Dashboard Design

Date	9 October 2025
Skillwallet	SWUID20250200484
Project name	Power BI Inflation Analysis: Journeying Through Global Economic Terrain
Maximum Marks	5 Marks

Creating an effective dashboard involves thoughtful design to ensure that the presented information is clear, relevant, and easily understandable for the intended audience. Here are some key principles and best practices for dashboard design

Activity 1: Interactive and visually appealing dashboards

Creating interactive and visually appealing dashboards involves a combination of thoughtful design, effective use of visual elements, and the incorporation of interactive features. The following points detail how the Global Inflation Risk Dashboard adheres to these principles, ensuring it is both visually appealing and highly engaging for users:

- **Clear and Intuitive Layout:** This was achieved via a **layered, four-dashboard structure** (Strategic, Operational, Effectiveness, Deep Dive). This design guides the user logically from macro-overview to micro-level forensic analysis, preventing information overload and establishing a smooth analytical workflow.
- **Use Appropriate Visualizations:** Charts were specifically chosen to convey complex financial metrics. The **Max & Min Range Chart** (advanced column visual) was utilized to clearly visualize **volatility spread** (Max-Min), a key risk metric. A **Map Visualization** was used for instant geographical risk assessment.
- **Colour and Theming:** A professional **dark theme** was adopted. The color strategy was critical: **Red/Orange** consistently signals High Risk and Maximum Rate values, while **Green/Blue** denotes Policy Success and Effectiveness, providing instant visual cues for rapid decision-making.
- **Interactive Filters and Slicers:** The dashboard features a **Range Slicer** on the **Year** field, allowing users to dynamically select time periods for YoY analysis. Standard **Dropdown Slicers** for Country and Region allow for targeted filtering of operational hotspots.
- **Drill-Down Capabilities:** The design supports the user's analytical journey by allowing them to **drill down** from the global trend to a **country-specific historical analysis** on the Deep Dive dashboard, aiding forensic investigation into specific events.
- **Custom Visuals and Icons:** Custom visuals and icons were used to highlight KPIs and provide visual differentiation, improving aesthetics and ensuring key numbers stand out.
- **Responsive Design:** Although Power BI desktop-focused, the layout was designed with sufficient white space and logical grouping, making it suitable for publication to the Power BI Service, where basic responsiveness is maintained.

The following are the five major analytical and functional outcomes delivered by the Global Inflation Risk Dashboard, adhering to the required format:

