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AMOD 5530H
Final Project
0831119

Part 1 - Reflections
Group Priorities

To develop our portfolio, we employed a structured approach that involved both fundamental and technical analysis to ensure a diversified and well-balanced selection of stocks. Our group first decided to diversify across various sectors, including medicine, technology, and finance. Each member of the group was responsible for selecting stocks from one of these fields, allowing us to reduce the risk associated with overconcentration in a single industry and leverage growth opportunities across different parts of the economy.

The first key metric we focused on was analyst recommendations. We prioritized stocks with "Buy" or "Strong Buy" ratings, as these reflect positive growth expectations and strong market potential based on professional evaluations of the company's fundamentals and market position. Another important factor was the stock's proximity to its 12-month target price. Since the challenge was conducted at the end of the year, we specifically targeted stocks that were close to or below their target price, signaling they might be undervalued and had the potential for price appreciation within the competition's short timeframe. To ensure we selected fundamentally strong stocks, we also looked at the P/E ratio, which helps assess a stock's valuation relative to its earnings. We targeted stocks with P/E ratios that were in line with industry averages or lower, suggesting they were not overvalued and had room for growth. Additionally, we considered the stock's beta, a measure of volatility. Lower-beta stocks were preferred for their stability, while higher-beta stocks were considered for their potential to generate higher returns during market rallies. A key criterion we maintained throughout the process was ensuring that every stock we selected outperformed the WLS Index. This benchmark allowed us to focus on stocks that demonstrated stronger relative performance, ensuring that our portfolio was consistently competitive in the market. Once we narrowed down our stock choices using fundamental analysis, we turned to technical indicators to fine-tune our entry points. This was crucial, given the short duration of the challenge, as optimal timing could significantly impact the portfolio's performance. We used the Relative Strength Index (RSI) to gauge momentum and identify stocks that were oversold (RSI below 30), signaling potential for a price rebound. We also applied Bollinger Bands to assess stock volatility and identify support and resistance levels. Stocks approaching the lower Bollinger Band were considered potential buying opportunities, as this often indicated undervaluation or oversold conditions. The stochastic oscillator was used to analyze price momentum and identify potential reversals, helping us pinpoint stocks likely to rise. By carefully considering these metrics fundamental strength, valuation, relative performance against the WLS Index, and technical indicators we ensured that our portfolio was diversified across sectors while maintaining a balance between risk and growth potential. Each member contributed their sector-specific expertise, which helped us build a well-rounded and strategic portfolio. Overall, this comprehensive approach enabled us to align our portfolio with the challenge's objectives while managing risk and maximizing potential returns.

After the first week of the competition, we realized that limiting group members to selecting stocks from only their assigned sectors was not effective. While this approach initially seemed like a good idea, it became clear that many members had strong interests in stocks outside their sectors, and there was a desire to diversify the portfolio further. As a result, we opened up the stock selection process, allowing each member to contribute stocks from any sector, which gave us more flexibility and allowed us to build a more diversified portfolio. Another adjustment we made was regarding the distribution of the initial capital. Initially, we divided the capital equally among all members, but we quickly noticed that some members were not fully utilizing their allocation. As the competition progressed, we made unused capital available to other group members, which helped us better utilize our resources and improve overall portfolio performance. While our strategy was working well in terms of selecting stocks with solid fundamentals and technical indicators, we encountered a challenge with our cautious approach to risk. We were hesitant to over-invest in certain stocks, fearing high volatility or potential losses, which led to a more conservative portfolio. However, this risk aversion turned out to be a disadvantage as the competition progressed. We realized too late that being overly cautious limited our ability to fully capitalize on high-growth opportunities. In the final weeks of the competition, we adapted our strategy by taking on a bit more risk in the hopes of maximizing returns, but by then, some opportunities had already passed. Overall, the experience taught us the importance of being flexible and adapting our strategy based on how the competition was evolving. While we were successful in managing risk early on, we learned that balancing risk with the potential for higher returns is crucial, especially in a competition with a fixed time horizon.

