# @channelDear Data Analysis Interns,Mid-Internship, 5a Task: Economic Variable Correlation and Productivity ModelObjective:

Conduct a financial analysis involving the correlation between key economic variables and identifying undervalued companies using financial data. **Steps**:

#### 1. **Data Collection:**

- Gather data for M1 money supply, real exchange rate (black market), country stock market performance, and inflation rate for Nigeria and the USA.
- Ensure data covers a sufficient time span to analyze trends and correlations.

# 1. Correlation Analysis:

- Plot the variables on a chart to visualize their relationships.
- Analyze the correlations between the variables, considering potential time-shifted correlations.
- Discuss the observed correlations and their implications.

#### 1. Theoretical Framework:

• Theorize that increased money supply leads to currency depreciation, stock market appreciation, and increased inflation due to a baseline productivity level.

## 1. **Productivity Model:**

- Develop a model combining the three variables to calculate productivity.
- Analyze if productivity appears flat, decreasing slightly, or increasing.

# 1. Productivity Baseline:

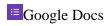
- Determine an appropriate formula for calculating the productivity baseline.
- Example: If money supply is flat but productivity increases, the exchange rate should rise, and inflation should decrease.

## 1. Currency Devaluation:

• Calculate real currency devaluation using a reference currency with flat M1 growth and stable productivity.

# **Deliverables**:

- Data Charts: Visual representation of the economic variables and their correlations.
- Analysis Report: Detailed discussion of the correlations and theoretical implications.
- **Productivity Model:** Model showing the calculated productivity for Nigeria and the USA.
- **Presentation:** Summarize findings and present the theoretical framework, data analysis, and productivity model.
- Submission Link
- Deadline is 24 July, 10:59 PM WAT.



**<u>Data Analysis Mid Internship Submission</u>** (23 kB)