

Visualizations

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Brief Summary

I used the data queried for mean unemployment rate each year and top 3 unemployment rates each year to answer two questions

Setting up my Environment

```
# install tidyverse
install.packages('tidyverse')

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.2'
## (as 'lib' is unspecified)

# load tidyverse
library(tidyverse)

## -- Attaching packages ----- tidyverse 1.3.2 --
## v ggplot2 3.3.6      v purrr   0.3.4
## v tibble  3.1.8      v dplyr  1.0.10
## v tidyr   1.2.1      v stringr 1.4.1
## v readr   2.1.2      v forcats 0.5.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()

# install ggplot2
install.packages('ggplot2')

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.2'
## (as 'lib' is unspecified)

# load ggplot2
library(ggplot2)
```

Creating Visualizations

Mean Unemployment Rate Each Year

My first question was: How did unemployment rates in Africa change over time?

```
# line graph of mean unemployment rate each year
ggplot(data=yearly_Africa_unemployment) +
  geom_smooth(mapping=aes(y = mean_unemployment_rate, x = Year)) +
  labs(
    title = 'How Did the Unemployment Rate in Africa Change Over Time',
```

```

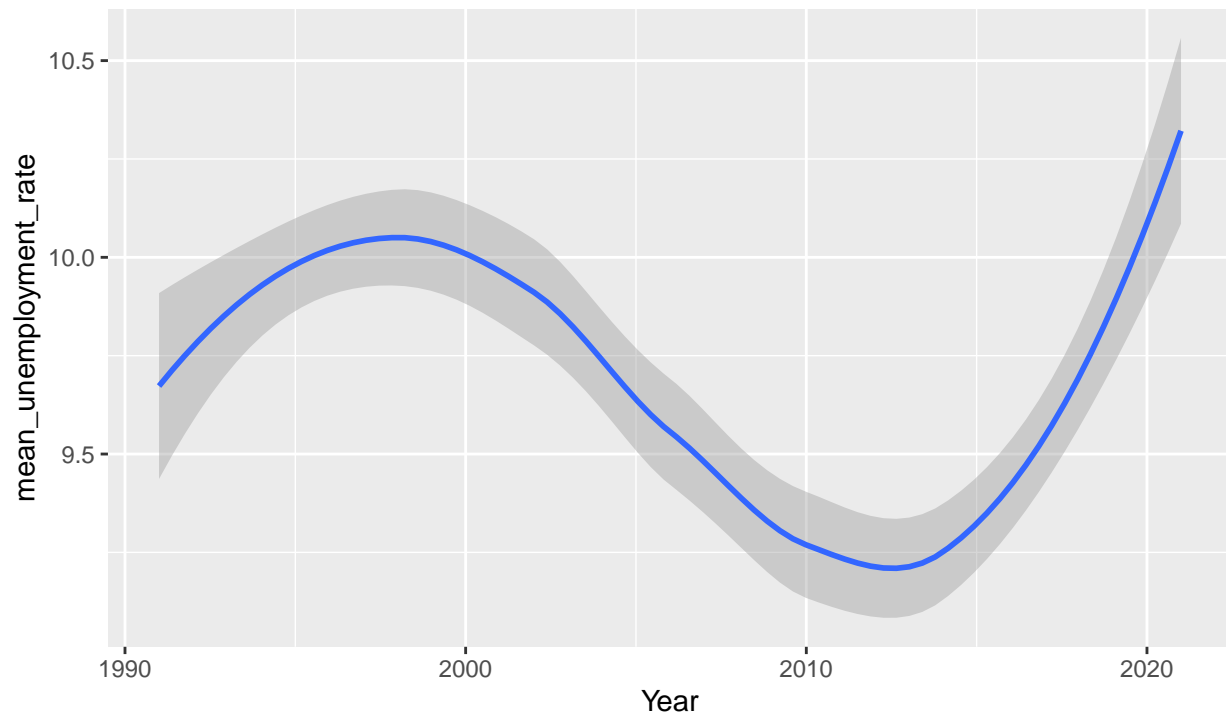
    subtitle = 'Mean unemployment rate of countries in Africa from 1990-2021',
    caption = 'Source: Destiny Wyche 01_proj Repository'
)

```

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

How Did the Unemployment Rate in Africa Change Over Time

Mean unemployment rate of countries in Africa from 1990–2021



Source: Destiny Wyche 01_proj Repository

Top 3 Unemployment Rates Each Year

My second question was: Which country most frequently had the highest unemployment rate each year?

