Smart Internz

Project Title

Measuring the Pulse of Prosperity: An Index of Economic Freedom Analysis

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INTRODUCTION

1. Project Overview

Economic freedom is the fundamental right of every human to control his or her own labor and property. In an economically free society, individuals are free to work, produce, consume, and invest in any way they please. In economically free societies, governments allow labor, capital, and goods to move freely, and refrain from coercion or constraint of liberty beyond the extent necessary to protect and maintain liberty itself.

2. Purpose

The purpose of this project is to explore For much of human history, most individuals have lacked economic freedom and opportunity, condemning them to poverty and deprivation.

IDEATION PHASE

1. Problem Statement

Today, we live in the most prosperous time in human history. Poverty, sicknesses, and ignorance are receding throughout the world, due in large part to the advance of economic freedom. In 2022, the principles of economic freedom that have fueled this monumental progress are once again measured in the Index of Economic Freedom, an annual guide published by The Heritage Foundation, Washington's No. 1 think tank.

Empathy Map Canvas
We measure economic freedom based on 12 quantitative and qualitative factors, grouped into four broad categories, or pillars, of economic freedom:

2. Brainstorming
- Rule of law (property rights, government integrity, judicial effectiveness)
- Government size (government spending, tax burden, fiscal health)
- Regulatory efficiency (business freedom, labor freedom, monetary freedom)
- Open markets (trade freedom, investment freedom, financial freedom)
- Compare regions and identify best-performing countries
- Develop an interactive dashboard for easy data exploration

REQUIREMENT ANALYSIS

1. Customer Journey Map

Discovery: Users learn about the Index of Economic Freedom
Exploration: Access interactive dashboards and visualizations
Insights: Analyze country rankings and economic trends
Action: Use insights for research, policy-making, or awareness

2. Solution Requirement

Functional Requirements:

- Data collection and preprocessing
- Tableau dashboard development
- Web application integration
- Interactive visualizations based on economic indicators

Non-Functional Requirements:
- User-friendly interface
- Real-time accessibility via Tableau Public
- Responsive design for mobile and desktop

3. Data Flow Diagram

Data Sources → Data Cleaning → Tableau Visualizations → Web Integration → End Users

4. Technology Stack

- **Data Processing:** Python, Pandas

- **Visualization:** Tableau, Tableau Public

- **Web Application:** HTML, CSS, Bootstrap

PROJECT DESIGN

1. Problem Solution Fit

The project provides a visual, data-driven approach to understanding how economic freedom contributes to prosperity, enabling users to analyze global trends effectively.

2. Proposed Solution

An interactive platform that presents country rankings, economic indicators, and their relationships through dynamic dashboards and storyboards.

3. Solution Architecture

- Data collection from reliable global sources

- Data cleaning and preparation

- Development of Tableau dashboards

- Integration with a responsive web application

PROJECT PLANNING G SCHEDULING

1. Project Planning

Phase	Timeline
Requirement Gathering	Week 1
Data Collection C Preprocessing	Week 2
Data Analysis C Visualization	Week 3-4
Dashboard C Story Development	Week 5
Web Integration C Testing	Week 6
Final Report C Presentation	Week 7

