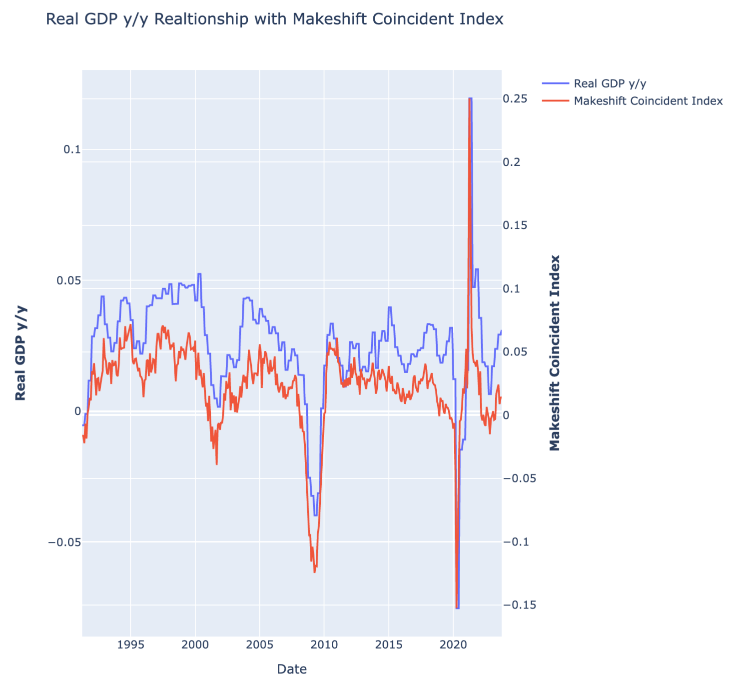
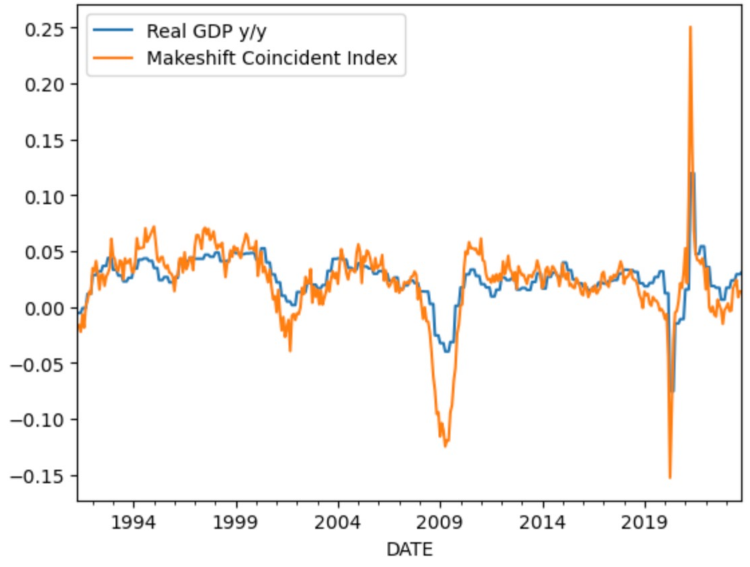
Macro Outlook Replication with Data

Coincident Index to GDP – Replacing LEI

- Leading Economic Indicator has declined 21 months in a row.
  - The Fed's most intense hike since the '70s
  - Manufacturers reduced inventories
  - Faced pressures from high input prices
  - China's closure in 2022
- Coincident Index - reflects employment, household income, industrial output, and business revenue.
  - Less cyclical and coincides with economic activity
- Couldn't find the LEI on FRED, but used a monthly average of the following:
  - Real Manufacturing and Trade Industries Sales
  - Real Personal Income excluding Current Transfer Receipts
  - Industrial Production
  - Nonfarm Payrolls