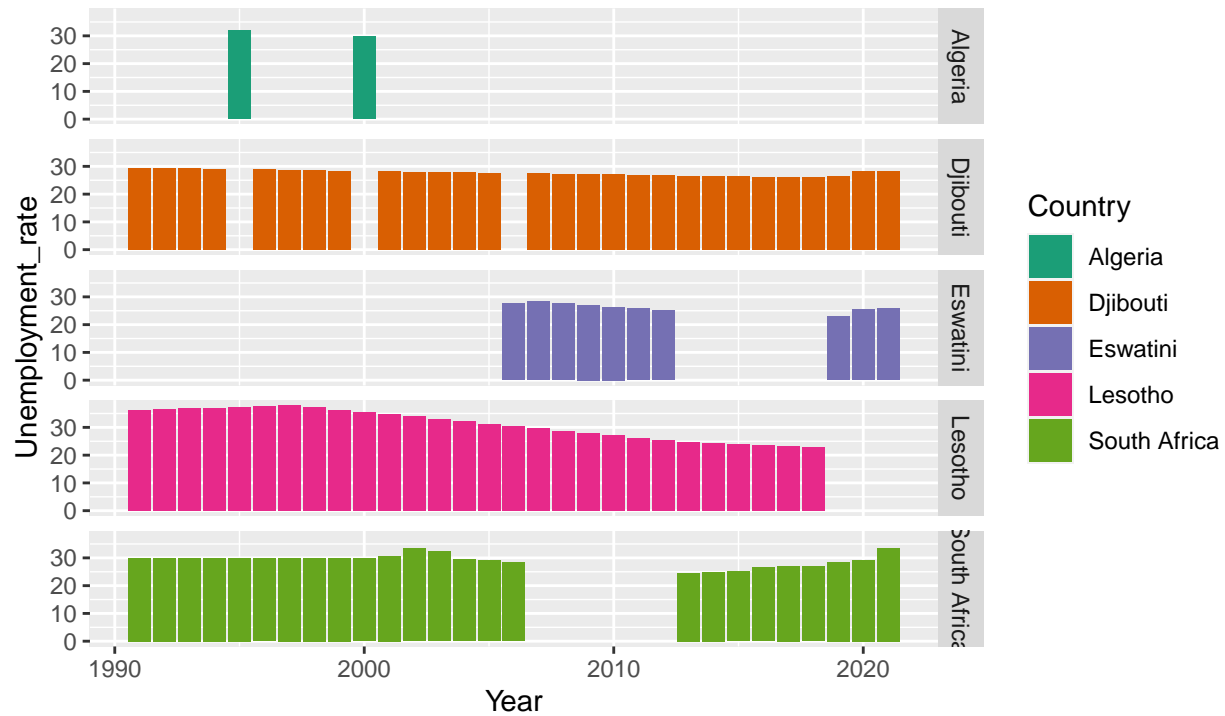
```

ggplot(top_3_unemploy, aes(x = Year , y= Unemployment_rate, fill = Country)) +
  geom_bar(position="dodge", stat = "identity") +
  scale_fill_brewer(palette= 'Dark2') +
  facet_grid(rows = vars(Country), scales = "free_x", space = "free_x") +
  labs(
    title = "Which Country in Africa Most Frequently Had the Highest Unemployment Rate?",
    subtitle = 'Top 3 unemployment rates each year',
    caption = 'Source: Destiny Wyche 01_proj Repository'
  )
)

```

Which Country in Africa Most Frequently Had the Highest Unemployment Rate?

Top 3 unemployment rates each year



Source: Destiny Wyche 01_proj Repository