**Report**

|  |  |
| --- | --- |
| Date | 01 October 2025 |
| Team ID | SWUID20250181698 |
| Project Name | Global Inflation Dynamics (1980-2024): A Comparative Time-Series Analysis |
| Maximum Marks | 5 Marks |

**I. Report Structure and Key Observations**

|  |  |  |
| --- | --- | --- |
| **Section** | **Description & Key Insights** | **Supporting Visuals (from Dashboard)** |
| Executive Summary | A concise overview of the project's most significant findings. Insight: Global inflation exhibits a clear, long-term trend of disinflation, which was aggressively reversed by the post-2020 synchronized global shock. The stability gap between G7 and BRICS remains the primary finding. | KPI Cards (Global Median), Main Line Chart (G7 vs. BRICS) |
| Data & Methodology | Details the data source, the Power Query Unpivot transformation, and the data cleaning rationale (filtering countries, handling NaNs). Justifies the use of the Median Inflation DAX Measure to handle hyperinflation outliers. | Data Quality Report Summary |
| 1. Trends Over Time (Global & Blocs) | Analyzes the long-term trend (1980-2024). Observation: The global median rate peaked in the early 1980s and was successfully contained until the recent resurgence. The G7 line proves long-term policy effectiveness, while the BRICS line shows persistent volatility. | Main Line Chart (G7 vs. BRICS) |
| 1. Performance Comparisons (Stability Gap) | Focuses on the divergence between the G7 and BRICS blocs. Observation: BRICS median inflation consistently exceeded G7 rates by 2x to 5x during the 1990s and 2000s, reflecting higher economic risk. The recent synchronization post-2020 suggests shared macro-drivers. | Main Line Chart (Comparative view) |
| 1. Customer Segmentation (Extreme Cases) | Identifies and contrasts the countries at the extreme ends of the inflation spectrum. Observation: The gap between the most stable economies (Japan, Switzerland) and the most volatile (Venezuela, Congo) highlights the limits of simple global averages. This section validates the use of median metrics. | Outlier Line Chart (Bottom Panel) |
| Conclusion & Recommendations | Summarizes final findings and provides actionable advice. Recommendation: Policy makers must differentiate the cause of inflation (local vs. global) using the bloc comparison. Investment analysts must continue to price in the high volatility risk for BRICS markets. | None (Text Summary) |

A screenshot of a graph

AI-generated content may be incorrect.

II. Detailed Analytical Observations (Example Report Content)

Observations drawn from the dashboard visualizations:

1. **Trends Over Time (Global Median):**

* The long-term analysis confirms the period known as the "Great Moderation," where low inflation and low volatility were achieved globally from the mid-2000s until 2019. The recent spike represents the most significant global inflationary event since the 1980s.

1. **Performance Comparisons (G7 vs. BRICS):**

* During their transition periods (1990s), BRICS nations demonstrated extreme instability, with their median inflation rate occasionally spiking to over 20%. This suggests significant systemic economic challenges (e.g., currency crises, debt) that G7 economies were protected from.
* The convergence of G7 and BRICS inflation lines in the 2010s was a sign of increasing globalization and stability in emerging markets, making the subsequent, synchronized divergence post-2020 a major concern.

1. **Outlier Impact (Extreme Cases):**

* The extreme high inflation rates (reaching thousands of percent) for countries like Venezuela demonstrate why reporting the Global Mean would be highly misleading. The use of the robust Median DAX measure is justified as the only accurate way to represent central tendency in this dataset.
* The consistent low inflation rates for G7 members like Japan and Switzerland prove the high effectiveness of their central banking policies and are the true benchmark for price stability.