Compare the bar graph and line graph to the table data – aren't the visualisations much easier to understand?

Compulsory Task 1

Examine the following graphs below and use some research and background knowledge to make conclusions based on your observations. For each graph, answer the questions associated with the graph in a document titled **data_viz.** Convert your answer document to a PDF before submitting it.

1. The following bar graph shows the gender wage gap in 26 countries based on data collected by the **OECD**. The gender wage gap is calculated by finding the difference between male and female median wages and dividing by male median wages. It is represented as a percentage in this graph.

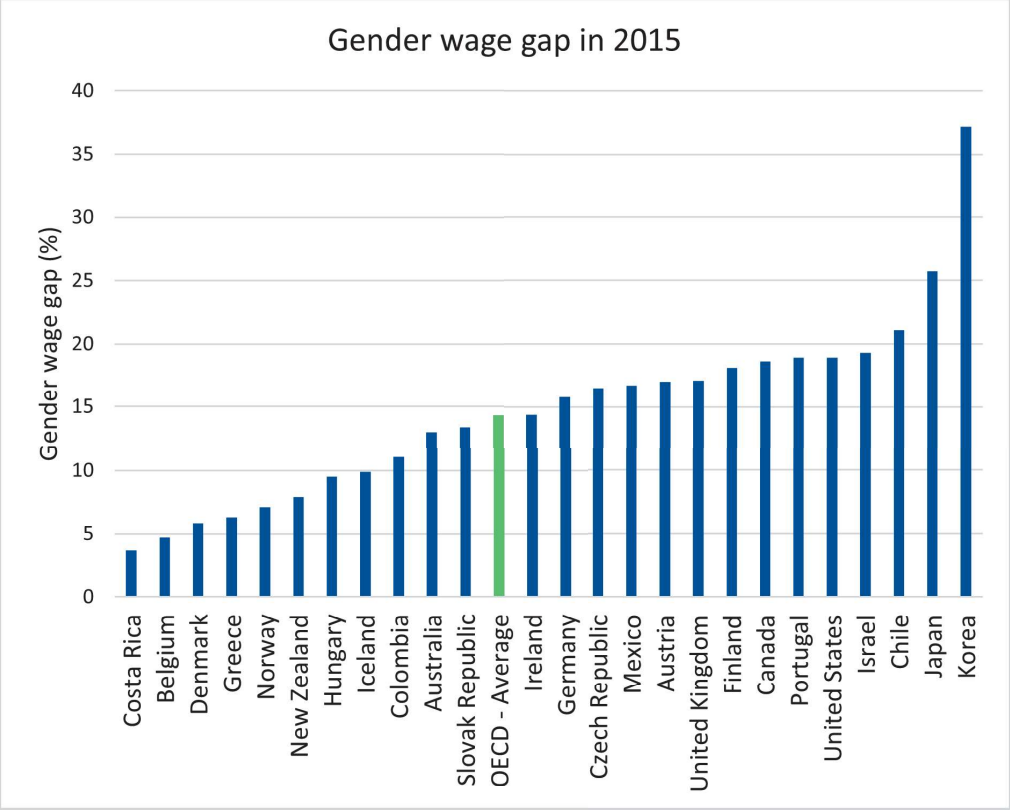

Figure 1: Gender wage gap in 2015 (**Source**)

- Which three countries have the lowest gender wage gap?
- Which three countries have the highest gender wage gap?

- Do some research on the country with the lowest gender wage gap and comment on why you think it succeeded in achieving a low gender wage gap in 2015 (max. 150 words).

2. The following line graph shows the sale of isopropanol from May 2019 to March 2020 in the United States of America. The sales are measured using US cents per weight (lb) of product (US CTS/lb). Focus on the general trend of the three lines on the graph rather than what each of the lines refers to specifically when answering the questions.

