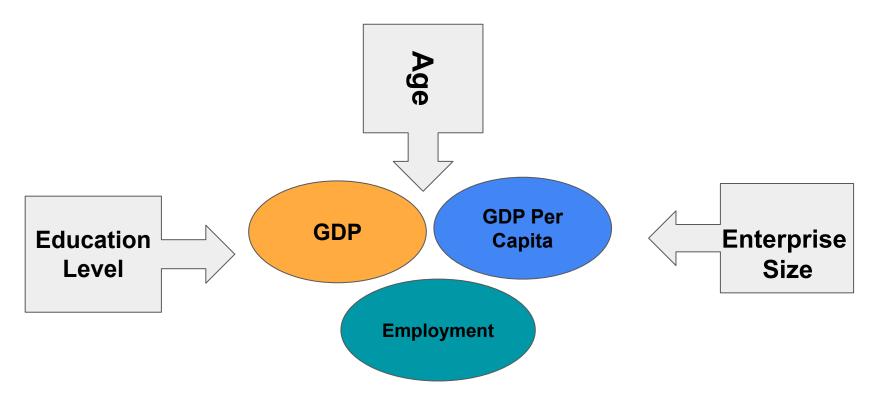
#### **Our Domain**



Presented By: Farzaneh Tabandeh, Xiaochun Tong

**Question 1:** Effect of Age on Employment and GDP per capita

### Age On Employment on GDP per Capita

- Age group 25-54 has the highest rate of employment
- People in age group 25-54 has the highest chance of employment in Iceland and lowest in South Africa
- Overall employment rate of Iceland is 85.45 and South Africa is 43.02
- Iceland has the greatest population of old age 55-64 employment
- 5 out of 10 top highest GDP per capita countries, including Switzerland, Norway, Iceland, Netherlands, and Denmark, are among the countries with highest old employment
- Higher employment rate + employment of old people = More active people in the country that earn money
- Hence higher GDP per capita

**Question 2:** Effect of Education on Employment and GDP per capita

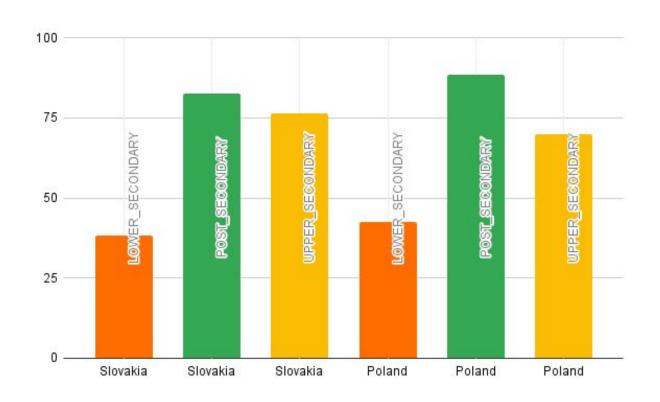
#### **Education on Employment and GDP per Capita**

- Three main education levels
  - POST SECONDARY
  - UPPER SECONDARY
  - LOWER\_SECONDARY
- POST\_SECONDARY has the highest employment rate in all countries
- Countries with higher employment rate like Switzerland and Iceland have higher employment rate in POST\_SECONDARY
- Countries with lowest employment rate like Greece and Turkey have lower employment rate in POST\_SECONDARY

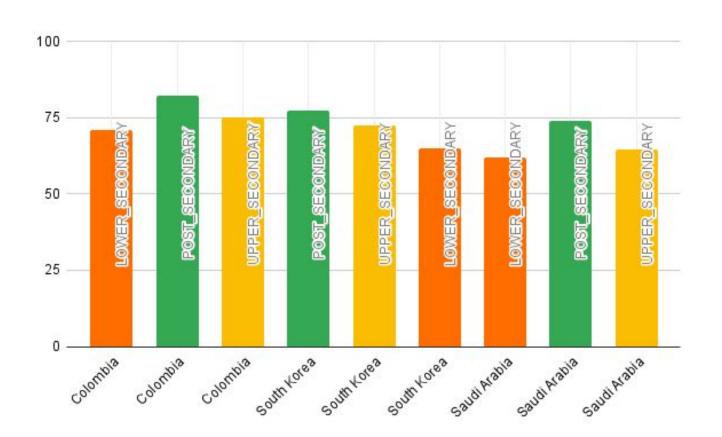
### **Education on Employment**

- How does the effect of education vary across different education levels?
- The highest standard deviation of the employment rate across all three education levels is 19.53%

#### **Countries with Highest Standard Deviation across Education Levels**



#### **Countries with Lowest Standard Deviation across Education Levels**



#### **Education on GDP per Capita**

- The value of the standard deviation does not have a predictable pattern of variation across countries with highest GDP or GDP per capita!
- So education level seems to affect the GDP of a country based on its economic structure and how their specific economic sectors can accommodate people with different education levels.

**Question 3:** Effect of Enterprise Sizes on Employment and GDP per capita

#### **Education on Enterprise Sizes and GDP per Capita**

- The enterprise size of 1\_9\_EMPLOYED has the highest number of enterprises in all countries
- Specifically highest GDP like Japan and relatively high GDP like 'Turkey' have the greatest number of small enterprises. Netherlands has the highest small business among the countries with highest GDP per Capita.
- Shows these specific high income countries depend on their small businesses by a large factor compared to all other countries

#### **Education on Enterprise Sizes and GDP per Capita**

- Relation between highest number of big enterprises of size 250MORE\_EMPLOYED and their GDP and employment?
- Many of the highest and relatively high GDP countries are in the list of countries with highest large enterprises
- Not a surprise! Since most of these high GDP countries rely on big enterprises and factories to produce such high GDP.
- Greater number of large enterprises -> greater tendency to have higher GDP
- On the other hand, having a higher number of large enterprises does not seem to necessarily affect employment rate of countries directly as much!

# Challenges

- Finding related topics to make our investigation more fruitful
- Cleaning data

## Lessons

- Turning raw unorganized data to a clean database design
- Data is insightful only if it is organized in a well-designed database

# Questions?