

# INFSCI 2415 Final Report

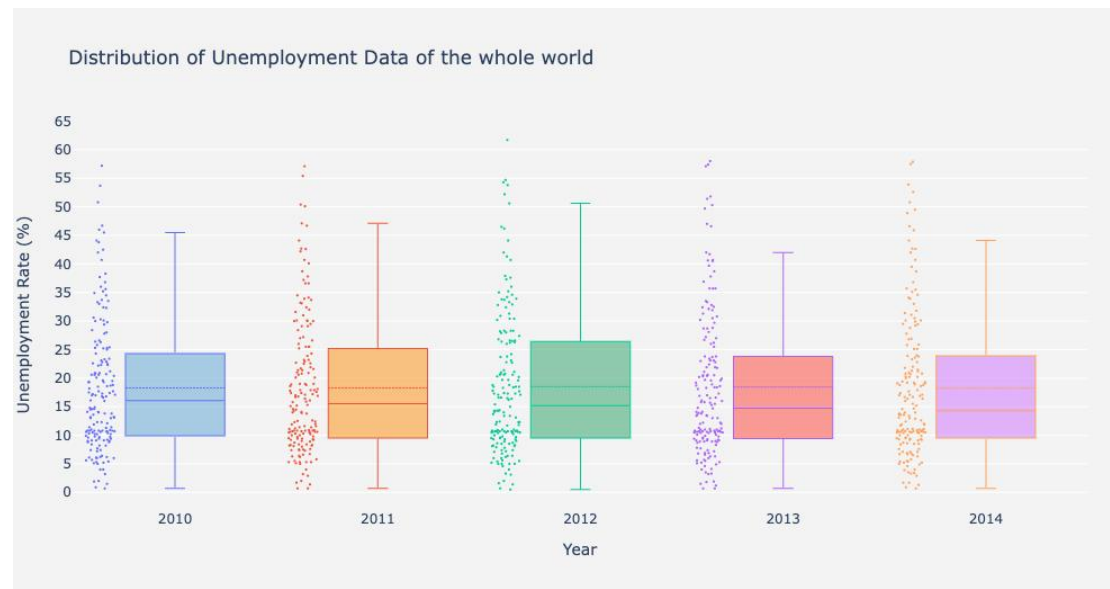
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## Title: Unemployment Rate during 2010 to 2014

1. Take a look at the dataset first:

	Country Name	Country Code	2010	2011	2012	2013	2014
0	Afghanistan	AFG	20.600000	20.900000	19.700001	21.100000	20.799999
1	Angola	AGO	10.800000	10.700000	10.700000	10.600000	10.500000
2	Albania	ALB	25.799999	27.000000	28.299999	28.700001	29.200001
4	United Arab Emirates	ARE	9.800000	9.800000	9.800000	9.900000	10.000000
5	Argentina	ARG	19.500000	18.799999	18.400000	19.700001	21.299999
...	...	...	...	...	...	...	...
214	Yemen, Rep.	YEM	30.299999	30.000000	30.200001	30.200001	29.900000
215	South Africa	ZAF	50.799999	50.099998	52.200001	51.400002	52.599998
216	Congo, Dem. Rep.	COD	12.300000	12.300000	12.300000	12.200000	11.900000
217	Zambia	ZMB	26.400000	26.600000	26.600000	25.500000	25.100000
218	Zimbabwe	ZWE	9.600000	8.300000	8.300000	8.900000	9.400000

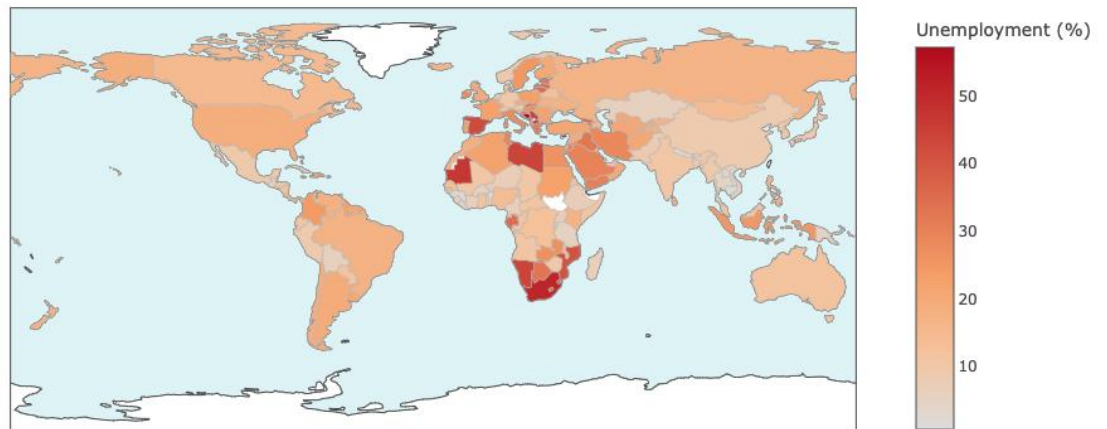
2. Let's plot the distribution of unemployment rate of the whole world



