Portfolio Risk Analysis Report

Report Date: October 15, 2025
Portfolio Size: 100 Assets
Analysis Period: 12 Months
Generated by: Automated Risk Analysis Pipeline

Risk Assessment Summary

HIGH RISK (RED): 74 Assets
MEDIUM RISK (YELLOW): 0 Assets
LOW RISK (GREEN): 26 Assets

Executive Summary

This report presents a comprehensive risk analysis of a portfolio containing 100 assets with a combined market capitalization of $12223.3 billion. **Key Findings:** • 74 assets (74.0%) are rated as HIGH RISK (RED) • 0 assets (0.0%) are rated as MEDIUM RISK (YELLOW) • Average portfolio volatility: 29.9% • Maximum drawdown observed: -52.7% **Risk Concentration:** The analysis reveals significant risk concentration in 74 assets requiring immediate attention and potential portfolio rebalancing. **Sentiment Analysis:** • 48 RED-flagged assets show negative market sentiment • Average sentiment score for flagged assets: -0.323 • News coverage indicates heightened market concern for these positions

Portfolio Overview

Sector Allocation

Sector	Assets	Market Cap ($B)	Percentage
Healthcare	12	2746.10	22.5%
Technology	14	2290.43	18.7%
Industrial	20	2244.08	18.4%
Energy	14	1478.02	12.1%
Real Estate	10	987.91	8.1%
Materials	9	857.49	7.0%
Consumer Staples	7	548.80	4.5%
Consumer Discretionary	5	440.09	3.6%
Financial Services	5	324.08	2.7%
Utilities	4	306.27	2.5%

Risk Analysis Results

Risk Distribution:
• HIGH RISK (RED): 74 assets
• MEDIUM RISK (YELLOW): 0 assets
• LOW RISK (GREEN): 26 assets

High Risk Assets

Symbol	Sector	Risk Rating	Volatility	Max Drawdown	Risk Score
GI	Financial Services	RED	44.5%	-49.9%	6
GQ	Technology	RED	44.5%	-49.1%	6
ZTB	Materials	RED	38.7%	-45.0%	5
TIQB	Technology	RED	40.3%	-40.7%	4
VLP	Energy	RED	39.9%	-43.0%	4

PUQ	Energy	RED	35.7%	-28.0%	3
AIHM	Industrial	RED	41.3%	-33.7%	3
SGO	Materials	RED	38.5%	-20.2%	2
SV	Energy	RED	41.6%	-36.0%	2
ZNK	Materials	RED	21.6%	-20.3%	2
PWIF	Technology	RED	15.2%	-23.2%	2
TUUY	Materials	RED	40.8%	-28.5%	2
RBFB	Industrial	RED	25.7%	-37.5%	2
TROU	Industrial	RED	30.8%	-52.7%	2
PN	Financial Services	RED	27.8%	-31.6%	2
SB	Industrial	RED	30.7%	-39.5%	2
VYCI	Materials	RED	27.3%	-36.6%	2
XW	Industrial	RED	44.7%	-37.9%	2
AY	Industrial	RED	31.2%	-32.8%	2
TFX	Utilities	RED	19.8%	-34.0%	2
XI	Consumer Discretionary	RED	26.7%	-41.2%	2
PPD	Real Estate	RED	21.2%	-35.3%	2
GEY	Energy	RED	19.4%	-23.3%	2
AHT	Real Estate	RED	25.6%	-22.8%	2
GOS	Financial Services	RED	18.0%	-20.8%	2
SIDF	Real Estate	RED	40.6%	-23.1%	2
RPZ	Consumer Discretionary	RED	26.1%	-35.5%	2
VFX	Real Estate	RED	24.8%	-38.3%	2
PEW	Healthcare	RED	39.3%	-51.4%	2
DX	Industrial	RED	24.0%	-23.3%	2
RDR	Energy	RED	42.1%	-28.5%	2
DYK	Consumer Staples	RED	16.7%	-34.1%	2
GJ	Technology	RED	41.2%	-20.1%	2
TADM	Energy	RED	42.0%	-41.1%	2
MBTT	Technology	RED	45.9%	-29.3%	2
CS	Utilities	RED	41.2%	-29.0%	2
RJ	Industrial	RED	43.9%	-33.7%	2
TM	Materials	RED	43.1%	-46.3%	2
GXNC	Consumer Staples	RED	16.9%	-23.1%	2
NR	Utilities	RED	31.6%	-39.3%	2
DOV	Technology	RED	19.6%	-29.1%	2
TUBY	Technology	RED	21.3%	-27.8%	2
MWO	Healthcare	RED	27.9%	-31.9%	2
GH	Real Estate	RED	33.4%	-25.4%	1
AYLE	Healthcare	RED	39.5%	-34.3%	1
DDJP	Utilities	RED	37.7%	-23.4%	1

