

Investment Idea Generation

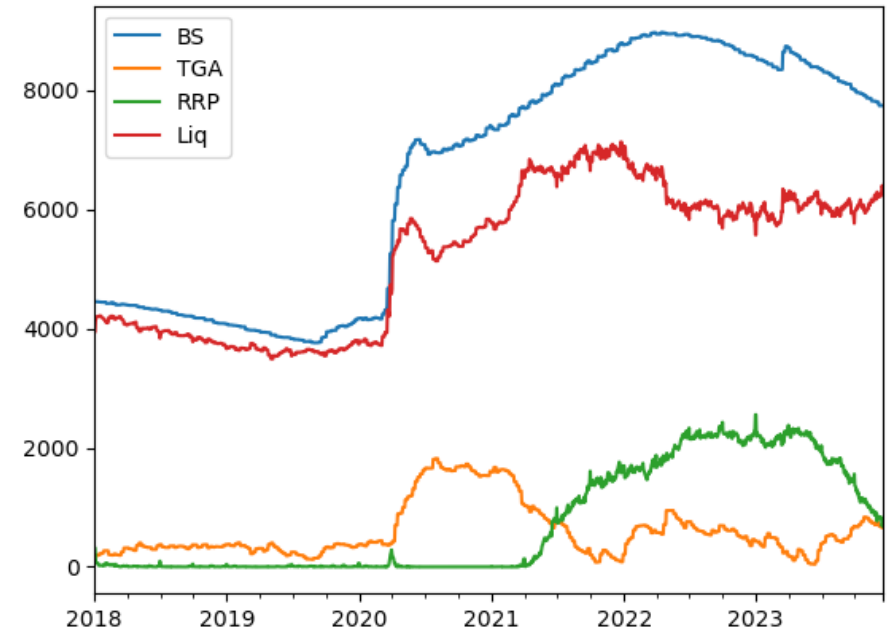
Siyun

Conceptual Idea

- This year S&P500 has returned ~15% from Q1 levels, amid higher-for-longer interest rate hikes and recession worries.
- Potential reason is Fed has been adding abundant liquidity since SVB crisis.
- Natural question to ask is whether net liquidity on the market is leading indicator for stock market returns.
- Define Fed liquidity tracker:

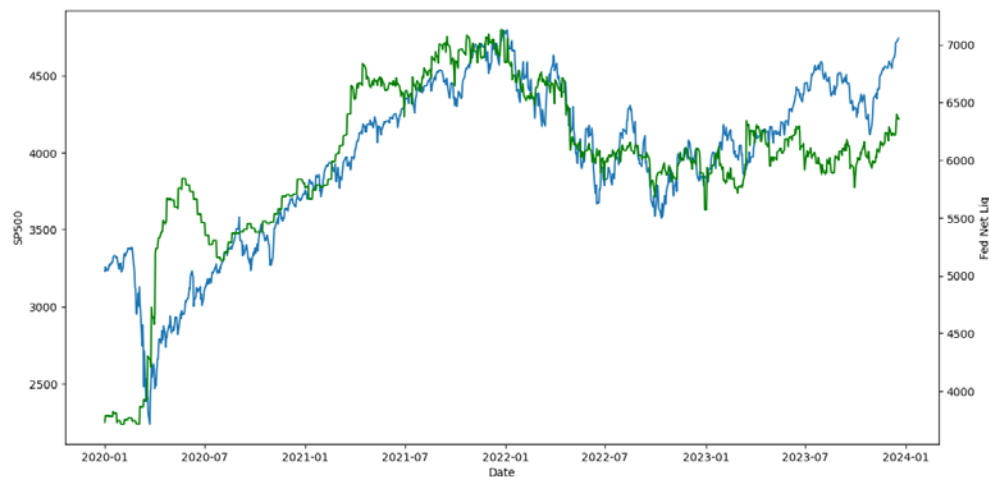
$$\text{Net Liquidity} = \text{Fed Balance Sheet} - \text{Treasury General Acct} - \text{Reverse Repo}$$

- Fed BS is available **weekly**.
- TGA is US Treasury's account at Fed and reduces reserve balance. Available **Daily**.
- RRP is bank's overnight lending for Fed Funds rate and reduces reserve balance. Available **Daily**.
- Before 2020, main driving force of NL is Fed BS
- After 2020, TGA and RRP is main force of NL. This means we will have a more responsive tracker.

