

Task 13 – Data visualization

Gender wage gap in 2015:

1 Which 3 countries have the lowest gender wage gap? The answers are Costa Rica, Belgium and Denmark

2. Which 3 countries have the highest wage gap? The answers are Korea, Japan and Chile

3. reasons for Costa Rica to have such a low wage gap is due to the lack of education and teaching for men bought upon by societal and cultural pressure. Women have better qualifications leading to work of higher pay. More women being qualified leads to higher female labour force participation and greater chance of being employed

Isopropanol sales(May 2019 – March 2020)

1. After a consistent and steady decline in sales from May of 2019 to February 2020, the rate of sales increases massively almost suddenly, lingering around 50 lb for that period to a peak at just over 125lb. This shows an approximately 75% increase in sales in a little over the month.
2. The obvious reason for this sharp increase in sales over March of 2020 was due to the Covid pandemic. It was heavily advised by governments and media to have a big priority on hygiene to avoid the virus and isopropanol is the main ingredient of hand sanitiser.

Africa:

The relationship is consistent with an almost steady incline. As the GDP per capita increases so does the CO2 Emission per person. The population of each country doesn't seem to play a factor as countries with the smallest populations are located all along the graph. On average African countries are at the lower end for GDP per capita and CO2 and appearing scattered.

Americas:

The Americas follow a similar pattern, once again there's an incline between the relationship of GDP and CO2 emissions but it appears that the CO2 emissions begin to increase at a faster rate at higher populations with even some outliers of countries of the Americas with smaller populations being amongst the highest countries with the most CO2 emission. The vast majority of the countries in the Americas are jumbled in the middle of the graph with an emission in between 0.10 and 1.00.

Asia:

Asia is the continent where the countries are most scattered. There seems to be no type of pattern except with the countries of the highest populations being relatively close to each other with a low GDP and low to medium CO2 emissions. The country with the lowest GDP and CO2 emission is an Asian country as well as the highest. There is a huge disparity between countries.

Europe:

There is once again a positive relationship of European countries, but most are jumbled towards the upper right of the graph, with a high GDP per capita and CO2 emissions. European countries seem to have the least variation out of all continents. The majority of the countries are small dots implying lack of population is a non-factor for its high placement.

Oceania:

Appears to have a neutral relationship with very consistent results. All of the countries are jumbled together at the top right of the graph.

Task 2:

1. The graph which represents the population of Boston the best is crime rate/median house value. Based on the graph, Boston has a low crime rate. Though there are small amounts of towns with really high crime rates.
2. The average number of rooms per dwelling is 5.
3. The correlation between rooms per dwelling and median house value is a positive relationship. It would be perfect but there is a sharp shift in where the rooms per dwelling decreases but median value remains the same.
4. The majority are old.
5. The correlation between percentage of units before 1940 and the Median House Value is a negative relationship.