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

## **1. Introduction**

### **1.1 Project Overview**

This project analyzes the economic freedom of various countries using different indicators such as inflation, GDP growth, monetary freedom, and employment rates. A dashboard has been designed to visualize and compare the economic freedom of top-ranking and bottom-ranking countries, highlighting key economic trends and relationships.

### **1.2 Objectives**

* To visualize the Economic Freedom Index across various countries.
* To analyze the correlation between inflation, GDP growth, and economic indicators.
* To develop an interactive dashboard for data-driven insights.
* To highlight economic freedom trends through data visualization.

## **2. Project Initialization and Planning Phase**

### **2.1 Define Problem Statement**

Understanding economic freedom across countries is critical for policymakers, investors, and researchers. This project aims to create a visual representation of economic indicators that influence economic freedom scores.

### **2.2 Project Proposal (Proposed Solution)**

We propose developing an interactive dashboard that:

* Ranks countries based on economic freedom.
* Shows correlations between various economic indicators.
* Provides insights into economic performance over time.

### **2.3 Initial Project Planning**

* Identification of relevant economic indicators.
* Data collection from reliable sources.
* Designing a structured dashboard layout.

## **3. Data Collection and Preprocessing Phase**

### **3.1 Data Collection Plan and Raw Data Sources Identified**

The data was collected from economic freedom reports, World Bank, and IMF databases. The dataset includes:

* Country names
* Economic Freedom Scores
* GDP growth rates
* Inflation and unemployment rates
* Population data

### **3.2 Data Quality Report**

* Checked for missing or inconsistent values.
* Standardized data formats.
* Handled outliers where necessary.

### **3.3 Data Exploration and Preprocessing**

* Used statistical analysis to detect trends.
* Performed data cleaning and transformation.

## **4. Data Visualization**

### **4.1 Framing Business Questions**

* How does inflation correlate with unemployment?
* What are the GDP growth trends among top-ranking economic freedom countries?
* How do population and economic freedom scores relate?

### **4.2 Developing Visualizations**

* Maps to show top and bottom-ranking countries.
* Line charts for inflation vs. unemployment correlation.
* Bar charts representing index scores and population relationships.
* Scatter plots for GDP growth analysis.

## **5. Dashboard**

### **5.1 Dashboard Design File**

* The dashboard includes multiple visualizations.
* It provides real-time insights into economic indicators.
* Interactive filters allow dynamic analysis.
* <https://public.tableau.com/app/profile/potluri.krishna.balamohan/viz/Book2_17430707720840/Dashboard1?publish=yes>

## **6. Report**

### **6.1 Story Design File**

* A structured storyline to explain economic freedom variations.
* Insights from visualizations are included in the report.

## **7. Performance Testing**

### **7.1 Utilization of Data Filters**

* Filters applied to analyze country-specific data dynamically.

### **7.2 Number of Calculation Fields**

* Various calculated fields used for trend analysis.

### **7.3 Number of Visualizations**

* Multiple interactive charts for in-depth insights.

## **8. Conclusion/Observation**

* Countries with high economic freedom scores have stable GDP growth.
* High inflation often correlates with high unemployment.
* Economic freedom is significantly influenced by government policies.

## **9. Future Scope**

* Expanding the dataset to include more years for trend analysis.
* Implementing AI-driven predictive models for economic forecasting.
* Enhancing dashboard interactivity with more user-defined metrics.

## **10. Appendix**

### **10.1 GitHub & Project Demo Link**

* <https://github.com/potlurikrishna/Measuring-the-Pulse-of-Prosperity-An-Index-of-Economic-Freedom-Analysis>
* [Final Vedio.mp4](https://drive.google.com/file/d/132_suUehFtrcyeO6NC2SwQR19K0sSSFM/view?usp=sharing)