Python Portfolio Management Project – Equal Weight Portfolio

1. Using five years of historical data from Yahoo! Finance, (ended 6/30/21), construct and analyze the performance of a portfolio that fits the following description:

    a. Begins with the following securities: TLT, VTI, VTV, VBR, AGG

    b. Rebalances the portfolio to equal weight each security in the portfolio at the beginning of each month

    c. Reinvests dividends into the securities that paid them

    d. Midway during the time period, (12/31/19), the portfolio replaces AGG with SHV during an otherwise normal rebalance

2. Using this constructed track record, calculate the following performance metrics for the portfolio:

    a. Cumulative Return

    b. Sharpe Ratio (vs. a RF of your choice)

    c. Information Ratio (vs. a benchmark of your choice)

    d. Sortino Ratio (vs. a benchmark of your choice)

    e. CAPM Beta (vs. a benchmark of your choice)

Provide:

1. The metrics both since inception and over rolling six-month timeframes.

2. An explanation of how each metric can and can't be interpreted, in this context.

3. A short explanation of why you chose the benchmark(s).

4. Any other analysis/visualization of the portfolio you find valuable

    Examples below:

    a. Turnover analysis

    b. Style analysis

    c. Macro exposure analysis