter volatility and high polarization.

7. The party system is fairly stable and socially rooted: moderate fragmentation, moderate voter volatility and moderate polarization.

10. The party system is stable and socially rooted: it is able to articulate and aggregate societal interest with low fragmentation, low voter volatility and low polarization.

* **Rule of Law (bti\_rol)**

Rule of Law: State powers check and balance one another and ensure civil rights. Including “To what extent is there a working separation of powers (checks and balances)”, “To what extent does an independent judiciary exist?”, “To what extent are public officeholders who abuse their positions prosecuted or penalized?” and “To what extent are civil rights guaranteed and protected, and to what extent can citizens seek redress for violations of these rights?”.

* **Stability of Democratic Institutions (bti\_sdi)**

Stability of Democratic Institutions: Democratic institutions are capable of performing, and they are adequately accepted as legitimate 1-10.

* **Socio-Economic Barriers (bti\_seb)**

To what extent are significant parts of the population fundamentally excluded from society due to poverty and inequality? 1-10.

1. Poverty and inequality are extensive and structurally ingrained.

4. Poverty and inequality are pronounced and partly structurally ingrained.

7. Poverty and inequality are limited and barely structurally ingrained.

10. Poverty and inequality are minor and not structurally ingrained.

* **Socio-Economic Level (bti\_sel)**

Socio-Economic Level: In principle, the country’s level of development permits adequate freedom of choice for all citizens 1-10. Higher scores are present for countries with better socio-economic level.

* **Separation of Powers (bti\_sop)**

To what extent is there a working separation of powers (checks and balances)? 1-10.

1. There is no separation of powers, neither de jure nor de facto.

4. One branch, generally the executive, has an ongoing and either informally or formally confirmed monopoly on power, which may include the colonization of other powers, even though they are institutionally differentiated.

7. The separation of powers generally is in place and functioning. Partial or temporary restrictions of checks and balances occur, but a restoration of balance is sought.

10. There is a clear separation of powers with mutual checks and balances.

* **Social Safety Nets (bti\_ssn)**

To what extent do social safety nets provide compensation for social risks? 1-10.

1. Social safety nets do not exist. Poverty is combated hardly at all, or only ad hoc.

4. Social safety nets are rudimentary and cover only few risks for a limited number of beneficiaries. The majority of the population is at risk of poverty.

7. Social safety nets are well developed, but do not cover all risks for all strata of the population. A significant part of the population is still at risk of poverty.

10. Social safety nets are comprehensive and compensate for social risks, especially nationwide health care and a well-focused prevention of poverty.

* **Sustainability (bti\_su)**

Economic growth is balanced, environmentally sustainable and future-oriented. Including “To what extent are environmental concerns effectively taken into account?” and “To what extent are there solid institutions for basic, secondary and tertiary education, as well as for research and development?”.

* **Welfare Regime (bti\_wr)**

Welfare Regime: Assesses whether there are available arrangements to compensate for social risks 1-10. Including “To what extent do social safety nets provide compensation for social risks?” and “To what extent does equality of opportunity exist?”.

## ***The Comparative Constitutions Project variables***

Elkins, Z., & Ginsburg, T. (2021). Characteristics of national constitutions, version 3.0 [Last modified: May 20, 2021. Available at comparativeconstitutionsproject.org]. http://www. comparativeconstitutionsproject.org

This dataset presents records of the characteristics of national constitutions written since 1789. Each constitutional text is coded twice by different coders working independently. To maximize the reliability of the final data, the discrepancies between these two codings are reconciled by a third individual - a reconciler. This is the second public release of data (version 2.0) on the content of constitutions. Authors rely on Ward and Gleditsch’s list to identify which countries are independent in a given year. There are utilized two concepts to categorize constitutional texts. A constitutional system encompasses the period in which a constitution is in force before it is replaced or suspended. A constitutional event is any change to a country’s constitution, including adoption, amendment, suspension, or reinstatement. For years in which there are multiple events, the constitution is coded as it stood in force at the end of the year. For example, if a constitution was amended the same year as it was adopted, the content of the constitution is coded as amended rather than as originally adopted. In addition, since events are (often) in force for multiple years, authors interpolated the data associated each event across all country-years in which that event was in force. Note that this is an extremely conservative interpolation strategy because most constitutional amendments do not change many provisions. As a result, for most variables, one can safely interpolate across constitutional systems.

* **Corruption Commission Present in Constitution (ccp\_cc)**

Does the constitution contain provisions for a counter corruption commission?

Yes  
No  
Other

**recoded as character variable**

* **Limits on Child Work in Constitution (ccp\_childwrk)**

Does the constitution place limits on child employment?

Yes  
No  
Other

**recoded as character variable**

* **Equality Before the Law Mentioned in Constitution (ccp\_equal)**

Does the constitution refer to equality before the law, the equal rights of men, or non-discrimination?

Yes  
No  
Other

**recoded as character variable**

* **Freedom of Religion in Constitution (ccp\_freerel)**

Does the constitution provide for freedom of religion?

Yes  
No  
Other

**recoded as character variable**

* **Status of Slavery in Constitution (ccp\_slave)**

Does the constitution prohibit slavery, servitude, or forced labor?

Universally prohibited  
Prohibited except in the case of war  
Prohibited with other exception(s)n  
Other  
Not specified

**recoded as character variable**

* **Right to Strike in Constitution (ccp\_strike)**

Does the constitution provide for a right to strike?

Yes

Yes, but with limitations

No

Other

**recoded as character variable**

* **State Fragility Index (cspf\_sfi) from the Center of Systemic Peace**

Marshall, M. G., & Elzinga-Marshall, G. (2017). Global report 2017: Conflict, governance, and state fragility

The State Fragility Index and Matrix provides annual state fragility, effectiveness, and legitimacy indices and the eight component indicators for the world’s 167 countries with populations greater than 500,000 in 2018.

A country’s fragility is closely associated with its state capacity to manage conflict; make and implement public policy; and deliver essential services and its systemic resilience in maintaining system coherence, cohesion, and quality of life; responding effectively to challenges and crises, and sustaining progressive development. State Fragility = Effectiveness Score + Legitimacy Score (25 points possible).

***ETH Zurich KOF Index of Globalization variables***

Gygli, S., Haelg, F., Potrafke, N., & Sturm, J.-E. (2019). The KOF Globalisation Index Revisited. <https://doi.org/10.1007/s11558-019-09344-2>

KOF Index of Globalization. All indexes below range between 0 and 100, where higher values indicate a higher degree of globalization.

The KOF Globalization Index measures the economic, social and political dimension to globalization. It is used in order to monitor changes in the level of globalization of different countries over extended periods of time. The current KOF Globalization Index is available for 185 countries and covers the period from 1970 until 2018. A distinction is drawn between de facto and de jure for the Index as a whole, as well as within the economic, social and political components.

The Index measures globalization on a scale of 1 to 100. The figures for the constituent variables are expressed as percentiles. This means that outliers are smoothed and ensures that fluctuations over time are lower. Due to the new methodology, the current Index is only to a limited extent comparable to the old KOF Globalization Index.

* **Economic Globalization (dr\_eg)**

Economic globalisation (scale of 1 to 100) covers both trade flows as well as financial flows. De facto trade is determined with reference to the trade in goods and services. De jure trade covers customs duties, taxes and restrictions on trade.

* **Index of Globalization (dr\_ig)**

The overall index of globalization (scale of 1 to 100) is the weighted average of the following variables: economic globalization, social globalization and political globalization (dr\_eg, dr\_sg and dr\_pg). Most weight has been given to economic followed by social globalization.

* **Political Globalization (dr\_pg)**

Political globalisation (scale of 1 to 100) regards the de facto segment measured with reference to the number of embassies and international non-governmental organisations (NGOs), along with participation in UN peacekeeping missions. The de jure segment contains variables focussing on membership of international organisations and international treaties.

* **Social Globalization (dr\_sg)**

Social globalization (scale of 1 to 100) is comprised of three segments, each with its own de facto and de jure segment. Interpersonal contact is measured within the de facto segment with reference to international telephone connections, tourist numbers and migration. Within the de jure segment, it is measured with reference to telephone subscriptions, international airports and visa restrictions. Flows of information are determined within the de facto segment with reference to international patent applications, international students and trade in high technology goods. The de jure segment measures access to TV and the internet, freedom of the press and international internet connections. Cultural proximity is measured in the de facto segment from trade in cultural goods, international trade mark registrations and the number of McDonald’s restaurants and IKEA stores. The de jure area focuses on civil rights (freedom of citizens), gender equality and public spending on school education.

* **Total Ecological Footprint of Consumption (GHA per person) (ef\_ef)**

Global Footprint Network. (2021). National footprint accounts data set (1961-2017), 2021 edition

[c 2021 Global Footprint Network. National Footprint Accounts, 2021 Edition, www.footprintnetwork.org.

[http://www.footprintnetwork.org](http://www.footprintnetwork.org/)

Total - Ecological Footprint in consumption. Measured in Global Hectares (GHA) per person.

The National Footprint Accounts (NFAs) measure the ecological resource use and resource capacity of nations over time. Based on approximately 6,000 data points per country per year, the Accounts calculate the Footprints of more than 200 countries, territories, and regions from 1961 to the present, providing the core data needed for all Ecological Footprint analysis worldwide. This Data Package contains Ecological Footprint and biocapacity as well as Human Development and population data to give a first approximation of the biological resource situation of the featured countries.

* **E-Government Index (egov\_egov)**

Department of Economic and Social Affairs. (2020). United nations e-government survey. https: //publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2020

The E-Government Development Index (EGDI) is a weighted average of normalised scores on the three most important dimensions of e-government, namely: scope and quality of online services (Online Service Index, OSI), status of the development of telecommunication infrastructure (Telecommunication Infrastructure Index, TII) and inherent human capital (Human Capital Index, HCI). Each of these sets of indices is in itself a composite measure that can be extracted and analysed independently.

The E-Government Development Index presents the state of E-Government Development of the United Nations Member States. Along with an assessment of the website development patterns in a country, the E-Government Development index incorporates the access characteristics, such as the infrastructure and educational levels, to reflect how a country is using information technologies to promote access and inclusion of its people. The EGDI is a composite measure of three important dimensions of e-government, namely: provision of online services, telecommunication connectivity and human capacity.

The EGDI is based on a comprehensive Survey of the online presence of all 193 United Nations Member States, which assesses national websites and how e-government policies and strategies are applied in general and in specific sectors for delivery of essential services. The assessment rates the e-government performance of countries relative to one another as opposed to being an absolute measurement. The results are tabulated and combined with a set of indicators embodying a country’s capacity to participate in the information society, without which e-government development efforts are of limited immediate use.

Although the basic model has remained consistent, the precise meaning of these values varies from one edition of the Survey to the next as understanding of the potential of e-government changes and the underlying technology evolves. This is an important distinction because it also implies that it is a comparative framework that seeks to encompass various approaches that may evolve over time instead of advocating a linear path with an absolute goal.

Mathematically, the EGDI is a weighted average of three normalized scores on three most important dimensions of e-government, namely: (1) scope and quality of online services (Online Service Index, OSI), (2) development status of telecommunication infrastructure (Telecommunication Infrastructure Index, TII), and (3) inherent human capital (Human Capital Index, HCI).

The EGDI is not designed to capture e-government development in an absolute sense; rather, it aims to give a performance rating of national governments relative to one another.

***Environmental Performance Index Data 2020 variables***

Wendling, Z., Emerson, J., de Sherbinin, A., Esty, D., & M.A. Levy, e. a. (2020). 2020 environmental performance index [Date accessed: 20 December 2021]. New Haven, CT: Yale Center for Environmental Law and Policy. https://epi.envirocenter.yale.edu/

The Environmental Performance Index provides a ranking that shines light on how each country manages environmental issues. The Environmental Performance Index (EPI) ranks how well countries perform on high-priority environmental issues in two broad policy areas: protection of human health from environmental harm and protection of ecosystems. Within these two policy objectives the EPI scores country performance in ten issue areas comprised of 32 indicators. Indicators in the EPI measure how close countries are to meeting internationally established targets or, in the absence of agreed-upon targets, how they compare to the range of observed countries.

Note: In many cases the EPI variables lack actual observations and rely on imputation. Please refer to the original documentation on more information about this. Also, some values (usually the value 0) are very unlikely, please use your judgement whether to treat these as the value 0 or as “Data missing”.

* **Environmental Health (0-100) (epi\_eh)**

The Environmental Health policy objective measures how well countries are protecting their populations from environmental health risks. It comprises 40% of the total EPI score and is made up of four issue categories: Air Quality (50%), Sanitation & Drinking Water (%40), Heavy Metals (%5), and Waste Management (%5).

