Project Title:

Global Inflation Analysis: Journeying Through Global Economic Terrain

Prepared by:

Vivek Kalyani

Date: 20 October 2025

1. Introduction

This Power BI project explores **global inflation trends** and how they differ across countries, regions, and time periods. Inflation is a key measure of economic health, affecting everything from purchasing power to policy decisions.

The goal of this project was to use **data visualization** to clearly understand global inflation behaviour and highlight patterns that might not be obvious from raw data.

The dataset used for this analysis was sourced from **Kaggle** and includes information on **196 countries** across **6 regions**, with yearly inflation rate data and inflation categories.

2. Data Preparation and Modeling

The dataset was first cleaned and prepared in **Power Query**. I removed duplicates, handled missing values, and standardized country names to ensure consistent analysis.

After cleaning, I created a data model in Power BI.

The main *Inflation* table was linked with *Date, Continent*, and *Inflation Category* tables. These relationships made it possible to analyse inflation dynamically — by year, by region, or by category.

3. Dashboard Design

The dashboard was designed to provide a **clear and interactive overview** of inflation worldwide. It includes several visuals that together tell the story of inflation trends:

- **KPI Cards:** Display key figures such as Average Inflation Rate (42.07), Max Inflation Rate (65.37K), Total Countries (196), and Total Regions (6).
- **Line Charts:** Show year-over-year inflation changes and adjusted inflation rates over time.
- Bar Charts: Highlight the top countries with the highest inflation rates, led by Venezuela, Congo (DRC), and Nicaragua.
- **Pie Chart:** Breaks down inflation categories into *High, Medium,* and *Low.*
- Regional Comparison Chart: Shows how inflation varies across regions, with Africa and

the Americas having the most countries represented.

Interactive slicers allow users to filter by country, making it easy to compare inflation rates across different nations.

4. Key Insights

After analysing the data, I identified a few interesting insights:

- 1. Venezuela shows extreme inflation spikes, reaching over 2,000% year-over-year.
- 2. Inflation peaked notably around **1990** and **2020**, both times of major global economic crises.
- 3. **Africa** and **the Americas** contain the highest number of countries facing elevated inflation.
- 4. Around **42**% **of countries** fall into the *high inflation* category, showing that inflation remains a widespread global issue.

5. Conclusion

This project demonstrates how **Power BI** can be used to transform raw economic data into meaningful insights.

Through data cleaning, modelling, and visualization, I was able to explore inflation trends and identify global disparities.

Working on this dashboard helped strengthen my skills in **Power Query**, **DAX**, and **analytical storytelling**, while also deepening my understanding of **macroeconomic data interpretation**.

6. Tools & Skills Used

- Power BI: Data modelling, dashboard creation, DAX measures
- Power Query: Data cleaning and transformation
- Excel / CSV: Data handling
- Analytical Skills: Trend identification, data-driven storytelling.