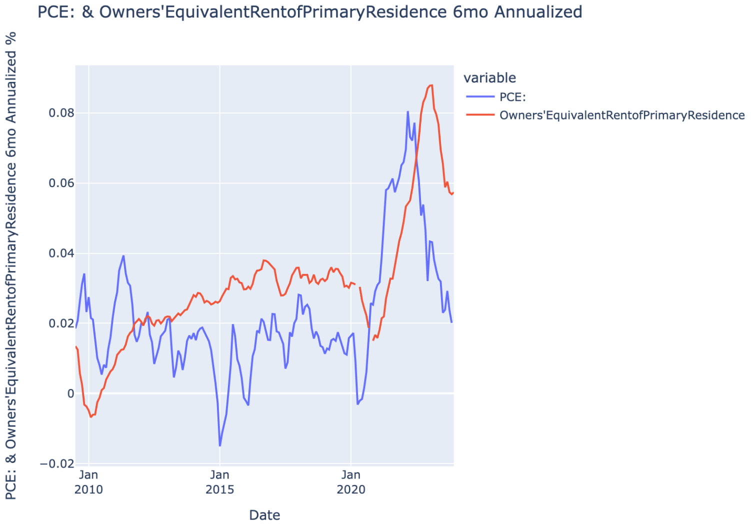


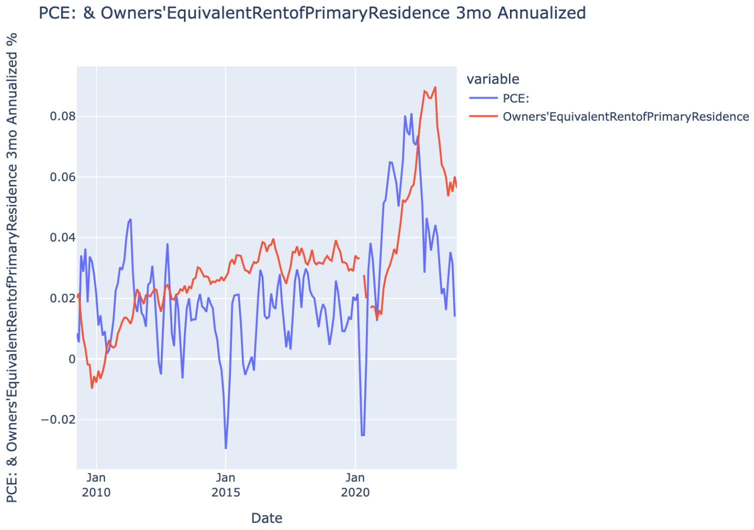
Tight Lending Standards

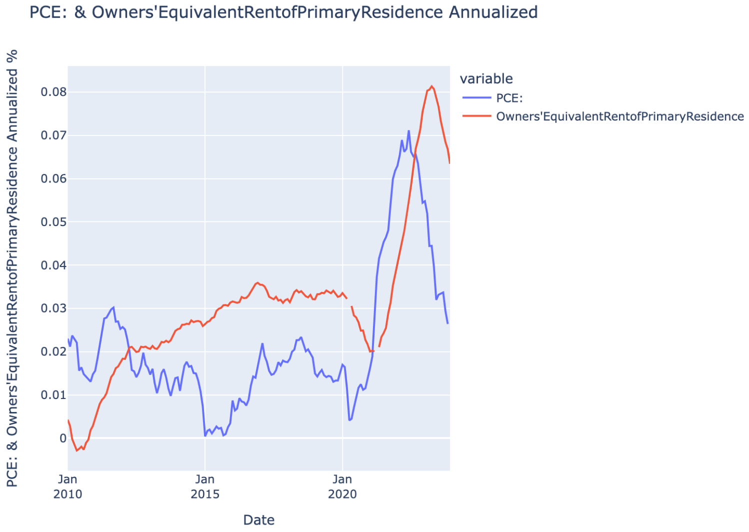
- Tighter lending standards have been correlated to slower growth periods as Banks lend less.
  - Multiplied Real GDP y/y by 1000 to scale
  - Lag 2 Example: April GDP was pulled ahead to October

PCE Inflation Normalizing to Fed Target

- CPI inflation is getting propped up by the rent and shelter portion which usually operates in a lag. This should normalize as Apartments List and Zillow show lower shelter and rent prices.
  - Compared annualized, 6-month annualized, and 3-month annualized PCE to CPI OER