* **Environmental Performance Index (0-100) (epi\_epi)**

The 2020 Environmental Performance Index (EPI) scores 180 countries on 32 performance indicators across ten issue categories covering environmental health and ecosystem vitality. The 2020 EPI represents a composite index. The EPI researchers begin by gathering data on 32 individual metrics of environmental performance. These metrics are aggregated into a hierarchy beginning with eleven issue categories: Air Quality, Sanitation & Drinking Water, Heavy Metals, Waste Management, Biodiversity and Habitat, Ecosystem Services, Fisheries, Climate Change, Pollution Emissions, Water Resources, and Agriculture.

These issue categories are then combined into two policy objectives, Environmental Health and Ecosystem Vitality, and then finally consolidated into the overall EPI. To allow for meaningful comparisons, the EPI researchers construct scores for each of the 32 indicators, placing them onto a common scale where 0 indicates worst performance and 100 indicates best performance. How far a country is from achieving international targets of sustainability determines its placement on this scale.

***Freedom House ‘Freedom in the World 2021’ variables***

Freedom House. (2021a). Freedom in the world 2021. https://freedomhouse.org/report/ freedom-world

Freedom in the World is an annual global report on political rights and civil liberties, composed of numerical ratings and descriptive texts for each country and a select group of territories. The 2020 edition covers developments in 195 countries and 15 territories from January 1, 2019, through December 31, 2019.

The report’s methodology is derived in large measure from the Universal Declaration of Human Rights, adopted by the UN General Assembly in 1948. Freedom in the World is based on the premise that these standards apply to all countries and territories, irrespective of geographical location, ethnic or religious composition, or level of economic development. Freedom in the World operates from the assumption that freedom for all people is best achieved in liberal democratic societies.

Freedom in the World assesses the real-world rights and freedoms enjoyed by individuals, rather than governments or government performance per se. Political rights and civil liberties can be affected by both state and nonstate actors, including insurgents and other armed groups. To read more about the methodology used by Freedom House, please visit https://freedomhouse.org/reports/freedomworld/freedom-world-research-methodology. These subcategories, drawn from the Universal Declaration of Human Rights, represent the fundamental components of freedom, which include an individual’s ability to:

- Vote freely in legitimate elections;

- Participate freely in the political process;

- Have representatives that are accountable to them;

- Exercise freedoms of expression and belief;

- Be able to freely assemble and associate;

- Have access to an established and equitable system of rule of law;

- Enjoy personal freedoms, including free movement, the right to hold private property, social freedoms, and equal access to economic opportunities.

* **Associational and Organizational Rights (fh\_aor)**

Associational and Organizational Rights - The variable evaluates the freedom of assembly, demonstrations and open public discussion; the freedom for nongovernmental organizations; and the freedom for trade unions, peasant organizations and other professional and private organizations. Countries are graded between 0 (worst) and 12 (best).

* **Civil Liberties (fh\_cl)**

Civil Liberties Rating - Civil liberties allow for the freedoms of expression and belief, associational and organizational rights, rule of law, and personal autonomy without interference from the state. The more specific list of rights considered vary over the years. Countries are graded between 1 (most free) and 7 (least free).

* **Electoral Process (fh\_ep)**

Electoral Process - The variable measures to what extent the national legislative representatives and the national chief authority are elected through free and fair elections. Countries are graded between 0 (worst) and 12 (best).

* **Freedom of Expression and Belief (fh\_feb)**

Freedom of Expression and Belief - The variable measures the freedom and independence of the media and other cultural expressions; the freedom of religious groups to practice their faith and express themselves; the academic freedom and freedom from extensive political indoctrination in the educational system; and the ability of the people to engage in private (political) discussions without fear of harassment or arrest by the authorities. Countries are graded between 0 (worst) and 16 (best).

* **Functioning of Government (fh\_fog)**

Functioning of Government - The variable examines in what extent the freely elected head of government and a national legislative representative determine the policies of the government; if the government is free from pervasive corruption; and if the government is accountable to the electorate between elections and operates with openness and transparency. Countries are graded between 0 (worst) and 12 (best).

* **Level of Democracy (Freedom House/Imputed Polity) (fh\_ipolity2)**

Scale ranges from 0-10 where 0 is least democratic and 10 most democratic. Average of Freedom House (fh\_pr and fh\_cl) is transformed to a scale 0-10 and Polity (p\_polity2) is transformed to a scale 0-10. These variables are averaged into fh\_polity2. The imputed version has imputed values for countries where data on Polity is missing by regressing Polity on the average Freedom House measure. Hadenius & Teorell (2005) show that this average index performs better both in terms of validity and reliability than its constituent parts.

* **Personal Autonomy and Individual Rights (fh\_pair)**

Personal Autonomy and Individual Rights - The variable evaluates the extent of state control over travel, choice of residence, employment or institution of higher education; the right of citizens to own property and establish private businesses; the private business’ freedom from unduly influence by government officials, security forces, political parties or organized crime; gender equality, freedom of choice of marriage partners and size of family; equality of opportunity and absence of economic exploitation. Countries are graded between 0 (worst) and 16 (best).

* **Political Rights (fh\_pr)**

Political Rights Rating - Political rights enable people to participate freely in the political process, including the right to vote freely for distinct alternatives in legitimate elections, compete for public office, join political parties and organizations, and elect representatives who have a decisive impact on public policies and are accountable to the electorate. The specific list of rights considered varies over the years. Countries are graded between 1 (most free) and 7 (least free).

* **Rule of Law (fh\_rol)**

Rule of Law - The variable measures the independence of the judiciary; the extent to which rule of law prevails in civil and criminal matters; the existence of direct civil control over the police; the protection from political terror, unjustified imprisonment, exile and torture; absence of war and insurgencies; and the extent to which laws, policies and practices guarantee equal treatment of various segments of the population. Countries are graded between 0 (worst) and 16 (best).

* **Freedom Status (fh\_status)**

Free

Partly Free

Not Free

**recoded as character variable**

***Freedom House ‘Freedom on the Net 2021’ variables***

Freedom House (2021) Freedom on the net 2020: The global drive to control big tech.  
https://freedomhouse.org/report/freedom-net/2021/global-drive-control-big-tech

Freedom on the Net is a Freedom House project consisting of cutting-edge analysis, fact-based advocacy, and on-the-ground capacity building. It features a ranked, country-by-country assessment of online freedom, a global overview of the latest developments, as well as in depth country reports. Freedom on the Net measures the subtle and not-so-subtle ways that governments and non-state actors around the world restrict our intrinsic rights online. Each country assessment includes a detailed narrative report and numerical score, based on methodology developed in consultation with international experts. This methodology includes three categories:

1. Obstacles to Access details infrastructural and economic barriers to access, legal and ownership control over internet service providers, and independence of regulatory bodies;

2. Limits on Content analyzes legal regulations on content, technical filtering and blocking of websites, self-censorship, the vibrancy/diversity of online news media, and the use of digital tools for civic mobilization;

3. Violations of User Rights tackles surveillance, privacy, and repercussions for online speech andactivities, such as imprisonment, extralegal harassment, or cyberattacks.

Freedom on the Net is a collaborative effort between a small team of Freedom House staff and an extensive network of local researchers and advisors in 65 countries.

* **Freedom on the Net: Score (fhn\_fotnsc)**

Freedom on the Net, Score: Measures the subtle and not-so-subtle ways that governments and nonstate actors around the world restrict our intrinsic rights online by looking at Obstacles to Access, Limits on Content and Violations of User Rights. The scores are based on a scale of 0 to 100 with 0 representing the best level of freedom on the net progress and 100 the worst.

* **Freedom on the Net: Status (fhn\_fotnst)**

Freedom on the Net, Status:

1. Free

2. Partly Free

3. Not Free

**recoded as character variable**

***Freedom House ‘Freedom of the Press 2017’ variables***

Freedom House. (2017). Freedom of the press 2017.  
https://freedomhouse.org/report/freedompress/freedom-press-2017

Freedom of the Press, an annual report on media independence around the world, was published between 1980 and 2017, and assessed the degree of print, broadcast, and digital media freedom in 199 countries and territories. It provided numerical scores and country narratives evaluating the legal environment for the media, political pressures that influenced reporting, and economic factors that affected access to news and information.

Note: The number in the variable names indicate what time period they refer to.

1: 1979-1987

2: 1988-1992

3: 1993-1995

4: 1996-2000

5: 2001-2016

* **Freedom of the Press, Score (2001-2016) (fhp\_score5)**

Freedom of the Press, Score (2001-2016): The press freedom index is computed by adding four component ratings: Laws and regulations, Political pressures and controls, Economic Influences and Repressive actions. The scale ranges from 0 (most free) to 100 (least free).

* **Freedom of the Press, Status (2001-2016) (fhp\_status5)**

Freedom of the Press, Status (1988-2016):

Free

Partly Free

Not Free

**recoded as character variable**

## ***Economic Freedom of the World Dataset (Fraser Institute) variables***

Gwartney, J., Lawson, R., Hall, J., Murphy, R., Callais, J. T., Fike, R., Geloso, V., Kahli, N. S., McMahon, F., & van Staden, M. (2021). Economic Freedom Dataset 2021, published in Economic Freedom of the World: 2021. Fraser Institute. https://www.fraserinstitute.org/economicfreedom/dataset

The index published in Economic Freedom of the World measures the degree to which the policies and institutions of countries are supportive of economic freedom. The cornerstones of economic freedom are personal choice, voluntary exchange, freedom to enter markets and compete, and security of the person and privately owned property. The EFW index now ranks 159 countries and territories. Data are available for approximately 100 nations and territories back to 1980, and many back to 1970. This data set makes it possible for scholars to analyze the impact of both cross-country differences in economic freedom and changes in that freedom across a time frame of three and a half decades.

For a consistent time-series for a particular country and/or longitudinal data for a panel of countries, the Fraser Institute previously developed and reported a chain-linked version of the index. One of the problems with the chain-linked index was that it was limited to just the 123 countries that were available in the chain-link’s “base year” of 2000. With this year’s report, the Institute is replacing the chain-linked index with the EFW Panel Dataset, which reports area and summary ratings for all countries for which we have a regular EFW index score in any given year.

The EFW Panel Dataset adjusts the regular EFW index in two ways. (1) From the most-recent year annually back to 2000, whenever possible, any missing data is estimated by autoregressively “backcasting” the data, meaning the actual values are used in later years to estimate the missing values for earlier years. For example, if a country is missing a data value for a particular component from 2000-2004, this method estimates the missing 2000-2004 values based on data available in 2005 and thereafter. This approach allows to have area and summary ratings for up to the entire 159 countries in the EFW index. (2) For 1970, 1975, 1980, 1985, 1990, and 1995, the index is chain-linked as described in previous editions. That is, using 2000 as the base year, changes in a country’s scores backward in time are based only on changes in components that were present in adjoining years. It should be noted that the EFW Panel Dataset contains area and summary ratings only for those years in which the country received a regular EFW index rating.

* **Freedom to Trade Internationally (current) (fi\_ftradeint)**

The index ranges from 0-10 where 0 corresponds to “increasing tax rate on international trade”, “slow import or export process”, “small trade sectors relative to the population and geographic size”, “exchange rate controls are present and a black-market exists”, and “restrictions on the freedom of citizens to engage in capital market exchange with foreigners” and 10 corresponds to “no specific taxes on international trade”, “swift import or export process”, “large trade sectors relative to the population and geographic size”, “no black-market exchange rate”, and “no restrictions on the freedom of citizens to engage in capital market exchange with foreigners”. The index consists of the following indicators: Taxes on international trade, Regulatory trade barriers, Actual size of trade sector compared to expected size, Difference between official exchange rate and black market rate, and International capital market controls.

* **Economic Freedom of the World Index (current) (fi\_index)**

The index is founded upon objective components that reflect the presence (or absence) of economic freedom. The index comprises 21 components designed to identify the consistency of institutional arrangements and policies with economic freedom in five major areas: size of government (fi\_sog), legal structure and security of property rights (fi\_legprop), access to sound money (fi\_sm), freedom to trade internationally (fi\_ftradeint), regulation of credit, labor and business (fi\_reg). The index ranges from 0-10 where 0 corresponds to “less economic freedom” and 10 to “more economic freedom”. This is the version of the index published at the current year of measurement, without taking methodological changes over time into account.

***Global Corruption Barometer variables***

International, T. (2017). Global corruption barometer 9th edition. https://www.transparency. org/research/gcb

The Global Corruption Barometer is the only worldwide public opinion survey about the views and experiences of corruption.

