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

1. INTRODUCTION

1.1 Project Overview

Economic freedom is the essential right of individuals to control their own labor and property. This project analyzes the Index of Economic Freedom, which is an annual global measure of prosperity and liberty. Published by The Heritage Foundation, this index evaluates how the principles of economic freedom have contributed to reducing poverty, ignorance, and illness.

1.2 Purpose

The purpose of this project is to assess and interpret the key indicators that measure economic freedom. The goal is to understand how economic liberty impacts national prosperity, governance, and individual opportunity, using the Index of Economic Freedom as a benchmark.

2. IDEATION PHASE

2.1 Problem Statement

Despite global progress, not all countries experience the same level of economic freedom. The challenge is to evaluate which factors influence economic liberty and how they correlate with national prosperity.

2.2 Empathy Map Canvas

Think & Feel: Citizens desire job opportunities, fair governance, and financial security.
See: Disparities in income and access to capital.
Say & Do: Advocate for policy reform and transparency.
Hear: Media discussions on economic crises or reforms.
Pain: Corruption, excessive taxation, restricted trade.
Gain: Transparent governance, free markets, better living standards.

2.3 Brainstorming

- What are the pillars of economic freedom?
- How can we visualize and compare data across countries?
- Which regions are consistently high or low in economic liberty?
- What reforms improve a country's score?

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

From collecting economic indicators → analyzing regional trends → interpreting correlations → forming actionable insights.

3.2 Solution Requirement

- Reliable dataset (Heritage Foundation Index)
- Visualization tools (e.g., Python, Power BI, Tableau)
- Analytical skills for interpreting indices

3.3 Data Flow Diagram

Input: Economic freedom dataset → Process: Clean, analyze, visualize → Output: Country rankings, insights, and recommendations

3.4 Technology Stack

- Python (for analysis and visualizations)
- Pandas, Matplotlib, Seaborn
- Jupyter Notebook
- External: Heritage Foundation dataset

4. PROJECT DESIGN

4.1 Problem Solution Fit

Measuring economic freedom helps governments, economists, and citizens understand where improvement is needed and how freedom fosters growth.

4.2 Proposed Solution

Perform an in-depth analysis using the Index of Economic Freedom 2022. Compare key indicators like rule of law, government size, regulatory efficiency, and open markets.

4.3 Solution Architecture

1. Data Collection
2. Preprocessing
3. Categorization into 4 pillars
4. Visualization and Ranking
5. Insight Generation

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

Week 1: Understanding Index structure & downloading dataset
Week 2: Preprocessing & cleaning data
Week 3: Exploratory data analysis
Week 4: Building visualizations
Week 5: Final review & documentation

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

- Accuracy in data representation through charts and plots
- Correlation checks between pillars and GDP per capita
- Consistency of results across multiple regions

7. RESULTS

7.1 Output Screenshots

(Include graphs such as: bar charts of country rankings, correlation heatmaps, and regional comparisons of economic freedom pillars.)

8. ADVANTAGES & DISADVANTAGES

Advantages:
- Comprehensive understanding of economic liberty
- Clear visual comparisons across countries
- Policy guidance through insights

Disadvantages:
- Dependence on external data source
- Qualitative factors may carry subjective bias
- Not real-time

9. CONCLUSION

Economic freedom is not just a theory but a proven driver of prosperity. Countries that embrace transparency, open markets, and rule of law often achieve higher standards of living. This analysis reinforces that progress in these areas directly benefits citizens and national growth.