XLA	Healthcare	RED	38.8%	-33.5%	1
MMUH	Industrial	RED	22.8%	-28.2%	1
NTSM	Energy	RED	37.1%	-32.4%	1
XAQO	Consumer Staples	RED	22.2%	-23.2%	1
PTYU	Financial Services	RED	24.0%	-30.6%	1
TANZ	Materials	RED	25.7%	-21.6%	1
SUH	Technology	RED	37.3%	-48.4%	1
NBE	Real Estate	RED	29.6%	-21.4%	1
STA	Technology	RED	37.3%	-25.4%	1
ZP	Industrial	RED	32.4%	-24.4%	1
SY	Energy	RED	26.4%	-33.5%	1
ASK	Real Estate	RED	39.3%	-23.4%	1
RU	Healthcare	RED	39.6%	-27.5%	1
DQY	Industrial	RED	27.0%	-33.4%	1
CY	Healthcare	RED	33.4%	-35.3%	1
AG	Consumer Staples	RED	32.3%	-44.8%	1
XBER	Consumer Discretionary	RED	34.9%	-34.8%	1
RM	Healthcare	RED	25.7%	-32.6%	1
NZP	Technology	RED	21.5%	-25.3%	1
DNUJ	Materials	RED	28.3%	-27.2%	1
NKLR	Real Estate	RED	25.5%	-22.1%	1
DWM	Consumer Staples	RED	31.2%	-24.4%	1
NJW	Technology	RED	32.6%	-29.2%	1
COZ	Industrial	RED	19.0%	-23.3%	1
AIY	Technology	RED	36.2%	-38.8%	1
SHL	Healthcare	RED	25.7%	-20.0%	1
SLW	Healthcare	RED	34.0%	-26.1%	1
CJ	Industrial	RED	19.1%	-31.5%	1

Machine Learning Analysis

Advanced machine learning techniques were applied to identify anomalies and predict future risk ratings. **Anomaly Detection Summary:**
• Total Anomalies Detected: 15
• Critical Anomalies: 4
• High Risk Anomalies: 3
• Anomaly Rate: 15.0%
Risk Prediction Model:
• Model Accuracy: 100.0%
• Rating Changes Predicted: 0
• Assets Predicted to Deteriorate: 0
• Assets Predicted to Improve: 0

Key Machine Learning Insights

• 4 assets show critical anomalous behavior requiring immediate review
• Anomaly detection identified 15 assets with unusual patterns
• Key risk drivers: Max Drawdown, Volatility, Price Change 6M

Critical Anomalies Detected

Symbol	Sector	Anomaly Score	Severity	Recommendation
GQ	Technology	100.0	CRITICAL	Critical anomaly - Consider immediate po...
GI	Financial Services	91.0	CRITICAL	Critical anomaly - Consider immediate po...
DJI	Consumer Staples	81.4	CRITICAL	Critical anomaly - Consider immediate po...
MBTT	Technology	80.2	CRITICAL	Critical anomaly - Consider immediate po...
DDJP	Utilities	69.0	HIGH	Significant anomaly - Conduct thorough d...
NJI	Financial Services	63.3	HIGH	Significant anomaly - Conduct thorough d...
ZTB	Materials	62.9	HIGH	Significant anomaly - Conduct thorough d...

Top Risk Factors (Feature Importance)

1. Max Drawdown: 65.5% importance
2. Volatility: 7.8% importance
3. Price Change 6M: 6.6% importance
4. Price Change 3M: 6.3% importance
5. Sharpe Ratio: 5.4% importance

ML Validation Results

Overall Validation Status: WARNING
Checks Passed: 2 / 4

✓ **Anomaly Detection Validation:** PASS
total_assets: 100, anomalies_detected: 15, anomaly_rate: 15.0
■ **Risk Prediction Validation:** WARNING
model_accuracy: 100.0, predictions_made: 100, rating_changes: 0
✓ **Feature Quality Validation:** PASS
features_checked: 9, nan_features: 0, total_samples: 100
■ **Feature Importance Validation:** WARNING
total_importance: 100.0, top_feature: Max Drawdown, top_importance: 65.6