The Global Corruption Barometer asks for people’s views on corruption in their country generally, how the level of corruption has changed and in which institution’s the problem of corruption is most severe. It also provides a measure of people’s experience of bribery in the past year across six different services. The survey asks people how well or badly they think their government has done at stopping corruption.

For the 2015-2017 version all the values have been assigned the year 2016.

Note: Only valid answers are used when calculating the averages, “Unknown”, “Don’t know” etc. are excluded.

For the 2003-2013 version, the data for a country is marked as missing if there are less than 100 respondents per year, if there are 100 or more, the value corresponds to the mean of all answers.

* **Total bribery rate, total population (gcb\_br)**

Total bribery rates by country. Total Bribery rate, total population. In percentage.

* **Fight against corruption: Well (% respondents) (gcb\_fcwell)**

Percentage of respondents who answered ‘Well’ to the following question: How well or badly would you say the current government is handling the following matter: “fighting corruption in government”?

* **Feel personally obliged to report corruption: agree (% respondents) (gcb\_orcag)**

Percentage of respondents who answered ‘Agree’ to the following question: Would you agree or disagree with the following statement: If I would witness an act of corruption, I would feel personally obliged to report it.

* **Corruption Perception-Business Executives: Most (% respondents) (gcb\_pcbmost)**

Percentage of respondents who answered ‘Most or All’ to the following question about Business Executives: How many of the following people do you think are involved in corruption, or haven’t you heard enough about them to say?

* **Corruption Perception-Judges: Most (% respondents) (gcb\_pcjmost)**

Percentage of respondents who answered ‘Most or All’ to the following question about Judges and Magistrates: How many of the following people do you think are involved in corruption, or haven’t you heard enough about them to say?

* **Corruption Perception-Local Gov Council: Most (% respondents) (gcb\_pclgcmost)**

Percentage of respondents who answered ‘Most or All’ to the following question about Local government councilors: How many of the following people do you think are involved in corruption, or haven’t you heard enough about them to say?

* **Corruption Perception-Legislature: Most (% respondents) (gcb\_pclmost)**

Percentage of respondents who answered ‘Most or All’ to the following question about the Members of Parliament or Senators: How many of the following people do you think are involved in corruption, or haven’t you heard enough about them to say?

* **Corruption Perception Change: Increase (% respondents) (gcb\_pcori)**

Percentage of respondents who answered ‘increased’ to the following question: In your opinion, over the past year, has the level of corruption in this country increased, decreased, or stayed the same?

* **Corruption Perception-Head of State: Most (% respondents) (gcb\_pcpmost)**

Percentage of respondents who answered ‘Most or All’ to the following question about the President or Prime Minister and Officials in his office: How many of the following people do you think are involved in corruption, or haven’t you heard enough about them to say?

* **Corruption Perception-Police: Most (% respondents) (gcb\_pcpolmost)**

Percentage of respondents who answered ‘Most or All’ to the following question about the Police: How many of the following people do you think are involved in corruption, or haven’t you heard enough about them to say?

* **Corruption Perception-Religious Leaders: Most (% respondents) (gcb\_pcrmost)**

Percentage of respondents who answered ‘Most or All’ to the following question about Religious Leaders: How many of the following people do you think are involved in corruption, or haven’t you heard enough about them to say?

* **Corruption Perception-Tax officers: Most (% respondents) (gcb\_pctaxmost)**

Percentage of respondents who answered ‘Most or All’ to the following question about Tax Officials, like Ministry of Finance officials or Local Government tax collectors: How many of the following people do you think are involved in corruption, or haven’t you heard enough about them to say?

* **Can people fight against corruption: agree (% respondents) (gcb\_pfcaag)**

Percentage of respondents who answered ‘Agree’ to the following question: Would you agree or disagree with the following statement: Ordinary people can make a difference in the fight against corruption.

* **Is socially acceptable to report corruption: agree (% respondents) (gcb\_sarcag)**

Percentage of respondents who answered ‘Agree’ to the following question: Would you agree or disagree with the following statement: In our society it is generally acceptable for people to report a case of corruption they witness.

* **Would spend a whole day in court to give evidence: agree (% respondents) (gcb\_wsdag)**

Percentage of respondents who answered ‘Agree’ to the following question: Would you agree or disagree with the following statement: I would report a case of corruption even if I would have to spend a day in court to give evidence.

***Political Terror Scale variables***

Gibney, M., Cornett, L., Wood, R., Haschke, P., Arnon, D., Pisanò, A., Barrett, G., & Park, B. (2020). The political terror scale 1976-2019 [Data retrieved from the Political Terror Scale website]. http://www.politicalterrorscale.org

The PTS seeks to measure political terror. The authors define political terror as violations of basic human rights to the physical integrity of the person by agents of the state within the territorial boundaries of the state in question. It is important to note that political terror as defined by the PTS is not synonymous with terrorism or the use of violence and intimidation in pursuit of political aims. The concept is also distinguishable from terrorism as a tactic or from criminal acts.

The PTS measures levels of political violence and terror that a country experiences in a particular year based on a 5-level ”terror scale” originally developed by Freedom House. The data used in compiling this index comes from three different sources: the yearly country reports of Amnesty International, the U.S. State Department Country Reports on Human Rights Practices, and Human Rights Watch’s World Reports.

* **Political Terror Scale - Amnesty International (gd\_ptsa)**

Political Terror Scale Levels from the yearly country reports of Amnesty International:

1. Countries under a secure rule of law, people are not imprisoned for their view, and torture israre or exceptional. Political murders are extremely rare.

2. There is a limited amount of imprisonment for nonviolent political activity. However, few personsare affected, torture and beatings are exceptional. Political murder is rare.

3. There is extensive political imprisonment, or a recent history of such imprisonment. Execution orother political murders and brutality may be common. Unlimited detention, with or without a trial, for political views is accepted.

4. Civil and political rights violations have expanded to large numbers of the population. Murders, disappearances, and torture are a common part of life. In spite of its generality, on this level terror affects those who interest themselves in politics or ideas.

5. Terror has expanded to the whole population. The leaders of these societies place no limits on themeans or thoroughness with which they pursue personal or ideological goals.

* **Political Terror Scale - Human Rights Watch (gd\_ptsh)**

Political Terror Scale Levels from the Human Rights Watch’s World Reports:

1. Countries under a secure rule of law, people are not imprisoned for their view, and torture israre or exceptional. Political murders are extremely rare.

2. There is a limited amount of imprisonment for nonviolent political activity. However, few personsare affected, torture and beatings are exceptional. Political murder is rare.

3. There is extensive political imprisonment, or a recent history of such imprisonment. Execution orother political murders and brutality may be common. Unlimited detention, with or without a trial, for political views is accepted.

4. Civil and political rights violations have expanded to large numbers of the population. Murders, disappearances, and torture are a common part of life. In spite of its generality, on this level terror affects those who interest themselves in politics or ideas.

5. Terror has expanded to the whole population. The leaders of these societies place no limits on themeans or thoroughness with which they pursue personal or ideological goals.

* **Gender Inequality Index (0 to 1 higher disparity) (gii\_gii)**

United Nations Development Program. (2020). Gender inequality index. http://hdr.undp.org/ en/content/gender-inequality-index-gii

The Gender Inequality Index (GII) reflects gender-based disadvantage in three dimensions - reproductive health, empowerment and the labour market - for as many countries as data of reasonable quality allow. It shows the loss in potential human development due to inequality between female and male achievements in these dimensions. It ranges from 0, where women and men fare equally, to 1, where one gender fares as poorly as possible in all measured dimensions.

The GII is an inequality index. It measures gender inequalities in three important aspects of human development-reproductive health, measured by maternal mortality ratio and adolescent birth rates; empowerment, measured by proportion of parliamentary seats occupied by females and proportion of adult females and males aged 25 years and older with at least some secondary education; and economic status, expressed as labour market participation and measured by labour force participation rate of female and male populations aged 15 years and older. The GII is built on the same framework as the IHDI-to better expose differences in the distribution of achievements between women and men. It measures the human development costs of gender inequality. Thus the higher the GII value the more disparities between females and males and the more loss to human development.

***Democratic Electoral Systems Around the World 1946-2016 (Bormann and Golder) variables***

Bormann, N.-C., & Golder, M. (2013). Democratic electoral systems around the world, 1946– 2011. *Electoral Studies*, *32*, 360–369

See also: <http://mattgolder.com/elections>

The data focus on national-level (lower house) legislative and presidential elections in democratic regimes. A regime is classified as a democracy at the time of an election if (i) the chief executive is elected, (ii) the legislature is elected, (iii) there is more than one party competing in elections, and (iv) an alternation under identical electoral rules has taken place. A regime is classified as a dictatorship at the time of an election if any of these four conditions do not hold (Przeworski et al., 2000; Cheibub, Gandhi and Vreeland, 2010).

Note: The original values of -99 (the information is missing but should theoretically be available) and -88 (there is no single value for this particular variable) have been recoded to ”.” (missing).

Note: The original data source is prepared in country-election format and data for interim years without elections has been filled using the latest election data, if an election was held in the last five years before the reference year.

* **Effective Number of Electoral Parties (gol\_enep)**

Effective number of electoral parties.

* **Electoral System Type-3 classes (gol\_est)**

This is a categorical variable that takes on one of three values indicating the basic type of electoral system used in the elections.

Majoritarian

Proportional

Mixed

**recoded as character variable**

* **Electoral System Type-11 classes (gol\_est\_spec)**

This is a categorical variable that provides a more detailed indication of the type of electoral system used in the election.

1. Single-Member-District-Plurality (SMDP)

2. Two-Round System (TRS)

3. Alternative Vote (AV)

4. Borda Count (BC)

5. Block Vote (BV)

6. Party Block Vote (PBV)

7. Limited Vote (LV)

8. Single Nontransferable Vote (SNTV)

9. List Proportional Representation (List PR)

10. Single Transferable Vote (STV)

11. Mixed Dependent (or Mixed Member Proportional)

12. Mixed Independent (or Mixed Parallel)

* **Electoral Formula used in an Electoral Tier (gol\_pr)**

This is a categorical variable that indicates the precise electoral formula used in an electoral tier.

1. Single-Member-District-Plurality (SMDP)

2. Two Round Majority-Plurality

3. Two Round Qualified Majority

4. Two Round Majority Runoff

5. Alternative Vote (AV)

6. Borda Count (BC)

7. Modified Borda Count (mBC)

8. Block Vote (BV)

9. Party Block Vote (PBV)

10. Limited Vote (LV)

11. Single Nontransferable Vote (SNTV)

12. Hare quota

13. Hare quota with largest remainders

14. Hare quota with highest average remainders

15. Hagenbach-Bischoff quota

16. Hagenbach-Bischoff quota with largest remainders

17. Hagenbach-Bischoff quota with highest average remainders18. Droop quota

19. Droop quota with largest remainders

20. Droop quota with highest average remainders

21. Imperiali quota

22. Imperiali quota with largest remainders

23. Imperiali quota with highest average remainders

24. Reinforced Imperiali quota

25. D’Hondt

26. Sainte-Laguë

27. Modified Sainte-Laguë

28. Single Transferable Vote.

Note: Users can find a detailed description of the difference between types in the original codebook.

* **Global Peace Index (1-5 Less peaceful) (gpi\_gpi)**

Institute for Economics and Peace. (2021). Global peace index 2021: Measuring peace in a complex world [Accessed 09-11-2021].   
http://visionofhumanity.org/reports <http://visionofhumanity.org/indexes/global-peace-index/>

The Global Peace Index (GPI), which ranks 163 independent states and territories according to their level of peacefulness. Produced by the Institute for Economics and Peace (IEP), the GPI is the world’s leading measure of global peacefulness. The complete version of the GPI covers 99.7 per cent of the world’s population, using 23 qualitative and quantitative indicators from highly respected sources, and measures the state of peace using three thematic domains: the level of Societal Safety and Security; the extent of Ongoing Domestic and International Conflict; and the degree of Militarisation. Please refer to the original source to see all of the indicators.

The GPI (Scaled 1 to 5, 5 being least peaceful) measures a country’s level of Negative Peace using three domains of peacefulness. The first domain, Ongoing Domestic and International Conflict, investigates the extent to which countries are involved in internal and external conflicts, as well as their role and duration of involvement in conflicts.

The second domain evaluates the level of harmony or discord within a nation; ten indicators broadly assess what might be described as Societal Safety and Security. The assertion is that low crime rates, minimal terrorist activity and violent demonstrations, harmonious relations with neighbouring countries, a stable political scene and a small proportion of the population being internally displaced or made refugees can be equated with peacefulness.