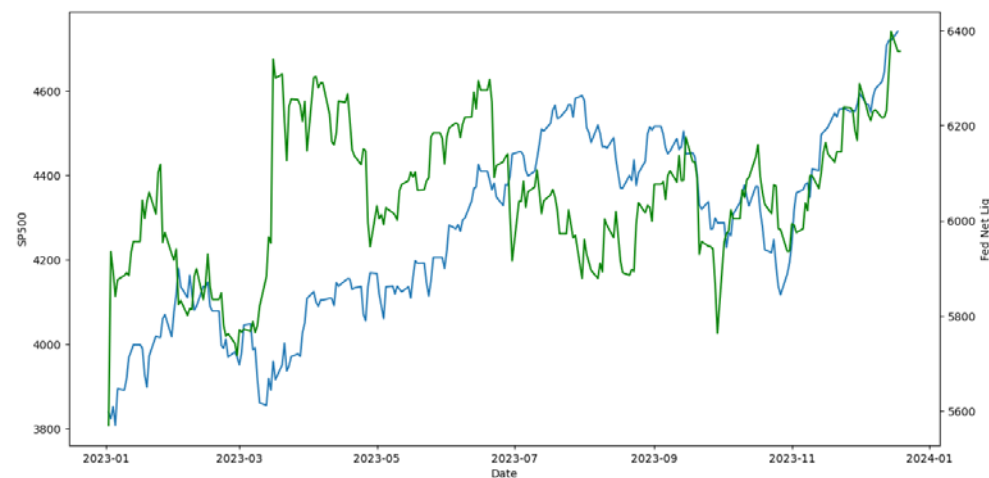


Data Visualization

- After 2020, Liquidity is playing a crucial role in driving stock market returns.
- Net liquidity is a (semi) high-freq economic indicator which we may use as a trading signal.

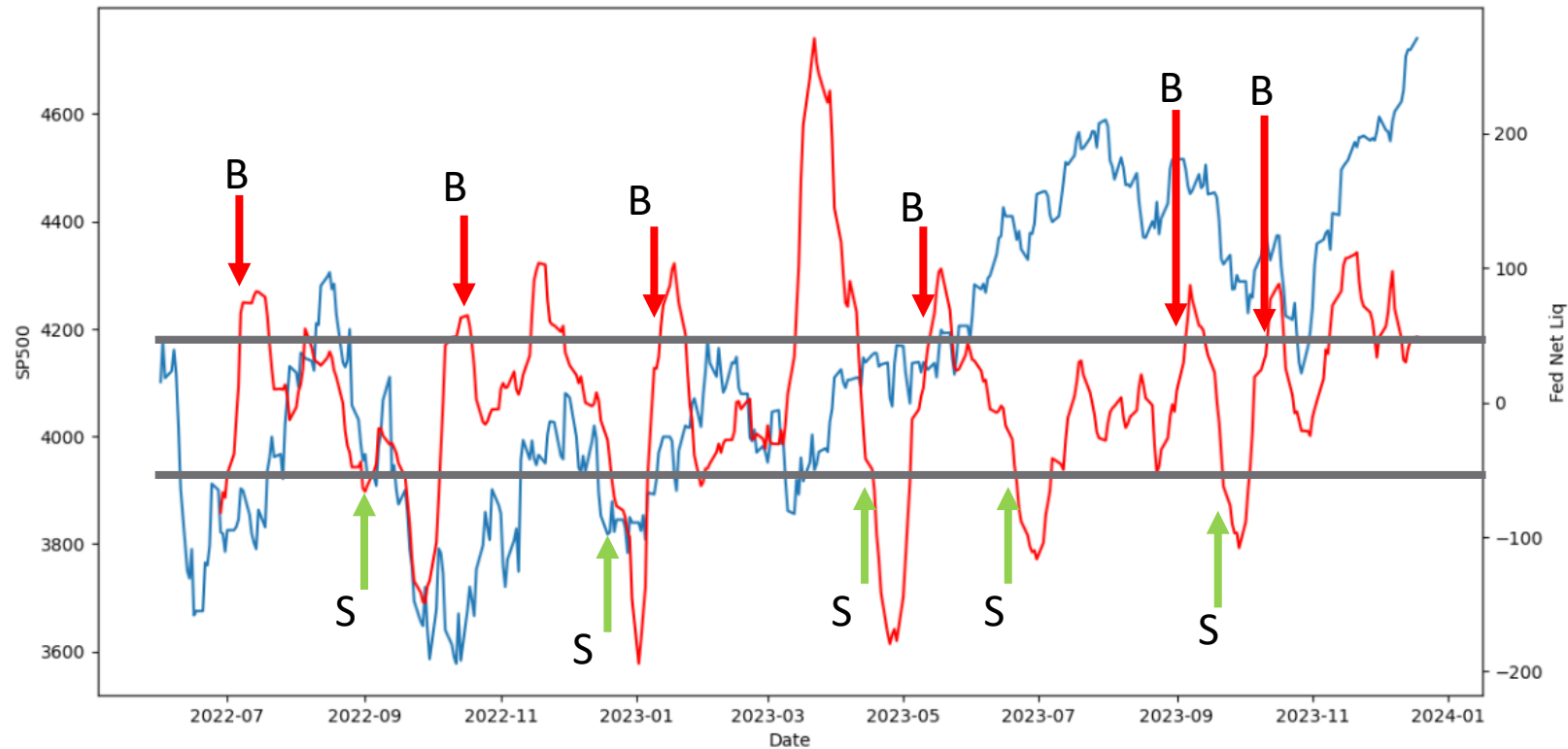


- Data after 2020. We ensure no look-ahead.
- Blue line is SP500 index
- Green line is Net Liquidity indicator.



- Data after 2023.
- A week lead-lag effect can be observed.

Conceptual Strategy



- Refresh Net Liquidity indicator daily using latest available TGA/RRP data
- MACD(5, 20) for entry-exit signal of SP500 or other US broad based index. We have 80% win rate for 5 closed trades in the period and 1 open trade.