

METU, Department of Economics

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ECON 106 – ASSIGNMENT 3

1. Install packages to obtain data from the World Bank and to create graphs. Load these packages to library.

2. Search keywords to find infant mortality rate, real GDP, and total population from the World Bank.

3. Assume that the indicator names are "SP.DYN.IMRT.IN", "NY.GDP.MKTP.KD", and "SP.POP.TOTL" for infant mortality, real GDP, and total population respectively.

a. Using these indicators, extract data from the World Bank, name data as **dat**, and keep the years from 2010 to 2020.

b. Keep only data of Türkiye.

4. Assume that your dataset looks like the table below

country	iso2c	iso3c	year	SP.DYN.IMRT.IN	NY.GDP.MKTP.KD	SP.POP.TOTL
Türkiye	TR	TUR	2010	15.5	6.141711e+11	73195345
Türkiye	TR	TUR	2011	14.5	6.829589e+11	74173854
Türkiye	TR	TUR	2012	13.6	7.156623e+11	75277439
Türkiye	TR	TUR	2013	12.7	7.763921e+11	76576117
Türkiye	TR	TUR	2014	11.9	8.147437e+11	78112073
Türkiye	TR	TUR	2015	11.1	8.643167e+11	79646178

a. Rename the variables "SP.DYN.IMRT.IN", "NY.GDP.MKTP.KD" and "SP.POP.TOTL" as respectively infant_mortality, rgdp, and total_pop.

b. Drop iso2c and iso3c variables.

5. Look at the class, summary statistics, structure, and head of the data.
6. Generate new variable GDP per capita by dividing real GDP by total population variables and names as `gdp_per_cap`.
7. Find the mean and standard deviation of `gdp_per_cap`.
8. Create a scatter plot that shows the relation between `gdp_per_cap` and `infant_mortality`.