Seven further indicators are related to a country’s Militarisation-reflecting the link between a country’s level of military build-up and access to weapons and its level of peacefulness, both domestically and internationally. Comparable data on military expenditure as a percentage of GDP and the number of armed service officers per head are gauged, as are financial contributions to UN peacekeeping missions.

* **Independent Judiciary from the Political Constraint Index (POLCON) Dataset (h\_j)**

Henisz, W. J. (2017). The Political Constraint Index (POLCON) Dataset 2017 release. [https: //mgmt.wharton.upenn.edu/profile/1327 https://mgmt.wharton.upenn.edu/profile/1327](https://mgmt.wharton.upenn.edu/profile/1327)

Dummy variable coded 1 if there is an independent judiciary (based on information from Polity’s Executive Constraints, p\_xconst) and - where available - on ICRG’s index of Law & Order.

## ***Authoritarian Regime Dataset variables***

Wahman, M., Teorell, J., & Hadenius, A. (2013). Authoritarian regime types revisited: Updated data in comparative perspective. Contemporary Politics, 19(1), 19–34

Hadenius, A., & Teorell, J. (2007). Pathways from authoritarianism. Journal of Democracy, 18(1), 143–157  
  
Teorell, J., & Wahman, M. (2018). Institutional stepping stones for democracy: How and why multipartyism enhances democratic change. Democratization, 25(1), 78–97

<https://sites.google.com/site/authoritarianregimedataset/data>

The Authoritarian Regimes Dataset version 6.0 covers the time period 1972-2014 and includes all 192 nations recognized as members of the UN except the four micro states of Europe (Andorra, Liechtenstein, Monaco and San Marino) and two micro states in the Pacific that are not members of the World Bank (Nauru and Tuvalu).

* **Colonial Origin (ht\_colonial)**

This is a tenfold classification of the former colonial ruler of the country. Following Bernard et al. (2004), we have excluded the British settler colonies (the US, Canada, Australia, Israel and New Zealand), and exclusively focused on “Western overseas” colonialism. This implies that only Western colonizers (e.g. excluding Japanese colonialism), and only countries located in the non-Western hemisphere “overseas” (e.g. excluding Ireland & Malta), have been coded. Each country that has been colonized since 1700 is coded. In cases of several colonial powers, the last one is counted, if it lasted for 10 years or longer. The categories are the following:

0. Never colonized by a Western overseas colonial power

1. Dutch

2. Spanish

3. Italian

4. US

5. British

6. French

7. Portuguese

8. Belgian

9. British-French

10. Australian

* **The Region of the Country (ht\_region)**

This is a tenfold politico-geographic classification of world regions, based on a mixture of two considerations: geographical proximity (with the partial exception of category 5 below) and demarcation by area specialists having contributed to a regional understanding of democratization. The categories are as follow:

1. Eastern Europe and post Soviet Union (including Central Asia)

2. Latin America (including Cuba, Haiti & the Dominican Republic)

3. North Africa & the Middle East (including Israel, Turkey & Cyprus)

4. Sub-Saharan Africa

5. Western Europe and North America (including Australia & New Zealand)

6. East Asia (including Japan & Mongolia)

7. South-East Asia

8. South Asia

9. The Pacific (excluding Australia & New Zealand)

10. The Caribbean (including Belize, Guyana & Suriname, but excluding Cuba, Haiti & the Dominican Republic)

* **Open Budget Index (ibp\_obi)**

International Budget Partnership. (2019). Open budget survey data [Accessed on 2021-1201]. <https://www.internationalbudget.org/data-evidence/>  
  
The Open Budget Survey is a comprehensive analysis and survey that evaluates whether governments give the public access to budget information and opportunities to participate in the budget process at the national level. The survey also assesses the capacity and independence of formal oversight institutions. The IBP works with civil society partners in 100 countries to collect the data for the survey.

These materials were developed by the International Budget Partnership. IBP has given us permission to use the materials solely for noncommercial, educational purposes.

The Open Budget Index (OBI) is a comparative measure of central government budget transparency. The OBI assigns countries covered by the Open Budget Survey a transparency score on a 100-point scale using 109 of the 140 questions on the Survey. These questions focus specifically on whether the government provides the public with timely access to comprehensive information contained in eight key budget documents in accordance with international good practice standards.

***Institute for Democracy and Electoral Assistance ‘Voter Turnout Database’ variables***

The International Institute for Democracy and Electoral Assistance. (2021). Voter turnout database. <https://www.idea.int/data-tools/data/voter-turnout>  
  
The Voter Turnout Database is the best resource for a wide array of statistics on voter turnout from around the world. It contains the most comprehensive global collection of voter turnout statistics from presidential and parliamentary elections since 1945. Always growing, the database also includes European Parliament elections, as presented by country using both the number of registered voters and voting age population as indicators, and in some cases the data includes statistics on spoilt ballot rate.

* **Parliamentary Election: Voter Turnout (ideavt\_legvt)**

Parliamentary Election: Voter Turnout

* **Presidential Election: Voter Turnout (ideavt\_presvt)**

Presidential Election: Voter Turnout

***Inter-Parliamentary Union variables***

Inter-Parliamentary Union. (2021). Parline database: Monthly ranking of women in national parliaments. https://data.ipu.org/women-ranking

The data has been compiled by the Inter-Parliamentary Union on the basis of information provided by National Parliaments. Comparative data on the world and regional averages as well as data concerning the two regional parliamentary assemblies elected by direct suffrage can be found on separate pages.

Note: The figures for South Africa on the distribution of seats in the Upper House do not include the 36 special rotating delegates appointed on an ad hoc basis, and all percentages given are therefore calculated on the basis of the 54 permanent seats. Included in the QoG Dataset are the data for January each year.

* **Share of Women (Lower and Single Houses) (ipu\_l\_sw)**

Share of Women (Lower and Single Houses).

* **Share of Women (Upper House) (ipu\_u\_sw)**

Share of Women (Upper House).

***COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University variables***

Ensheng, D., Du, H., & Gardner, L. (2020). An interactive web-based dashboard to track covid19 in real time. The Lancet, 20(5), 533–534. <https://doi.org/10.1016/S1473-3099(20)30120-1>

* **Number of COVID-19 cases reported (jht\_ccc)**

This is the number of reported cases of COVID-19 during the year.

* **Number of COVID-19 deaths reported (jht\_ccd)**

This is the number of reported deaths due to COVID-19 during the year.

***Data used in the article "The Quality of Government" by La Porta, López-de-Silanes, Shleifer and Vishny***

Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999). The quality of government. Journal of Law, Economics, and Organization, 15(1), 222–279  
  
<http://faculty.tuck.dartmouth.edu/rafael-laporta/research-publications/>

* **Latitude (lp\_lat\_abst)**

Latitude: The absolute value of the latitude of the capital city, divided by 90 (to take values between 0 and 1).

* **Legal Origin (lp\_legor)**

Legal origin: Identifies the legal origin of the Company Law or Commercial code of each country. There are five possible origins:

1. English Common Law

2. French Commercial Code

3. Socialist/Communist Laws

4. German Commercial Code

5. Scandinavian Commercial Code

***Maddison Project Database 2020 variables***

Bolt, J., & van Zanden, J. L. (2020). Maddison project database, version 2020 [Maddison style estimates of the evolution of the world economy: A new 2020 update]. https://www.rug.nl/ ggdc/historicaldevelopment/maddison/research

https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2020 (Data downloaded: 2021-10-13)

The Maddison Project Database provides information on comparative economic growth and income levels over the very long run. The 2020 version of this database covers 169 countries and the period up to 2018.

* **Real GDP per Capita (mad\_gdppc)**

Real GDP per capita in 2011 US dollars, multiple benchmarks.

* **Real GDP per Capita (year 1900) (mad\_gdppc1900)**

Real GDP per capita in 2011 US dollars for year 1900, multiple benchmarks.

***Polity V Annual Time-Series, 1800-2018 variables***

Marshall, M. G., & Gurr, T. R. (2020). Polity V project, political regime characteristics and transitions, 1800-2018 <http://www.systemicpeace.org/inscrdata.html>

The Polity project is one of the most widely used data resource for studying regime change and the effects of regime authority. The Polity5 dataset covers all major, independent states in the global system over the period 1800-2018 (i.e., states with a total population of 500,000 or more in the most recent year (167 countries in 2018). Please note that the codes -99, -88, -77 and -66 has been recoded to missing.

* **Regime Durability (p\_durable)**

Regime Durability: The number of years since the most recent regime change (defined by a three point change in the p\_polity score over a period of three years or less) or the end of a transition period defined by the lack of stable political institutions (denoted by a standardized authority score). In calculating the p\_durable value, the first year during which a new (post-change) polity is established is coded as the baseline “year zero” (value = 0) and each subsequent year adds one to the value of the p\_durable variable consecutively until a new regime change or transition period occurs.

* **Revised Combined Polity Score (p\_polity2)**

Revised Combined Polity Score: The polity score is computed by subtracting the p\_autoc score from the p\_democ score; the resulting unified polity scale ranges from +10 (strongly democratic) to -10 (strongly autocratic). The revised version of the polity variable is designed to facilitate the use of the polity regime measure in time-series analyses. It modifies the combined annual polity score by applying a simple treatment, or “fix” to convert instances of “standardized authority scores” (i.e., -66, -77, and -88) to conventional polity scores (i.e., within the range, -10 to +10). The values have been converted according to the following rule set:

(-66) Cases of foreign “interruption” are treated as “system missing.”

(-77) Cases of “interregnum”, or anarchy, are converted to a “neutral” Polity score of “0.” (-88) Cases of “transition” are prorated across the span of the transition.

For example, country X has a p\_polity score of -7 in 1957, followed by three years of -88 and, finally, a score of +5 in 1961. The change (+12) would be prorated over the intervening three years at a rate of per year, so that the converted scores would be as follow: 1957 -7; 1958 -4; 1959 -1; 1960 +2; and 1961 +5.

***Electoral Integrity Project (Version 7.0) variables***

Norris, P., & Groemping, M. (2019). Perceptions of Electoral Integrity, (PEI-7.0) [V2, UNF:6:2wnukYraCZzg+gojPE[fileUNF]]. <https://doi.org/10.7910/DVN/EWYTZ7>

<https://dataverse.harvard.edu/dataverse/PEI>

This dataset by the Electoral Integrity Project evaluates the quality of elections held around the world. Based on a rolling survey collecting the views of election experts, this research provides independent and reliable evidence to compare whether countries meet international standards of electoral integrity. PEI-7.0 cumulative release covers 336 national parliamentary and presidential contests held worldwide in 166 countries from 1 July 2012 to 31 December 2018.

* **Electoral Integrity Rating (pei\_eir)**

Overall how would you rate the integrity of this election on a scale from 1 (very poor) to 10 (very good)?

* **Perception of Electoral Integrity Index (pei\_peii)**

The PEI index is designed to provide an overall summary evaluation of expert perceptions that an election meets international standards and global norms. It is generated at the individual level using experts’ answers to the 49 substantive variables below. Therefore, an Index score is missing if an expert does not answer a question. The 49 scores are summed and then standardized to a 100 point scale.

***Penn World Table variables***

Feenstra, R. C., Inklaar, R., & Timmer, M. P. (2015). The next generation of the penn world table. The American Economic Review, 105(10), 3150–3182. www.ggdc.net/pwt

PWT version 10.0 is a database with information on relative levels of income, output, input and productivity, covering 183 countries between 1950 and 2019.

* **Human capital index (pwt\_hci)**

Human capital index, based on years of schooling (Barro & Lee, 2010) and assumed returns, based on Mincer equation estimates around the world.

* **Population (in millions) (pwt\_pop)**

Population (in millions).

* **Corruption Perceptions Index (ti\_cpi) from Transparency International**

Transparency International. (2021). Corruption perception index 2020 [Licensed under CCBY-ND 4.0]. http://www.transparency.org/cpi

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

The CPI focuses on corruption in the public sector and defines corruption as the abuse of public office for private gain. The surveys used in compiling the CPI tend to ask questions in line with the misuse of public power for private benefit, with a focus, for example, on bribe-taking by public officials in public procurement. The sources do not distinguish between administrative and political corruption. The CPI Score relates to perceptions of the degree of corruption as seen by business people, risk analysts and the general public and ranges between 100 (highly clean) and 0 (highly corrupt).