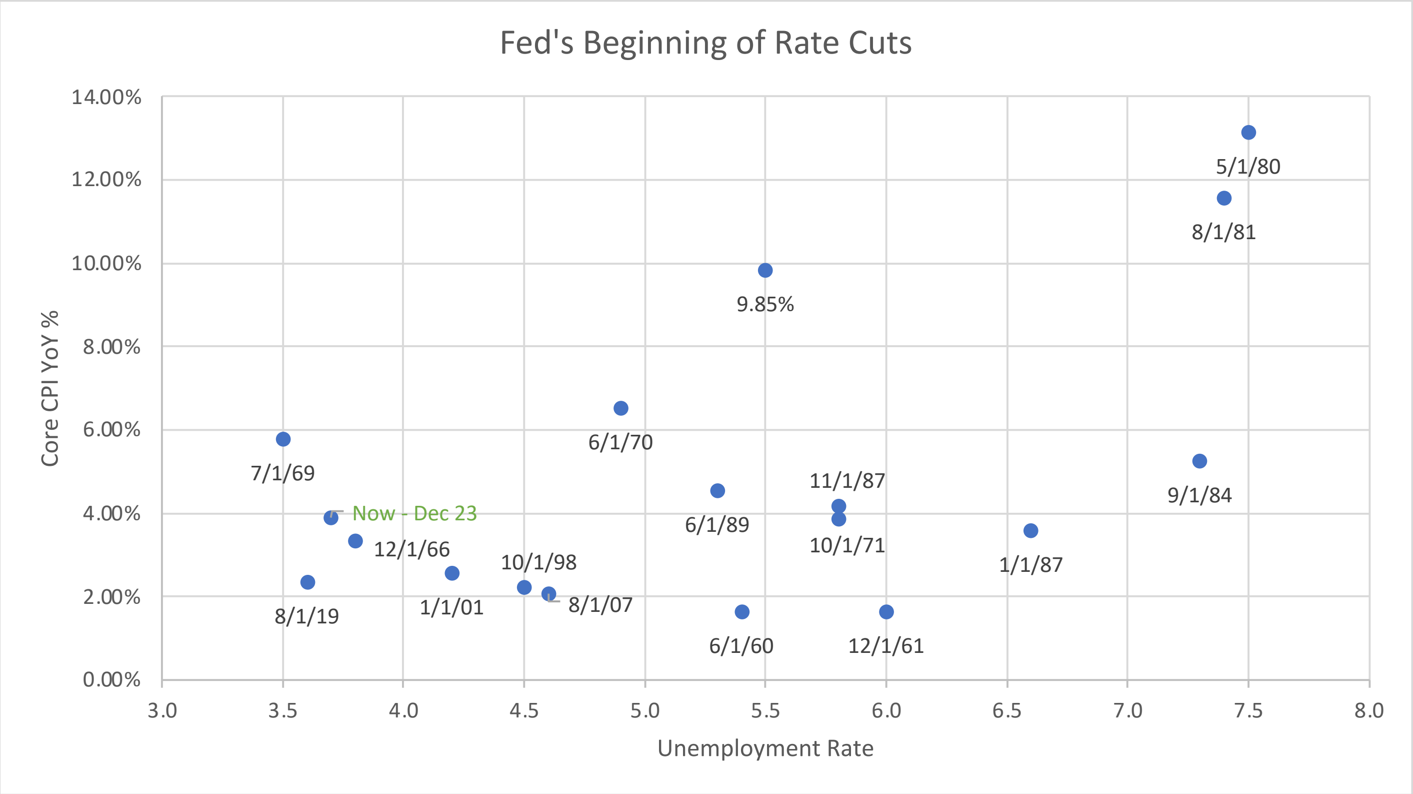






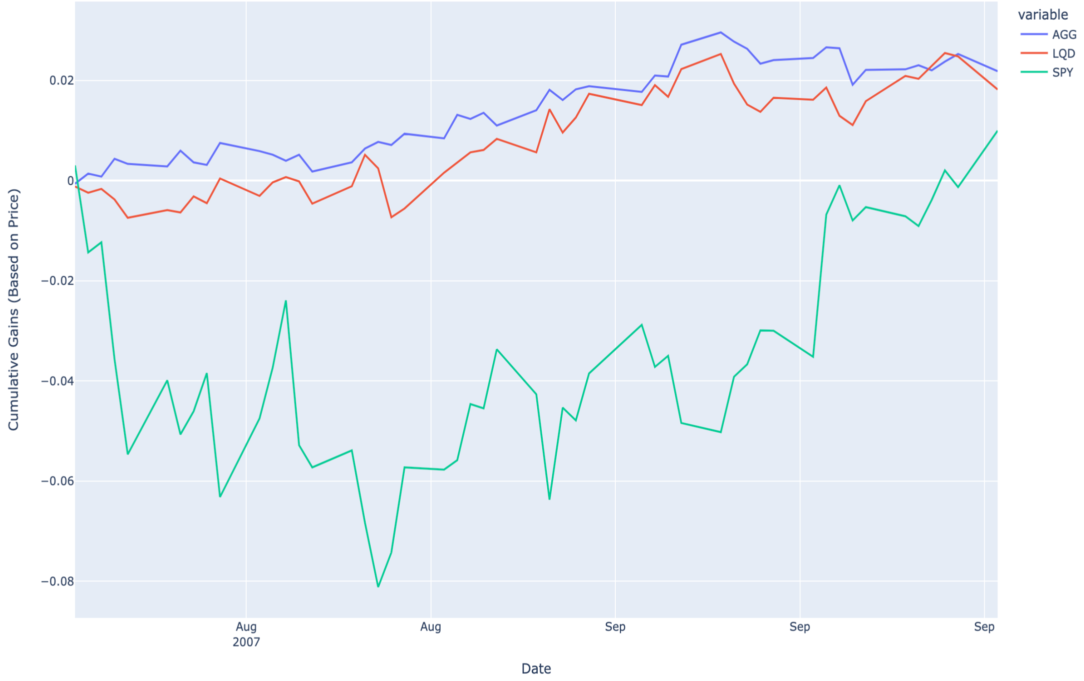
Core CPI and Unemployment: Fed Rate Cuts

- Can see why the markets are pricing in rate cuts starting at the beginning of March
  - Recent Fed speak (Bostic) doesn't want to cut and then need to hike again
- These are all the times where Fed started to cut rates
- Green Text: Where we were most recently
  - Just under 4.0% for CORE CPI
  - Low Unemployment (3.7%)

