# Exploring Economic Prosperity: A GDP per Capita (Current US\$) Analysis.

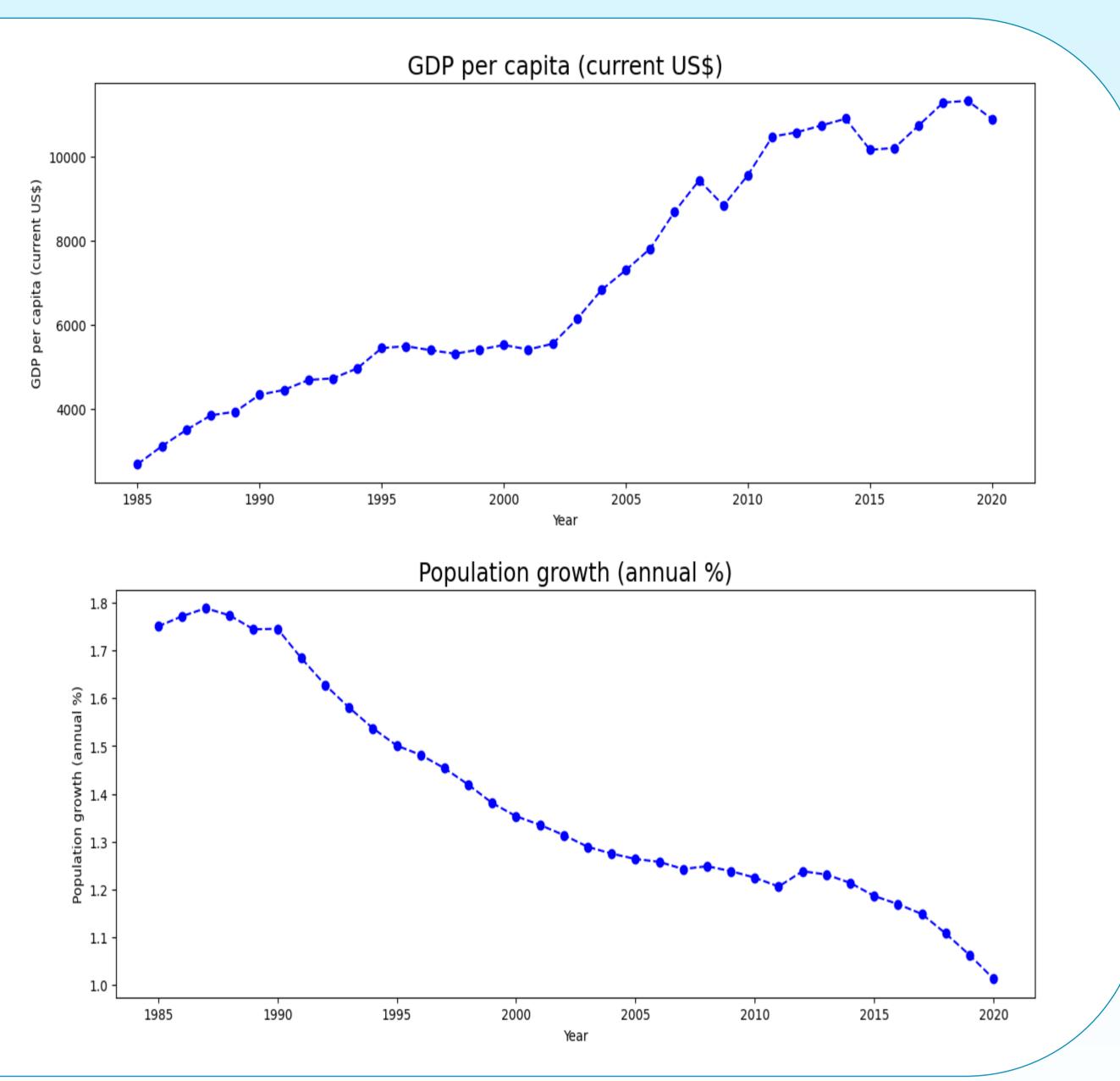
## **ABSTRACT**

This poster examines the Gross Domestic Product per capita (GDP per capita) of various countries, measured in current US dollars. The analysis provides insights into the economic output and prosperity of these countries, taking into account their population size. The primary objective is to assess the relative prosperity of different countries by analyzing their GDP per capita. It identifies the most prosperous countries in terms GDP, reveals disparities in wealth distribution, highlights potential areas for economic growth and development

