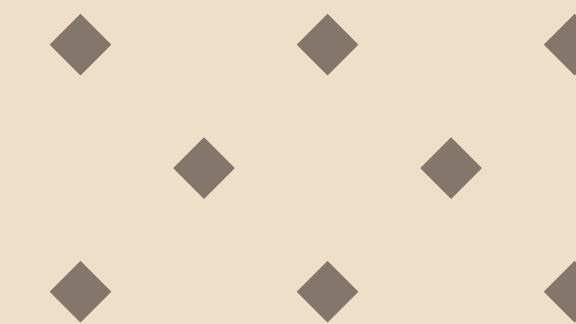


# COVID-19'S INFLUENCE ON GLOBAL SOCIO-ECONOMIC LANDSCAPE

Smart Analysis in Big Data Systems



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# INTRODUCTION

**O1**

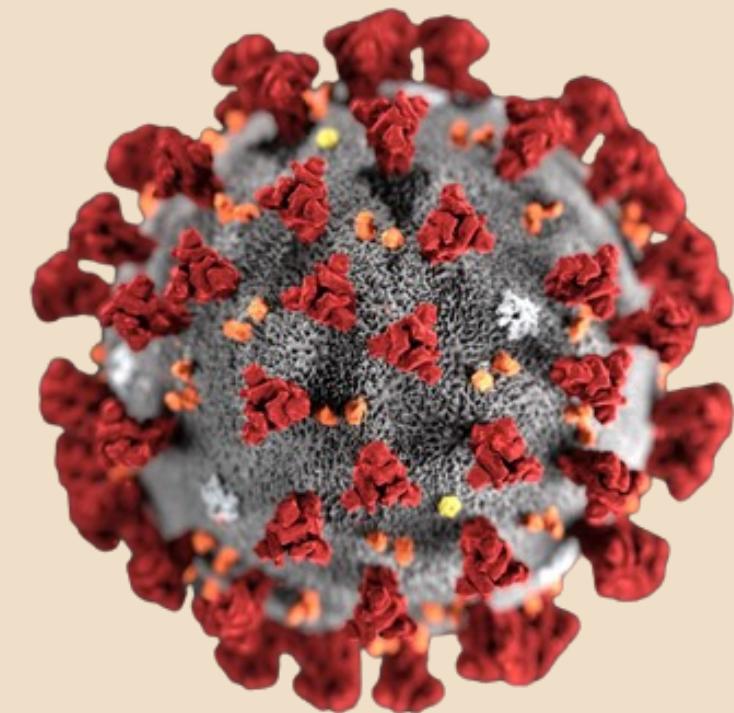
The COVID-19 pandemic drastically altered global life, causing widespread economic and social challenges.

**O2**

Our study examines the impact of the pandemic on GDP, Inflation, Migration, Population, Taxes and Unemployment.

**O3**

Research questions focus on the impact on a global scale, comparing G8 and non-G8 Countries, G8 versus G20 and conducting a Continental analysis on these factors.