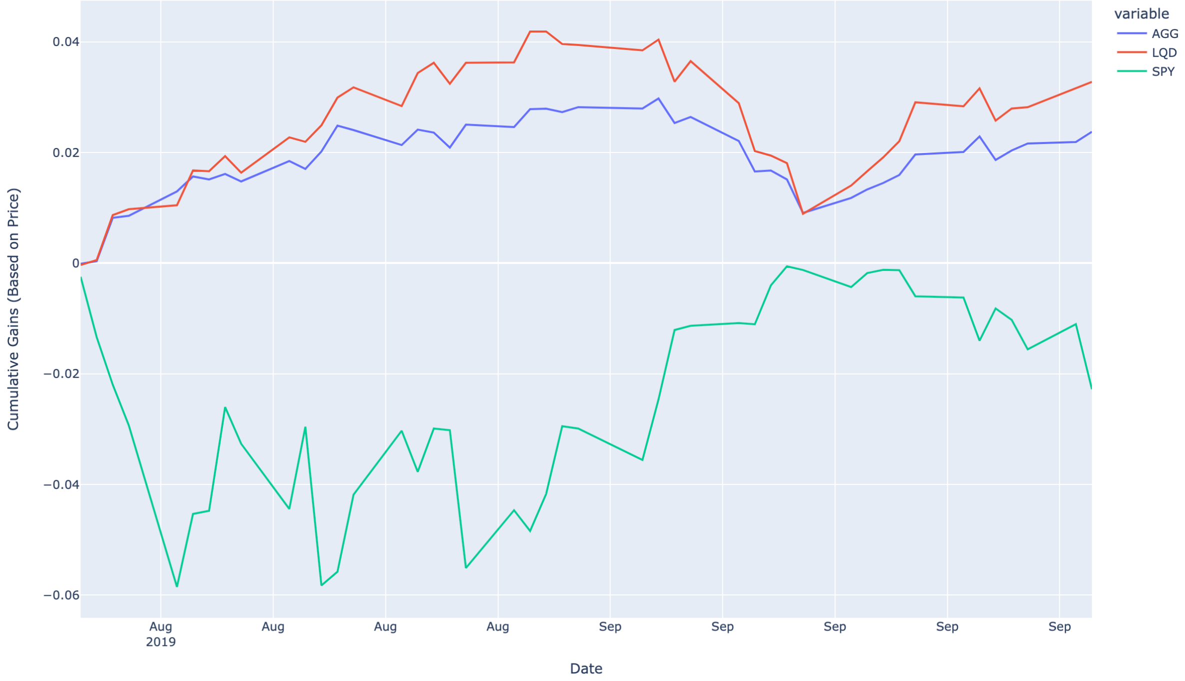


Fixed Income outperforms after Fed Pause

SPY v Fixed Income: Pause August 2007

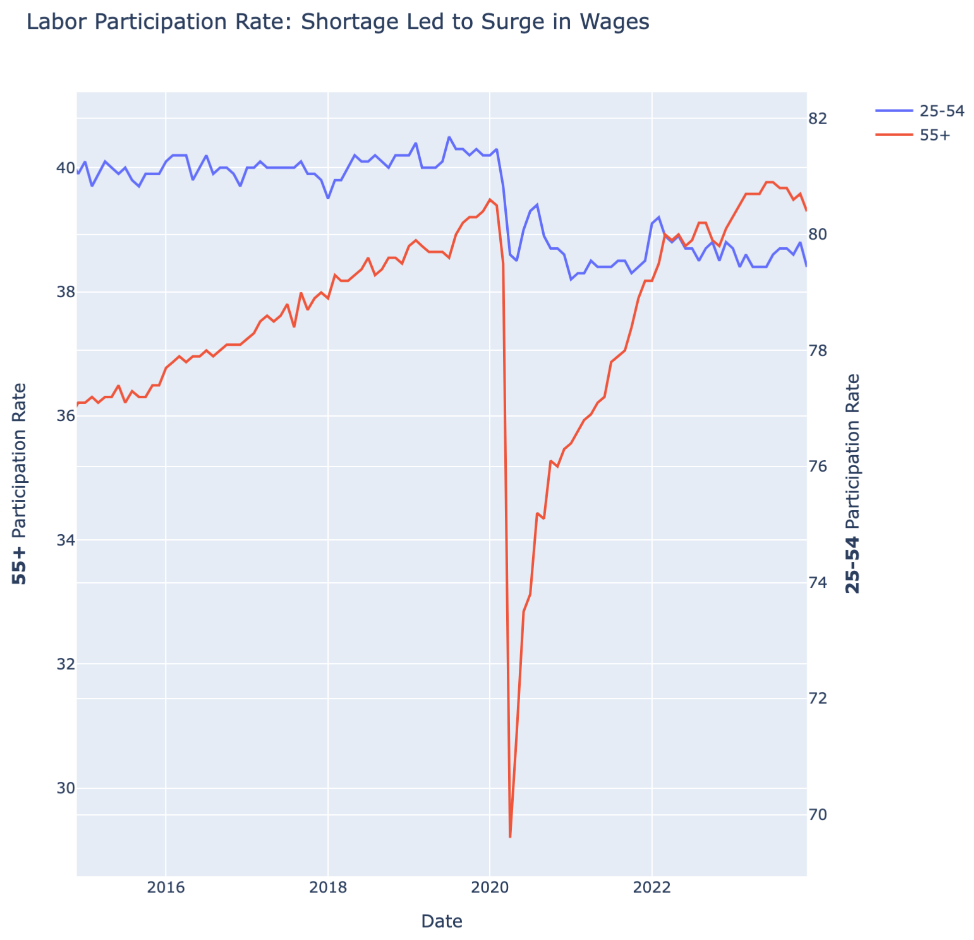


SPY v Fixed Income: Pause August 2019



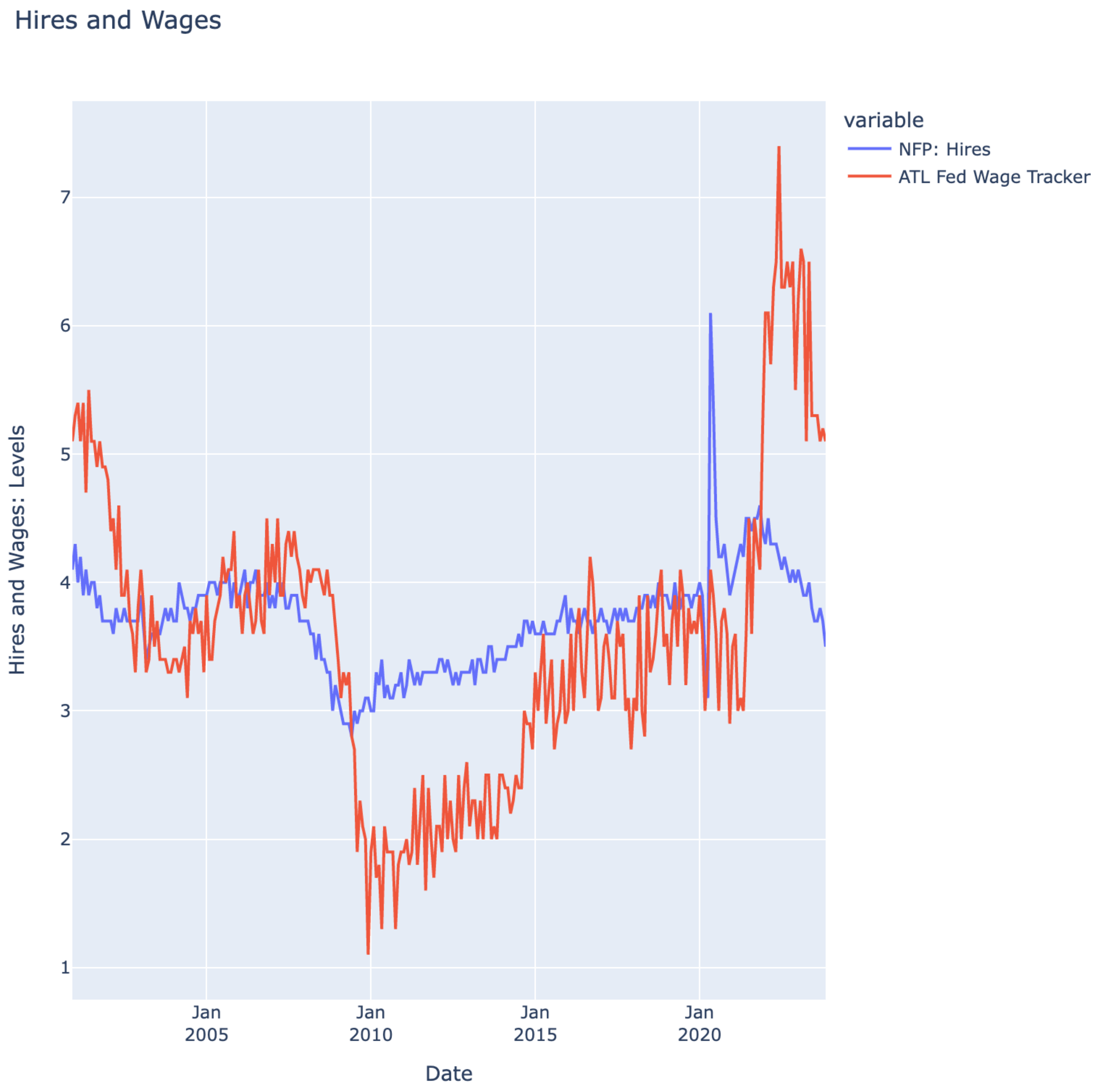
Labor Force Participation Rate – Leading to Surge in Wages

- The pandemic led early retirements that left the labor force around 2 million workers short from pre-pandemic estimations.
- The sudden shortfall in labor led to rapid wage increases that attracted more people into the work force to ease the shortage that has since leveled off