The stocks with the best returns in our portfolio were SOFI US, UAL US, JPM US, TSLA US, and PYPL US, with SOFI US leading the way with a return of $74,568. These stocks performed well due to a combination of strong fundamentals, favorable market conditions, and positive analyst recommendations. For example, SOFI US experienced significant growth as it continued to expand its financial services, while UAL US benefited from the recovery of the airline industry as travel demand surged post-pandemic. JPM US delivered steady returns, driven by strong financial performance and the resilience of the banking sector. TSLA US, in particular, was chosen strategically after the U.S. election due to the perceived positive relationship between Elon Musk and Donald Trump, which contributed to investor optimism and confidence in Tesla's growth potential. Similarly, PYPL US capitalized on the growing market demand for digital payments and investor confidence in its innovative financial services. On the other hand, the stocks with the worst returns were META US, DOFG NO, AVGO US, DJT US, and LLY US. META US struggled due to ongoing concerns about competition and stagnating user growth. DOFG NO and AVGO US were affected by broader market volatility and sector-specific challenges, leading to lower-than-expected performance. DJT US (Trump Media) faced a particularly steep decline in value, as its price fluctuated wildly based on speculation surrounding the U.S. presidential election. Despite adjusting the stop loss regularly to mitigate potential losses, the stock continued to underperform, and the member who selected it decided to close the position after a significant drop in value. While the stock had high speculative potential if Trump had won the election, the uncertainty and volatility tied to the political situation ultimately made it a poor investment choice. Another factor in the underperformance of some stocks, like LLY US, was the short duration of the competition. Certain stocks were selected based on strong analyst recommendations, but these picks required a longer time horizon to realize their growth potential, which did not align with the competition's timeframe. Looking back, the main issues with the underperforming stocks were the risks associated with speculative investments like DJT US and the challenge of timing growth-focused picks within a short trading period. A revised strategy focusing more on risk management could have helped mitigate these losses. This would include prioritizing stocks with stable earnings, lower volatility, and solid fundamentals while limiting exposure to speculative assets and event-driven risks like political elections. This alternative approach would likely have been more successful by aligning stock selections with the competition's short duration and focusing on companies with immediate growth potential and consistent market performance.

Group Communications

At the beginning of the competition, our group's communication goals were focused on fostering collaboration, keeping all members informed, and making sure everyone was aligned with the investment strategy. We aimed to create an environment where all members could actively contribute ideas, share their analyses, and discuss potential adjustments to the portfolio. To facilitate this, we set up a group chat as our primary communication tool. This allowed for instant updates and discussions throughout the competition. Additionally, we scheduled weekly meetings every Thursday, a day when all members were available on campus. These meetings served as a platform to review our portfolio's performance, discuss stock movements, and evaluate our strategies. The group leader, who had access to input and close positions, was responsible for notifying the team whenever they were on campus or planning to be there to execute trades on behalf of the group. The leader also shared the weekly performance reports of the portfolio, highlighting what went well, what went wrong, and how we could improve. This helped to ensure we were all on the same page and continuously refining our approach. In addition to the group meetings, the group leader shared external resources like stock journals and newsletters, such as the "Daily Squeeze," to keep everyone updated on market trends and relevant news. These insights from stock market analyses and expert opinions were crucial in helping us understand the broader market sentiment and its potential impact on our portfolio. By discussing the latest stock market news and trends, we were able to make more informed decisions about how to adjust our strategy or identify new opportunities.

This communication strategy worked well for the duration of the competition. By having a dedicated group chat for real-time discussions and scheduling weekly meetings every Thursday, we were able to stay connected and make timely decisions. The group leader's responsibility for sharing weekly performance reports, managing trades, and keeping everyone updated with external resources like the "Daily Squeeze" newsletter ensured that all members were well-informed about market conditions and portfolio performance. This regular flow of information allowed us to adapt quickly to changes and keep the strategy aligned with our goals throughout the competition. Overall, the communication structure we implemented helped us remain coordinated and focused on optimizing our portfolio's performance.

As the group leader, I felt that our communication method was very effective throughout the competition. We made sure that members received immediate responses whenever anything was brought to their attention, ensuring that decisions were made promptly and with all the necessary input from the team. By sharing key information, such as weekly performance reports, stock market insights, and updates from resources like the "Daily Squeeze" newsletter, members were able to adjust their positions effectively based on the latest market trends and news. I believe this open, responsive communication fostered a collaborative environment where everyone's ideas were respected and taken into consideration. The clarity of the information shared helped everyone stay aligned on the strategy and made it easier to make informed decisions. For future students participating in the Global Trading Challenge, my advice would be to prioritize clear and timely communication. Ensure that everyone has access to the latest information and feels comfortable sharing their thoughts. Establishing a routine, such as weekly meetings and using a group chat for real-time updates, will help maintain focus and facilitate quick decision-making. Most importantly, be receptive to feedback and remain flexible in adapting the communication approach as the competition evolves.

