**Data Source**

The data used in this research was sourced from the **Precious Metals Data** dataset, available on Kaggle [1], and processed into three individual datasets for gold, silver, and platinum prices. These datasets provide comprehensive daily market data for each metal, starting from **March 2019 to June 2024**. The data covers key trading details and offers a reliable foundation for analyzing price trends and fluctuations of precious metals during this period.

The datasets consist of the following columns:

* **Date**: This column records the specific date of trading activity, formatted as MM/DD/YYYY. It serves as the key for time-series analysis, enabling the tracking of price movements and market trends over time.
* **Open**: The price at which the precious metal began trading at the start of the day (USD per ounce). This provides insight into market sentiment at the opening of trading sessions.
* **High**: The highest price reached by the precious metal during the trading day (USD per ounce). This reflects peak trading activity or sudden market reactions.
* **Low**: The lowest price recorded for the precious metal during the trading day (USD per ounce). This helps in understanding the market's downside volatility.
* **Close**: The price at which the precious metal closed trading at the end of the day (USD per ounce). This is often considered the most important price for daily trend analysis and forecasting.
* **Volume**: The number of trading units exchanged during the day. For precious metals, this indicates the level of market activity and investor interest during a specific trading session.

These columns collectively provide a detailed view of daily trading patterns for gold, silver, and platinum, offering critical data points for studying price volatility, market trends, and the overall behavior of these metals.

**Data Cleaning and Preparation**

The data, originally retrieved from Kaggle, underwent a cleaning and processing phase to ensure its reliability for analysis. Missing values and anomalies were addressed, and all numerical columns were formatted with consistent decimal precision. The analysis focuses on the period from **March 2019 to June 2024**, allowing for a robust examination of the impact of significant global events such as the COVID-19 pandemic, inflationary pressures, and shifts in investor behavior.