# DEFINITIONS

**01** COVID-19

**02** Gross Domestic Product (GDP)

**03** Inflation

**04** Migration

**05** Population

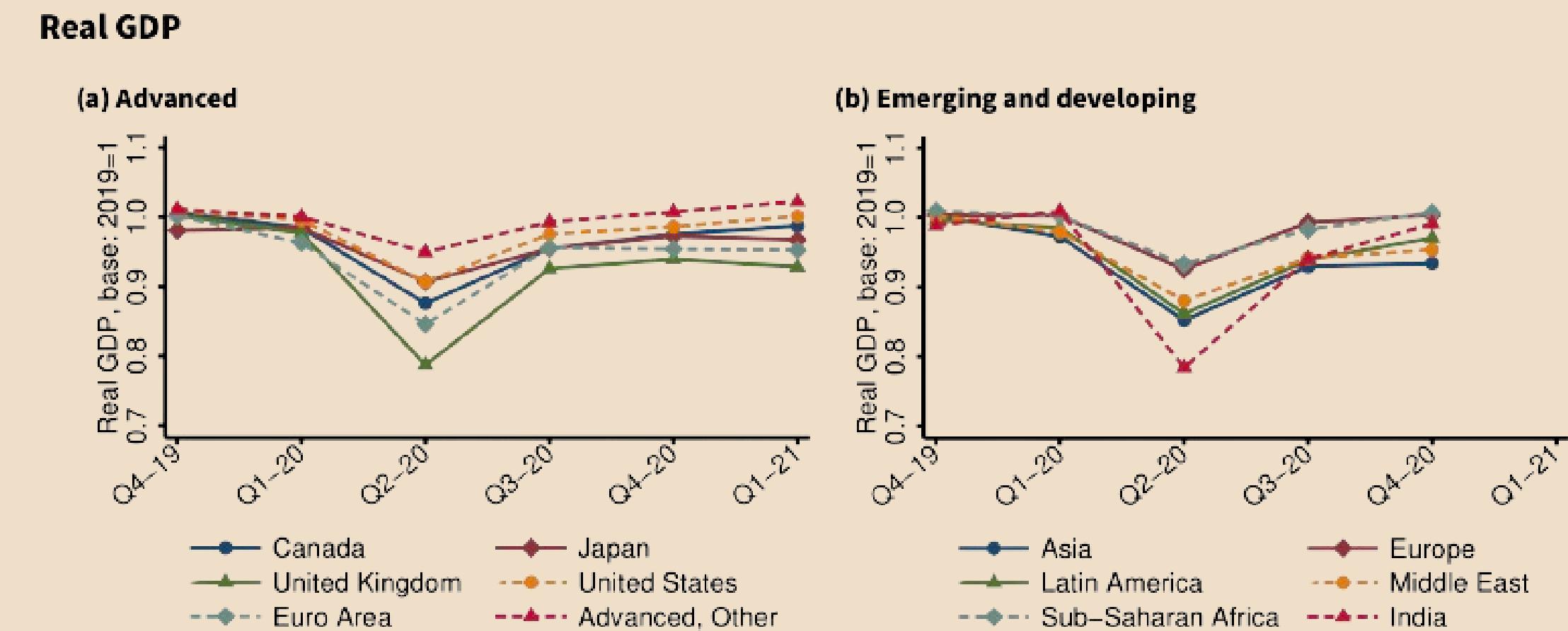
**06** Taxes

**07** Unemployment

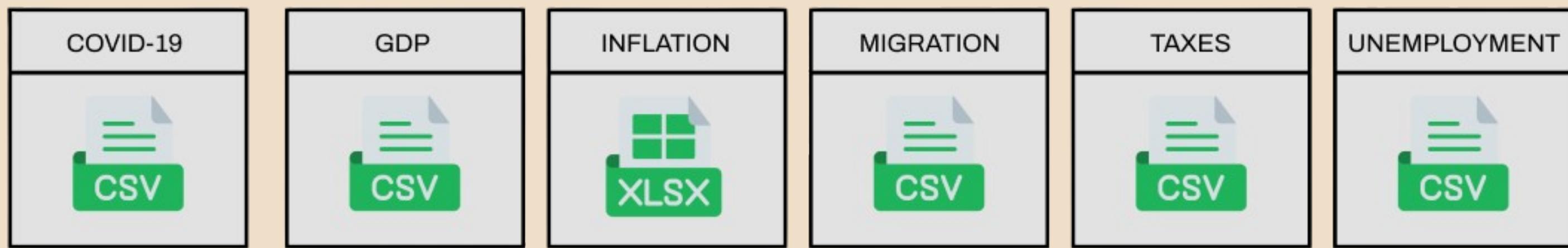
**08** G8 and G20 Countries

# STATE OF THE ART

- O1** GDP decrease in the beginning of the Pandemic across all Continents and Countries
- O2** Boosted demand without corresponding production lead to the rise of the Inflation
- O3** Slow Migration rates
- O4** Slow Population growth
- O5** Unemployment spikes with gradual recovery



