

Achievement 6: Global voter Turnout

By: Alexandra Lindsay

Data source

I've changed my data source since it wasn't appropriate for the questions of this achievement.

<https://www.idea.int/data-tools/data/voter-turnout>

Data source:

- IDEA stands for The International Institute for Democracy and Electoral Assistance. They are an organization government by its 35 member states, which Canada chairs. Their primary source are the national electoral management bodies and national statistical bureaus of the respective countries. The data is either taken from source's website or official reports. If the data is not available, their secondary source are the country's census reports. Since the data comes from official country sources it is trustworthy.

Data collection:

- The data is collected after the voter turnout reports are published by the national electoral management bodies of the respective countries. IDEA takes that information from either their website or official platform. If any information is missing, they then try to access their census information.

Data Content:

- This data source is collected after every election from 1945-2022. it contains: Country, election type (Parliamentary, Presidential and EU parliament), the year, the voter turnout, total vote, total registered voters, the voting age population turnout (VAP), the voting age population, total population, invalid vote and compulsory voting.

Data limitation:

- IDEA does disclose that the information provided is dependent on the reports that the countries provide. They do state to be aware of the following:
 - The VAP is an estimation of the total population in voting age
 - Certain registration rolls exceed the countries' VAP due to inaccuracies in the electoral roll or VAP
 - The data doesn't reflect if voters move. Although IDEA keeps track of census population figures it is not exact.
 - Some electoral data is missing, which is missing at the source
 - There are many countries that do not have universal suffrage

Ethics:

- IDEA has their established codes and ethics for the countries that can become members, but the ethics of the data collection is put on the establishments that publish that data. Biases could be present in the data due to not knowing who could be excluded (example not all of the countries

where voter turn out was collected has universal suffrage) but also there is a column for invalid votes. We do not have the definition of what constitutes as an invalid vote.

Data Relevance:

This data set will help see the trends of voter turn out world wide and see what levels certain countries are at compared to others.

Data Profile:

Clean your data

years: 2000 and up to have enough data points and establish a trend
no duplicates
no multi data type columns
time line correct
missing data yes but cannot input
inaccurate maybe but information comes from official sources and do not have the information to correct it or remove it.

Understand your data

Cleaned data has 11 columns and 1627 lines.

	Data Types			
Variables	time - variant/- invariant	structured/unstructure d	qualitative/quantitativ e	qualitative: nominal/ordinal quantitative: discrete/continuou s
Country	Time- invariant	Structured	Qualitative	nominal
election type	time- variant	Structured	Qualitative	nominal
year	time- variant	Structured	Quantitative	continuous
voter turnout		Structured	Quantitative	Discrete
total vote	Time- invariant	Structured	Quantitative	Discrete
registration	Time- invariant	Structured	Quantitative	Discrete

VAP turnout	Time-invariant	Structured	Quantitative	Discrete
voting age population	Time-invariant	Structured	Quantitative	Discrete
population	Time-invariant	Structured	Quantitative	Discrete
invalid vote	Time-invariant	Structured	Quantitative	Discrete
compulsory voting	time-variant	Structured	Qualitative	Binary

More data set profiling can be found in the Python notebook attached to this task.

Consider its limitations and Ethics

This has been answered in the data source section.

Questions to explore:

Goal: To see if voter turnout has decreased over the years.

Objectives: see if the past 3 years are worse than the 20-year average.

Scope: Do governments, that voting is not compulsory, need to establish strategies to target their voters of age to participate in their civic right?