Validation Warnings (2):
1. Suspiciously high accuracy: 100.0% (possible overfitting)
2. Single feature dominates: Max Drawdown (65.55%)

Sentiment Analysis

Sentiment analysis was conducted on 74 RED-flagged assets using financial news from the past 12 months. **Key Findings:**

- Average sentiment score: -0.323
- Assets with negative sentiment: 48/74
- Total news articles analyzed: 1655

Sentiment Analysis Results

Symbol	Sentiment Score	Label	News Count	Trend	Key Themes
GH	-0.486	NEGATIVE	21	DETERIORATING	financial_health, earnings, regulatory
DNUJ	-0.450	NEGATIVE	15	DETERIORATING	regulatory, financial_health, operations
RJ	-0.423	NEGATIVE	30	DETERIORATING	regulatory, financial_health, earnings
VYCI	-0.419	NEGATIVE	17	IMPROVING	earnings, regulatory, market_share
TUUY	-0.417	NEGATIVE	27	STABLE	earnings, financial_health, regulatory
SB	-0.409	NEGATIVE	22	IMPROVING	regulatory, financial_health, earnings
XW	-0.408	NEGATIVE	26	IMPROVING	regulatory, earnings, operations
CS	-0.407	NEGATIVE	18	IMPROVING	regulatory, earnings, financial_health
DWM	-0.404	NEGATIVE	25	DETERIORATING	earnings, regulatory, financial_health
RM	-0.404	NEGATIVE	21	STABLE	earnings, regulatory, market_share
SLW	-0.397	NEGATIVE	25	STABLE	financial_health, regulatory, market_share
NJW	-0.397	NEGATIVE	29	IMPROVING	operations, regulatory, financial_health
PUQ	-0.394	NEGATIVE	24	DETERIORATING	financial_health, earnings, regulatory
VLP	-0.392	NEGATIVE	25	IMPROVING	financial_health, operations, earnings
SV	-0.391	NEGATIVE	21	DETERIORATING	financial_health, regulatory, earnings
PN	-0.386	NEGATIVE	24	STABLE	financial_health, market_share, earnings
GI	-0.383	NEGATIVE	17	DETERIORATING	financial_health, operations, earnings
MBTT	-0.382	NEGATIVE	18	IMPROVING	regulatory, financial_health, management
SY	-0.378	NEGATIVE	17	IMPROVING	financial_health, earnings, regulatory
SHL	-0.374	NEGATIVE	21	STABLE	regulatory, financial_health, management
XBER	-0.372	NEGATIVE	23	DETERIORATING	financial_health, regulatory, earnings
MMUH	-0.366	NEGATIVE	15	STABLE	earnings, financial_health, regulatory
SUH	-0.360	NEGATIVE	20	IMPROVING	earnings, regulatory, financial_health
VFX	-0.359	NEGATIVE	16	DETERIORATING	regulatory, management, market_share
XLA	-0.350	NEGATIVE	23	DETERIORATING	regulatory, financial_health, market_share
CY	-0.350	NEGATIVE	15	IMPROVING	earnings, regulatory, market_share
RU	-0.350	NEGATIVE	26	IMPROVING	earnings, regulatory, financial_health
DX	-0.341	NEGATIVE	24	DETERIORATING	earnings, financial_health, regulatory
DDJP	-0.336	NEGATIVE	16	DETERIORATING	earnings, regulatory, operations
RBFB	-0.336	NEGATIVE	21	IMPROVING	regulatory, earnings, management
GOS	-0.333	NEGATIVE	20	IMPROVING	regulatory, earnings, management
NKLR	-0.332	NEGATIVE	18	IMPROVING	financial_health, regulatory, earnings
TIQB	-0.332	NEGATIVE	24	IMPROVING	earnings, financial_health, operations