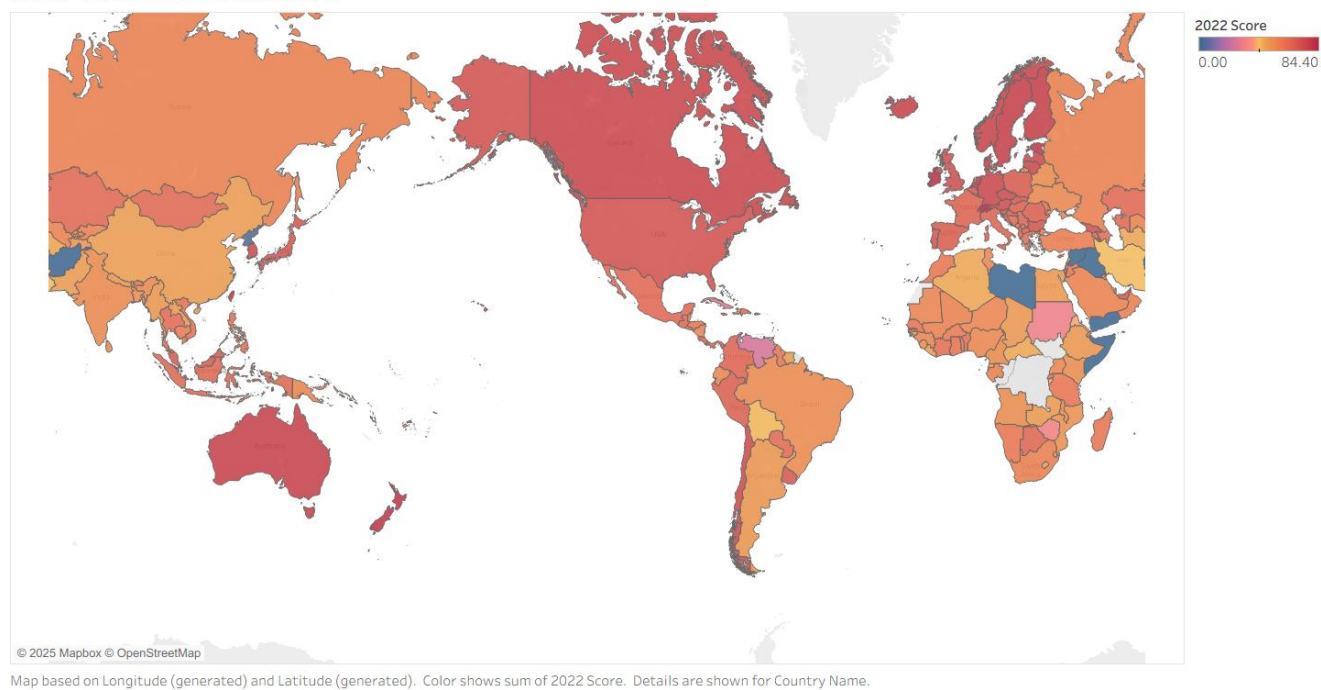# FUNCTIONAL AND PERFORMANCE TESTING

1. Performance Testing

- Tested dashboard load times and responsiveness

- Verified accurate data rendering across devices

