**Unveiling Global Trade Dynamics with Kaggle's Commodity Trade Statistics**

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**Task Context:**

With an ever-changing international trade landscape, it is important to analyze trends and shifts in the flow of commodities. It allows policymakers, businesses and researchers to make data-driven decisions. A Kaggle dataset on Global Commodity Trade Statistics, collected by James & Meidan (2020), provides a unique opportunity to analysis these vital trade dynamics.

**Problem Statement:**

The dataset offers a vast array of data points, so making sense out of them needs sophisticated form analysis techniques. This project intends to use this set as a source in order to elucidate trends, principle trade partners and products & services exchanged - effectively mapping the complex landscape of global commerce.

**Dataset Source:**

This project utilizes the "Global Commodity Trade Statistics" dataset available on Kaggle (United Nations).

* Dataset Link: <https://www.kaggle.com/datasets/unitednations/global-commodity-trade-statistics>

This dataset is an extensive collection of international trade data spanning tens to hundreds of thousands of commodities traded among dozens, if not a hundred or so countries.

**Dataset Description:**

While the dataset will be further expanded and regularly updated, this first version of the EURINT 2.0 "dataset" is based on a series of core attributes (modelled implicitly after United Nations Comtrade Database here: https://comtrade.un.org/).

* **Product Category:** Type of traded goods (such as agricultural produce, minerals or manufactured goods).
* **HS Code:** means an imported code of the products.
* **Trading Partners:** Import and Export Countries
* **The real value:** The amount of money in which the two trade their possessions.
* **Trade Volume:** The quantity of commodities traded (in kilogram, barrels etc., depending on the commodity)
* **Time Period:** Trade Transaction for the Year or month

**Aim & Objectives:**

The main goal of this project is to explore global trade dynamics by using the Kaggle Global Commodity Trade Statisticsdataset. Specific objectives include:

* Determine the major trade partners that you have and what are most sold or bought.
* Examine commodity trade volume and value trends across time periods.
* Understand how MEIOs are susceptible to global events (e. g., economic crises, natural disasters) that might impact trade flows
* Create challenge solutions in data visualizations to represent insights gathered from the trade data.

**Methodology:**

The project is going to involve an integrated data analysis pipeline:

* **Cleaning data**: Dealing that there are no mistakes and discrepancies in the dataset
* **EDA (Exploratory Data Analysis):** Descriptive statistics, time series analysis & evidence of ins and outs.
* **Time Series Analysis:** Looking for trends and seasons based on trading data over time.
* **Network Analysis:** Building networks to plot the trade interconnections between countries

**Expected Outcomes:**

* How diverse are global trade patterns in a wide range of commodities.
* Determine the major changes and fluctuations in Trade Volume & Value.
* Discover of potential links between global events and trade flows
* Eye-catching views of that trade data which made it easier for insights to be clearly communicated.

**References:**

* James, A., & Meidan, A. (2020). International trade: A guide to theory and policy (7th ed.). Routledge.
* United Nations. (n.d.). Global commodity trade statistics. [Dataset]. Kaggle. <https://www.kaggle.com/datasets/unitednations/global-commodity-trade-statistics>