Note: The time-series information in the CPI scores can only be used if interpreted with caution. Year-to-year shifts in a country’s score can result not only from a changing perception of a country’s performance but also from a changing sample and methodology. That is, with differing respondents and slightly differing methodologies, a change in a country’s score may also relate to the fact that different viewpoints have been collected and different questions have been asked. Moreover, each country’s CPI score is composed as a 3-year moving average, implying that if changes occur they only gradually affect a country’s score. For a more detailed discussion of comparability over time in the CPI, see Lambsdorff 2005.

***World Inequality Database variables***

Alvaredo, F., Atkinson, A. B., Piketty, T., & Saez, E. (2020b). World inequality report 2020. <http://wid.world/>  
Alvaredo, F., Atkinson, A. B., Piketty, T., & Saez, E. (2020). World inequality database. <http://wid.world/data>

Built to accompany the publishing of the two books Top Incomes: a Global Perspective (2010, Oxford University Press) and Top Incomes over the XX Century (2007, Oxford University Press), the World Top Incomes Database offers the most comprehensive set of historical series on income inequality available so far. In the 2010 book, the authors analyze the long term evolution of top incomes in 12 new countries (after the 10 initial countries analyzed in the 2007 book).

* **Top 10% income share (top\_top10\_income\_share)**

Income share of the top 10% of the population. This refers to the share of pre-tax national income among equal-split adults for the top 10% in each country-year.

The pre-tax national income is the sum of all pre-tax personal income flows accruing to the owners of the production factors, labor and capital, before taking into account the operation of the tax/transfer system, but after taking into account the operation of pension system.

The central difference between personal factor income and pre-tax income is the treatment of pensions, which are counted on a contribution basis by factor income and on a distribution basis by pre-tax income. The population is comprised of individuals over age 20. The base unit is the individual (rather than the household) but resources are split equally within couples.

* **Top 1% income share (top\_top1\_income\_share)**

Income share of the top 1% of the population. This refers to the share of pre-tax national income among equal-split adults for the top 1% in each country-year.

The pre-tax national income is the sum of all pre-tax personal income flows accruing to the owners of the production factors, labor and capital, before taking into account the operation of the tax/transfer system, but after taking into account the operation of pension system.

The central difference between personal factor income and pre-tax income is the treatment of pensions, which are counted on a contribution basis by factor income and on a distribution basis by pre-tax income. The population is comprised of individuals over age 20. The base unit is the individual (rather than the household) but resources are split equally within couples.

* **Human Development Index (undp\_hdi)**

United Nations Development Program. (2020b). Human development report 2020. http:// hdr.undp.org/en/2020-report

The Human Development Report (HDR) is an annual report published by the Human Development Report Office of the United Nations Development Programme (UNDP).

The HDI was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. The HDI can also be used to question national policy choices, asking how two countries with the same level of GNI per capita can end up with different human development outcomes. These contrasts can stimulate debate about government policy priorities.

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

The health dimension is assessed by life expectancy at birth, the education dimension is measured by mean of years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income per capita. The HDI uses the logarithm of income, to reflect the diminishing importance of income with increasing GNI. The scores for the three HDI dimension indices are then aggregated into a composite index using geometric mean. Refer to Technical notes for more details.

The HDI simplifies and captures only part of what human development entails. It does not reflect on inequalities, poverty, human security, empowerment, etc. The HDRO offers the other composite indices as broader proxy on some of the key issues of human development, inequality, gender disparity and human poverty.

* **Vanhanen’s Index of Democratization (van\_index)**

Vanhanen, T. (2019). Measures of democracy 1810-2018 [dataset] [Version 8.0]. http://urn. fi/urn:nbn:fi:fsd:T-FSD1289

Finnish Social Science Data Archive [producer and distributor]. (2019). Measures of democracy 1810-2018 [codebook] [Version 8.0]

The Measures of Democracy 1810-2018 data contain three different variables, created by Tatu Vanhanen. The variables in question are political competition, political participation and the index of democratization. The index of democratization is formed by multiplying the competition and the participation variables and then dividing the outcome by 100.

***Varieties of Democracy Dataset version 11.1 variables***

Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S. I., Teorell, J., Alizada, N., Altman, D., Bernhard, M., Cornell, A., Fish, M. S., Gastaldi, L., Gjerløw, H., Glynn, A., Hicken, A., Hindle, G., Ilchenko, N., Krusell, J., Luhrmann, A., Maerz, S. F., ... Ziblatt, D. (2021). V-dem [country-year/country-date] dataset v11.1. https://doi.org/10.23696/vdemds21

Pemstein, D., Marquardt, K. L., Tzelgov, E., Wang, Y.-t., Medzihorsky, J., Krusell, J., Miri, F., & von Römer, J. (2021). The V-Dem measurement model: Latent variable analysis for crossnational and cross-temporal expert-coded data

Varieties of Democracy (V-Dem) is a new approach to conceptualizing and measuring democracy. It provides a multidimensional and disaggregated dataset that reflects the complexity of the concept of democracy as a system of rule that goes beyond the simple presence of elections. The V-Dem project distinguishes between five high-level principles of democracy: electoral, liberal, participatory, deliberative, and egalitarian, and collects data to measure these principles.

* **Political corruption index (vdem\_corr)**

Political corruption. Question: How pervasive is political corruption?

Clarification: The directionality of the V-Dem corruption index runs from less corrupt to more corrupt (unlike the other V-Dem variables that generally run from less democratic to more democratic situation). The corruption index includes measures of six distinct types of corruption that cover both different areas and levels of the polity realm, distinguishing between executive, legislative and judicial corruption. Within the executive realm, the measures also distinguish between corruption mostly pertaining to bribery and corruption due to embezzlement. Finally, they differentiate between corruption in the highest echelons of the executive (at the level of the rulers/cabinet) on the one hand, and in the public sector at large on the other. The measures thus tap into several distinguished types of corruption: both ’petty’ and ’grand’; both bribery and theft; both corruption aimed and influencing law making and that affecting implementation. Aggregation: The index is arrived at by taking the average of (a) public sector corruption index; (b) executive corruption index; (c) the indicator for legislative corruption; and (d) the indicator for judicial corruption. In other words, these four different government spheres are weighted equally in the resulting index. V-Dem replaces missing values for countries with no legislature by only taking the average of (a), (b) and (d).

* **Deliberative democracy index (vdem\_delibdem)**

Deliberative democracy index. Question: To what extent is the ideal of deliberative democracy achieved?

Clarification: The deliberative principle of democracy focuses on the process by which decisions are reached in a polity. A deliberative process is one in which public reasoning focused on the common good motivates political decisions - as contrasted with emotional appeals, solidary attachments, parochial interests, or coercion. According to this principle, democracy requires more than an aggregation of existing preferences. There should also be respectful dialogue at all levels - from preference formation to final decision - among informed and competent participants who are open to persuasion. To make it a measure of not only the deliberative principle but also of democracy, the index also takes the level of electoral democracy into account.

* **Egalitarian democracy index (vdem\_egaldem)**

Egalitarian democracy index. Question: To what extent is the ideal of egalitarian democracy achieved?

Clarifications: The egalitarian principle of democracy holds that material and immaterial inequalities inhibit the exercise of formal rights and liberties, and diminish the ability of citizens from all social groups to participate. Egalitarian democracy is achieved when 1) rights and freedoms of individuals are protected equally across all social groups; and 2) resources are distributed equally across all social groups. The distribution of resources must be sufficient to ensure that citizens’ basic needs are met in a way that enables their meaningful participation. Additionally, an equal distribution of resources ensures the potential for greater equality in the distribution of power. To make it a measure of egalitarian democracy, the index also takes the level of electoral democracy into account.

* **Women political empowerment index (vdem\_gender)**

Women political empowerment index. Question: How politically empowered are women?

Clarifications: Women’s political empowerment is defined as a process of increasing capacity for women, leading to greater choice, agency, and participation in societal decision-making. It is understood to incorporate three equally-weighted dimensions: fundamental civil liberties, women’s open discussion of political issues and participation in civil society organizations, and the descriptive representation of women in formal political positions. Aggregation: The index is formed by taking the average of women’s civil liberties index, women’s civil society participation index, and women’s political participation index.

* **Liberal democracy index (vdem\_libdem)**

Liberal democracy index. Question: To what extent is the ideal of liberal democracy achieved? Clarifications: The liberal principle of democracy emphasizes the importance of protecting individual and minority rights against the tyranny of the state and the tyranny of the majority. The liberal model takes a ”negative” view of political power insofar as it judges the quality of democracy by the limits placed on government. This is achieved by constitutionally protected civil liberties, strong rule of law, an independent judiciary, and effective checks and balances that, together, limit the exercise of executive power. To make this a measure of liberal democracy, the index also takes the level of electoral democracy into account.

* **Media corrupt (vdem\_mecorrpt)**

Media corrupt. Question: Do journalists, publishers, or broadcasters accept payments in exchange for altering news coverage? V-Dem uses a specifically designed measurement model to provide countryyear point estimates, aggregated from multiple codings submitted by country experts by taking disagreement and measurement error into account. In this version of the variable, used in the QoG dataset, V-Dem has linearly translated the measurement model point estimates back to the original ordinal scale of each variable as an interval measure.

* **Participatory democracy index (vdem\_partipdem)**

Participatory democracy index. Question: To what extent is the ideal of participatory democracy achieved?

Clarifications: The participatory principle of democracy emphasizes active participation by citizens in all political processes, electoral and non-electoral. It is motivated by uneasiness about a bedrock practice of electoral democracy: delegating authority to representatives. Thus, direct rule by citizens is preferred, wherever practicable. This model of democracy thus takes suffrage for granted, emphasizing engagement in civil society organizations, direct democracy, and subnational elected bodies. To make it a measure of participatory democracy, the index also takes the level of electoral democracy into account.

* **Electoral democracy index (vdem\_polyarchy)**

Electoral democracy index. Question: To what extent is the ideal of electoral democracy in its fullest sense achieved?

Clarifications: The electoral principle of democracy seeks to embody the core value of making rulers responsive to citizens, achieved through electoral competition for the electorate’s approval under circumstances when suffrage is extensive; political and civil society organizations can operate freely; elections are clean and not marred by fraud or systematic irregularities; and elections affect the composition of the chief executive of the country. In between elections, there is freedom of expression and an independent media capable of presenting alternative views on matters of political relevance. In the V-Dem conceptual scheme, electoral democracy is understood as an essential element of any other conception of (representative) democracy - liberal, participatory, deliberative, egalitarian, or some other. Aggregation: The index is formed by taking the average of, on the one hand, the sum of the indices measuring freedom of association (thick), suffrage, clean elections, elected executive (de jure) and freedom of expression; and, on the other, the five-way interaction between those indices. This is half way between a straight average and strict multiplication, meaning the average of the two. It is thus a compromise between the two most well known aggregation formulas in the literature, both allowing “compensation” in one sub-component for lack of polyarchy in the others, but also punishing countries not strong in one sub-component according to the “weakest link” argument. The aggregation is done at the level of Dahl’s sub-components (with the one exception of the non-electoral component).

* **Global Terrorism Index (voh\_gti)**

Institute for Economics and Peace. (2020). Global terrorism index 2020: Measuring the impact of terrorism [Accessed 11-11-2021]. http://www.visionofhumanity.org/#/page/indexes/terrorismindex

The Global Terrorism Index (GTI) is a comprehensive study which accounts for the direct and indirect impact of terrorism in 162 countries in terms of its effect on lives lost, injuries, property damage and the psychological after-effects of terrorism. This study covers 99.6 per cent of the world’s population. It aggregates the most authoritative data source on terrorism today, the Global Terrorism Database (GTD) collated by the National Consortium for the Study of Terrorism and Responses to Terrorism (START) into a composite score in order to provide an ordinal ranking of nations on the negative impact of terrorism. The GTD is unique in that it consists of systematically and comprehensively coded data on domestic as well as international terrorist incidents and now includes more than 140,000 cases.

***World Bank Worldwide Governance Indicators (2010)***

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). The worldwide governance indicators: A summary of methodology, data and analytical issues. World Bank Policy Research Working Paper, 5430

Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.

The Worldwide Governance Indicators report on six broad dimensions of governance for over 200 countries and territories over the period 1996-2020:

- Voice and Accountability

- Political Stability and Absence of Violence/Terrorism

- Government Effectiveness

- Regulatory Quality

- Rule of Law

- Control of Corruption

The Worldwide Governance Indicators (WGI) are a research dataset summarizing the views on the quality of governance provided by a large number of enterprise, citizen and expert survey respondents in industrial and developing countries. These data are gathered from a number of survey institutes, think tanks, non-governmental organizations, international organizations, and private sector firms. The WGI do not reflect the official views of the Natural Resource Governance Institute, the Brookings Institutions, the World Bank, its Executive Directors, or the countries they represent. The WGI are not used by the World Bank Group to allocate resources.