NZP	-0.330	NEGATIVE	21	STABLE	regulatory, financial_health, operations
PPD	-0.327	NEGATIVE	19	STABLE	regulatory, operations, financial_health
GJ	-0.326	NEGATIVE	21	DETERIORATING	earnings, regulatory, management
AG	-0.326	NEGATIVE	22	DETERIORATING	regulatory, financial_health, operations
ZP	-0.326	NEGATIVE	19	IMPROVING	earnings, financial_health, regulatory
ZNK	-0.323	NEGATIVE	30	DETERIORATING	earnings, regulatory, financial_health
AIHM	-0.321	NEGATIVE	28	IMPROVING	earnings, regulatory, financial_health
TADM	-0.320	NEGATIVE	24	DETERIORATING	regulatory, earnings, financial_health
AHT	-0.316	NEGATIVE	29	IMPROVING	earnings, financial_health, operations
TUBY	-0.315	NEGATIVE	25	STABLE	regulatory, operations, management
TROU	-0.314	NEGATIVE	27	DETERIORATING	earnings, regulatory, financial_health
ZTB	-0.310	NEGATIVE	26	IMPROVING	regulatory, earnings, financial_health
MWO	-0.309	NEGATIVE	29	DETERIORATING	earnings, regulatory, financial_health
AY	-0.303	NEGATIVE	18	DETERIORATING	earnings, regulatory, financial_health
COZ	-0.300	NEGATIVE	22	IMPROVING	earnings, regulatory, management
TFX	-0.299	NEUTRAL	20	DETERIORATING	earnings, operations, regulatory
GXNC	-0.294	NEUTRAL	17	STABLE	earnings, regulatory, financial_health
XI	-0.291	NEUTRAL	26	STABLE	earnings, regulatory, financial_health
AYLE	-0.291	NEUTRAL	16	DETERIORATING	financial_health, regulatory, earnings
DOV	-0.283	NEUTRAL	19	STABLE	earnings, regulatory, market_share
NBE	-0.282	NEUTRAL	16	IMPROVING	earnings, regulatory, management
DQY	-0.279	NEUTRAL	25	IMPROVING	earnings, financial_health, regulatory
RPZ	-0.265	NEUTRAL	29	STABLE	earnings, operations, regulatory
CJ	-0.263	NEUTRAL	29	DETERIORATING	earnings, financial_health, regulatory
RDR	-0.260	NEUTRAL	17	STABLE	regulatory, financial_health, earnings
AIY	-0.260	NEUTRAL	27	DETERIORATING	earnings, regulatory, operations
SGO	-0.259	NEUTRAL	26	IMPROVING	earnings, operations, financial_health
NTSM	-0.253	NEUTRAL	18	IMPROVING	earnings, regulatory, financial_health
PTYU	-0.250	NEUTRAL	19	IMPROVING	earnings, regulatory, market_share
PWIF	-0.250	NEUTRAL	18	IMPROVING	earnings, regulatory, financial_health
XAQO	-0.249	NEUTRAL	27	DETERIORATING	earnings, financial_health, management
GEY	-0.244	NEUTRAL	17	DETERIORATING	earnings, regulatory, management
DYK	-0.242	NEUTRAL	20	DETERIORATING	earnings, regulatory, operations
SIDF	-0.242	NEUTRAL	27	IMPROVING	earnings, regulatory, operations
PEW	-0.238	NEUTRAL	26	IMPROVING	earnings, financial_health, management
GQ	-0.228	NEUTRAL	18	DETERIORATING	regulatory, financial_health, operations
NR	-0.223	NEUTRAL	29	STABLE	earnings, regulatory, financial_health
ASK	-0.223	NEUTRAL	24	IMPROVING	financial_health, operations, earnings
TANZ	-0.217	NEUTRAL	26	DETERIORATING	financial_health, regulatory, management
STA	-0.201	NEUTRAL	27	DETERIORATING	earnings, regulatory, management
TM	-0.138	NEUTRAL	28	STABLE	earnings, financial_health, regulatory

Detailed Asset Analysis

Asset: GI

Sector: Financial Services
Current Price: $49.49
Market Cap: $4.85B
Risk Rating: RED
Risk Metrics:
• Volatility: 44.5%
• Maximum Drawdown: -49.9%
• Beta: 0.11
• Sharpe Ratio: -0.78
• RSI: 8.2
Performance:
• 1-Month Return: -17.6%
• 3-Month Return: -35.6%
• 6-Month Return: -43.6%
Risk Flags:
• High Volatility, Extreme Drawdown, Severe Decline, Extended Decline, Poor Risk Return, Momentum Breakdown
Market Sentiment:
• Sentiment Score: -0.383 (NEGATIVE)
• News Articles: 17
• Trend: DETERIORATING