- **Adjustment Effectiveness Quantified:** The primary KPI, **"Adjustment Effectiveness (%)"**, directly reports the policy's success rate in mitigating maximum inflation risk, providing stakeholders with an immediate, **actionable validation metric**.
- **DAX Resilience Confirmed:** The model successfully computes accurate **YoY Change** and **Volatility Range** metrics using **complex, non-Time-Intelligence DAX logic** (e.g., CALCULATE(MAX([Year])-1)) to overcome the challenge of the unclean date dimension.
- **Volatility Hotspot Identification:** The custom **Max & Min Range Chart** clearly highlights regions or countries that exhibit the **largest price stability risk** (Max-Min Spread), immediately directing attention to the highest volatility zones for preemptive action.
- **Operational Prioritization List:** The **Top 10 High-Risk Countries** bar chart translates macroeconomic risk into a practical, ranked list, enabling regional managers to focus resources and intervention strategies on the most persistent threats.
- **Model Integrity Verified:** The comparative **Raw Rate vs. Adjusted Rate** trend chart provides visual proof that the **standardization process** did not distort the data's long-term behavior, ensuring the final standardized metrics are trustworthy for critical decision-making.
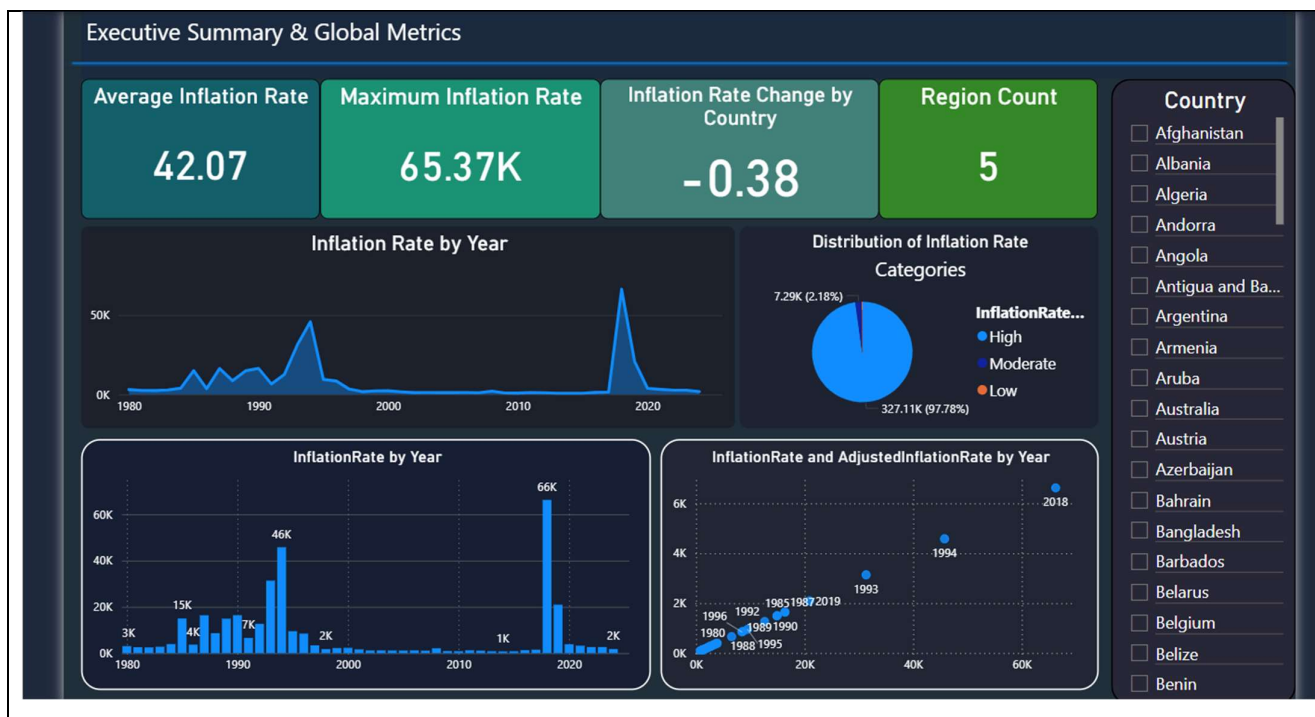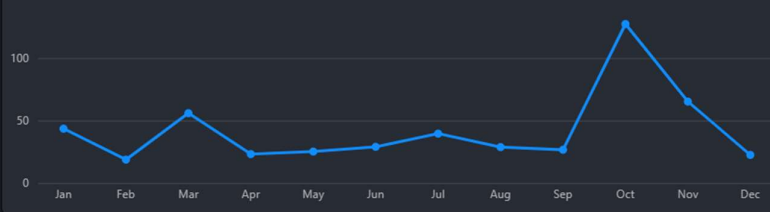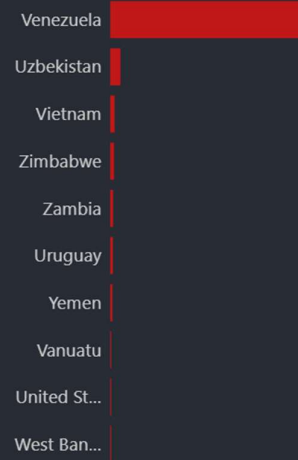
| Oceania | Europe | Asia | Americas | Africa | | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |

Monthly Volatility Trend (Inflation Rate)

Top 10 High-Risk Countries

- Venezuela
- Uzbekistan
- Vietnam
- Zimbabwe
- Zambia
- Uruguay
- Yemen
- Vanuatu
- United St...
- West Ban...