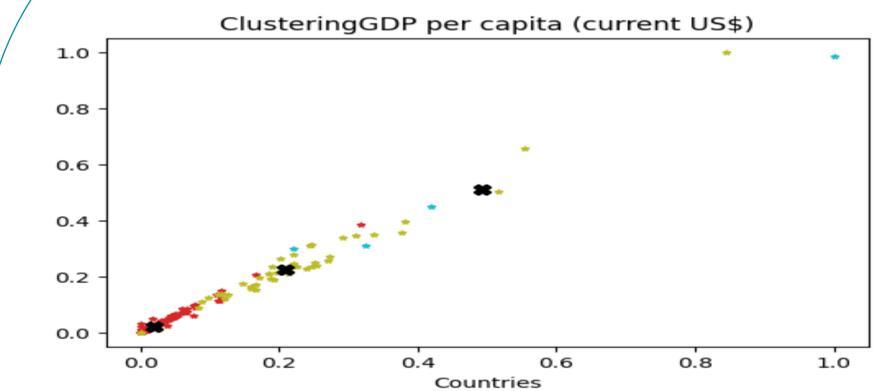
### INTRODUCTION

In the ever-evolving world economy, understanding the relationship between Gross Domestic Product (GDP) and population growth is crucial. GDP, a measure of a country's economic output, and population growth, a driver of economic expansion, are inter-related and influence a country's prosperity.

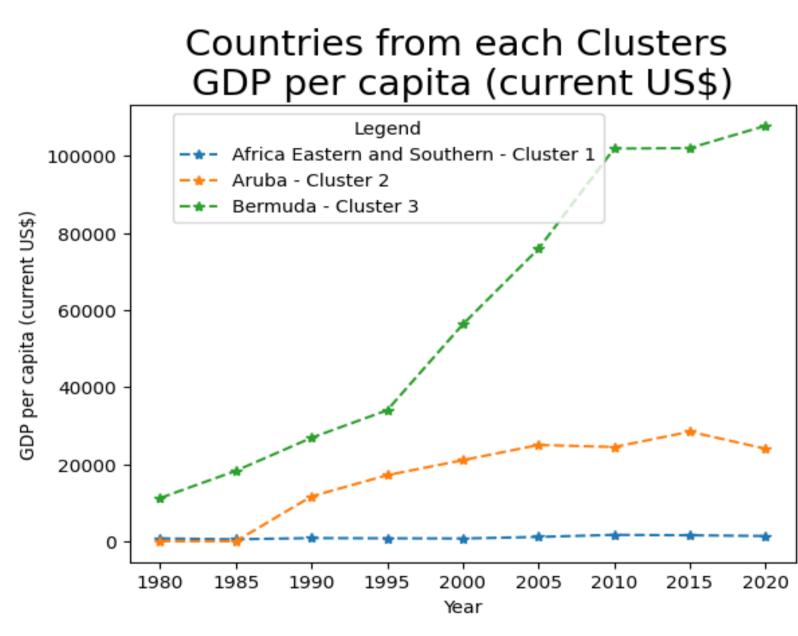
- ➤ Global GDP per capita surged fourfold from 1990 to 2020. This growth is not evenly distributed.
- > Occasional fluctuations in this positive trend occurred, mainly linked to financial crises.
- Worldwide population growth has shown a decelerating trend over the years.
- Remarks: GDP growth is stronger than population growth, GDP per capita increases worldwide, indicating improved economic output.