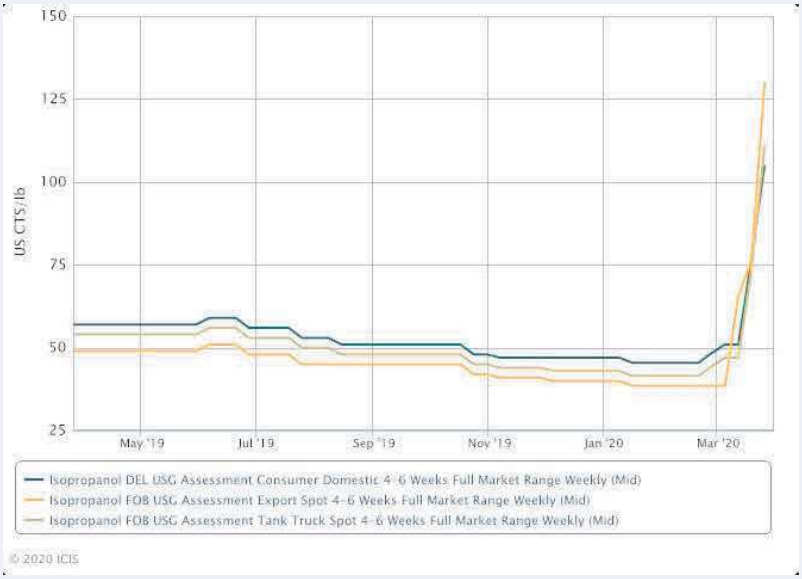

Figure 2: Isopropanol sales from May 2019 to March 2020 (**Source**)

- Explain what is happening in the graph during March 2020 with regards to isopropanol sales (max. 100 words).
- Describe a possible reason for the observation you made about isopropanol sales in March 2020 (max. 100 words). **Hint:** Isopropanol is the main ingredient in hand sanitiser.

3. Below, the bubble plot (a scatter plot with variable dot size) shows carbon dioxide (CO_2) emissions per person in tonnes vs. the gross domestic product (GDP) per capita (average per person). No unit is given for the GDP per capita, however, the US dollar is typically used when comparing different countries (Callen, n.d.). Each dot represents a country. The colours of the dots refer to the continent to which the country belongs. The size of the dot refers to the size of the population in the country. The larger the dot, the larger the population.

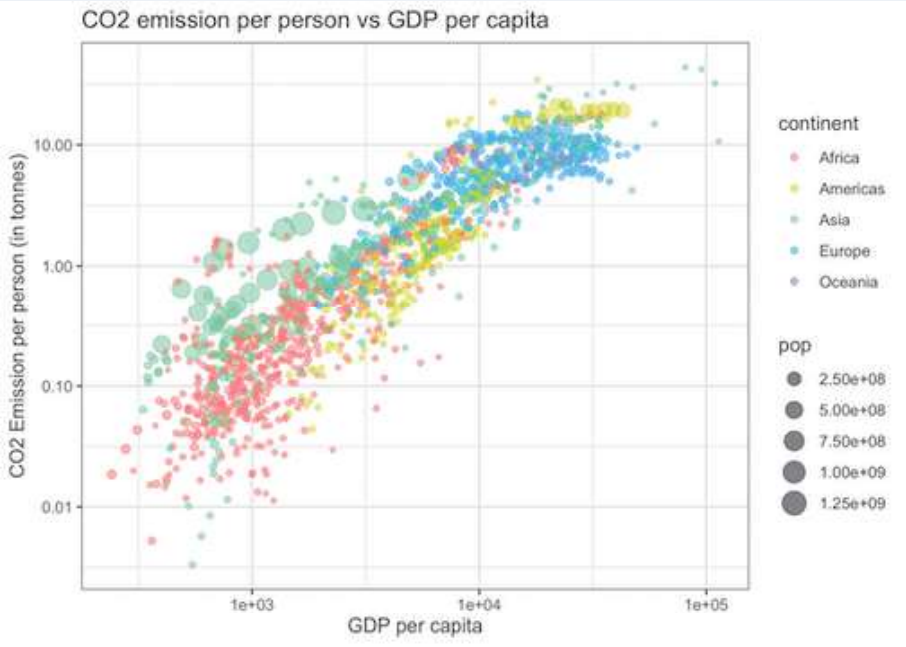

Figure 3: CO_2 emissions per person vs GDP per capita

- Discuss the relationship between CO_2 emissions per person and GDP per capita for each continent listed in the figure legend (max. 350 words).

Completed the task(s)?

Ask an expert to review your work!

Review work