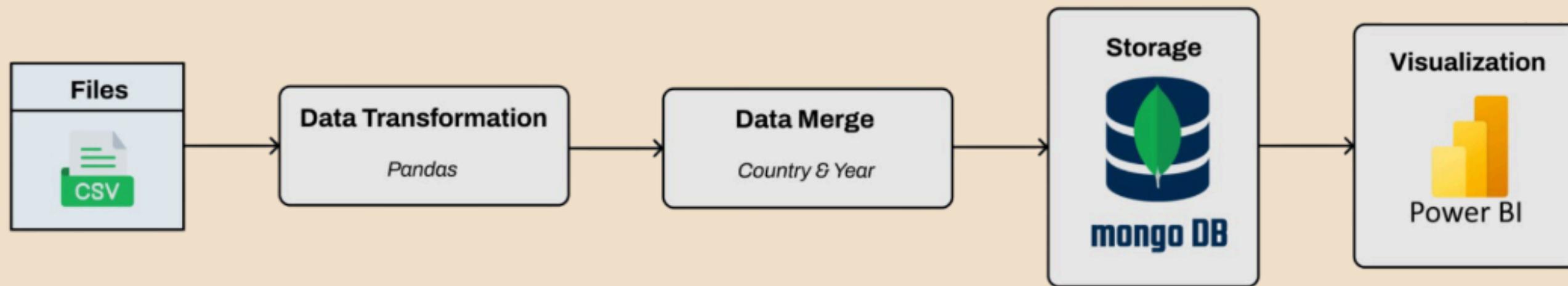
# DATA BREAKDOWN



Dataset Files

# METHODS

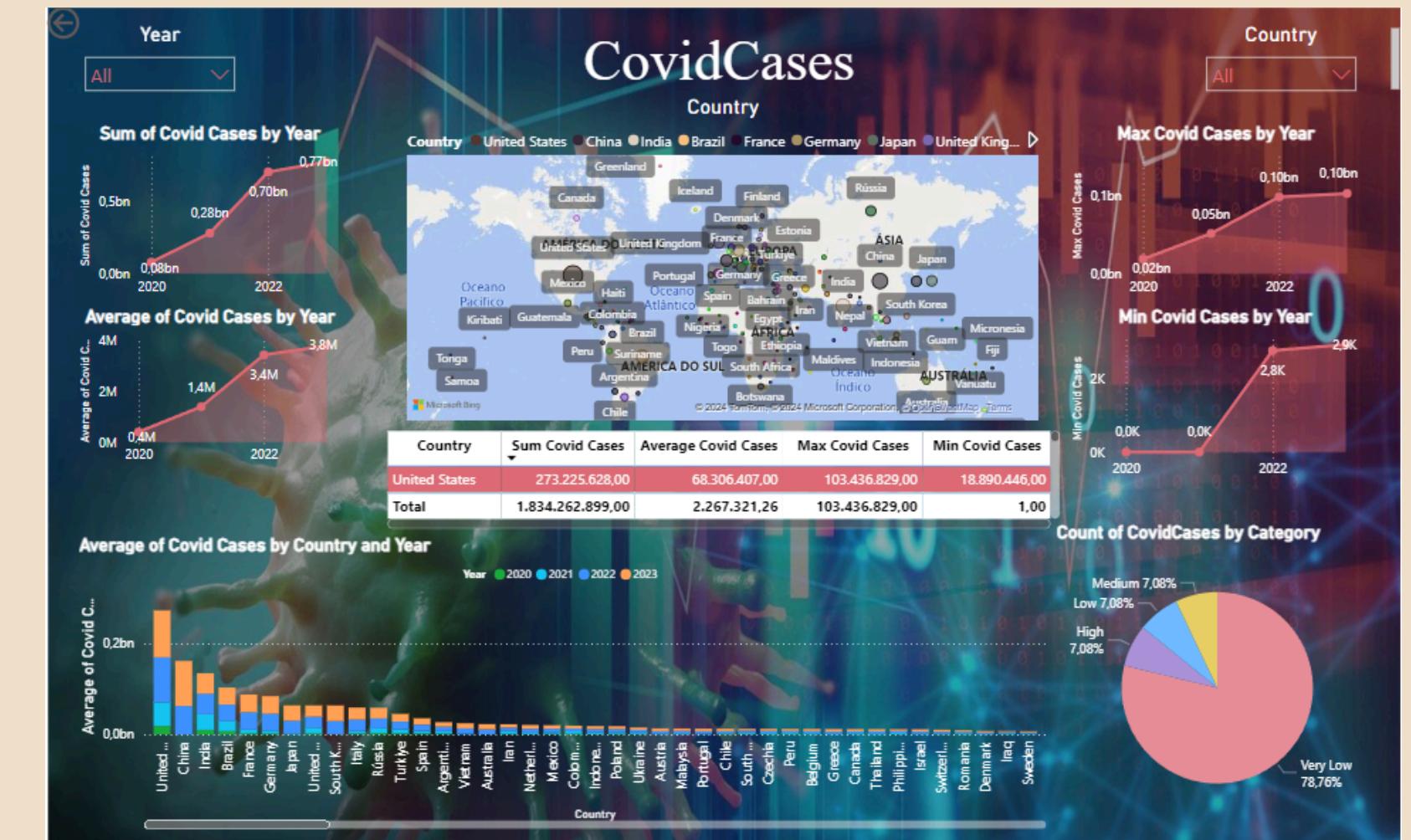
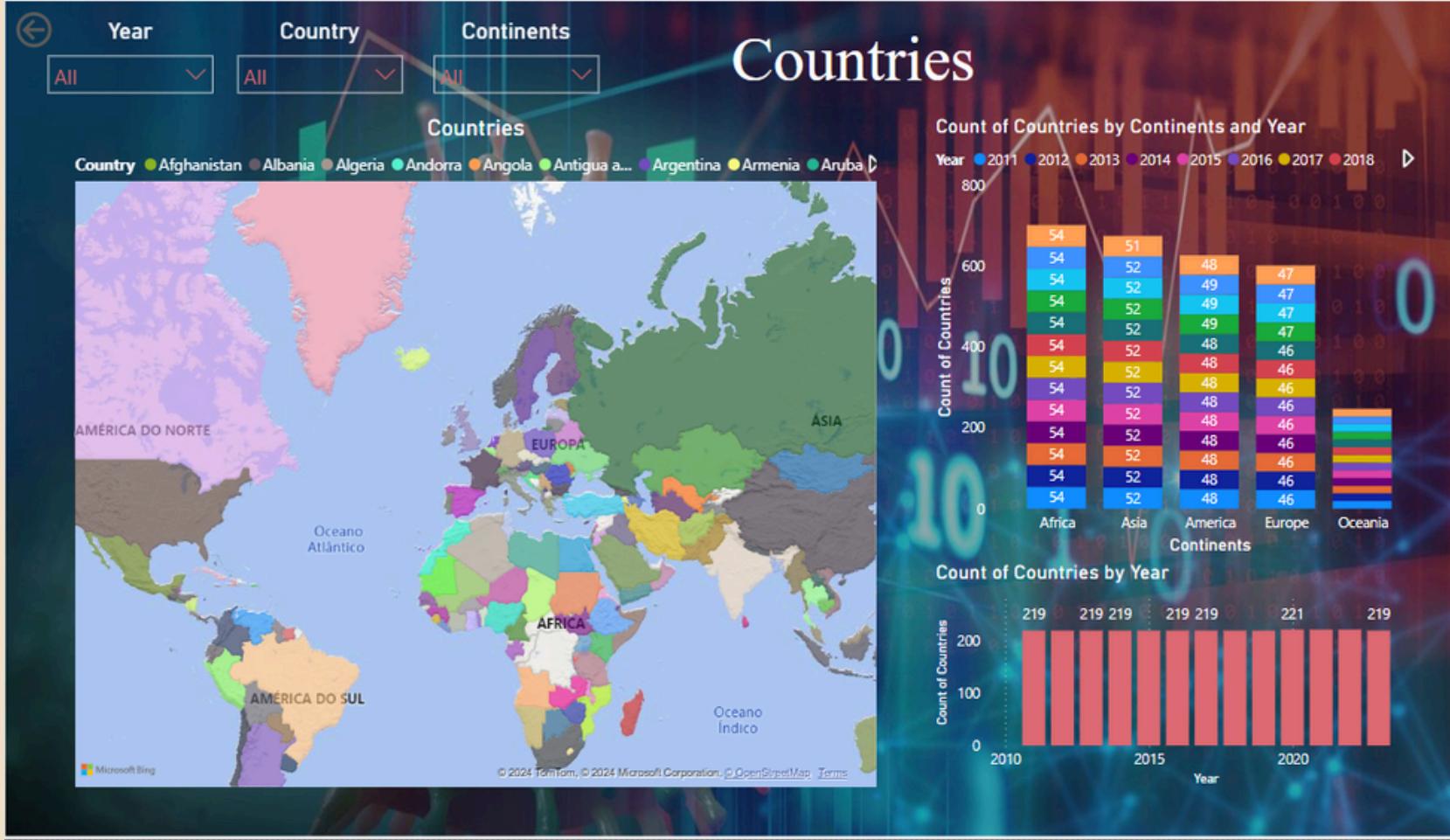
## Architecture



- O1** Reshaping the Datasets based on the *melt* function
- O2** Merge process done by Country and Year
- O3** Apache Spark (14.7 secs) versus Pandas (1.3 secs)