Part 2 - Analysis
QUESTION 1
Beta Analysis

A)

TOP PERFORMING STOCKS

STOCK	RAW BETA	ADJUSTED BETA
SOFI US EQUITY	2.524	2.016
UAL US EQUITY	1.350	1.233

UNDERPERFORMING STOCKS

STOCK	RAW BETA	ADJUSTED BETA
META US EQUITY	1.328	1.218
DOFG US EQUITY	0.907	0.938

A raw beta of 2.524 indicates that SOFI is highly volatile and sensitive to market movements compared to the benchmark (WLS). The adjusted beta of 2.016 suggests a moderated expectation of future volatility. Despite the adjustment, SOFI remains more than twice as volatile as the market.This high beta aligns with SOFI's strong performance, indicating it likely benefited significantly from favorable market conditions or sector-specific catalysts.

UAL has a moderate beta, implying it moves 1.35 times the market's volatility. The adjusted beta smoothens this to 1.233, showing reduced sensitivity but still indicating above-market volatility. As a top performer, UAL likely benefited from broader market trends and/or airline sector recovery, consistent with its moderate market sensitivity.

META's beta shows it is slightly more volatile than the market, with both raw and adjusted values close to 1. Despite moderate market sensitivity, its underperformance suggests company-specific challenges (e.g., declining ad revenue or higher operating costs) rather than broader market conditions.

DOFG has a beta below 1, indicating lower volatility than the market. This suggests DOFG is relatively defensive and less influenced by broader market movements. However, its underperformance might be tied to sector-specific weaknesses or company-specific issues, as low beta alone wouldn't drive poor returns.

The top-performing stocks (SOFI and UAL) both exhibit higher beta values, showing greater sensitivity to market trends, which amplified their returns in favorable conditions. The underperforming stocks (META and DOFG) have lower beta values, suggesting their returns were less driven by market dynamics and more influenced by internal or sector-specific factors.

B)
HISTORICAL BETA

TOP PERFORMING STOCKS

STOCK	RAW BETA	ADJUSTED BETA

SOFI US EQUITY	2.516	2.010
UAL US EQUITY	0.892	0.928

UNDERPERFORMING STOCKS

STOCK	RAW BETA	ADJUSTED BETA
META US EQUITY	1.240	1.160
DOFG US EQUITY	0.476	0.651

1. Top-Performing Stocks

SOFI (SoFi Technologies)

Historical Beta: This high historical beta suggests that SOFI is highly sensitive to market movements, typically amplifying the direction of broader market trends. Outperformed its historical beta expectations by showing resilience during the WLS Index's declines and maintaining gains even in downturns. Historical beta indicated a strong correlation with market volatility, yet SOFI displayed less sensitivity to the WLS Index's fluctuations than expected. Over a longer timeframe, SOFI's high historical beta would suggest significant gains in bullish markets but potential amplified losses in bearish conditions. However, its recent resilience hints at evolving fundamentals or market sentiment, which could make it a more stable high-growth option for risk-tolerant investors.

UAL :-Outperformed its historical beta by showing significant growth even when the WLS Index declined. Its beta suggested alignment with market trends, but UAL displayed independent growth, possibly due to sector-specific factors (e.g., recovery in travel demand). Over a longer period, UAL's moderate beta suggests it could continue offering balanced risk and return. Its outperformance relative to historical beta highlights the importance of tracking sector trends and company-specific developments, such as demand recovery or operational efficiency.

2. Underperforming Stocks

META (Meta Platforms): Underperformed its historical beta expectations by falling significantly below the WLS Index, even during market recoveries. Instead of moving in line with the market (as suggested by its beta), META faced company-specific headwinds (e.g., regulatory pressures, innovation concerns). META's historical beta implies potential recovery in bullish markets. However, its recent underperformance indicates fundamental or external issues that could persist. Over a year, META's deviation from historical beta suggests caution is warranted, with a focus on resolving underlying challenges.

DOFG: Initially outperformed expectations with a strong rally but later aligned better with its low historical beta during recovery. This erratic performance deviated from the consistent stability expected from a low-beta stock, possibly due to short-term market sentiment or unexpected events. Over a longer period, DOFG's low historical beta suggests it should offer stability, making it suitable for conservative investors. Its recent volatility highlights the importance of considering both beta and short-term drivers when evaluating defensive stocks.

Insights on Investing Over a Full Year

High Beta Stocks (e.g., SOFI): Amplify market trends. In bullish markets, these stocks could deliver outsized returns, but risk increases in downturns. Resilience during recent declines suggests SOFI may be a unique high-beta stock worth monitoring for bullish phases.

Moderate Beta Stocks (e.g., UAL): Provide balanced exposure, aligning with market trends while allowing room for independent growth. UAL's recent outperformance suggests it could offer stability with growth potential in favorable sector conditions.

