# Data Visualization and Communication

1<sup>st</sup> Assignment

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This report is one of the two deliverables which I provide as solution for the 1st Assignment for the course of Data Visualization and Communication for the MSc in Data Science at Athens University of Economics and Business.

#### Data

- The data refer to the daily number of reported cases and deaths from COVID-19 per country.
- Downloaded from here.
- From 31/12/2019 unit 21/11/2020.

# Graphs

## Situation in Greece

Figure 1: Cases over time in Greece
Cases over time in Greece (31/12/2019 – 21/11/2020)

3000

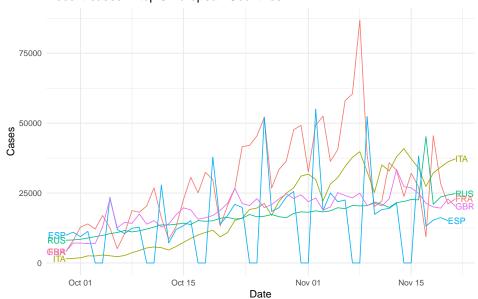
Jan Apr Jul Oct

In the figure 1, we can noticed that there is minor increase in cases at April and a sharp increase the last two months.

In the second figure, we can noticed that there is a simiral trend in the number of deaths.

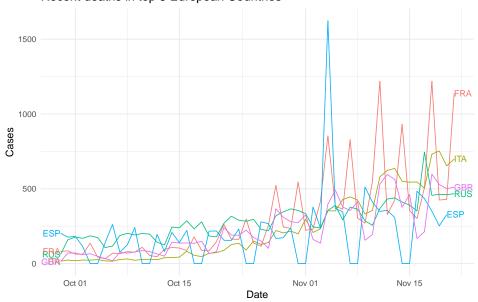
## Situation in Europe

Figure 3: Cases of the top 5 countries in Europe the last two months Recent cases in top 5 European Countries



From the third chart, we can see that Italy, Russia, France, United Kingdom and Spain are the countries with the most cases in Europe. In addition, Spain doesn't give data in weekends.

Figure 4: Deaths of the top 5 countries in Europe the last two months Recent deaths in top 5 European Countries



The same countries depicted from the figure 4 with Franch has the first place in deaths. Fortunately, Greece doesn't belong to these lists.

### Situation in other countries compared to Greece

Figure 5: Cases in countries with simiral population (29/9/2020 - 21/11/2020)

Cases in other countries with simiral population compared to Greece (29/09/20

15000

5000

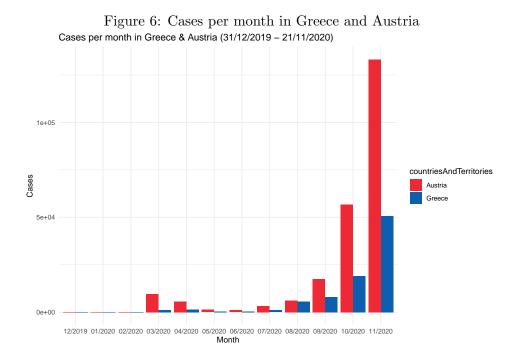
Date

Cases in other countries with simiral population compared to Greece (29/09/20

AUT
CZE
Nov 01

Nov 15

In figure 5, we can see the cases in other coutries, with similar population with Greece, the last two months. It can be easily noticed that the spread of the virus in Greece is much smaller.



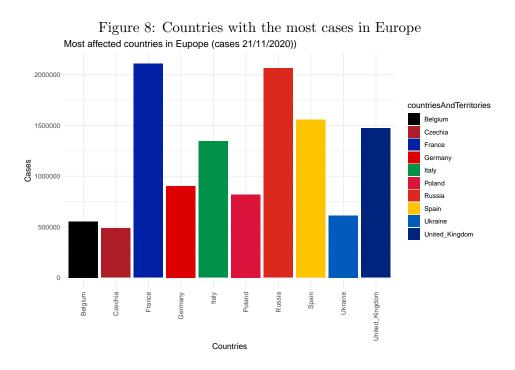
From figure 6, we can compare the number of cases per month in Greece and Austria. Throughout the pandemic the cases are much smaller in Greece compared to Austria even though they have similar population.

Deaths per month in Greece & Austria (31/12/2019 - 21/11/2020) 1000 750 countriesAndTerritories Cases 500 Austria 250 

Figure 7: Deaths per month in Greece and Austria

The same situation as before can be seen from deaths per month expept from August and Semtember where Greece has more deaths from Austria.

## Most affected countries in Europe



In figure 8, we can notice that France and Russia are the most affected countries in Europe in terms of cases.

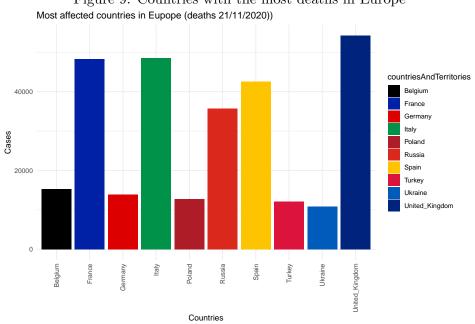
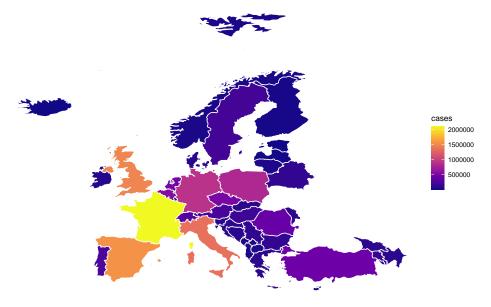


Figure 9: Countries with the most deaths in Europe

In figure 9, we can notice that United Kingdom, France and Italy are the most affected countries in Europe in terms of deaths. Again, Greece doesn't belong to these lists (figure 8 and 9).

Figure 10: Map with all cases (31/12/2019 - 21/11/2020) Total cases in Eupope (21/11/2020)



Last but not least, we can see total cases in all european countries. We conclude that Greece belongs to a group of countries with a small number of cases.