

Business Case

Question: A client is looking to understand how markets (S&P500, US 10y yields, EURUSD, USDBRL) tend to move in periods of strong economic growth vs periods of economic slowdowns. Using data from public sources such as Yahoo Finance, St. Louis FRED or Trading Economics (all accessible via Python API), please build a simple framework that will allow you to write a response to the client, explaining the process and result. Visual aids should be included, as much as possible.

Sub questions:

- How do you assess economic slowdowns? What can be considered a threshold for strong vs weak economic growth?
- How does each asset tend to trade during these different periods?
- Is there a specific asset that tends to have leading information over others or do they tend to co-move?
- Does this leading information or relation between assets change over time?

Fill free to add any other analysis you'd deem important to support your reply to the client.

Notes:

- Please send back your results and visual aids.
- The analysis should be done in Python. Also provide the script used.