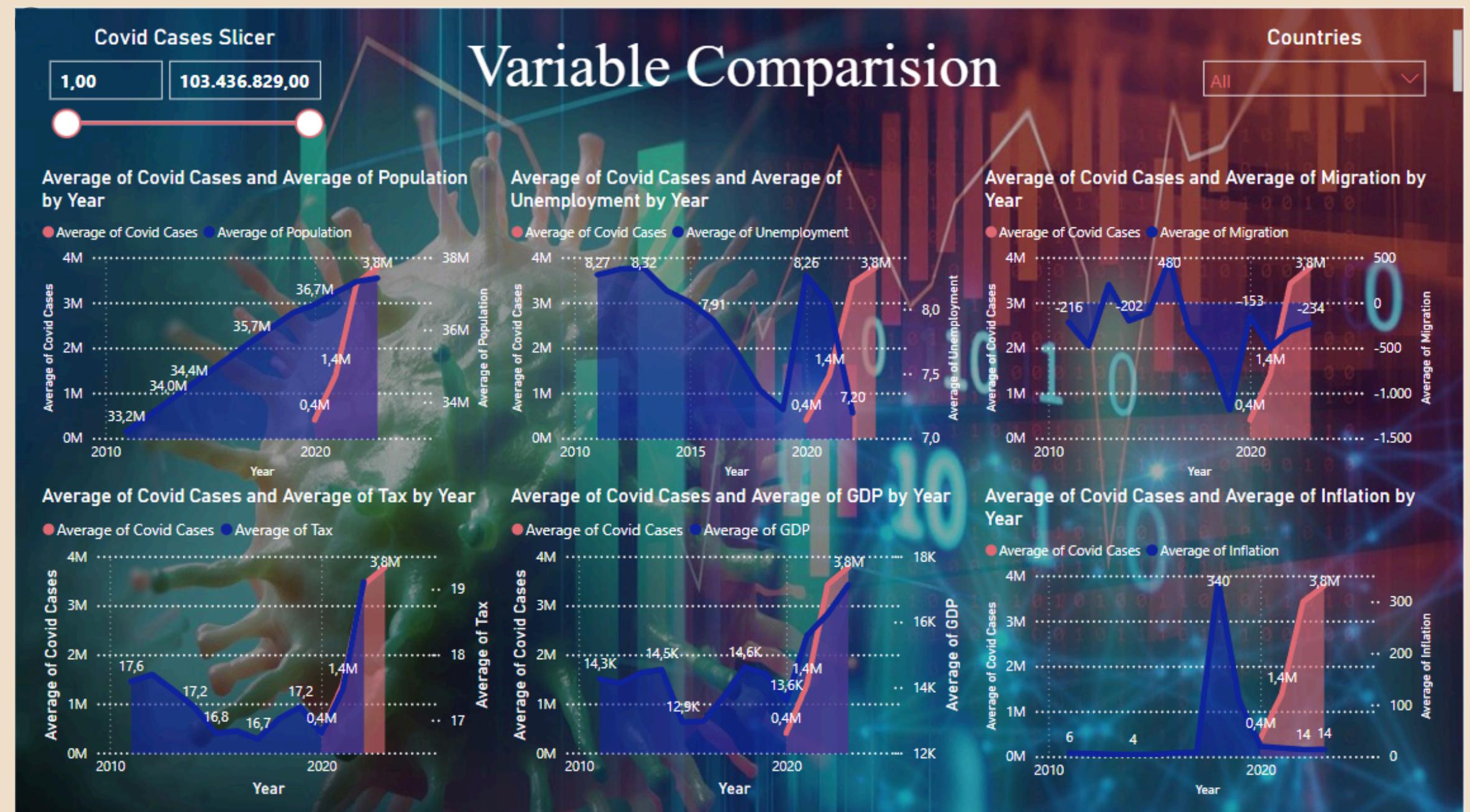
# RESULTS

## Globally