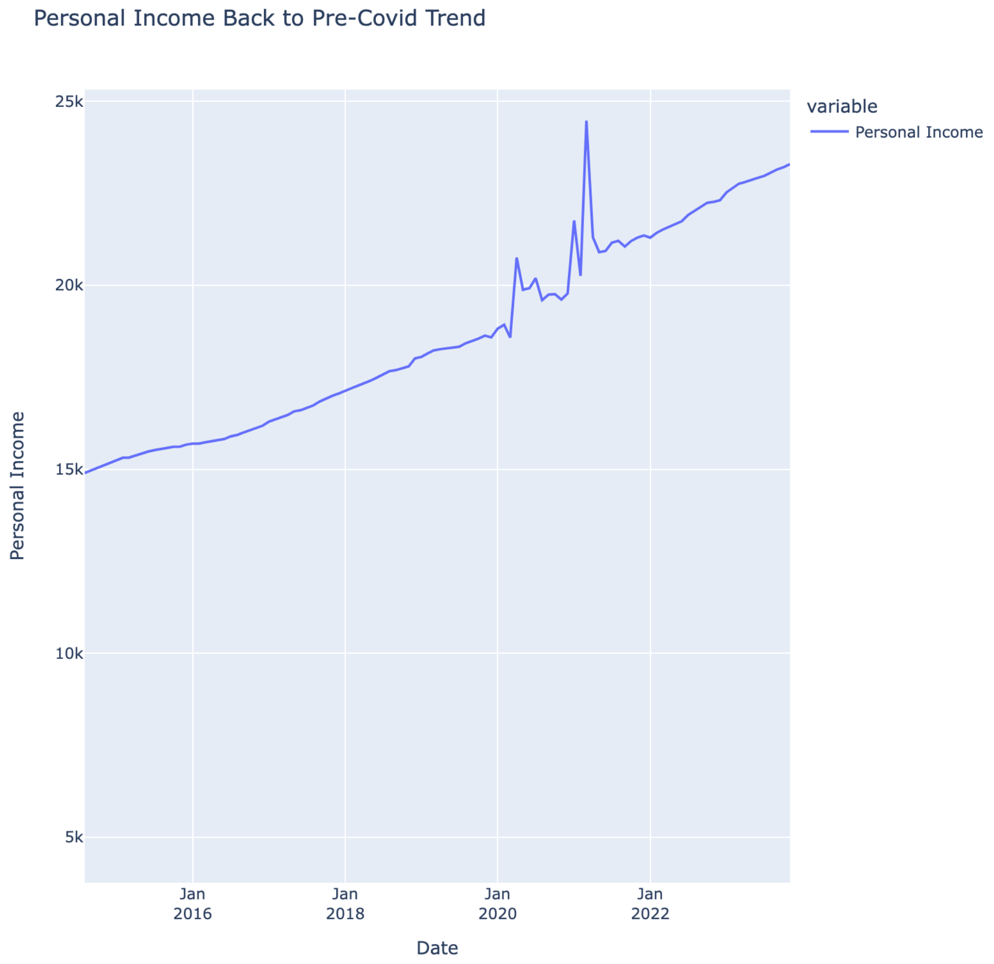
NFP Hires and Wages starting to Normalize

- Wages are normalizing as new hires are declining from highs.