10. FUTURE SCOPE

- Predicting economic trends based on freedom indices
- Regional deep-dives (e.g., Asia vs Africa)
- Real-time dashboards using APIs
- Machine learning to forecast future scores
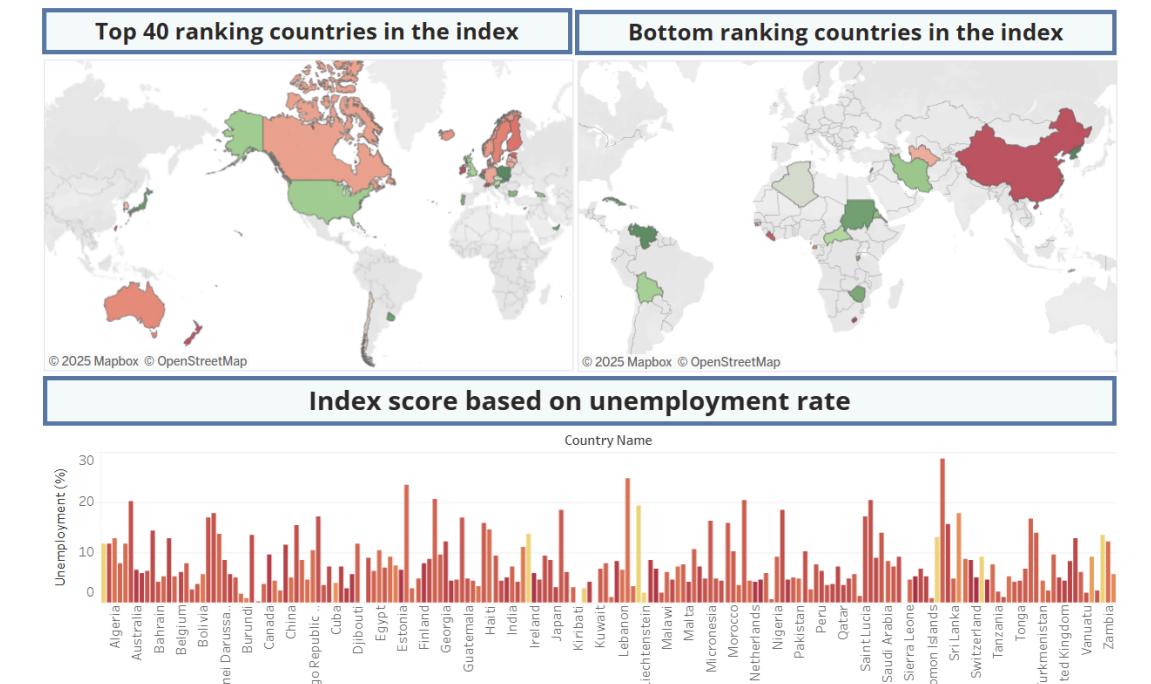
11. APPENDIX

Source Code: (Attach .ipynb file or GitHub link)

Dataset Link: https://www.heritage.org/index
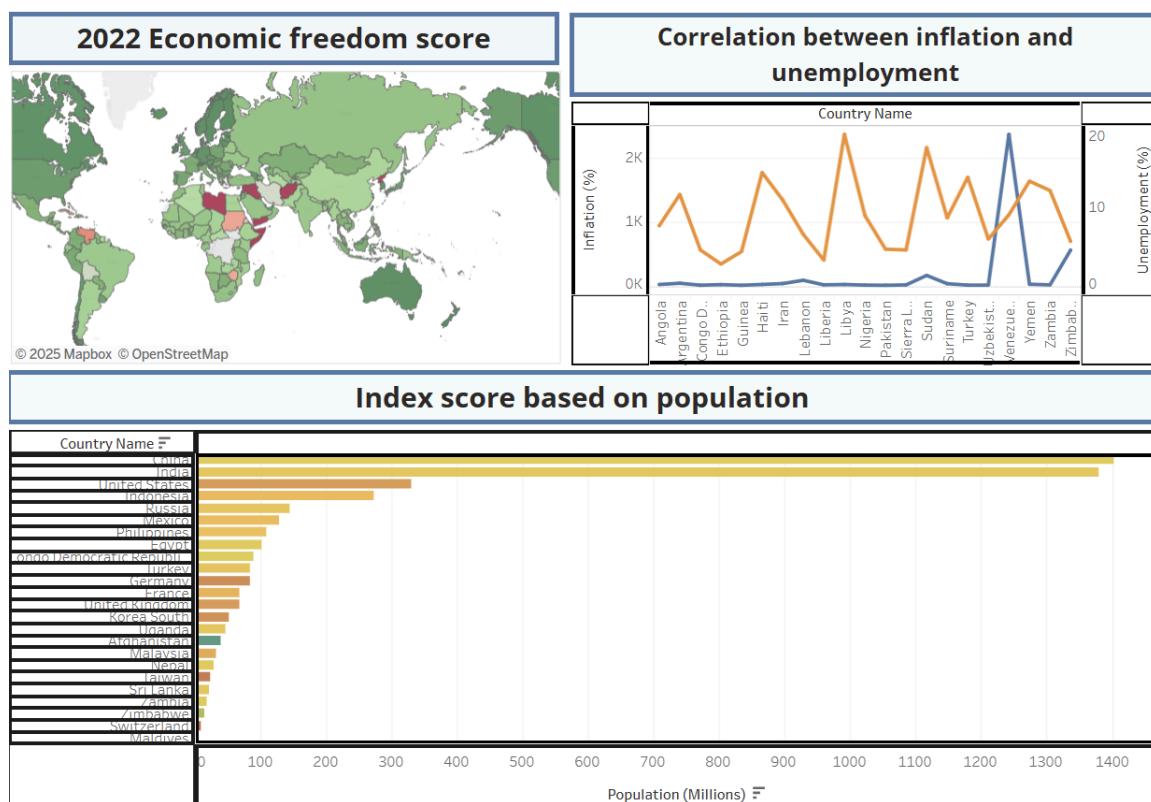
GitHub & Project Demo Link: (Insert your GitHub repo if available)