* **Control of Corruption, Estimate (wbgi\_cce)**

Control of Corruption - Estimate: “Control of Corruption” measures perceptions of corruption, conventionally defined as the exercise of public power for private gain. The particular aspect of corruption measured by the various sources differs somewhat, ranging from the frequency of “additional payments to get things done”, to the effects of corruption on the business environment, to measuring “grand corruption” in the political arena or in the tendency of elite forms to engage in “state capture”.

* **Government Effectiveness, Estimate (wbgi\_gee)**

Government Effectiveness - Estimate: “Government Effectiveness” combines into a single grouping responses on the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government’s commitment to policies. The main focus of this index is on “inputs” required for the government to be able to produce and implement good policies and deliver public goods.

* **Political Stability and Absence of Violence/Terrorism, Estimate (wbgi\_pve)**

Political Stability and Absence of Violence- Estimate: “Political Stability and Absence of Violence/Terrorism” measures perceptions of the likelihood of political instability and/or politicallymotivated violence, including terrorism.

* **Rule of Law, Estimate (wbgi\_rle)**

Rule of Law - Estimate: “Rule of Law” includes several indicators which measure the extent to which agents have confidence in and abide by the rules of society. These include perceptions of the incidence of crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts. Together, these indicators measure the success of a society in developing an environment in which fair and predictable rules form the basis for economic and social interactions and the extent to which property rights are protected.

***World Bank World Development Indicators***

World Bank. (2021). World development indicators. https://databank.worldbank.org/source/ world-development-indicators

The primary World Bank collection of development indicators, compiled from officially-recognized international sources.

This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by The World Bank.

* **Access to electricity (% of population) (wdi\_acel)**

Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys and international sources.

* **Access to electricity, rural (% of rural population) (wdi\_acelr)**

Access to electricity, rural is the percentage of rural population with access to electricity.

* **Access to electricity, urban (% of urban population) (wdi\_acelu)**

Access to electricity, urban is the percentage of urban population with access to electricity.

* **Armed forces personnel (% of total labor force) (wdi\_afp)**

Armed forces personnel are active duty military personnel, including paramilitary forces if the training, organization, equipment, and control suggest they may be used to support or replace regular military forces. Labor force comprises all people who meet the International Labour Organization’s definition of the economically active population.

* **Age dependency ratio (% of working-age pop.) (wdi\_agedr)**

Age dependency ratio is the ratio of dependents–people younger than 15 or older than 64–to the working-age population–those ages 15-64. Data are shown as the proportion of dependents per 100 working-age population.

* **Alternative and nuclear energy (% of total energy use) (wdi\_ane)**

Clean energy is noncarbohydrate energy that does not produce carbon dioxide when generated. It includes hydropower and nuclear, geothermal, and solar power, among others.

* **Arable land (% of land area) (wdi\_araland)**

Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

* **Land area (sq. km) (wdi\_area)**

Land area is a country’s total area, excluding area under inland water bodies, national claims to continental shelf, and exclusive economic zones. In most cases the definition of inland water bodies includes major rivers and lakes.

* **Arms exports (SIPRI trend indicator values) (wdi\_armexp)**

Exports - Arms transfers cover the supply of military weapons through sales, aid, gifts, and those made through manufacturing licenses. Data cover major conventional weapons such as aircraft, armored vehicles, artillery, radar systems, missiles, and ships designed for military use. Excluded are transfers of other military equipment such as small arms and light weapons, trucks, small artillery, ammunition, support equipment, technology transfers, and other services.

* **Arms imports (SIPRI trend indicator values) (wdi\_armimp)**

Imports - Arms transfers cover the supply of military weapons through sales, aid, gifts, and those made through manufacturing licenses. Data cover major conventional weapons such as aircraft, armored vehicles, artillery, radar systems, missiles, and ships designed for military use. Excluded are transfers of other military equipment such as small arms and light weapons, trucks, small artillery, ammunition, support equipment, technology transfers, and other services.

* **Birth rate, crude (per 1,000 people) (wdi\_birth)**

Crude birth rate indicates the number of live births occurring during the year, per 1,000 population estimated at midyear. Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the rate of population change in the absence of migration.

* **Bribery incidence (% of firms experiencing at least one bribe request) (wdi\_bribfirm)**

Bribery incidence is the percentage of firms experiencing at least one bribe payment request across six public transactions dealing with utilities access, permits, licenses, and taxes.

* **Fixed broadband subscriptions (per 100 people) (wdi\_broadb)**

Fixed broadband subscriptions refers to fixed subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, 256 kbit/s. This includes cable modem, DSL, fiber-to-the-home/building, other fixed (wired)-broadband subscriptions, satellite broadband and terrestrial fixed wireless broadband. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks. It should include fixed WiMAX and any other fixed wireless technologies. It includes both residential subscriptions and subscriptions for organizations.

* **New business density (new registrations per 1,000 people ages 15-64) (wdi\_busden)**

New businesses registered are the number of new limited liability corporations registered in the calendar year.

* **CO2 emissions (metric tons per capita) (wdi\_co2)**

Carbon dioxide emissions are those stemming from the burning of fossil fuels and the manufacture of cement. They include carbon dioxide produced during consumption of solid, liquid, and gas fuels and gas flaring.

* **Death rate, crude (per 1,000 people) (wdi\_death)**

Crude death rate indicates the number of deaths occurring during the year, per 1,000 population estimated at midyear. Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the rate of population change in the absence of migration.

* **Central government debt, total (% of GDP) (wdi\_debt)**

Debt is the entire stock of direct government fixed-term contractual obligations to others outstanding on a particular date. It includes domestic and foreign liabilities such as currency and money deposits, securities other than shares, and loans. It is the gross amount of government liabilities reduced by the amount of equity and financial derivatives held by the government. Because debt is a stock rather than a flow, it is measured as of a given date, usually the last day of the fiscal year.

* **School enrollment, primary, private (% of total primary) (wdi\_eduprp)**

Percentage of enrollment in primary education in private institutions (%).

* **School enrollment, secondary, private (% of total secondary) (wdi\_eduprs)**

Percentage of enrollment in secondary education in private institutions (%).

* **Renewable electricity output (% of total electricity output) (wdi\_elerenew)**

Renewable electricity is the share of electrity generated by renewable power plants in total electricity generated by all types of plants.

* **Electricity production from coal sources (% of total) (wdi\_elprodcoal)**

Sources of electricity refer to the inputs used to generate electricity. Coal refers to all coal and brown coal, both primary (including hard coal and lignite-brown coal) and derived fuels (including patent fuel, coke oven coke, gas coke, coke oven gas, and blast furnace gas). Peat is also included in this category.

* **Electricity production from natural gas sources (% of total) (wdi\_elprodgas)**

Sources of electricity refer to the inputs used to generate electricity. Gas refers to natural gas but excludes natural gas liquids.

* **Electricity production from hydroelectric sources (% of total) (wdi\_elprodhyd)**

Sources of electricity refer to the inputs used to generate electricity. Hydropower refers to electricity produced by hydroelectric power plants.

* **Electricity production from nuclear sources (% of total) (wdi\_elprodnuc)**

Sources of electricity refer to the inputs used to generate electricity. Nuclear power refers to electricity produced by nuclear power plants.

* **Electricity production from oil sources (% of total) (wdi\_elprodoil)**

Sources of electricity refer to the inputs used to generate electricity.Oil refers to crude oil and petroleum products.

* **Employers, total (% of total employment) (modeled ILO) (wdi\_emp)**

Employers are those workers who, working on their own account or with one or a few partners, hold the type of jobs defined as a “self-employment jobs” i.e. jobs where the remuneration is directly dependent upon the profits derived from the goods and services produced, and, in this capacity, have engaged, on a continuous basis, one or more persons to work for them as employee(s). Modeled ILO estimate.

* **Employment in agriculture (% of total employment) (modeled ILO) (wdi\_empagr)**

Employment in agriculture as a percentage of all employment. Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The agriculture sector consists of activities in agriculture, hunting, forestry and fishing, in accordance with division 1 (ISIC 2) or categories A-B (ISIC 3) or category A (ISIC 4). Modeled ILO estimate.

* **Employment in agriculture, female (% female employment) (modeled ILO) (wdi\_empagrf)**

Female employment in agriculture as a percentage of all female employment. Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The agriculture sector consists of activities in agriculture, hunting, forestry and fishing, in accordance with division 1 (ISIC 2) or categories A-B (ISIC 3) or category A (ISIC 4). Modeled ILO estimate.

* **Employment in agriculture, male (% male employment) (modeled ILO) (wdi\_empagrm)**

Male employment in agriculture as a percentage of all male employment. Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The agriculture sector consists of activities in agriculture, hunting, forestry and fishing, in accordance with division 1 (ISIC 2) or categories A-B (ISIC 3) or category A (ISIC 4). Modeled ILO estimate.

* **Employment in industry (% of total employment) (modeled ILO) (wdi\_empind)**

Employment in industry as a percentage of all employment. Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The industry sector consists of mining and quarrying, manufacturing, construction, and public utilities (electricity, gas, and water), in accordance with divisions 2-5 (ISIC 2) or categories C-F (ISIC 3) or categories B-F (ISIC 4). Modeled ILO estimate.

* **Employment in industry, female (% female employment) (modeled ILO) (wdi\_empindf)**

Female employment in industry as a percentage of all female employment. Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The industry sector consists of mining and quarrying, manufacturing, construction, and public utilities (electricity, gas, and water), in accordance with divisions 2-5 (ISIC 2) or categories C-F (ISIC 3) or categories B-F (ISIC 4). Modeled ILO estimate.

* **Employment in industry, male (% of male employment) (modeled ILO) (wdi\_empindm)**

Male employment in industry as a percentage of all male employment. Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The industry sector consists of mining and quarrying, manufacturing, construction, and public utilities (electricity, gas, and water), in accordance with divisions 2-5 (ISIC 2) or categories C-F (ISIC 3) or categories B-F (ISIC 4). Modeled ILO estimate.

* **Employment in services (% of total employment) (modeled ILO) (wdi\_empser)**

Total employment in services as percentage of total employment. Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The services sector consists of wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services, in accordance with divisions 6-9 (ISIC 2) or categories G-Q (ISIC 3) or categories G-U (ISIC 4). Modeled ILO estimate.

* **Employment in services, female (% of female employment) (modeled ILO) (wdi\_empserf)**

Female employment in services (% of female employment). Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The services sector consists of wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services, in accordance with divisions 6-9 (ISIC 2) or categories G-Q (ISIC 3) or categories G-U (ISIC 4). Modeled ILO estimate.

* **Employment in services, male (% of male employment) (modeled ILO) (wdi\_empserm)**

Male employment in services (% of male employment). Employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The services sector consists of wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services, in accordance with divisions 6-9 (ISIC 2) or categories G-Q (ISIC 3) or categories G-U (ISIC 4). Modeled ILO estimate.

* **Energy imports, net (% of energy use) (wdi\_eneimp)**

Net energy imports are estimated as energy use less production, both measured in oil equivalents. A negative value indicates that the country is a net exporter. Energy use refers to use of primary energy before transformation to other end-use fuels, which is equal to indigenous production plus imports and stock changes, minus exports and fuels supplied to ships and aircraft engaged in international transport.

* **Ease of doing business index (1=most business-friendly regulations) (wdi\_eodb)**

Ease of doing business ranks economies from 1 to 189, with first place being the best. A high ranking (a low numerical rank) means that the regulatory environment is conducive to business operation. The index averages the country’s percentile rankings on 10 topics covered in the World Bank’s Doing Business. The ranking on each topic is the simple average of the percentile rankings on its component indicators.

* **Government expenditure on education, total (% of GDP) (wdi\_expedu)**

General government expenditure on education (current, capital, and transfers) is expressed as a percentage of GDP. It includes expenditure funded by transfers from international sources to government. General government usually refers to local, regional and central governments.

Note: The value for Tuvalu in 1997 has been recoded to missing due to an extreme and very unlikely value.