- Ensured stable integration between Tableau Public and the web application
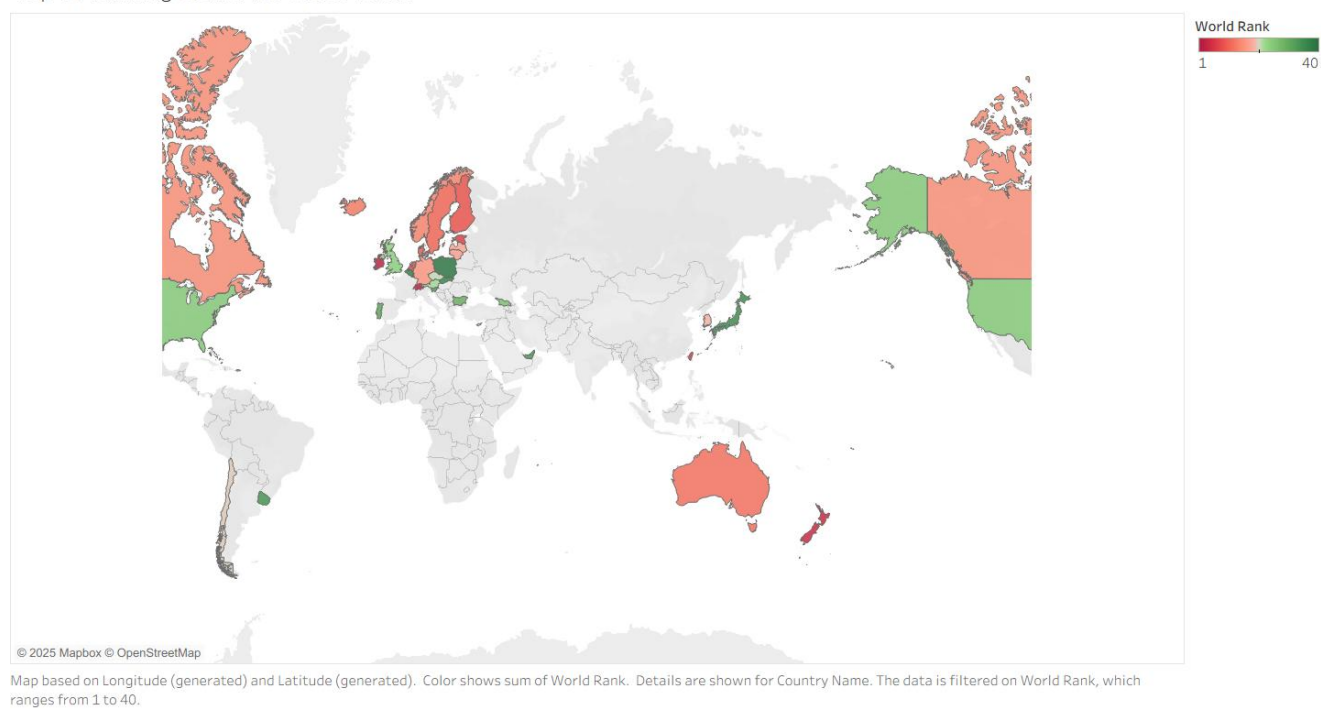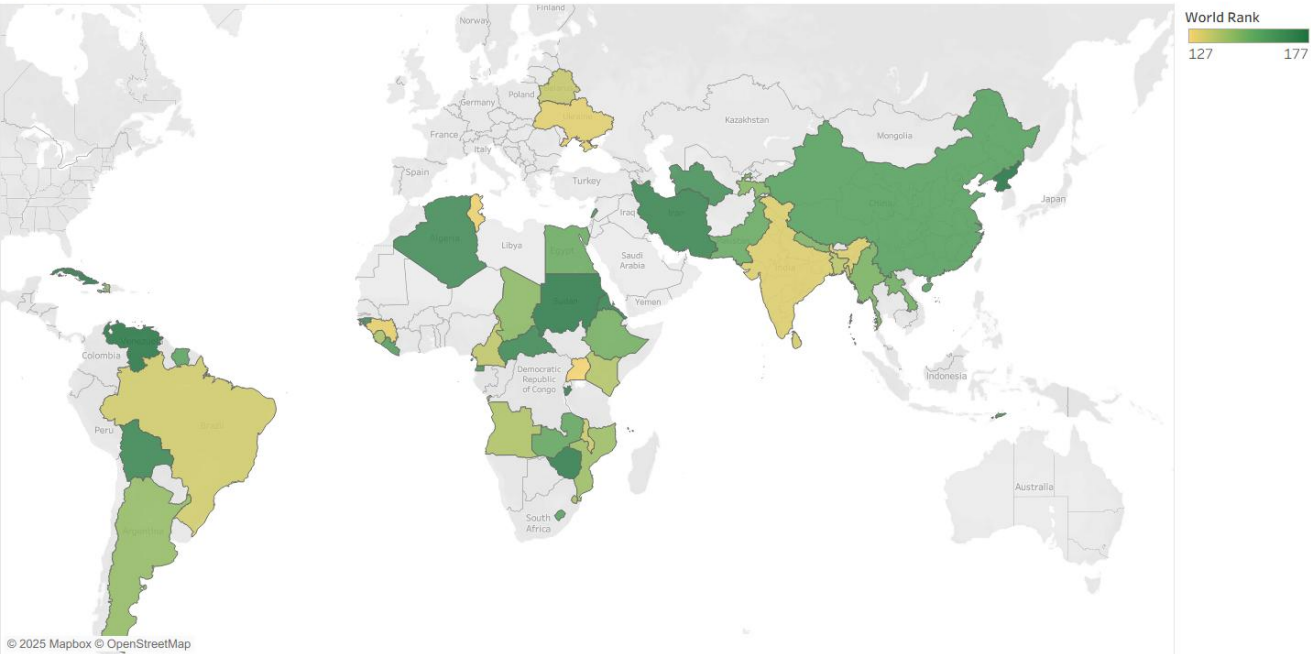
RESULTS