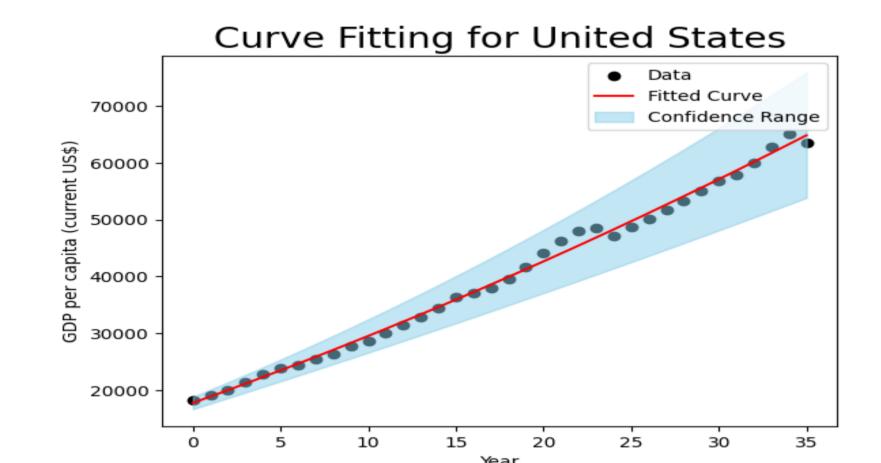
# ANALYSIS



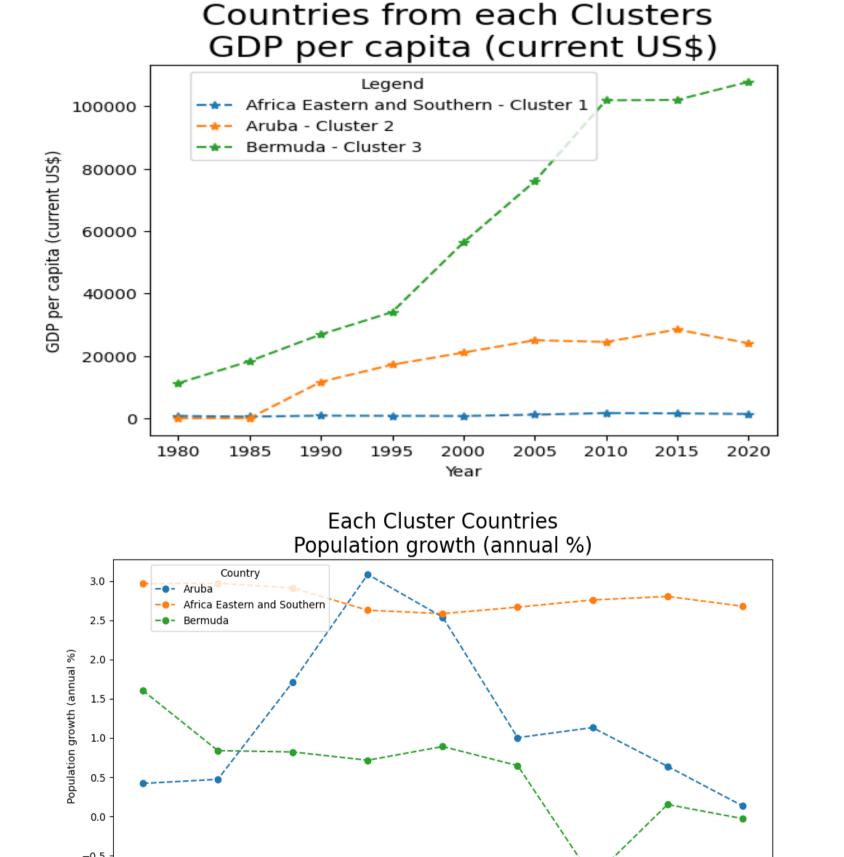
☐ Countries classifies into three clusters based on comparable GDP per capita values.