* **Government expenditure on education, total (% of government expenditure) (wdi\_expeduge)**

Total general (local, regional and central) government expenditure on education (current, capital, and transfers), expressed as a percentage of total general government expenditure on all sectors (including health, education, social services, etc.). It includes expenditure funded by transfers from international sources to government. Public education expenditure includes spending by local/municipal, regional and national governments (excluding household contributions) on educational institutions (both public and private), education administration, and subsidies for private entities (students/households and other privates entities). In some instances data on total public expenditure on education refers only to the ministry of education and can exclude other ministries that spend a part of their budget on educational activities. The indicator is calculated by dividing total public expenditure on education incurred by all government agencies/departments by the total government expenditure and multiplying by 100. For more information, consult the UNESCO Institute of Statistics website: http://www.uis.unesco.org/Education/

* **Expenditure on primary education (% of government expenditure on edu.) (wdi\_expedup)**

Expenditure on Primary education, expressed as a percentage of total general government expenditure on education. Divide government expenditure on a given level of education (ex. primary, secondary) by total government expenditure on education (all levels combined), and multiply by 100. A high percentage of government expenditure on education spent on a given level denotes a high priority given to that level compared to others. When interpreting this indicator, one should take into account enrollment at that level, and the relative costs per student between different levels of education. For more information, consult the UNESCO Institute of Statistics website:

http://www.uis.unesco.org/Education/

* **Expenditure on secondary education (% of government expenditure on edu.) (wdi\_expedus)**

Expenditure on Secondary education, expressed as a percentage of total general government expenditure on education. Divide government expenditure on a given level of education (ex. primary, secondary) by total government expenditure on education (all levels combined), and multiply by 100. A high percentage of government expenditure on education spent on a given level denotes a high priority given to that level compared to others. When interpreting this indicator, one should take into account enrollment at that level, and the relative costs per student between different levels of education. For more information, consult the UNESCO Institute of Statistics website: http://www.uis.unesco.org/Education/

* **Expenditure on tertiary education (% of government expenditure on edu.) (wdi\_expedut)**

Expenditure on Tertiary education, expressed as a percentage of total general government expenditure on education. Divide government expenditure on a given level of education (ex. primary, secondary) by total government expenditure on education (all levels combined), and multiply by 100. A high percentage of government expenditure on education spent on a given level denotes a high priority given to that level compared to others. When interpreting this indicator, one should take into account enrollment at that level, and the relative costs per student between different levels of education. For more information, consult the UNESCO Institute of Statistics website: http://www.uis.unesco.org/Education/

* **Military expenditure (% of GDP) (wdi\_expmil)**

Military expenditure (% of GDP). Military expenditures data from SIPRI are derived from the NATO definition, which includes all current and capital expenditures on the armed forces, including peacekeeping forces; defense ministries and other government agencies engaged in defense projects; paramilitary forces, if these are judged to be trained and equipped for military operations; and military space activities. Such expenditures include military and civil personnel, including retirement pensions of military personnel and social services for personnel; operation and maintenance; procurement; military research and development; and military aid (in the military expenditures of the donor country). Excluded are civil defense and current expenditures for previous military activities, such as for veterans’ benefits, demobilization, conversion, and destruction of weapons. This definition cannot be applied for all countries, however, since that would require much more detailed information than is available about what is included in military budgets and off-budget military expenditure items. (For example, military budgets might or might not cover civil defense, reserves and auxiliary forces, police and paramilitary forces, dual-purpose forces such as military and civilian police, military grants in kind, pensions for military personnel, and social security contributions paid by one part of government to another).

* **Foreign direct investment, net inflows (% of GDP) (wdi\_fdiin)**

Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and shortterm capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.

* **Foreign direct investment, net outflows (% of GDP) (wdi\_fdiout)**

Foreign direct investment are the net outflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net outflows of investment from the reporting economy to the rest of the world and is divided by GDP.

* **Fertility rate, total (births per woman) (wdi\_fertility)**

Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year.

* **Firms with female top manager (% of firms) (wdi\_firftopm)**

Firms with female top manager refers to the percentage of firms in the private sector who have females as top managers. Top manager refers to the highest ranking manager or CEO of the establishment. This person may be the owner if he/she works as the manager of the firm. The results are based on surveys of more than 100,000 private firms.

* **Firms expected to give gifts in meetings w. tax officials (% of firms) (wdi\_firgifttax)**

Firms expected to give gifts in meetings with tax officials is the percentage of firms that answered positively to the question “Was a gift or informal payment expected or requested during a meeting with tax officials?”.

* **Forest area (% of land area) (wdi\_forest)**

Forest area is land under natural or planted stands of trees of at least 5 meters in situ, whether productive or not, and excludes tree stands in agricultural production systems (for example, in fruit plantations and agroforestry systems) and trees in urban parks and gardens.

* **Fossil fuel energy consumption (% of total) (wdi\_fossil)**

Fossil fuel comprises coal, oil, petroleum, and natural gas products.

* **Agriculture, forestry, and fishing, value added (% of GDP) (wdi\_gdpagr)**

Agriculture corresponds to ISIC divisions 1-5 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 3 or 4.

* **GDP per capita (constant 2010 US dollar) (wdi\_gdpcapcon2010)**

GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy 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 2010 U.S. dollars.

* **Industry (including construction), value added (% of GDP) (wdi\_gdpind)**

Industry corresponds to ISIC divisions 10-45 and includes manufacturing (ISIC divisions 15-37). It comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas. 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 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.

* **School enrollment, primary (% gross) (wdi\_gerp)**

Total enrollment in primary education, regardless of age, expressed as a percentage of the population of official primary education age. GER can exceed 100% due to the inclusion of over-aged and under-aged students because of early or late school entrance and grade repetition.

* **School enrollment, preprimary (% gross) (wdi\_gerpp)**

Total enrollment in pre-primary education, regardless of age, expressed as a percentage of the total population of official pre-primary education age. GER can exceed 100% due to the inclusion of over-aged and under-aged students because of early or late school entrance and grade repetition.

* **School enrollment, secondary (% gross) (wdi\_gers)**

Total enrollment in secondary education, regardless of age, expressed as a percentage of the population of official secondary education age. GER can exceed 100% due to the inclusion of over-aged and under-aged students because of early or late school entrance and grade repetition.

* **School enrollment, tertiary (% gross) (wdi\_gert)**

Total enrollment in tertiary education (ISCED 5 to 8), regardless of age, expressed as a percentage of the total population of the five-year age group following on from secondary school leaving.

* **Gini index (World Bank estimate) (wdi\_gini)**

Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

* **Intentional homicides (per 100,000 people) (wdi\_homicides)**

Intentional homicides are estimates of unlawful homicides purposely inflicted as a result of domestic disputes, interpersonal violence, violent conflicts over land resources, intergang violence over turf or control, and predatory violence and killing by armed groups. Intentional homicide does not include all intentional killing; the difference is usually in the organization of the killing. Individuals or small groups usually commit homicide, whereas killing in armed conflict is usually committed by fairly cohesive groups of up to several hundred members and is thus usually excluded.

* **Internally displaced persons, new displacement-disasters (number) (wdi\_idpdis)**

Internally displaced persons, new displacement associated with disasters (number of people). Internally displaced persons are defined according to the 1998 Guiding Principles (http://www.internaldisplacement.org/publications/1998/ocha-guiding-principles-on-internal-displacement) as people or groups of people who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of armed conflict, or to avoid the effects of armed conflict, situations of generalized violence, violations of human rights, or natural or human-made disasters and who have not crossed an international border. “New Displacement” refers to the number of new cases or incidents of displacement recorded, rather than the number of people displaced. This is done because people may have been displaced more than once.

* **Internally displaced persons, new displacement-conflict and violence (number) (wdi\_idpvc)**

Internally displaced persons, new displacement associated with conflict and violence (number of cases). Internally displaced persons are defined according to the 1998 Guiding Principles (http://www.internaldisplacement.org/publications/1998/ocha-guiding-principles-on-internal-displacement) as people or groups of people who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of armed conflict, or to avoid the effects of armed conflict, situations of generalized violence, violations of human rights, or natural or human-made disasters and who have not crossed an international border. “New Displacement” refers to the number of new cases or incidents of displacement recorded, rather than the number of people displaced. This is done because people may have been displaced more than once.

* **Internally displaced persons, total displaced by conflict-violence (number) (wdi\_idpvp)**

Internally displaced persons, new displacement associated with conflict and violence (number of people). Internally displaced persons are defined according to the 1998 Guiding Principles (http://www.internaldisplacement.org/publications/1998/ocha-guiding-principles-on-internal-displacement) as people or groups of people who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of armed conflict, or to avoid the effects of armed conflict, situations of generalized violence, violations of human rights, or natural or human-made disasters and who have not crossed an international border. “People displaced” refers to the number of people living in displacement as of the end of each year.

* **International migrant stock (% of population) (wdi\_imig)**

International migrant stock is the number of people born in a country other than that in which they live. It also includes refugees. The data used to estimate the international migrant stock at a particular time are obtained mainly from population censuses. The estimates are derived from the

data on foreign-born population–people who have residence in one country but were born in another country. When data on the foreign-born population are not available, data on foreign population– that is, people who are citizens of a country other than the country in which they reside–are used as estimates. After the breakup of the Soviet Union in 1991 people living in one of the newly independent countries who were born in another were classified as international migrants. Estimates of migrant stock in the newly independent states from 1990 on are based on the 1989 census of the Soviet Union. For countries with information on the international migrant stock for at least two points in time, interpolation or extrapolation was used to estimate the international migrant stock on July 1 of the reference years. For countries with only one observation, estimates for the reference years were derived using rates of change in the migrant stock in the years preceding or following the single observation available. A model was used to estimate migrants for countries that had no data.

* **Informal payments to public officials (% of firms) (wdi\_infpay)**

Informal payments to public officials are the percentage of firms expected to make informal payments to public officials to “get things done” with regard to customs, taxes, licenses, regulations, services, and the like.

* **Individuals using the Internet (% of population) (wdi\_internet)**

Internet users are individuals who have used the Internet (from any location) in the last 3 months. The Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV etc.

* **Labor force, female (% of total labor force) (wdi\_lfpf)**

Female labor force as a percentage of the total show the extent to which women are active in the labor force. Labor force comprises people ages 15 and older who meet the International Labour Organization’s definition of the economically active population.

* **Life expectancy at birth, total (years) (wdi\_lifexp)**

Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.

* **Life expectancy at birth, female (years) (wdi\_lifexpf)**

Life expectancy at birth for females indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.

* **Life expectancy at birth, male (years) (wdi\_lifexpm)**

Life expectancy at birth for males indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.

* **Literacy rate, adult total (% of people ages 15 and above) (wdi\_litrad)**

Percentage of the population age 15 and above who can, with understanding, read and write a short, simple statement on their everyday life. Generally, ‘literacy’ also encompasses ‘numeracy’, the ability to make simple arithmetic calculations. This indicator is calculated by dividing the number of literates aged 15 years and over by the corresponding age group population and multiplying the result by 100.

* **Literacy rate, adult female (% of females ages 15 and above) (wdi\_litradf)**

Percentage of the female population age 15 and above who can, with understanding, read and write a short, simple statement on their everyday life. Generally, ‘literacy’ also encompasses ‘numeracy’, the ability to make simple arithmetic calculations. This indicator is calculated by dividing the number of literates aged 15 years and over by the corresponding age group population and multiplying the result by 100.

* **Literacy rate, adult male (% of males ages 15 and above) (wdi\_litradm)**

Percentage of the male population age 15 and above who can, with understanding, read and write a short, simple statement on their everyday life. Generally, ‘literacy’ also encompasses ‘numeracy’, the ability to make simple arithmetic calculations. This indicator is calculated by dividing the number of literates aged 15 years and over by the corresponding age group population and multiplying the result by 100.

* **Literacy rate, youth total (% of people ages 15-24) (wdi\_litry)**

Number of people age 15 to 24 years who can both read and write with understanding a short simple statement on their everyday life, divided by the population in that age group. Generally, ‘literacy’ also encompasses ‘numeracy’, the ability to make simple arithmetic calculations. Divide the number of people aged 15 to 24 years who are literate by the total population in the same age group and multiply the result by 100.

* **Net migration (wdi\_migration)**

Net migration is the net total of migrants during the period, that is, the total number of immigrants less the annual number of emigrants, including both citizens and noncitizens. Data are five-year estimates.

* **School enrollment, primary (% net) (wdi\_nerp)**

Net enrollment rate is the ratio of children of official school age who are enrolled in school to the population of the corresponding official school age. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

* **School enrollment, secondary (% net) (wdi\_ners)**

Net enrollment rate is the ratio of children of official school age who are enrolled in school to the population of the corresponding official school age. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.

* **Population, total (wdi\_pop)**

Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship. The values shown are midyear estimates.

* **Population ages 0-14 (% of total population) (wdi\_pop14)**

Total population between the ages 0 to 14 as a percentage of the total population. Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship.

* **Population ages 15-64 (% of total population) (wdi\_pop1564)**

Total population between the ages 15 to 64 as a percentage of the total population. Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship.