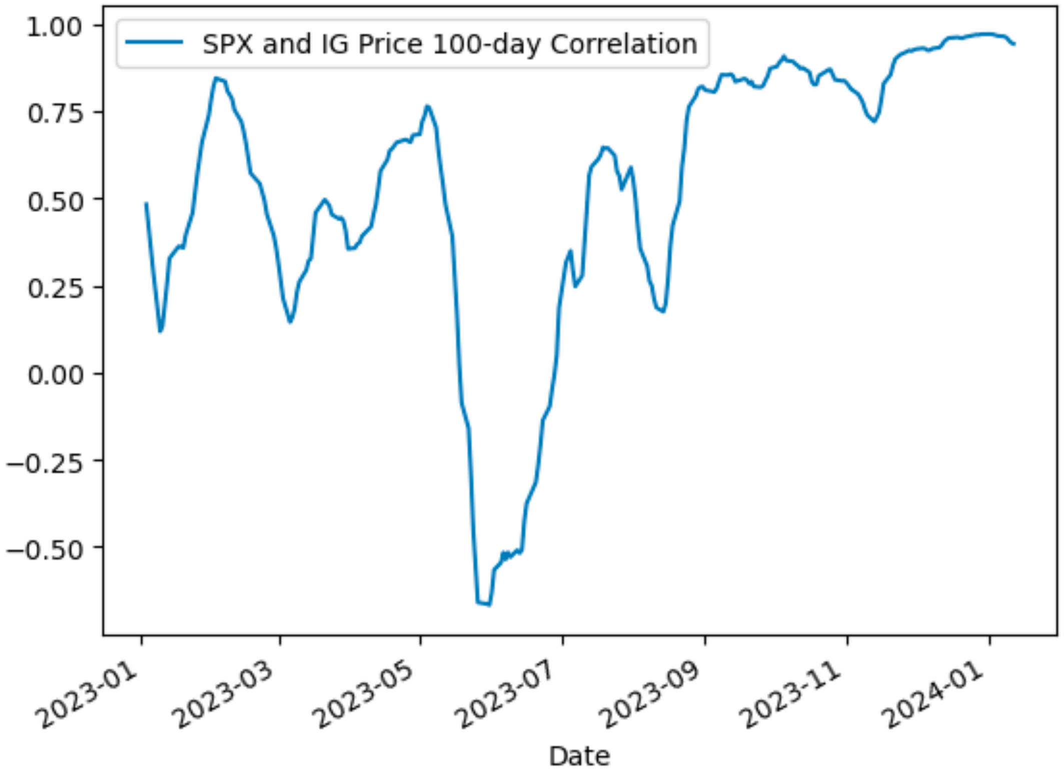


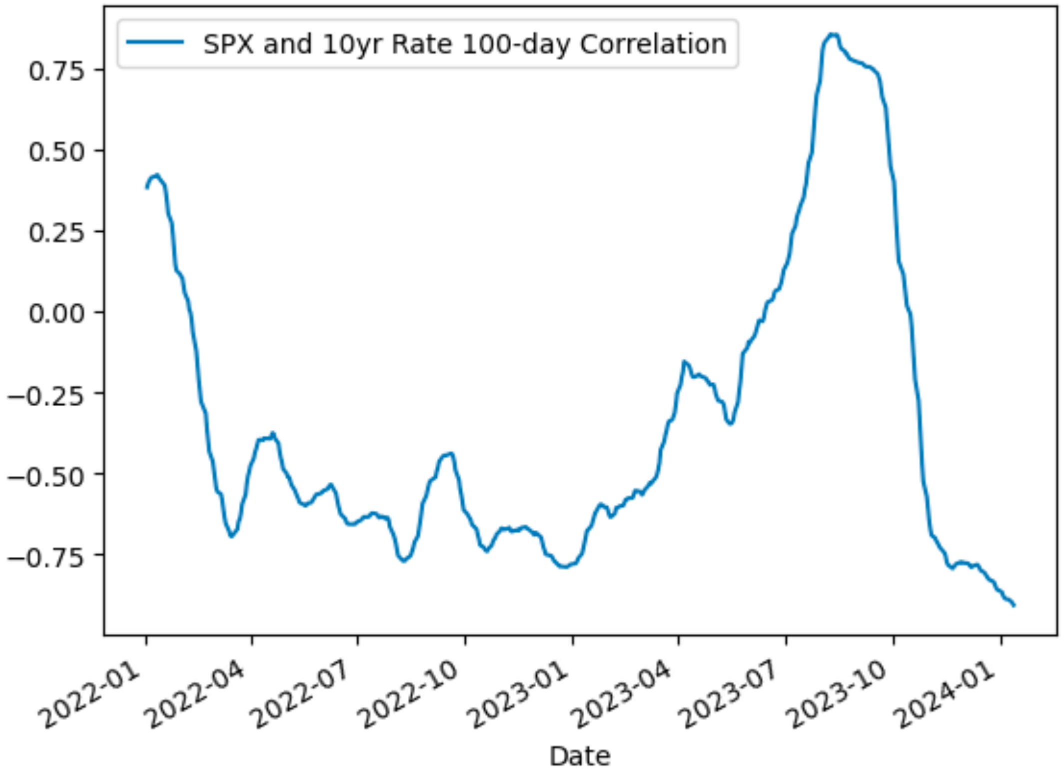
Personal Income

- Personal Income has fallen back to pre-Covid trend.
- Disposable Incomes recovered leading to better consumer demand in ’23.



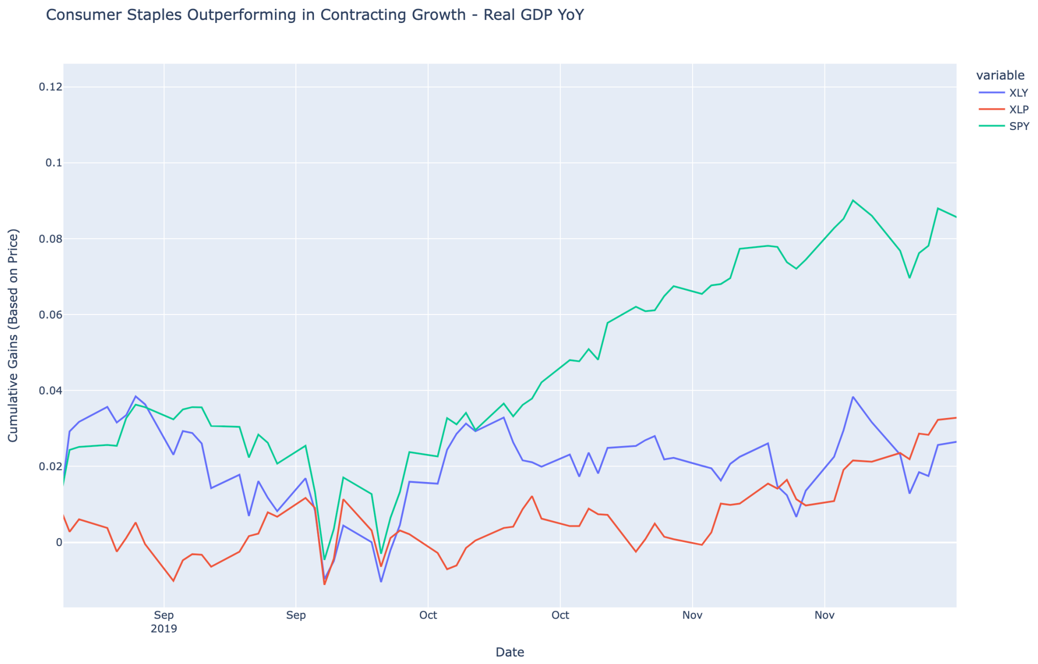
IG (Price) & Treasuries (Yield) Moving with Equities – Alternative Assets like Hedge Funds & Private Equity