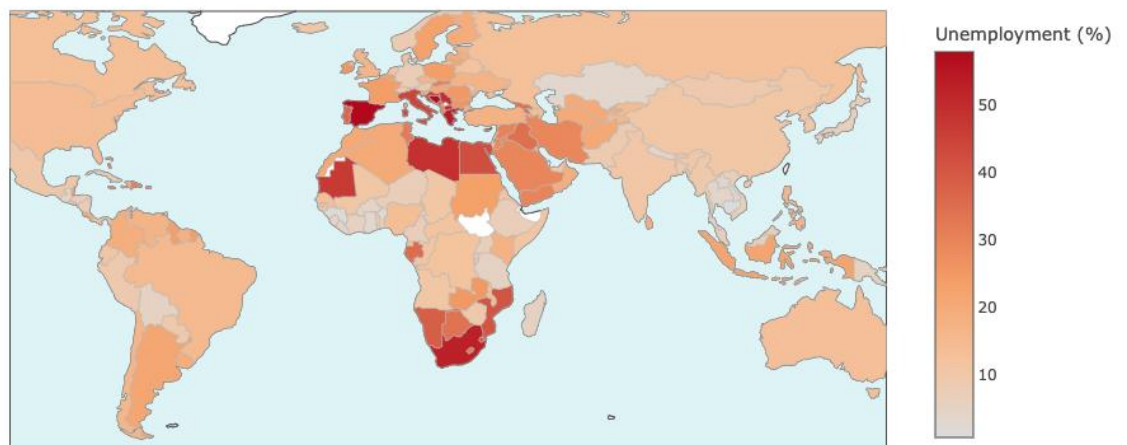
In this figure, I plot the distribution of all 218 area's unemployment rate in each year with box plots and scatter plots. The data in 2012 indicates the average world's unemployment rate is the highest in 5 years.

3. Let's first plot the data from 2010 and 2014 on the world map.

Unemployment around the globe in 2010



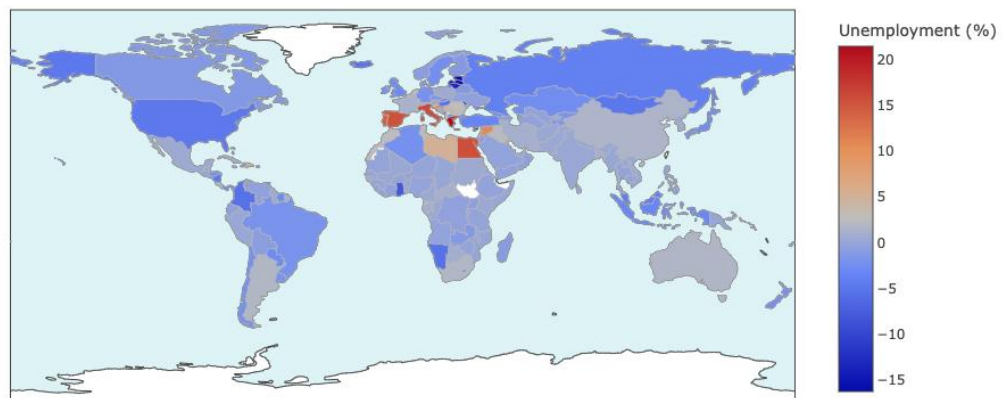
Unemployment around the globe in 2014



In these two figures we can see clearly see the unemployment rate all around the world. As the color gets darker, this area suffers a higher unemployment rate.

4. Calculate the changes of the unemployments rate from 2010 to 2014.

Changes in Unemployment rate around the world from 2010 to 2014



This figure shows the net increases or decreases in unemployment rate of the areas from the whole world. The area with blue color means the unemployment rate decreases while those with red color means the unemployment increases. From 2010 to 2014, we can see most of the world was going through a decendent in unemployment rate or mataining their previous level, while some countries in North Africa and Europe shows they have huge increment in unemployment rate.