1. Output Screenshots

2022 Economic freedom score

Map based on Longitude (generated) and Latitude (generated). Color shows sum of 2022 Score. Details are shown for Country Name.

Top 40 ranking countries in the index

Map based on Longitude (generated) and Latitude (generated). Color shows sum of World Rank. Details are shown for Country Name. The data is filtered on World Rank, which ranges from 1 to 40.
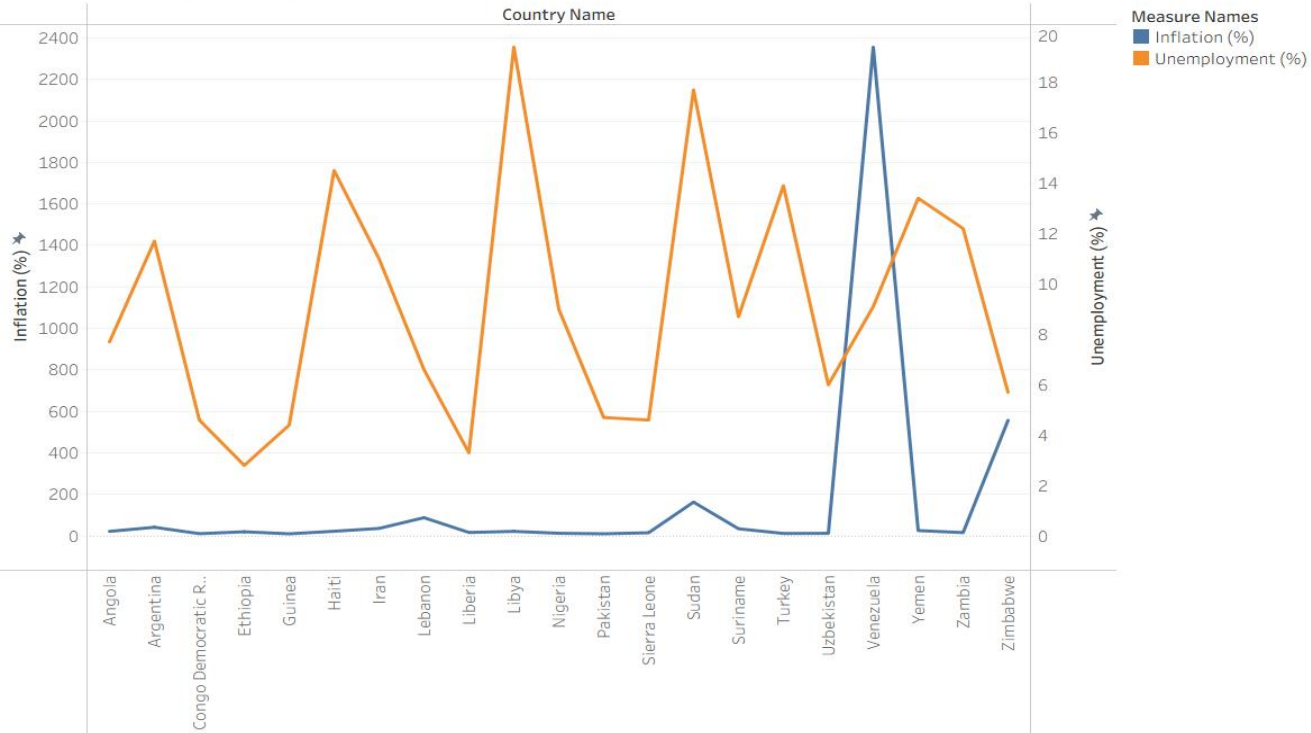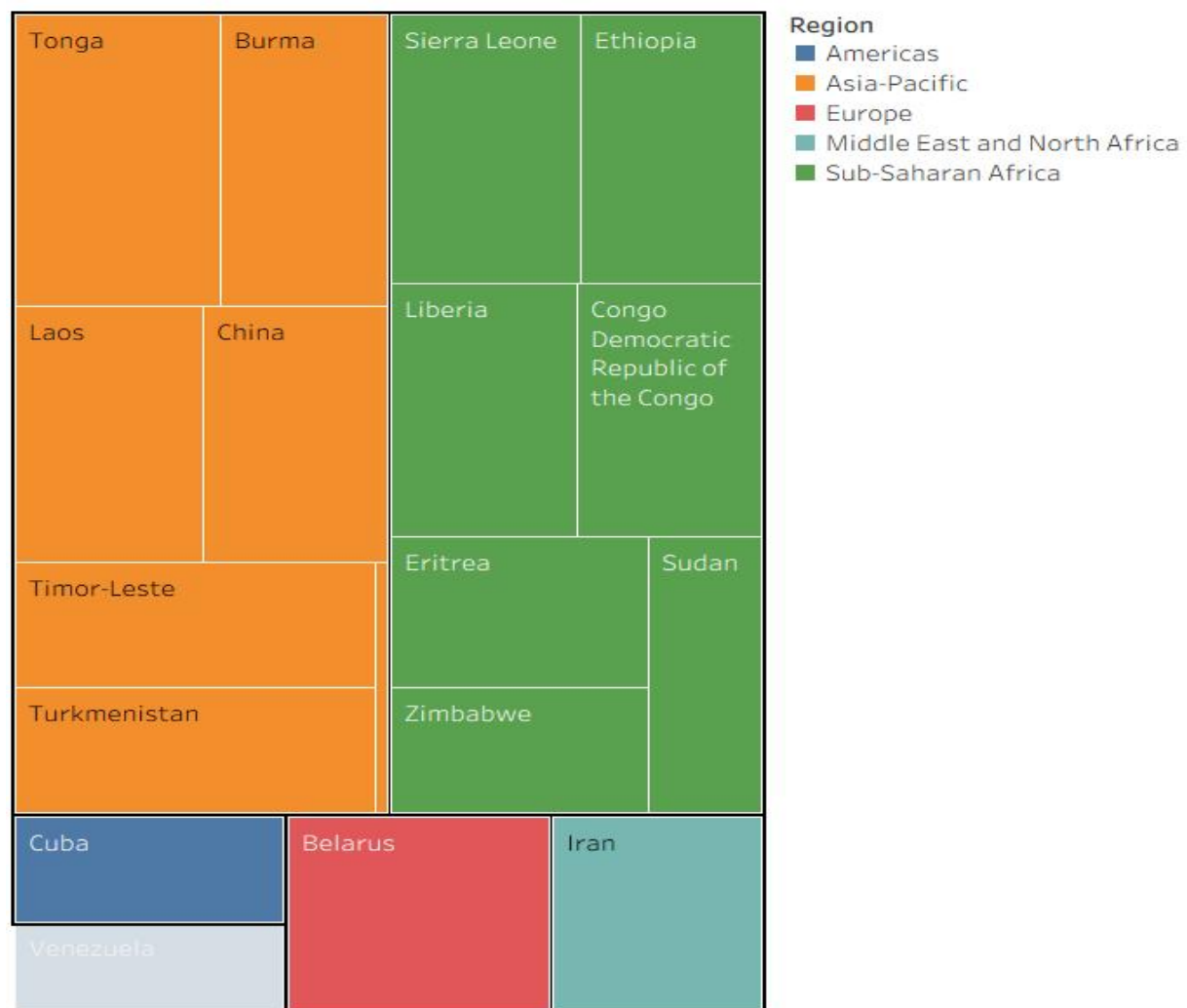
Bottom ranking countries in the index