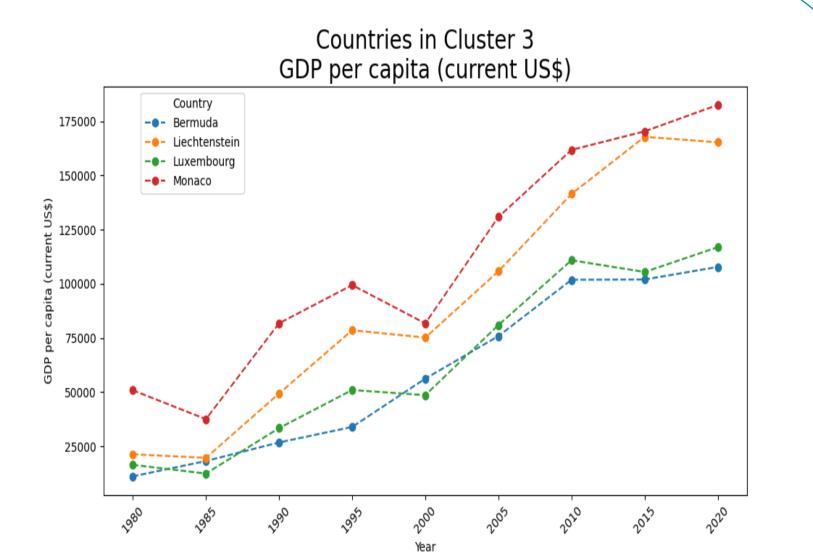
- ☐ GDP per capita has fluctuated in cluster 3 country with increasing trend.
- ☐ Aruba GDP per capita consistently increases from 1985, show similarity with Bermuda.

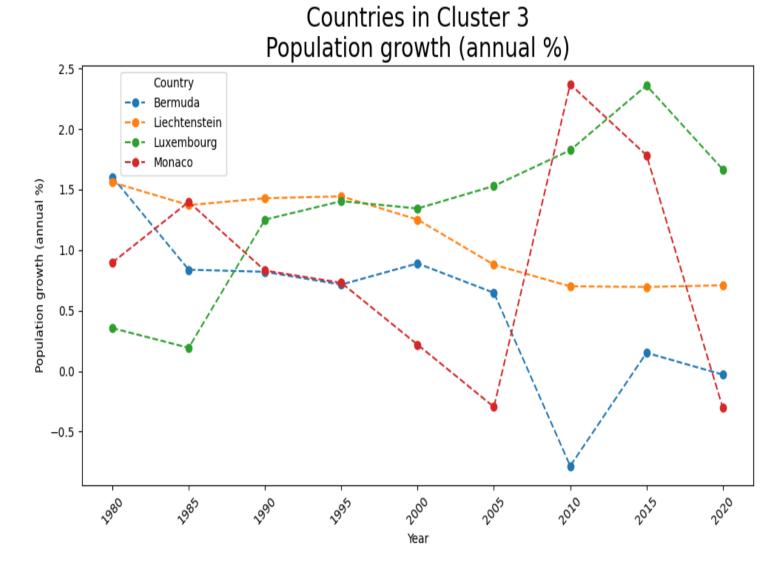


☐ Curve fit for USA.



□ Population decrease from 2000 increases GDP per capita for Bermuda and minor increase for Aroba.





- ☐ However, trend of Monaco for positive GPD per capita against increased population growth from 2000-2010 is observed.
- ☐ Cluster 3 countries show similar trend for GPD per capita.
- ☐ Monaco and Luxembourg have similarity, while Bermuda and Liechtenstein conduct same pattern for population growth.

#### CONCLUSION

In conclusion, population growth and GDP per capita are inversely related worldwide. However, the relationship between population growth and GDP per capita is complex and influenced by various factors, including technological progress, resource availability, and economic policies. Therefore, it is crucial to implement effective economic policies to maximize the benefits of demographic transitions and promote sustainable economic growth.

Git hub link:https://github.com/Barathnsj/Applied-Data-Science-1-Assignment-3