

Risk Assessment Report

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Executive Summary

Total Portfolio Value: \$828969.34

Portfolio VaR (95%): \$11600.09 (1.40%)

Portfolio ES (95%): \$29906.29 (3.61%)

Diversification Benefit: 42.92%

Market Data Summary

Period: 2023-01-02 to 2023-12-29

| Symbol | Latest Price | Period Return | Annualized Volatility | Avg Daily Volume |
|--------|--------------|---------------|-----------------------|------------------|
| AAPL | \$772.10 | -1.52% | 26.29% | 5,745,859 |
| MSFT | \$106.98 | -21.91% | 29.66% | 5,250,732 |
| AMZN | \$270.44 | 0.91% | 18.14% | 5,395,642 |

| Symbol | Latest Price | Period Return | Annualized Volatility | Avg Daily Volume |
|--------|--------------|---------------|-----------------------|------------------|
| GOOGL | \$1265.32 | 29.91% | 17.22% | 5,505,002 |
| META | \$154.31 | -30.49% | 29.43% | 5,807,683 |

Portfolio Risk Analysis

Trade Level Risk

| Symbol | Position Value (\$) | VaR (95%) | ES (95%) | Loss Prob (5%) | Loss Prob (10%) |
|--------|---------------------|-----------------------|-----------------------|----------------|-----------------|
| AAPL | \$378328.68 | \$10656.64 (2.82%) | \$14022.48 (3.71%) | 0.00% | 0.00% |
| MSFT | \$24926.23 | \$801.93 (3.22%) | \$990.59 (3.97%) | 0.77% | 0.00% |
| AMZN | \$21365.08 | \$409.55 (1.92%) | \$498.39 (2.33%) | 0.00% | 0.00% |
| GOOGL | \$318860.26 | \$5381.87 (1.69%) | \$7131.63 (2.24%) | 0.00% | 0.00% |
| META | \$85489.08 | \$3073.46 (3.60%) | \$3543.85 (4.15%) | 0.00% | 0.00% |

Stress Test Results

| Scenario | Mean Return | Median Return | Return StdDev | VaR (95%) | ES (95%) | Max Loss | Prob of Loss |
|--------------|-------------|---------------|---------------|-----------|----------|----------|--------------|
| Base Case | nan% | nan% | nan% | nan% | nan% | nan% | 0.00% |
| Market Crash | nan% | nan% | nan% | nan% | nan% | nan% | 0.00% |

Market Sentiment Analysis

| Symbol | Latest Sentiment | Positive Score | Negative Score | Avg Sentiment | Return Correlation |
|--------|------------------|----------------|----------------|---------------|--------------------|
| AAPL | 0.94 | 0.94 | 0.00 | 0.09 | 0.09 |
| MSFT | -0.94 | 0.00 | 0.94 | -0.13 | -0.17 |
| AMZN | 0.95 | 0.95 | 0.00 | 0.10 | 0.04 |
| GOOGL | -0.96 | 0.00 | 0.96 | -0.08 | 0.02 |
| META | -0.97 | 0.00 | 0.97 | -0.15 | -0.06 |

Sentiment Impact Analysis

The correlation between news sentiment and price movements indicates a weak positive relationship.

Machine Learning Risk Predictions

Predicted Risk Metrics (Next 10 Days)

| Symbol | Predicted Volatility | Predicted VaR (95%) | Predicted ES (95%) |
|-----------|----------------------|-------------------------|---------------------------|
| AAPL | 4.93% | \$97186.20 (25.69%) | \$3204659.11 (847.06%) |
| MSFT | 4.28% | \$5607.62 (22.50%) | \$184908.11 (741.82%) |
| AMZN | 3.29% | \$3760.39 (17.60%) | \$123996.54 (580.37%) |
| GOOGL | 1.99% | \$33034.46 (10.36%) | \$1089292.38 (341.62%) |
| META | 4.77% | \$20950.69 (24.51%) | \$690837.07 (808.10%) |
| Portfolio | - | \$160539.36 (19.37%) | \$5293693.21 (638.59%) |

Recommendations

- Positive market sentiment detected. Market conditions appear favorable but remain vigilant for sentiment shifts.

Disclaimer

This report is for informational purposes only and does not constitute investment advice. Past performance is not indicative of future results. All investments involve risk, including the possible loss of principal.