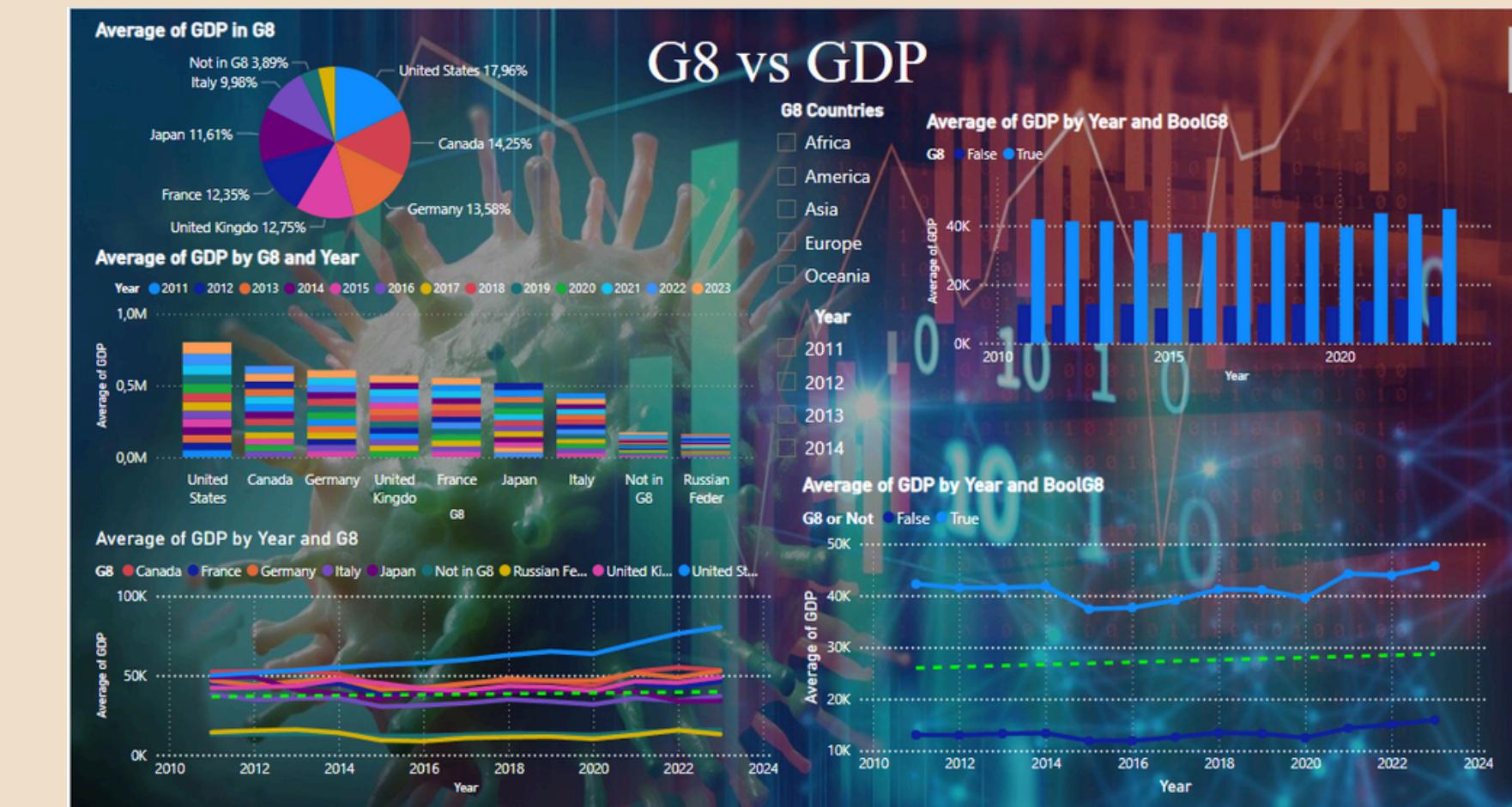
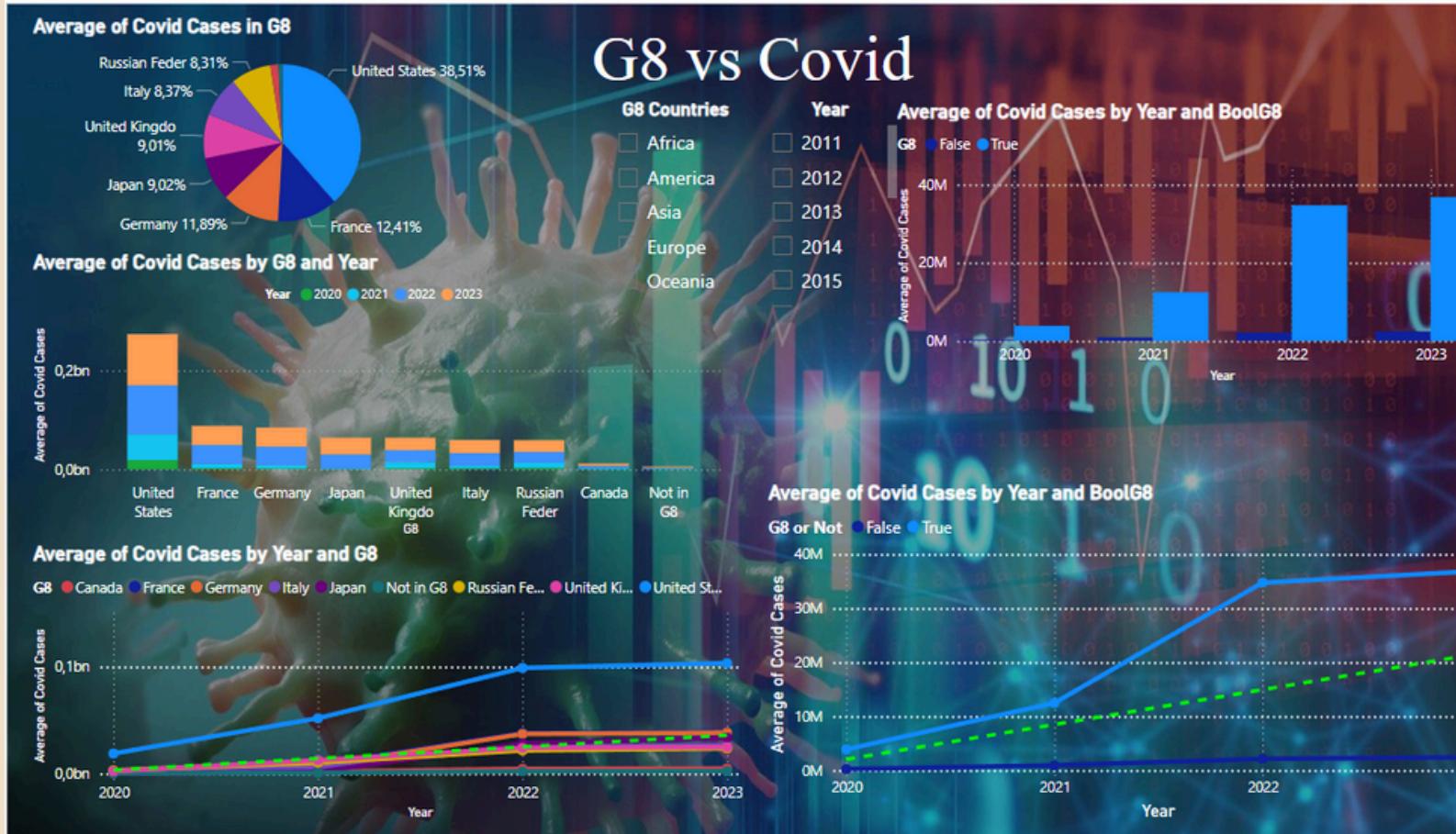
# RESULTS