Asset: GQ

Sector: Technology
Current Price: $229.09
Market Cap: $446.32B
Risk Rating: RED
Risk Metrics:
• Volatility: 44.5%
• Maximum Drawdown: -49.1%
• Beta: -0.23
• Sharpe Ratio: -0.96
• RSI: 5.9
Performance:
• 1-Month Return: -38.2%
• 3-Month Return: -33.4%
• 6-Month Return: -33.8%
Risk Flags:
• High Volatility, Extreme Drawdown, Severe Decline, Extended Decline, Poor Risk Return, Momentum Breakdown
Market Sentiment:
• Sentiment Score: -0.228 (NEUTRAL)
• News Articles: 18
• Trend: DETERIORATING

Asset: ZTB

Sector: Materials
Current Price: $119.42
Market Cap: $26.20B
Risk Rating: RED
Risk Metrics:
• Volatility: 38.7%
• Maximum Drawdown: -45.0%
• Beta: 0.21
• Sharpe Ratio: -0.79
• RSI: 24.4
Performance:
• 1-Month Return: -24.5%
• 3-Month Return: -26.4%
• 6-Month Return: -28.9%
Risk Flags:
• Extreme Drawdown, Severe Decline, Extended Decline, Poor Risk Return, Momentum
Breakdown
Market Sentiment:
• Sentiment Score: -0.310 (NEGATIVE)
• News Articles: 26
• Trend: IMPROVING

Asset: TIQB

Sector: Technology
Current Price: $73.07
Market Cap: $97.46B
Risk Rating: RED
Risk Metrics:
• Volatility: 40.3%
• Maximum Drawdown: -40.7%
• Beta: -0.05
• Sharpe Ratio: -0.56
• RSI: 21.3
Performance:
• 1-Month Return: -12.0%
• 3-Month Return: -24.1%
• 6-Month Return: -6.8%
Risk Flags:
• High Volatility, Extreme Drawdown, Poor Risk Return, Momentum Breakdown
Market Sentiment:
• Sentiment Score: -0.332 (NEGATIVE)
• News Articles: 24
• Trend: IMPROVING

Asset: VLP

Sector: Energy
Current Price: $56.56
Market Cap: $78.91B
Risk Rating: RED
Risk Metrics:
• Volatility: 39.9%
• Maximum Drawdown: -43.0%
• Beta: -0.04
• Sharpe Ratio: -0.86
• RSI: 30.4

Performance:
• 1-Month Return: -18.4%
• 3-Month Return: -21.0%
• 6-Month Return: -12.7%
Risk Flags:
• Extreme Drawdown, Severe Decline, Poor Risk Return, Momentum Breakdown
Market Sentiment:
• Sentiment Score: -0.392 (NEGATIVE)
• News Articles: 25
• Trend: IMPROVING

Recommendations

Based on the comprehensive risk analysis, the following recommendations are provided:
Immediate Actions (RED-flagged assets):
1. Consider reducing position sizes for 74 high-risk assets
2. Implement stop-loss orders to limit further downside exposure
3. Review fundamental analysis for potential divestiture candidates
4. Monitor daily price movements and news flow closely
Medium-term Actions (YELLOW-flagged assets):
1. Conduct deeper due diligence on 0 medium-risk assets
2. Consider hedging strategies for positions with high volatility
3. Review correlation with overall portfolio risk
4. Set up enhanced monitoring and alerts
Portfolio-level Recommendations:
1. Diversify across sectors to reduce concentration risk
2. Consider alternative investments to reduce correlation
3. Implement systematic risk management framework
4. Schedule monthly portfolio risk reviews
Sentiment-based Actions:
1. Monitor news flow for 48 assets with negative sentiment
2. Consider contrarian opportunities if fundamentals remain strong
3. Assess impact of market sentiment on price movements
4. Review analyst coverage and institutional positioning

Appendix

Methodology

This risk analysis employs a four-stage pipeline methodology: **Stage 1 - Data Ingestion:** • Historical price data (252 trading days) • Trading volume information • Market capitalization data • Sector classifications **Stage 2 - Core Analysis:** • Volatility calculation (annualized) • Maximum drawdown analysis • Beta coefficient estimation • Risk-adjusted return metrics (Sharpe ratio) • Technical indicators (RSI) • Rule-based risk flagging system **Stage 3 - Sentiment Analysis:** • News article collection (12-month lookback) • Natural language processing for sentiment scoring • Trend analysis and confidence metrics • Key theme extraction **Stage 4 - Report Generation:** • Comprehensive risk assessment compilation • Visual data presentation • Actionable recommendations • Professional PDF report output