* **Population ages 65 and above (% of total population) (wdi\_pop65)**

Population ages 65 and above as a percentage of the total population. Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship.

* **Population density (people per sq. km of land area) (wdi\_popden)**

Population density is midyear population divided by land area in square kilometers. Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship–except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. Land area is a country’s total area, excluding area under inland water bodies, national claims to continental shelf, and exclusive economic zones. In most cases the definition of inland water bodies includes major rivers and lakes.

* **Rural population (% of total population) (wdi\_poprul)**

Rural population refers to people living in rural areas as defined by national statistical offices. It is calculated as the difference between total population and urban population.

* **Urban population (% of total population) (wdi\_popurb)**

Urban population refers to people living in urban areas as defined by national statistical offices. The data are collected and smoothed by United Nations Population Division.

* **Poverty gap at USD 1.90 a day (2011 PPP) (%) (wdi\_povgap190)**

Poverty gap at 1.90 dollars a day (2011 PPP) is the mean shortfall in income or consumption from the poverty line 1.90 dollars a day (counting the nonpoor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions. Note: five countries – Bangladesh, Cabo Verde, Cambodia, Jordan, and Lao PDR – use the 2005 PPP conversion factors and corresponding 1.25 dollars a day and 2 dollars a day poverty lines. This is due to the large deviations in the rate of change in PPP factors relative to the rate of change in domestic consumer price indexes. See Box 1.1 in the Global Monitoring Report 2015/2016 (http://www.worldbank.org/en/publication/globalmonitoring-report) for a detailed explanation.

* **Refugee population by country or territory of asylum (wdi\_refasy)**

Refugees are people who are recognized as refugees under the 1951 Convention Relating to the Status of Refugees or its 1967 Protocol, the 1969 Organization of African Unity Convention Governing the Specific Aspects of Refugee Problems in Africa, people recognized as refugees in accordance with the UNHCR statute, people granted refugee-like humanitarian status, and people provided temporary protection. Asylum seekers–people who have applied for asylum or refugee status and who have not yet received a decision or who are registered as asylum seekers–are excluded. Palestinian refugees are people (and their descendants) whose residence was Palestine between June 1946 and May 1948 and who lost their homes and means of livelihood as a result of the 1948 Arab-Israeli conflict. Country of asylum is the country where an asylum claim was filed and granted.

* **Refugee population by country or territory of origin (wdi\_refori)**

Refugees are people who are recognized as refugees under the 1951 Convention Relating to the Status of Refugees or its 1967 Protocol, the 1969 Organization of African Unity Convention Governing the Specific Aspects of Refugee Problems in Africa, people recognized as refugees in accordance with the UNHCR statute, people granted refugee-like humanitarian status, and people provided temporary protection. Asylum seekers–people who have applied for asylum or refugee status and who have not yet received a decision or who are registered as asylum seekers–are excluded. Palestinian refugees are people (and their descendants) whose residence was Palestine between June 1946 and May 1948 and who lost their homes and means of livelihood as a result of the 1948 Arab-Israeli conflict. Country of origin generally refers to the nationality or country of citizenship of a claimant.

* **Self-employed, total (% of total employment) (modeled ILO) (wdi\_semp)**

Self-employed workers are those workers who, working on their own account or with one or a few partners or in cooperative, hold the type of jobs defined as a “self-employment jobs”. i.e. jobs where the remuneration is directly dependent upon the profits derived from the goods and services produced. Self-employed workers include four sub-categories of employers, own-account workers, members of producers’ cooperatives, and contributing family workers. Modeled ILO estimate.

* **Smoking prevalence, females (% of adults) (wdi\_smokf)**

Prevalence of smoking, female is the percentage of women ages 15 and over who smoke any form of tobacco, including cigarettes, cigars, pipes or any other smoked tobacco products. Data include daily and non-daily or occasional smoking.

* **Smoking prevalence, males (% of adults) (wdi\_smokm)**

Prevalence of smoking, male is the percentage of men ages 15 and over who smoke any form of tobacco, including cigarettes, cigars, pipes or any other smoked tobacco products. Data include daily and non-daily or occasional smoking.

* **CPIA social protection rating (1=low to 6=high) (wdi\_spr)**

Social protection and labor assess government policies in social protection and labor market regulations that reduce the risk of becoming poor, assist those who are poor to better manage further risks, and ensure a minimal level of welfare to all people.

* **CPIA transparency-accountability-corruption in public sector rating (1-6) (wdi\_tacpsr)**

Transparency, accountability, and corruption in the public sector assess the extent to which the executive can be held accountable for its use of funds and for the results of its actions by the electorate and by the legislature and judiciary, and the extent to which public employees within the executive are required to account for administrative decisions, use of resources, and results obtained. The three main dimensions assessed here are the accountability of the executive to oversight institutions and of public employees for their performance, access of civil society to information on public affairs, and state capture by narrow vested interests.

* **Tax revenue (% of GDP) (wdi\_taxrev)**

Tax revenue refers to compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded. Refunds and corrections of erroneously collected tax revenue are treated as negative revenue.

Note: The value for San Marino for 1995 was extremely high (44326) and has been recoded to missing.

* **Fixed telephone subscriptions (per 100 people) (wdi\_tele)**

Fixed telephone subscriptions refers to the sum of active number of analogue fixed telephone lines, voice-over-IP (VoIP) subscriptions, fixed wireless local loop (WLL) subscriptions, ISDN voice-channel equivalents and fixed public payphones.

* **Trade (% of GDP) (wdi\_trade)**

Trade is the sum of exports and imports of goods and services measured as a share of gross domestic product.

* **Unemployment, female (% of female labor force) (modeled ILO) (wdi\_unempfilo)**

Unemployment refers to the share of the labor force that is without work but available for and seeking employment. Female.

* **Unemployment, total (% of total labor force) (modeled ILO) (wdi\_unempilo)**

Unemployment refers to the share of the labor force that is without work but available for and seeking employment. Total.

* **Unemployment, male (% of male labor force) (modeled ILO) (wdi\_unempmilo)**

Unemployment refers to the share of the labor force that is without work but available for and seeking employment. Male.

* **Unemployment, youth female (% of female labor force 15-24) (modeled ILO) (wdi\_unempyfilo)**

Youth unemployment refers to the share of the labor force ages 15-24 without work but available for and seeking employment.

* **Unemployment, youth total (% of total labor force 15-24) (modeled ILO) (wdi\_unempyilo)**

Youth unemployment refers to the share of the labor force ages 15-24 without work but available for and seeking employment.

* **Unemployment, youth male (% of male labor force 15-24) (modeled ILO) (wdi\_unempymilo)**

Youth unemployment refers to the share of the labor force ages 15-24 without work but available for and seeking employment.

* **Proportion of seats held by women in national parliaments (%) (wdi\_wip)**

Women in parliaments are the percentage of parliamentary seats in a single or lower chamber held by women.

***Global Competitiveness Report 2019 of the World Economic Forum***

World Economic Forum. (2019). The global competetiveness report 2019 [Commercial use of data produced by the World Economic Forum is forbidden]. http://www3.weforum.org/docs/ WEF\_TheGlobalCompetitivenessReport2019.pdf

The Global Competitiveness Index 4.0 assesses the competitiveness landscape of 140 economies, measuring national competitiveness - defined as the set of institutions, policies and factors that determine the level of productivity. The Report presents information and data that were compiled and/or collected by the World Economic Forum organized into 12 pillars: Institutions, Infrastructure, ICT adoption, Macroeconomic Stability, Health, Skills, Product Market, Labor Market, Financial System, Market Size, Business Dynamism, and Innovation Capabilities.

* **Innovation capability. 0-100 (best) (wef\_ci)**

Innovation capability. 0-100 (best). Original sources: World Economic Forum, Global Competitiveness Report 2018

* **Electricity. 0-100 (best) (wef\_elec)**

Electricity. 0-100 (best). This indicator is calculated by the World Economic Forum by aggregating two indicators that measure the electrification rate and electric power transmission and distribution losses. For more information, write to gcp@weforum.org.

* **Global Competitiveness Index 4.0. 0-100 (best) (wef\_gci)**

Global Competitiveness Index 4.0. 0-100 (best). The Global Competitiveness Index 4.0 assesses the microeconomic and macroeconomic foundations of national competitiveness, which is defined as the set of institutions, policies, and factors that determine the level of productivity of a country. Original sources: World Economic Forum, Global Competitiveness Report 2018

* **Mobile-cellular telephone subscriptions/100 pop. (wef\_mobile)**

Mobile-cellular telephone subscriptions. Number of mobile-cellular telephone subscriptions per 100 population. Original sources: International Telecommunications Union (ITU)

* **Organized crime. 1-7 (best) (wef\_oc)**

Organized crime. 1-7 (best). In your country, to what extent does organized crime (mafia-oriented racketeering, extortion) impose costs on businesses? [1 = to a great extent-imposes huge costs; 7 = not at all-imposes no costs] Original sources: World Economic Forum, Executive Opinion Survey

* **Property rights. 1-7 (best) (wef\_pr)**

Property rights. 1-7 (best). In your country, to what extent are property rights, including financial assets, protected? [1 = not at all; 7 = to a great extent] Original sources: World Economic Forum, Executive Opinion Survey

* **Transport infrastructure. 0-100 (best) (wef\_qoi)**

Transport infrastructure. 0-100 (best). This indicator is calculated by the World Economic Forum by aggregating eight indicators that measure roads, railroads, air transport and water transport infrastructure. For more information, write to gcp@weforum.org. Original sources: World Economic Forum, Global Competitiveness Report 2018

* **Ratio of wage and salaried female workers to male workers (wef\_wlf)**

Ratio of wage and salaried female workers to male workers. Ratio. The ratio of the percentage of women aged 15-64 participating in the labour force as wage and salaried workers to the percentage of men aged 15-64 participating in the labour force as wage and salaried workers. Original sources: International Labour Organization (ILO), World Economic Forum.

**Global Health Observatory data repository of the WHO variables**

World Health Organization. (2021). Global health observatory data repository [Accessed on 2021-11-29]. http://www.who.int/gho/en/

The GHO data repository is WHO’s gateway to health-related statistics for its 194 Member States. It provides access to over 1000 indicators on priority health topics including mortality and burden of diseases, the Millennium Development Goals (child nutrition, child health, maternal and reproductive health, immunization, HIV/AIDS, tuberculosis, malaria, neglected diseases, water and sanitation), non communicable diseases and risk factors, epidemic-prone diseases, health systems, environmental health, violence and injuries, equity among others.

* **Healthy Life Expectancy, Total (Years) (who\_halet)**

Healthy life expectancy (HALE) at birth (years), Total.

* **Total population using basic sanitation services (%) (who\_sanittot)**

Total population using basic sanitation services (%).

* **National-level average scores for subjective well-being (whr\_hap)**

Helliwell, J., Layard, R., Sachs, J., & Neve, J. D. (2020). World happiness report 2020 <https://worldhappiness.report/>  
  
The World Happiness Report is a landmark survey of the state of global happiness that ranks 156 countries by how happy their citizens perceive themselves to be.  
  
National-level average scores for subjective well-being, as measured by answers to the Cantril ladder question asking people to evaluate the quality of their current lives on a scale of 0 to 10, where 0 represents the worst possible life for them, and 10 the best.

* **Youth Representation Index (35 years or younger) (yri\_yri35)**

Sundström, A., & Stockemer, D. (2020). Conceptualizing, measuring, and explaining youths’ relative absence in legislatures. PS: Political Science and Politics, 1–7. https://doi.org/10.1017/ S1049096520000906  
  
https://www.cambridge.org/core/journals/ps-political-science-and-politics/article/conceptualizing-measuringand-explaining-youths-relative-absence-in-legislatures/A50A3BC3EEB6983FABBCEF0CBEC69E76 (Data downloaded: 2021-01-04)  
  
The Youth Representation Index assesses the magnitude of youths’ under-representation across countries using the last year of election available for 91 countries. Rather than calculating youths’ representation by the percentage of Members of Parliament 35 or 40 years old and younger or legislatures’ median age, the authors argue that scholars should assess youths’ parliamentary presence relative to their proportion of the voting-age population.

The YRI 35 is a measure in which the percentage of youth in parliament - MPs ages 18 to 35 years - is divided by the proportion of youth (ages 18 to 35) within the eligible voting-age population and then multiplying by 100. A higher score on this measure indicates a larger correspondence between youth in the population and their presence in parliaments. A score of 100 suggest that the share of young MPs is on par with the share of young people in voting-age youth in the population. A score of zero indicates that not a single individual Member of Parliament (MP) is considered to be young.