## Globally



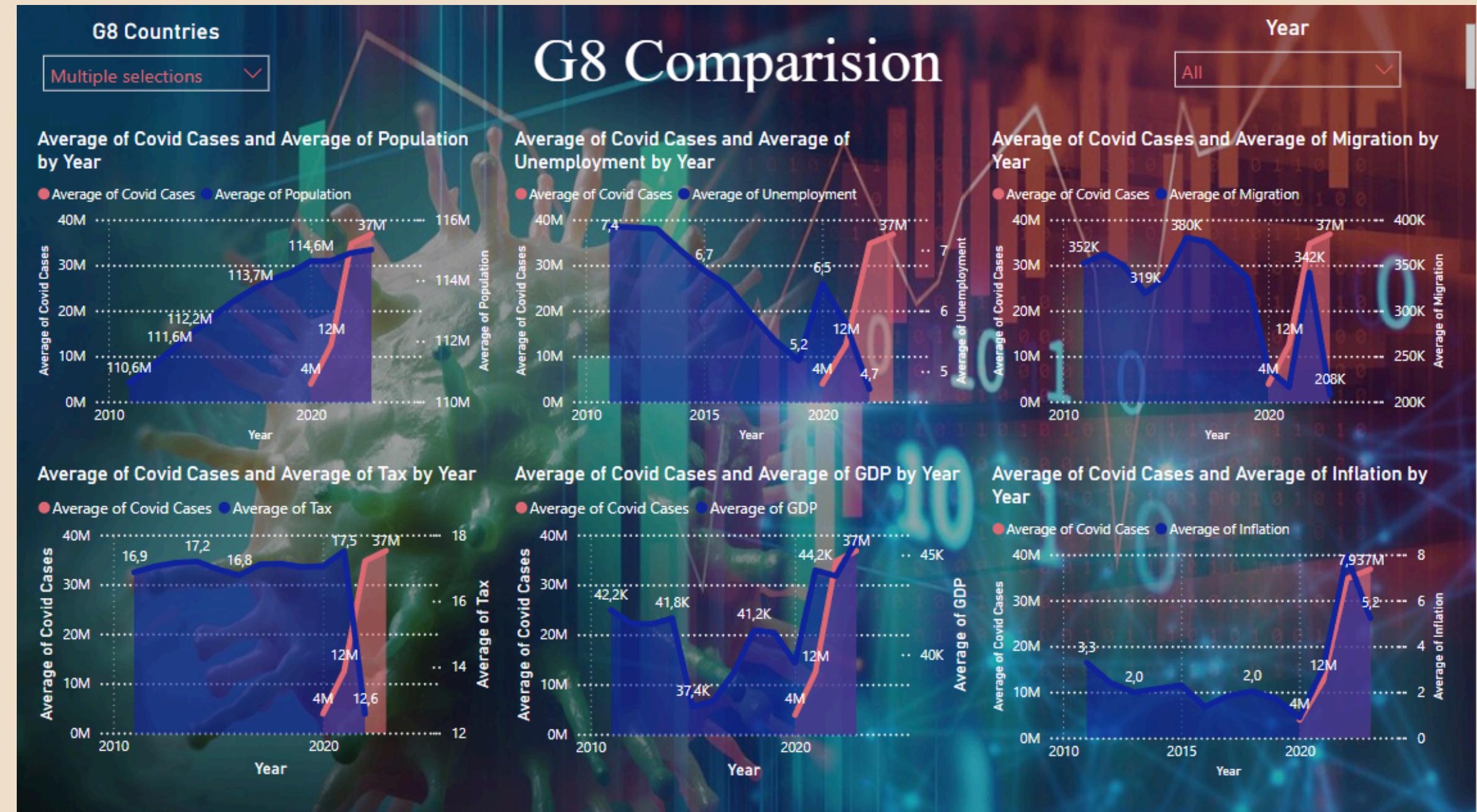
# RESULTS

## G8 Countries



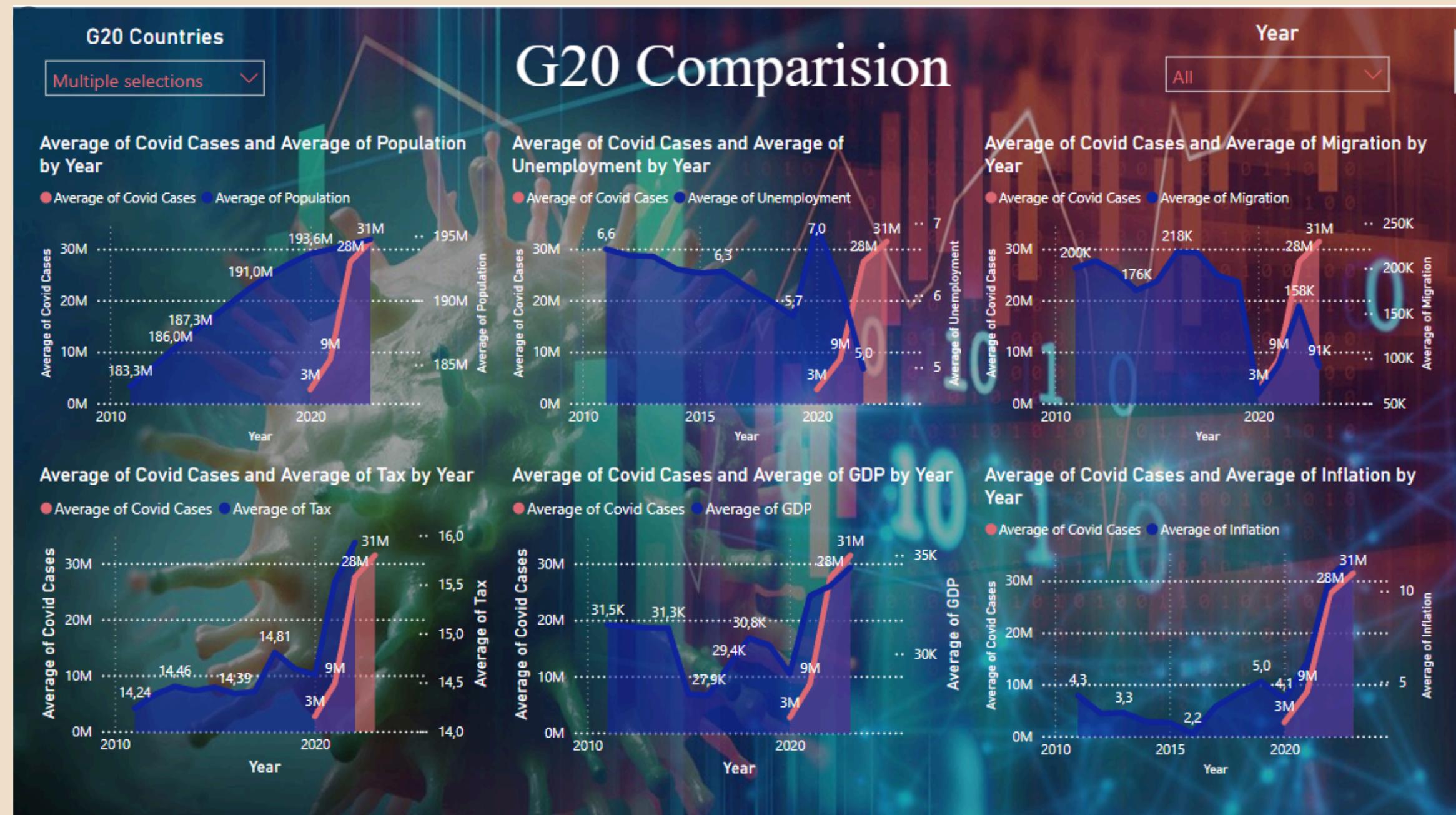