Map based on Longitude (generated) and Latitude (generated). Color shows sum of World Rank. Details are shown for Country Name. The data is filtered on World Rank, which ranges from 127 to 177.
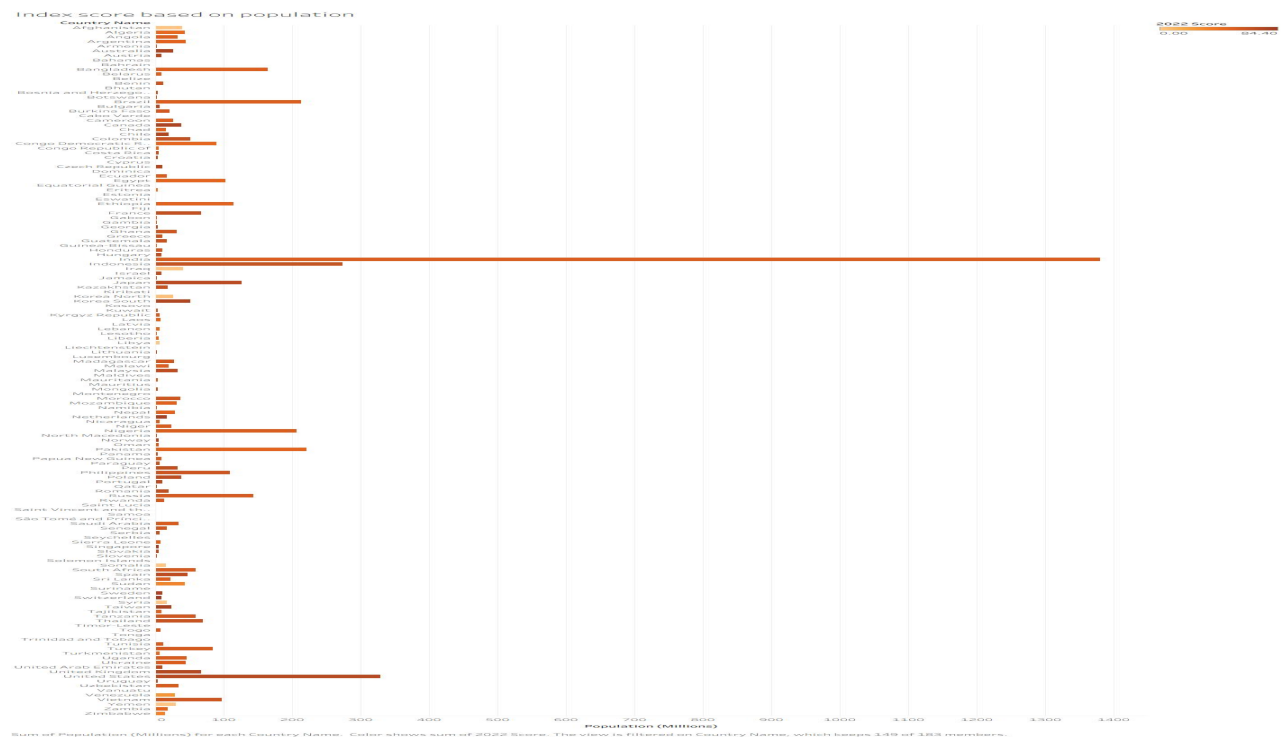
Index score based on unemployment rate

The trends of Inflation (%) and Unemployment (%) for Country Name. Color shows details about Inflation (%) and Unemployment (%). The view is filtered on Country Name, which keeps 21 of 183 members.
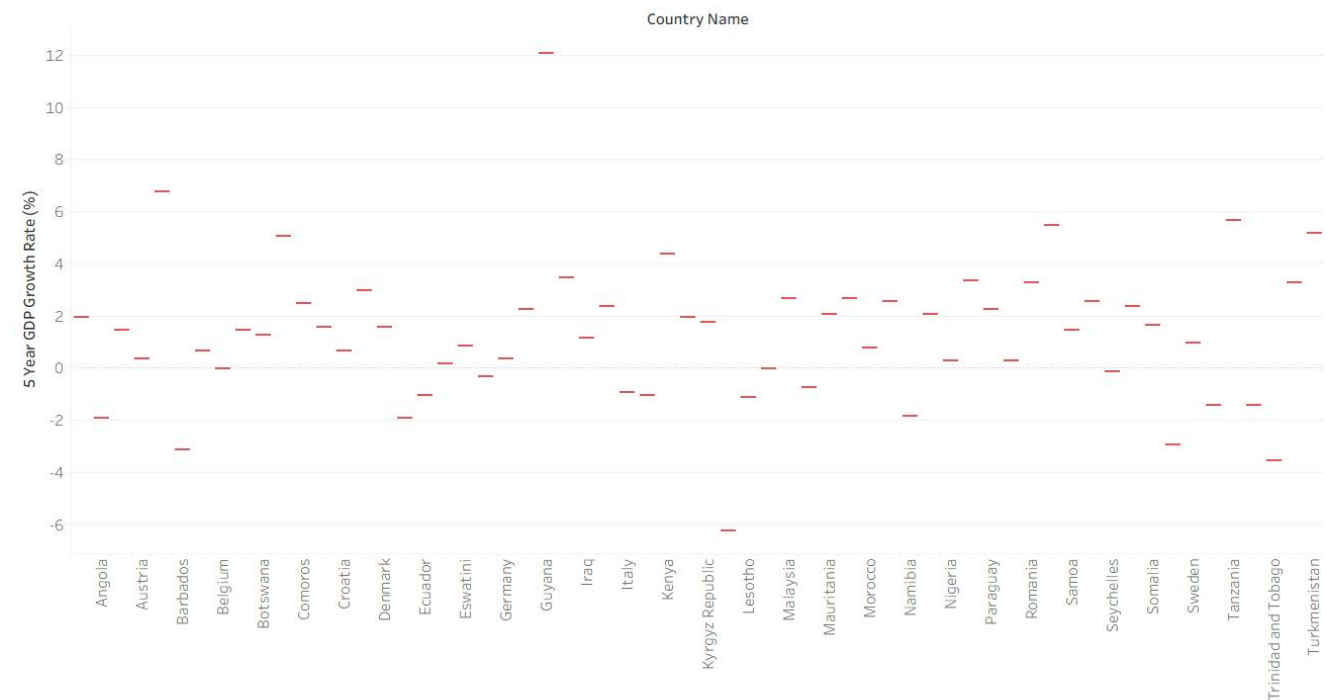
Index score based on financial freedom