12. VISUAL ANALYSIS

| Top 40 ranking countries in the index | Bottom ranking countries in the index |

Index score based on unemployment rate
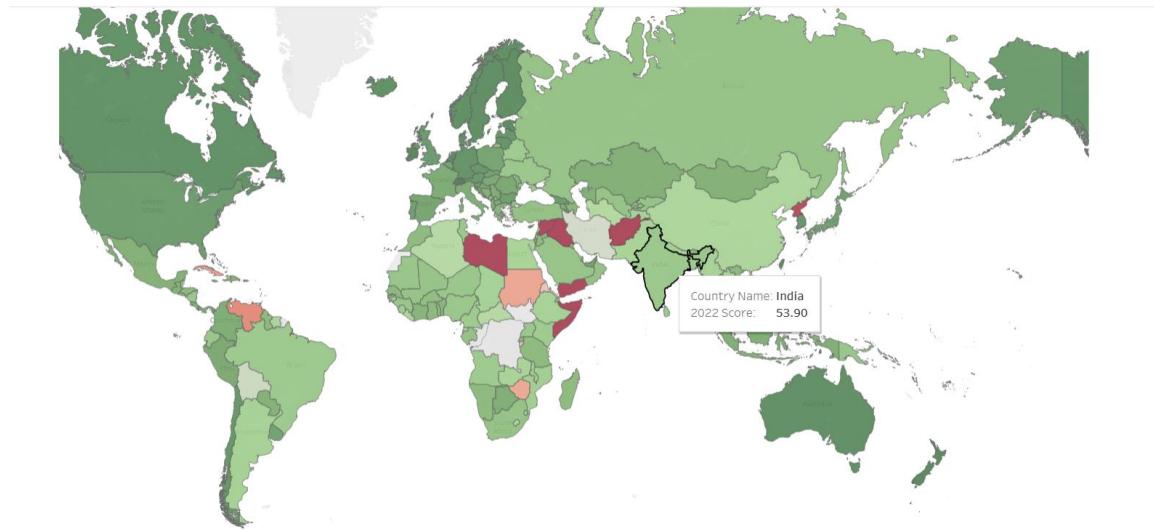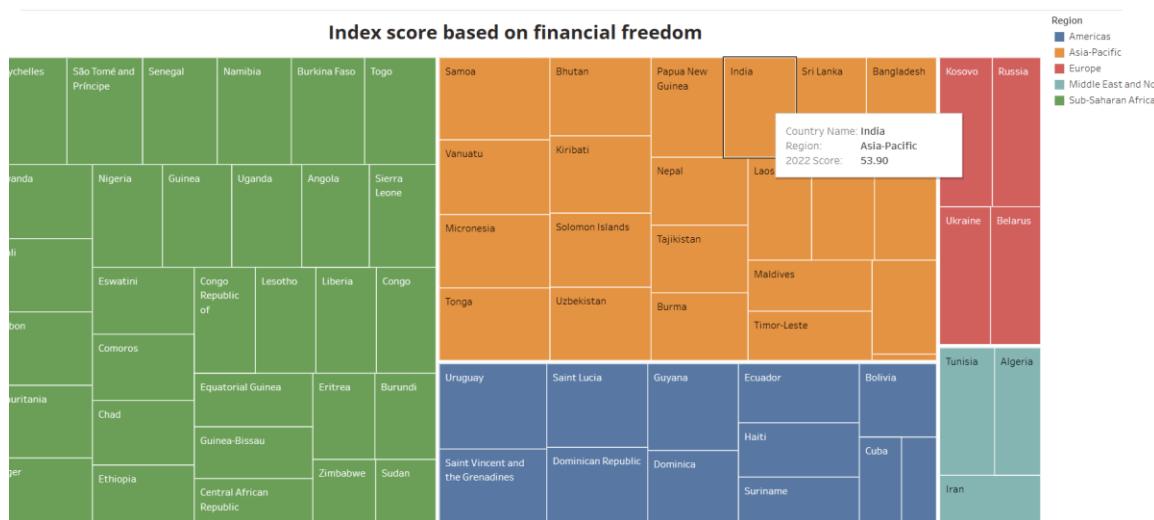
Top and Bottom Ranking Countries by Unemployment and Index Score

2022 Economic freedom score

Correlation between inflation and unemployment

Index score based on population

Economic Freedom Score and Population-Based Index Scores

Global Economic Freedom Score Map (India Highlighted)

Index Score Based on Financial Freedom by Region