# RESULTS

## G8 Countries



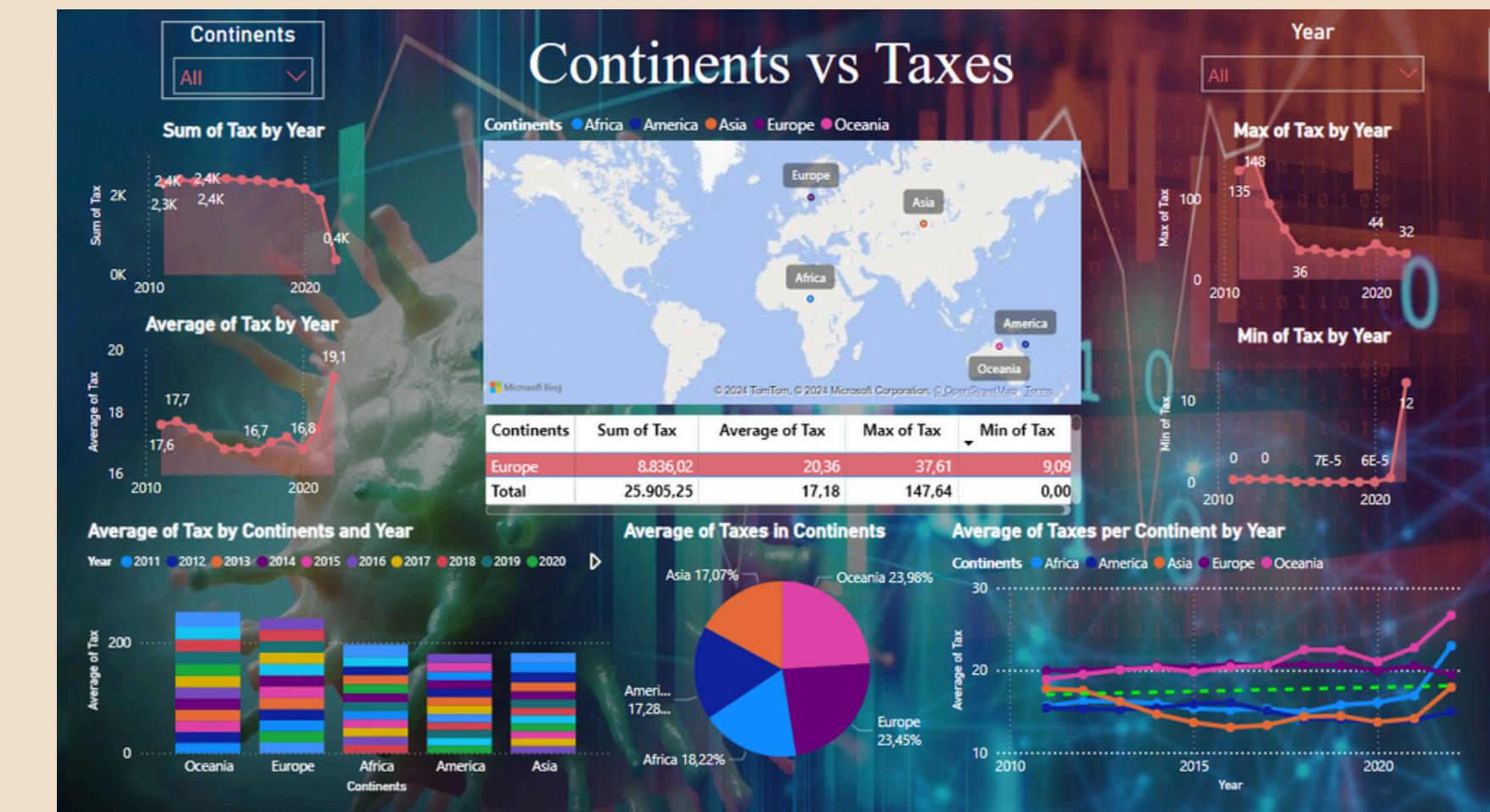
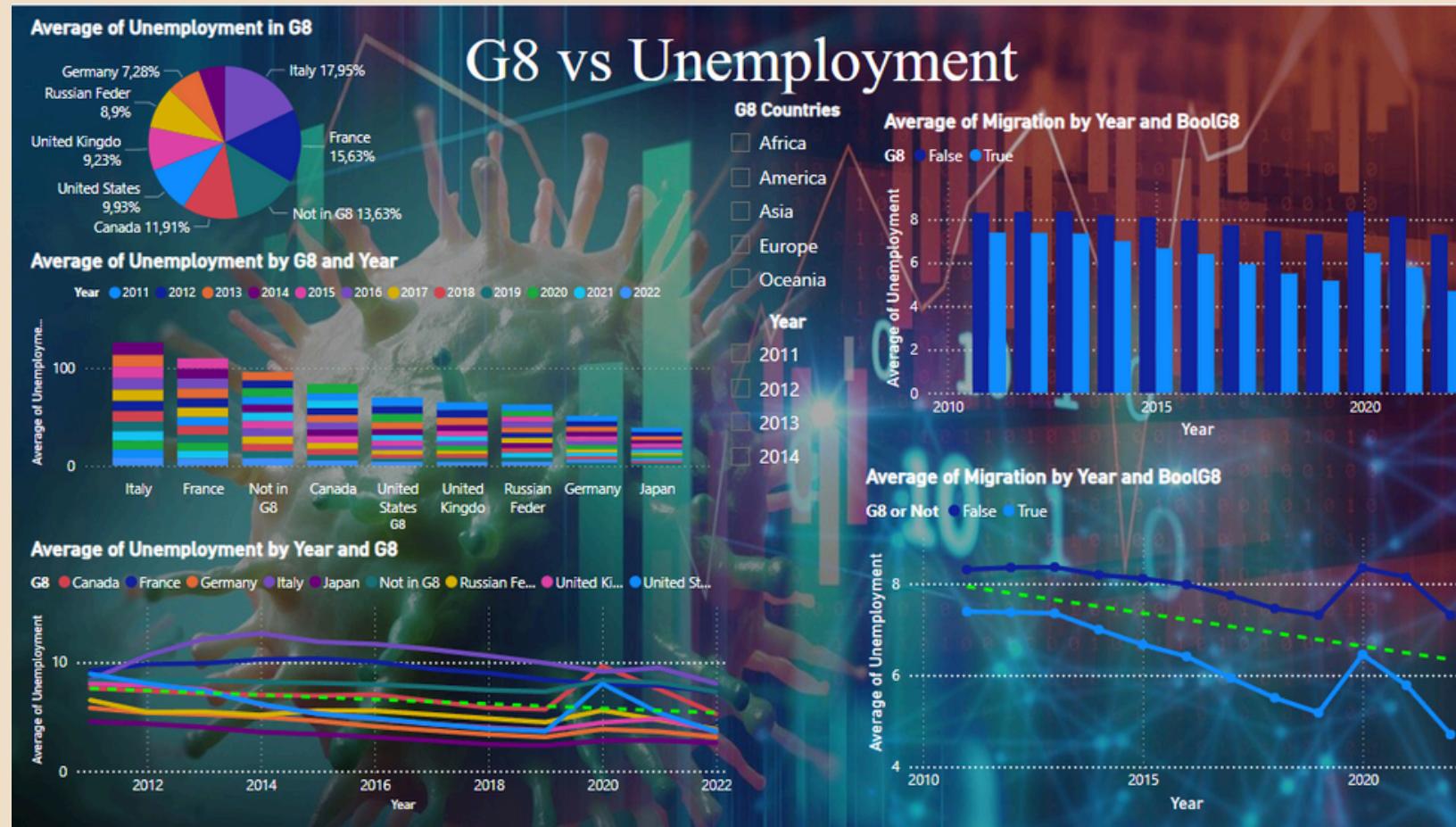
# RESULTS