Tonga	Burma	Sierra Leone	Ethiopia
Laos	China	Liberia	Congo Democratic Republic of the Congo
Timor-Leste		Eritrea	Sudan
Turkmenistan		Zimbabwe	
Cuba	Belarus	Iran	
Venezuela			

Region
- Americas
- Asia-Pacific
- Europe
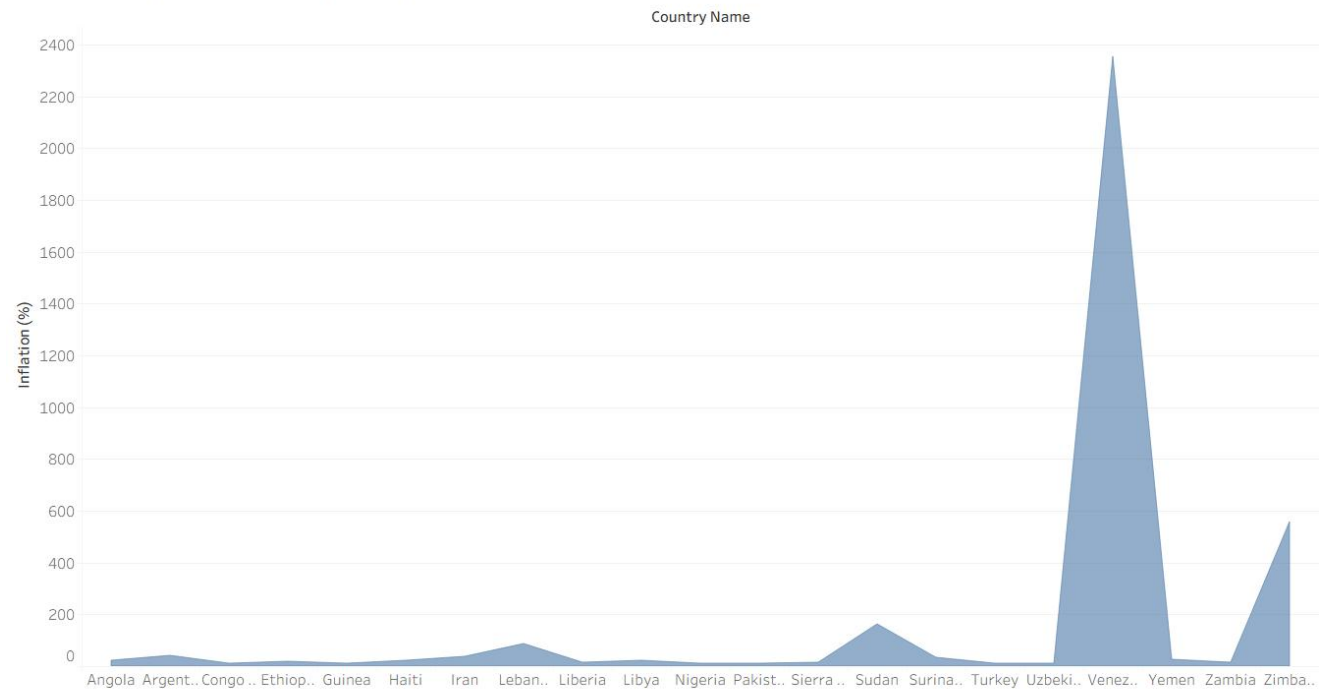- Middle East and North Africa
- Sub-Saharan Africa

Country Name. Color shows details about Region. Size shows sum of 2022 Score. The marks are labeled by Country Name. The view is filtered on Country Name, which keeps 25 of 183 members.

