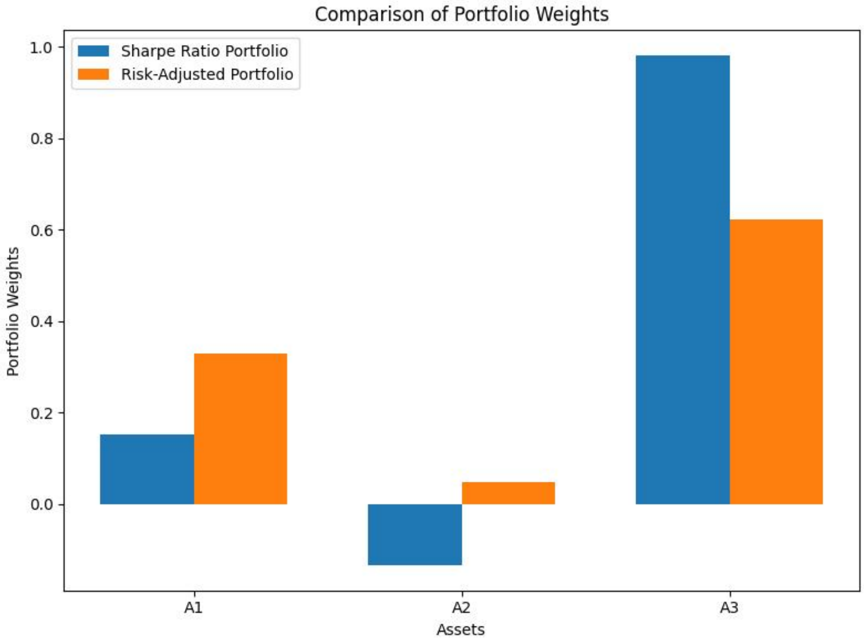
Extra Credit

	Metric	Sharpe Ratio Portfolio	Risk-Adjusted Portfolio
0	Expected Return	0.182059	0.160388
1	Volatility	0.391005	0.417771
2	Sharpe Ratio	0.344136	0.270215
3	Expected Shortfall (2.5%)	0.754376	0.383188
4	Risk-Adjusted Ratio	0.178371	0.294602

Asset Weights Comparison:

	Asset	Sharpe Ratio Portfolio Weights	Risk-Adjusted Portfolio Weights
0	A1	0.152029	0.330056
1	A2	-0.133020	0.047349
2	A3	0.980991	0.622595



Comparison Analysis

1. Returns and Risks

The Sharpe Ratio portfolio has a higher expected return (18.21%) but slightly lower volatility compared to the Risk-Adjusted portfolio.

The Risk-Adjusted portfolio, although offering a lower expected return (16.04%), prioritizes controlling extreme market risks through Expected Shortfall, making it more suitable for risk-sensitive investors.

2. Weight Distribution

The Sharpe Ratio portfolio heavily relies on A3, which makes it more vulnerable to the performance of this single asset.

The Risk-Adjusted portfolio is more balanced, allocating significant weights to both A1 and A3, thereby reducing excessive exposure to any single asset.

3. For Investors

The Sharpe Ratio portfolio is better suited for investors willing to take on higher risks in pursuit of maximum returns.

The Risk-Adjusted portfolio is ideal for investors focused on risk management and looking for stable returns under extreme market conditions.