## G20 Countries



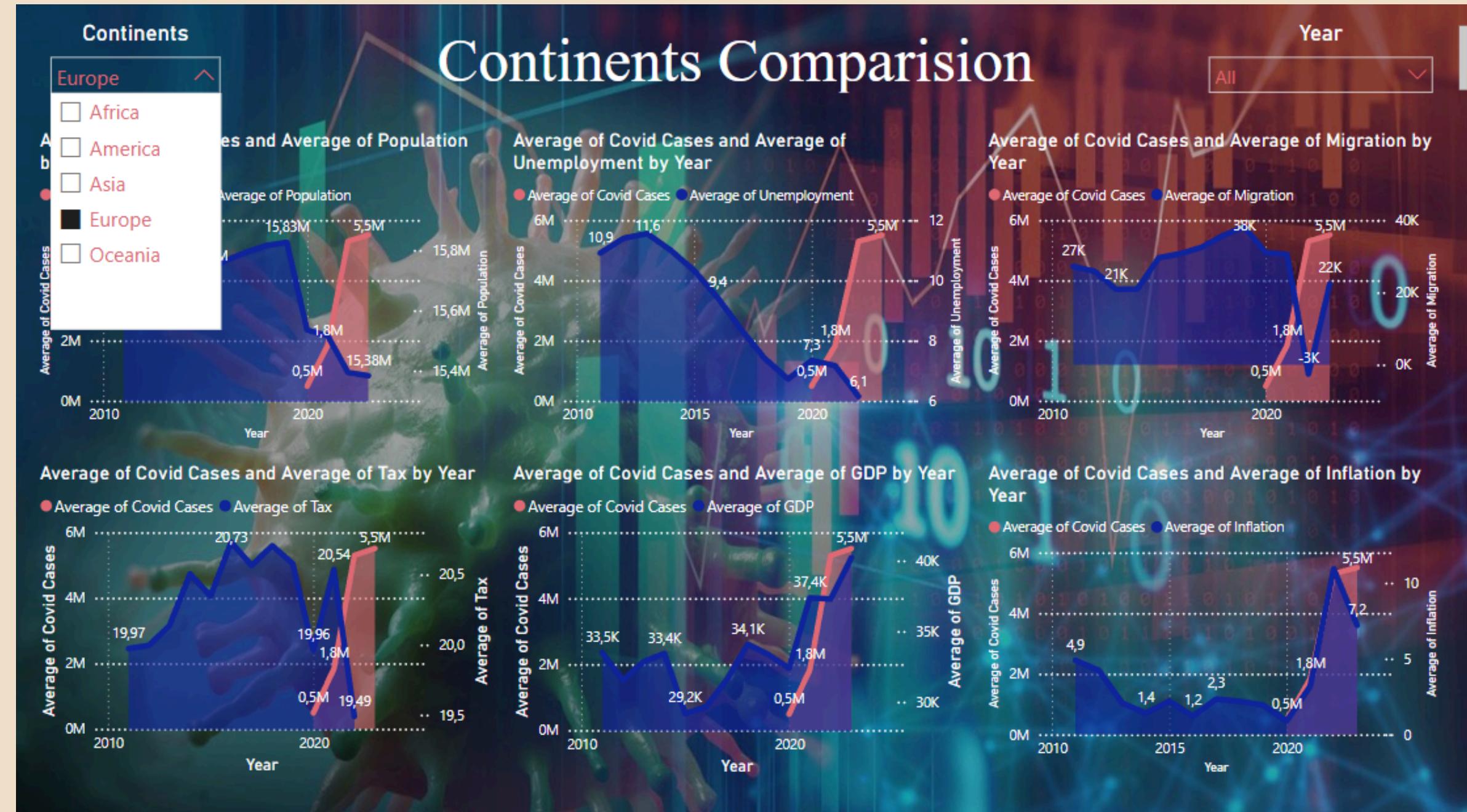
# RESULTS

## Continents



# RESULTS

## Continents



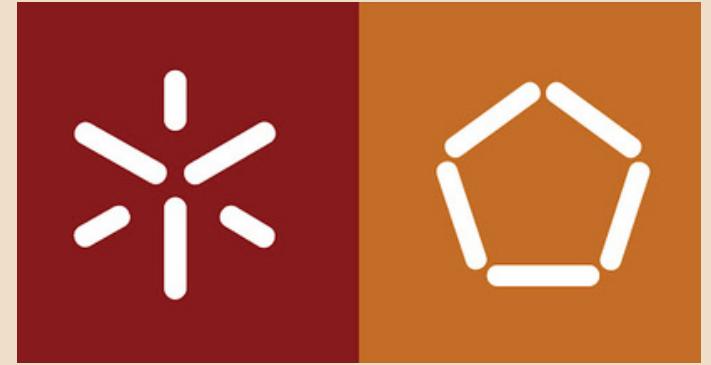
# CONCLUSION

**Global Economic  
Impact and  
Recovery  
Dynamics**

**Employment,  
Income  
Inequality, and  
Poverty**

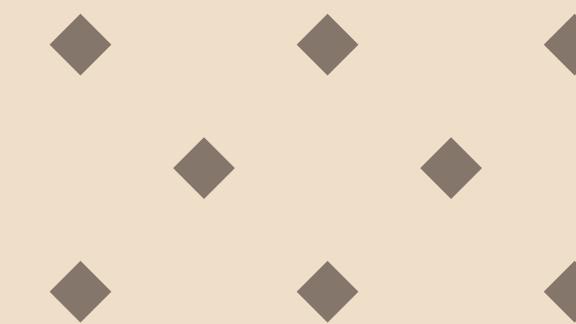
**Disparities  
Between  
Developed and  
Developing  
Nations**

**Socio-Economic  
Changes and  
Long-Term  
Implications**



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