

FX Dashboard: GBP Exchange Rate and Economic Drivers

Introduction

The FX Dashboard is a comprehensive visualization tool designed to display various currency exchange rates against the British Pound (GBP) and their relationship to key economic indicators. This tool aggregates historical data to present trends, volatility, and the impact of economic changes on currency values. It serves as a resource for analysts, traders, and financial professionals to monitor and analyze currency performances in the context of global economic shifts.

Objective

The main objective of this dashboard is to provide an interactive and detailed analysis of the GBP exchange rates with other major currencies such as the Australian Dollar (AUD), Indian Rupee (INR), Canadian Dollar (CAD), and US Dollar (USD). Additionally, the dashboard correlates these currency trends with economic indicators like GDP and inflation rates, offering insights into how these factors influence currency valuation over time.

Dashboard Components

1. FX Rates Time Series Graphs:

AUD-GBP, INR-GBP, CAD-GBP, USD-GBP Rate Graphs: These line graphs display the historical exchange rate trends from 2016 to 2024, highlighting fluctuations over the years. Each graph represents the exchange rate movement of GBP against one of the currencies mentioned, providing a clear view of trends and volatility.

2. Average Exchange Rate Gauges:

Average Rate with Min and Max of Last 10 Years: These gauge charts show the average, minimum, and maximum exchange rates for AUD-GBP, INR-GBP, CAD-GBP, and USD-GBP over the last decade. This visualization helps quickly assess the stability and range of each currency pair.

3. Bar Plots for Volatility of FX Rates:

Annual Volatility for Each Currency Pair: These bar charts track the year-on-year volatility, measured as the standard deviation of daily rates. They highlight the years with significant fluctuations, thereby indicating periods of high uncertainty or economic events impacting currency values.

4. FX Rates and Economic Indicators Relation (GDP, Inflation):

Trend Analysis Graphs: These line graphs provide a visual representation of the trends between currency exchange rate changes and shifts in economic indicators like GDP and inflation rates for Australia, India, Canada, the UK, and the USA. Although these graphs are not configured as dual-axis charts for direct correlation analysis, they effectively display time-

aligned trends, allowing users to visually inspect how movements in economic metrics may coincide with fluctuations in currency exchange rates.

Understanding the Trends and Patterns

- The time series graphs provide insights into the broader economic impacts on currency rates, including geopolitical events, economic policies, and market sentiment.
- The average rate gauges reflect the general stability or instability of currencies, giving a quick snapshot of potential risk and opportunity.
- Volatility bar charts are crucial for identifying the best times for currency trading, risk management, and strategic planning, based on historical performance.
- By observing these Economic and FX line graphs, users can identify periods where significant economic changes (e.g., GDP growth or inflation spikes) align with or precede shifts in currency exchange rates. This can provide valuable insights into potential causal relationships or simply highlight how currencies might react to domestic economic events.
- These graphs help in spotting historical trends which can be useful for making projections about future currency performance under similar economic conditions.

Conclusion

The FX Dashboard is an essential tool for anyone looking to understand and anticipate movements in foreign exchange rates in relation to economic indicators globally. With its comprehensive and user-friendly visualizations, the dashboard simplifies complex data, allowing users to quickly absorb and analyze trends between economic metrics and currency values. While it does not provide direct statistical correlations, it effectively sets the stage for deeper analysis and informed decision-making in financial markets. This makes it invaluable for deriving insights and forming hypotheses in an accessible yet thorough manner.

Note:

AUD-GBP Rate of 0.54: This rate indicates that 1 Australian Dollar (AUD) is equivalent to 0.54 British Pounds (GBP). To convert 1 GBP to AUD, you would need approximately 1.85 AUD.

INR-GBP Rate of 0.01: This rate shows that 1 Indian Rupee (INR) is worth 0.01 British Pounds (GBP). It would take about 100 Indian Rupees to make up 1 GBP.

CAD-GBP Rate of 0.58: A rate of 0.58 means that 1 Canadian Dollar (CAD) is equal to 0.58 British Pounds (GBP). Therefore, 1 GBP can be exchanged for approximately 1.72 CAD.

USD-GBP Rate of 0.76: With this rate, 1 US Dollar (USD) is equivalent to 0.76 British Pounds (GBP). To get 1 GBP, you would need around 1.32 USD.