Index score based on population

Country Name

2022 Score
0.00 $4.40

Population (Millions)

Index score based on 5 year on GDP growth rate(%)

Country Name

5 Year GDP Growth Rate (%)

Angola · Austria · Barbados · Belgium · Botswana · Comoros · Croatia · Denmark · Ecuador · Eswatini · Germany · Guyana · Iraq · Italy · Kenya · Kyrgyz Republic · Lesotho · Malaysia · Mauritania · Morocco · Namibia · Nigeria · Paraguay · Romania · Samoa · Seychelles · Somalia · Sweden · Tanzania · Trinidad and Tobago · Turkmenistan

Sum of 5 Year GDP Growth Rate (%) for each Country Name. The view is filtered on Country Name, which keeps 62 of 183 members.
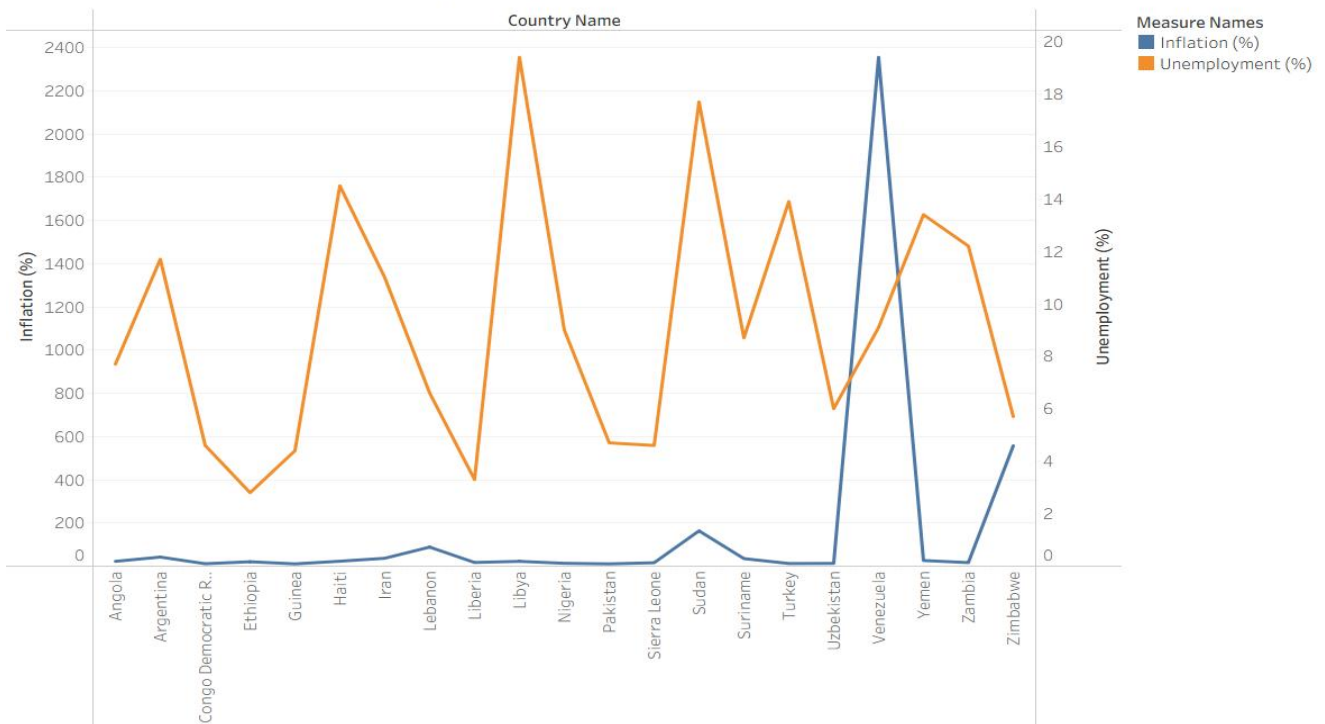
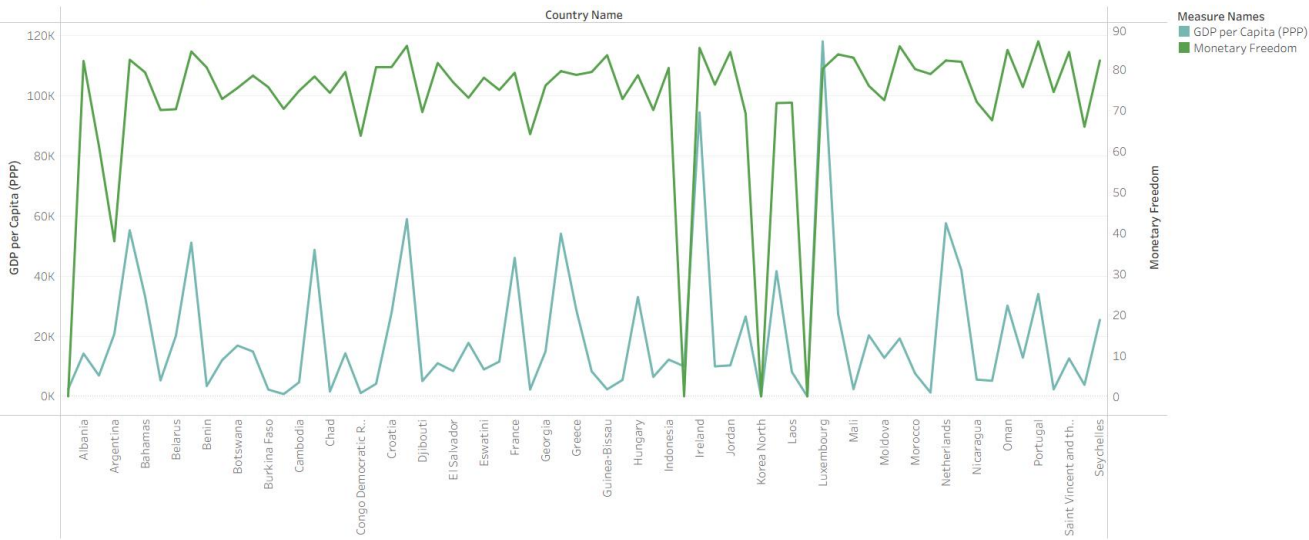## Inflation rate in different countries