Righ Risk

Regional Inflation: Raw vs Adjusted

Region

Africa   Americas   Asia   Europe   Oceania

● Average of InflationRate   ● Average of AdjustedInflationRate

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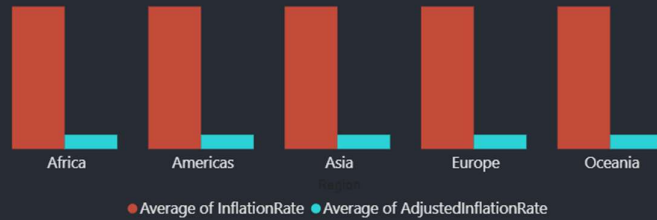
Geographic & Comparative Analysis

Global Average Rate	Maximum Inflation Rate	Minimum Inflation Rate	Adjustment Effectiveness (%)
42.07	65.37K	-72.70	90.00%

Inflation Trends & Data Validation

Global Risk Category Distribution

- ● High
- ● Modera...
- ● Low

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Average Inflation by Region

ASIA   NORTH AMERICA   EUROPE   ASIA   NORTH AMERICA

Pacific Ocean   Atlantic Ocean   Pacific Ocean   Atlantic Ocean

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Regional Volatility (Max vs Min Rate)

■ Max of InflationRate   ● Min of InflationRate

Armenia   Bulgaria   Somalia   Azerbaijan   Portugal   Kuwait   Marshall Islands   Czech Republic   Burundi   Iran
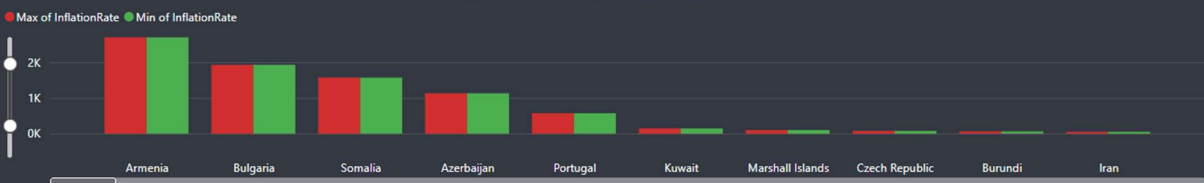
Deep Dive: Category & Country Impact

Armenia had the highest **InflationRate** at **3731.80** followed by **Bulgaria** at **1927.40** and **Somalia** at **1568.10.**
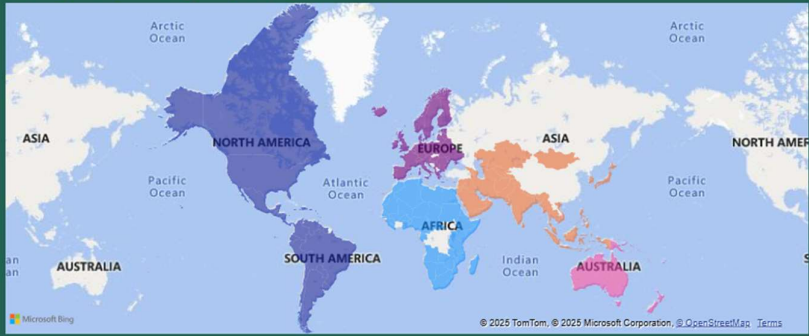
Armenia accounted for **51.63%** of the total **InflationRate** among countries.

At **10457.20 High Inflation Category** had the largest **InflationRate**, which was **33,203.18% higher than Low Category**, which had the lowest **InflationRate** at **31.40**.
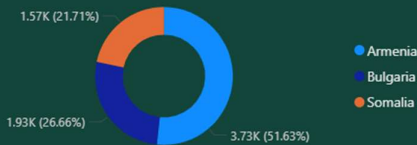
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Count of Region by Country and Region

Region ● Africa ● Americas ● Asia ● Europe ● Oceania

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InflationRate by Country Name

1.57K (21.71%)

1.93K (26.66%)

3.73K (51.63%)

● Armenia
● Bulgaria
● Somalia

Distribution of InflationRate by Inflation Rate Categories

High   Moderate   Low