

Problem 4

Predictability/Impact of Technical Indicators on Stock Prices

Objective: Analyze the predictability/usage of specific technical indicators on the stock prices of one company/INDEX. The analysis should include two of the following technical indicators with any time interval settings $> 1D$..

- Simple Moving Average (SMA)
- Exponential Moving Average (EMA)
- Supertrend
- Moving Average Convergence Divergence (MACD)
- Bollinger Bands
- RSI

Instructions:

1. Selection of Companies:

- Give a reason for your selection.

2. Indicator Analysis:

- Select one or two technical indicators from the list provided. (Combination of 2 indicators if it increases accuracy is a plus)
- Use historical stock price data and the selected indicators to perform the analysis.
- Data: Use Yahoo Finance Website for excel/ import yfinance as yf
`yf.download(#ticker_name,start=01-01-2010,period='1D')` for python/etc.

3. Report:

- Present your findings in a report as an Excel document, PowerPoint presentation, code (Python, R, etc.), or any other suitable format.

The report should include:

- A brief explanation of the selected indicators.
- The methodology used for the analysis.
- Statistical results and their interpretation.
- Conclusions on the predictability or impact of the indicators on stock prices.
- Usage Recommendations for investors based on your analysis.

Resources: You are encouraged to use CHATGPT, Google, research reports, and other resources to prepare your analysis and report to its fullest.