Country Name

Sum of Inflation (%) for each Country Name. The view is filtered on Country Name, which keeps 21 of 183 members.

Correlation between inflation and unemployment

Country Name

Measure Names
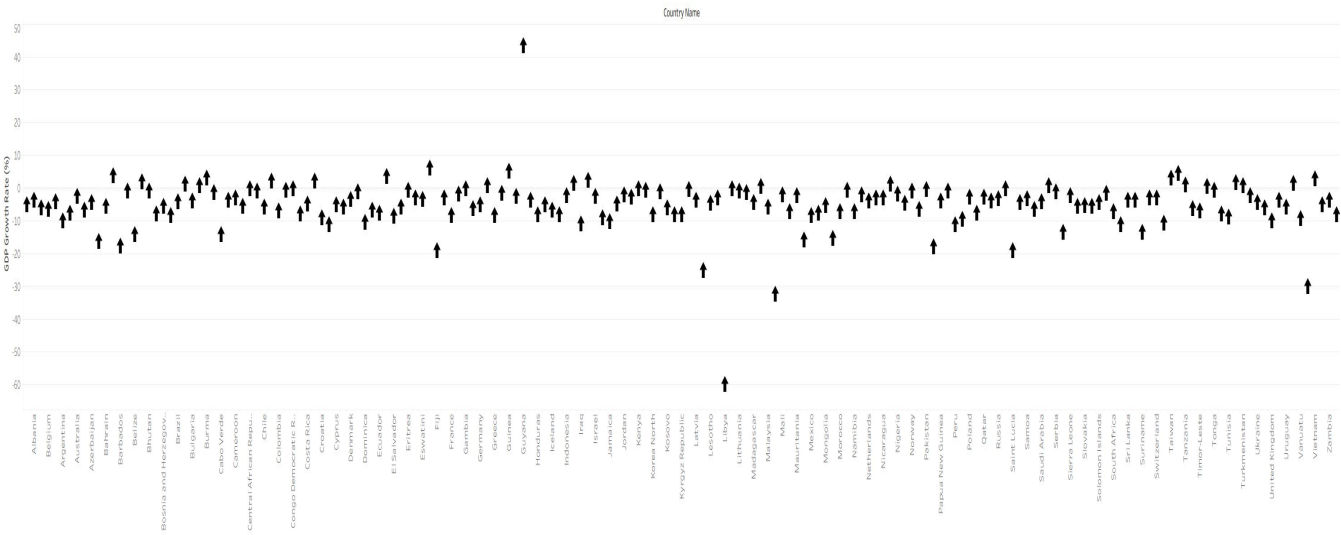- Inflation (%)
- Unemployment (%)

The trends of Inflation (%) and Unemployment (%) for Country Name. Color shows details about Inflation (%) and Unemployment (%). The view is filtered on Country Name, which keeps 21 of 183 members.

Correlation between GDP(PPP) and monetary freedom

The trends of GDP per Capita (PPP) and Monetary Freedom for Country Name. Color shows details about GDP per Capita (PPP) and Monetary Freedom. The view is filtered on Country Name, which keeps 68 of 183 members.

Top 40 countries by GDP growth rate

Sum of GDP Growth Rate (%) for each Country Name. The view is filtered on Country Name, which keeps 183 of 183 members.

ADVANTAGES G DISADVANTAGES

Advantages:

- Interactive and user-friendly data exploration
- Visual insights into global economic trends - Supports policymakers, researchers, and students

Disadvantages:

- Dependence on third-party data sources
- Some indicators may have subjective interpretations

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6. CONCLUSION

The project effectively demonstrates how economic freedom correlates with prosperity. By providing visual insights and comparative analysis, it contributes to a better understanding of global economic patterns.

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10. FUTURE SCOPE

- Inclusion of time-series data for trend analysis

- Expansion of economic indicators such as HDI

- Integration of predictive models for forecasting

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11. APPENDIX

- **Dataset Link: "C:\Users\bhanu\Downloads\index_of_economic_freedom (1).csv"**

- **Dashboard public link:**
  https://public.tableau.com/app/profile/enugu.bhanu/viz/new_dashboard_17515987140100/Dashboard1?publish=yes

- **Story board public link:**
  https://public.tableau.com/app/profile/enugu.bhanu/viz/new_dashboard_17515987140100/Story1?publish=yes