Low Beta Stocks (e.g., DOFG): Typically less volatile and defensive. DOFG's performance variability during the competition suggests it may still require closer scrutiny to confirm its stability over a longer timeframe.

Deviation from Historical Beta:

Stocks like META that underperformed their historical beta indicate company-specific risks that could persist. A longer competition might confirm whether these are temporary setbacks or structural challenges.

Stocks outperforming their beta (e.g., SOFI, UAL) suggest potential catalysts or evolving market dynamics that could make them stronger investments than their beta implies.

QUESTION 2B

1. Earnings Yield (E/P)

FTW Analysis: Challenge Duration Return: +4.76%

FTST Backtesting:

- QSpread Ann Return: +4.76%
- QSpread Sharpe: N/A
- QSpread IR: N/A

The Earnings Yield (E/P) factor showed positive returns over all periods, including a 4.76% return over the challenge duration, and strong long-term growth (especially with +182.50% over 10 years). Based on the FTST backtest results, Earnings Yield performed positively, contributing well to returns, especially over the long term.

2. Beta (Volatility)

FTW Analysis: Challenge Duration Return: +5.27%

FTST Backtesting:

- QSpread Ann Return: +97.7%
- QSpread Sharpe: 2.64
- QSpread IR: 0.2364

Beta, which represents volatility, showed a positive return in both short-term (1-day) and long-term (challenge duration). The backtest results also indicated high returns, especially in the 10-year period, with a Sharpe ratio of 2.64, signaling good risk-adjusted performance.Beta was also an advantageous metric for the strategy, especially over the longer term. Stocks with higher volatility (risk) outperformed the index, particularly in volatile markets.

3. 3-Month Target Price Change (%)

FTW Analysis: Challenge Duration Return: +5.66%

FTST Backtesting:

- QSpread Ann Return: +66.39%
- QSpread Sharpe: 1.18
- QSpread IR: 0.4055

The 3-Month Target Price Change metric showed strong returns, particularly in the long term. It demonstrated positive returns both in short-term (1-day) and long-term (challenge duration) periods, with impressive performance over the 10-year horizon. This metric was also advantageous, as upward revisions in target prices were linked to strong price growth, making it a useful addition to the strategy.

4. 14D RSI (Relative Strength Index)

FTW Analysis:Challenge Duration Return: +4.57%

FTST Backtesting:

- QSpread Ann Return: +435.11%

- QSpread Sharpe: 9.09
- QSpread IR: 9.09

The 14D RSI metric exhibited outstanding performance, with a QSpread annual return of 435.11%, a Sharpe ratio of 9.09, and high risk-adjusted returns. The FTW results also show consistent positive returns, particularly over longer periods. RSI was the most advantageous metric based on both FTW and FTST results. It significantly outperformed the index and showed high potential in predicting stock price movements.

Advantageous Metrics:

RSI (14-Period): Strong performance in both FTW and FTST, with high risk-adjusted returns.

Beta: Positive returns over the challenge duration and a high Sharpe ratio in the backtest.

3-Month Target Price Change: Strong performance in both short-term and long-term, contributing positively to returns.

Less Advantageous Metric:

Earnings Yield (E/P): While it performed well, the impact was not as strong as other metrics like RSI or Beta.

The strategy was advantageous overall, primarily driven by RSI, Beta, and 3-Month Target Price Change. These metrics performed well in both short-term and long-term periods, particularly in terms of risk-adjusted returns. The strategy would likely benefit from emphasizing RSI more heavily, while also incorporating Beta and 3-Month Target Price Change for broader diversification in stock selection.

QUESTION 2C

Based on the analysis of FTW and FTST results, the recommended strategy involves:

Prioritizing Momentum:

- **RSI (14-Period):** Strong predictive power and risk-adjusted returns.
- **BI Momentum:** Positive returns in both short and long-term horizons.

Incorporating Long-Term Growth:

- **3-Month Target Price Change:** Identifies stocks with upward revisions in target prices.

Avoiding Underperforming Metrics:

- **P/E Ratio:** Negative returns, indicating potential underperformance.
- **Analyst Recommendations:** Poor performance, suggesting reliance on analyst ratings can be detrimental.
- **High Target Price Estimates:** Extremely negative returns, indicating that overly optimistic target prices can lead to underperformance.

Factor Weighting:

- **Momentum Indicators (RSI and BI Momentum):** Highest weight due to strong performance.
- **3-Month Target Price Change:** Moderate weight for identifying long-term potential.
- **P/E Ratio, Analyst Recommendations, and High Target Price Estimates:** Low or zero weight due to poor performance.

By combining these factors and weighting them appropriately, the strategy aims to optimize the portfolio's return potential while mitigating risk.