

## Data set: International

### Sample Description

Most of the variables in the dataset come from the World Bank's World Development Indicators (WDI). The WDI includes data from 209 countries spanning the years 1960 to 2010. The WDI is the primary World Bank database for development data, and data are collected from officially recognized international resources. In the dataset for this course, you are provided with a balanced panel of 177 countries for the years 1990, 2000 and 2010, *although* many variables are missing data for some countries and *this issue must be addressed before you estimate* anything if you use these variables. The data for this course are a subset of all available data provided by the World Bank and provide information on a variety of topics including the environment, economic policy and debt, the private sector and trade, health, and infrastructure, among others. The full set of indicators provided by the World Bank, as well as detailed information on definition of indicators can be found at: <http://data.worldbank.org/>

In addition to select indicators from the World Bank data, this dataset includes two variables measuring environmental governance and institutions. These data were obtained from Freedom House. The full set of indicators regarding environmental governance and institutions, as well as any information on the definition of the indicators included in the dataset for this course can be found at: [http://earthtrends.wri.org/searchable\\_db/index.php?action=select\\_variable&theme=10](http://earthtrends.wri.org/searchable_db/index.php?action=select_variable&theme=10)

Notes:

- 1) You can and should use fixed effects with countries. We will discuss fixed effects later in the course.
- 2) A value of 0 does not indicate missing data. All data were coded so that missing data take on a value of ".", which is the default missing value in STATA. See 3 below.
- 3) **Some variables are missing data for some countries. Make sure you check for this before you proceed with your analysis. You must "impute" the values for missing data for your independent variables, which can be done in various ways, but for this course, use the average of the variable (mean) of all other countries in that sample year. If you do not do this, you will drop too many countries from your analyses.**

**You cannot impute values for missing data for your dependent variables so only choose dependent variables that have "few" missing data (like fewer than 10 missing if possible).**

- 4) The political rights and civil liberties indicators are constructed in such a way that the values of the indices are SMALLER for those countries with MORE rights and liberties (i.e. in the civil liberties index, a value of 1 indicates most free). If you plan to use these variables, it may be easier to interpret your results if you recode these variables first, so that they are increasing with amount of freedom experienced by individuals in the country.

Table 1 provides the variable names and definitions available for your project.

Name and Definition	Description
<b>Identification</b>	
cn	Country name
cc	Country code
year	Year. Equal to 1990, 2000 or 2008
<b>Environment</b>	
ag_lnd	Agricultural land in square kilometers. Agricultural land is land that is arable, under permanent crops, and under permanent pastures.
ag_surf	Agricultural land as a percent of land area.
co2_em	Carbon dioxide emissions in metric tons per capita. Includes those emissions produced from the burning of fossil fuels and manufacture of cement
elec_cons_kh	Electric power consumption in kilowatt-hours per capita.
elec_cons_kg	Energy use in kilograms of oil equivalent per capita. Energy use refers to primary energy before transformation to other end-use fuels.
srf_area	Country's total surface area, including areas under inland bodies of water and some coastal waterways.
<b>Economic Policy &amp; Debt</b>	
exp_gds_srv	Exports of goods and services, as percent of GDP. This measure provides information on the value of all goods and other market services provided by the country to the rest of the world.
ext_dbt	Debt owed to nonresidents repayable in foreign currency, goods, or services. Data are reported in current U.S. dollars.
for_dir_invst	Net inflows of investment to acquire a lasting management interest (10 percent of more of voting stock) in an enterprise operating in an economy other than that of the investor.
gdp_curr	GDP in current U.S. dollars. Equal to the 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.
gdpcap	GDP per capita, in current U.S. dollars. Equal to the GDP divided by the midyear population.
gdp_grwth	Annual percentage growth rate of GDP at market prices, based on constant local currency.
grs_cap_frm	Gross capital formation, as percent of GDP (sometimes referred to as gross domestic investment)
imp_gds_srv	Imports of goods and services, as percent of GDP. This measure provides information on the value of all goods and other market services received by the country from the rest of the world.
ind_va	Value-added of industry, as percent of GDP. For the purposes of this measure, "industry" includes mining, manufacturing, construction, electricity, water, and gas. Value-added is the net output of a sector after adding up all outputs and subtracting intermediate inputs.