Consumer Staples to Consumer Discretionary – Declining Growth

- Consumer Staples tends to outperform when growth is set to slow
  - Soft data has pointed to increasing stress on the consumer (bank earnings)
  - Net Charge Offs are up on GSIBs almost double from 1Q23 to 4Q23

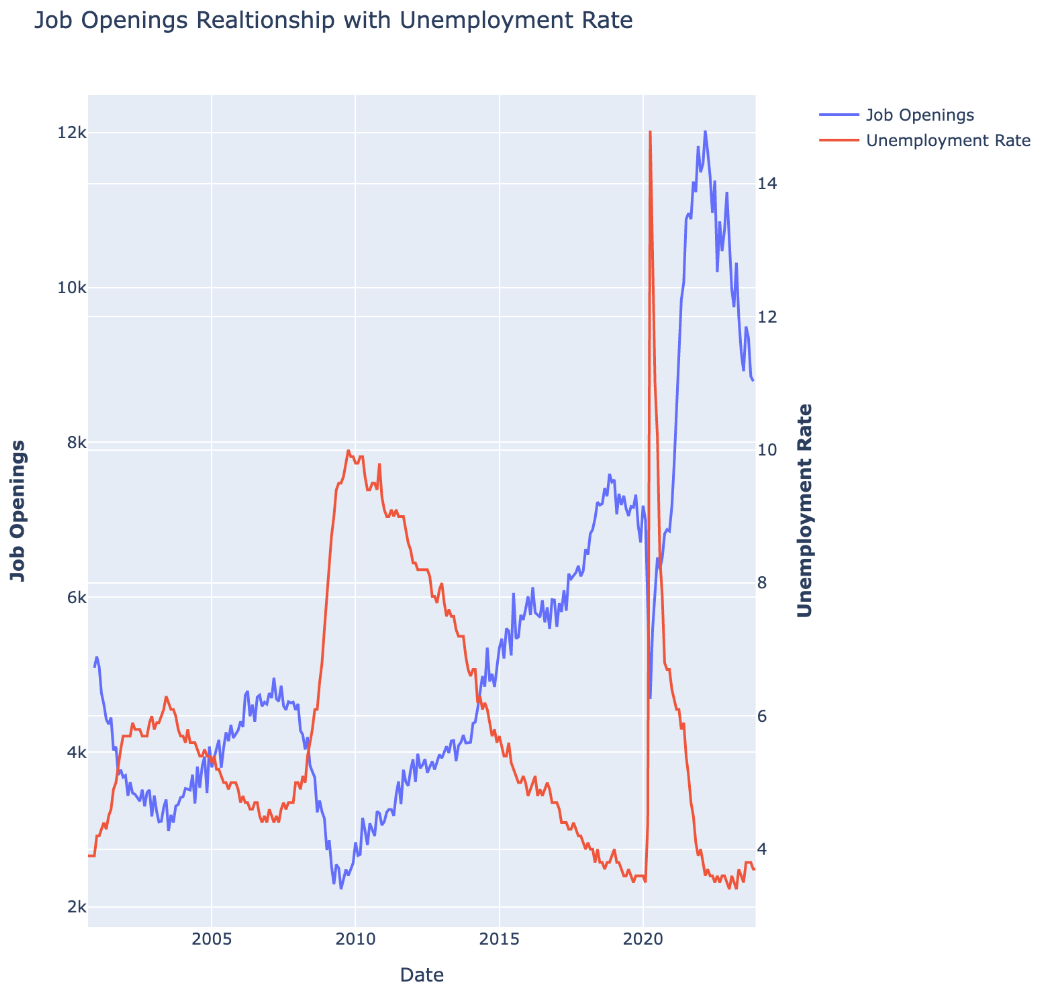


Healthcare to S&P 500 – Declining Growth

- Healthcare equities tend to outperform when Real GDP slows year-over-year.
- Consumer Demand is expected to slow as wages normalize and personal savings continue to dwindle down.

Job Openings to Unemployment Rate

- Job openings tend be inversely related to the unemployment rate
- As there are less job openings, unemployment goes up.



Inverted since November of 2022

- When market becomes more fearful of the economy, flight to quality takes place as investors rush into the 10-year treasury that is risk free and very liquid.
  - The yield on the ten-year drops as more demand from the flight to quality drives up the price.