off_dev_asst	Net official development assistance and official aid received, reported in U.S. dollars.
serv_va	Value-added of services, etc. as percent of GDP. For the purposes of this measure, “services, etc.” include wholesale and retail trade, transport, and government, financial, professional, and personal services (i.e. education, health care, etc.).
<b>Financial Sector</b>	
gdp_defl	Inflation, GDP deflator, as annual percent. Inflation as measured by annual growth rate of the GDP implicit deflator shows the rate of price change in the economy as a whole. The GDP implicit deflator is the ratio of the GDP in the current local currency to GDP in constant local currency.
<b>Private Sector &amp; Trade</b>	
mrch_trd	Merchandise trade, as percent of GDP. Equal to the sum of merchandise exports and imports divided by the value of GDP, in current U.S. dollars.
net_brtr	Net barter terms of trade index (2000 = 100). Calculated as the percentage ratio of the export unit value indexes to the import unit value indexes, measured relative to base year 2000.
<b>Public Sector</b>	
mil_expnd	Military expenditures, as percent of GDP. Data are derived from NATO definition of military expenditures.
<b>Health</b>	
frtl_rte	Total fertility rate, births per woman. 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 current age-specific fertility rates.
msl_immun	Percent of children ages 12-23 months immunized for measles. Measures the percentage of children ages 12-23 months who received vaccinations before 12 months of age or at any time before the survey.
imprv_san	Percent of urban population with access to improved sanitation facilities. Refers to the percentage of the population with at least adequate access to excreta disposal facilities that can effectively prevent human, animal, and insect contact with excreta.
imprv_h2o	Percent of urban population with access to improved water source. Refers to the percentage of the population with reasonable access to an adequate amount of water from an improved source, such as household connection, public standpipe, borehole, protected well or spring, and rainwater collection.
lifeexp	Life expectancy at birth. Indicates the number of years a newborn infant would be expected to live if prevailing patterns of mortality at the time of his or her birth were to stay the same throughout his or her life.
mort_rte_undr5	Under-five mortality rate, per 1,000. This can be interpreted as the probability, per 1,000, that a newborn baby will die before reaching age 5, subject to current age-specific mortality rates.
<b>Population</b>	
pop_grwth	Annual population growth. Based on the de facto definition of population, which counts all residents regardless of legal status or citizenship, except refugees not permanently settled in country of asylum.
tot_pop	Total population, midyear estimates.
popdens	Population density (people per sq. km of land area)
urban	% of total population that is urban

<b>Infrastructure</b>	
intnet_usrs	Internet users, per 100 people.
cell_cubscrip	Mobile cellular subscriptions, per 100 people
rds_pave	Paved roads as a percent of all the country's roads, measured in length. Includes roads surfaced with crushed stone and hydrocarbon binder or bituminized agents, with concrete, or with cobblestones.
<b>Environmental Governance and Institutions</b>	
pol_rgt_ind	Political rights index, obtained from Freedom House. <sup>1</sup> 1 = most free 7 = least free
cvl_lib_ind	Civil liberties index, obtained from Freedom House. <sup>2</sup> 1 = most free 7 = least free

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<sup>1</sup> This indicator measures the degree of freedom in the electoral process, political pluralism and participation, and functioning of government. A rating of 1 indicates free and fair elections, political competition, and autonomy for all citizens, including minority groups. A rating of 2 indicates that a country is less free. Countries with a rating of 6 are ruled by military juntas, one-party dictatorships, religious hierarchies, or autocrats. There may be a few local elections or some minority representation. A rating of 7 indicates that political rights are basically nonexistent due to extremely oppressive regimes, civil war, extreme violence or warlord rule.

<sup>2</sup> This indicator measures freedom of expression, assembly, association, and religion. Countries with a rating of 1 usually have an established and equitable rule of law with free economic activity. Countries with a rating of 2 are still relatively free. Countries with a rating of 6 enjoy partial rights, such as a few social and religious freedoms and some restricted business activity. A rating of 7 indicates virtually no freedom. For more information, see <http://earthtrends.wri.org/text/environmental-governance/variable-508.html>