Risk Assessment Thresholds

RED Flag Thresholds: • Volatility > 40% (annualized) • Maximum drawdown < -20% • Volume decline > 50% • 1-month price decline > 15% **YELLOW Flag Thresholds:** • Volatility > 25% (annualized) • Maximum drawdown < -10% • Volume decline > 30% • Multiple warning indicators present **Sentiment Thresholds:** • Negative sentiment: Score < -0.3 • Positive sentiment: Score > 0.3 • Neutral sentiment: -0.3 ≤ Score ≤ 0.3

Report Generation Details:
• Generated: 2025-10-15 10:08:41
• Analysis Period: 12 months
• Total Assets Analyzed: 100
• Pipeline Version: 1.0

Test Data - Portfolio Details

Complete portfolio and risk analysis data has been exported to CSV files for further analysis:

Portfolio Data CSV: portfolio_data_20251015_100841.csv
Risk Analysis CSV: risk_analysis_20251015_100841.csv

The tables below provide summary information for quick reference.

Performance Metrics Data

Symbol	1M Return	3M Return	6M Return	Vol Decline	Sharpe Ratio
AG	0.0%	20.5%	70.2%	4.3%	-0.10
AHT	-7.8%	-10.4%	-3.4%	-1.2%	-0.65
AIHM	5.3%	-25.3%	-9.4%	-4.8%	-0.06
AIY	-13.9%	-4.0%	-27.3%	-0.7%	-0.01
ASK	-6.9%	-1.4%	-10.8%	-6.3%	0.13
AY	-9.6%	-6.5%	-9.9%	5.5%	-0.53
AYLE	-6.8%	-24.4%	-28.1%	6.5%	-0.21
AYU	-9.0%	-2.1%	-13.7%	3.5%	0.26
BCOK	1.2%	2.5%	2.6%	-3.5%	-0.44
BJ	0.4%	-2.2%	8.0%	4.3%	-0.33
CEQA	7.8%	25.3%	45.1%	-13.0%	2.02
CJ	8.5%	8.4%	-10.0%	7.4%	-0.04
COZ	6.4%	23.8%	15.4%	1.6%	0.40
CS	-0.5%	-11.1%	11.0%	5.0%	0.60
CTK	2.4%	-5.1%	10.6%	-3.9%	0.58
CVL	9.9%	37.7%	51.2%	5.2%	1.66
CY	2.1%	14.8%	32.1%	3.3%	0.42
DA	-5.1%	-14.6%	3.6%	-2.8%	1.26
DDJP	24.0%	54.2%	57.7%	-3.8%	1.80
DIM	7.0%	16.5%	25.3%	2.0%	0.85
DJI	-9.9%	24.5%	27.0%	14.3%	2.50
DMR	0.8%	15.0%	23.5%	-2.5%	0.33
DNUJ	8.1%	-2.8%	-4.3%	-5.6%	0.18
DOV	7.5%	4.2%	-9.2%	-4.3%	-1.25
DQY	7.8%	-0.2%	0.9%	-1.5%	-0.40
DWM	-5.5%	2.5%	-16.5%	4.6%	-0.36
DX	-5.1%	-7.7%	-7.8%	-9.9%	-0.85
DYK	-5.5%	-13.8%	-26.4%	6.1%	-2.03
GEY	2.5%	9.2%	6.8%	-2.2%	-0.51
GH	-4.6%	27.6%	68.3%	8.9%	1.33

GI	-17.6%	-35.6%	-43.6%	-15.7%	-0.78
GJ	4.4%	38.8%	29.7%	12.0%	1.38
GOS	2.3%	0.3%	-15.0%	-3.1%	-0.62
GQ	-38.2%	-33.4%	-33.8%	5.5%	-0.96
GXNC	-0.2%	-3.7%	-10.4%	15.8%	-1.08
GZTE	3.5%	14.6%	4.7%	0.4%	-0.02
MBTT	32.0%	38.6%	11.4%	-3.2%	0.45
MCX	-5.3%	-0.7%	-2.2%	1.7%	-0.13
MMUH	14.9%	2.3%	4.4%	-10.0%	-0.11
MWO	-11.2%	-15.5%	-23.4%	3.3%	-0.03
NBE	-3.8%	11.8%	51.7%	4.8%	1.64
NJI	16.9%	58.6%	47.5%	2.6%	1.93
NJW	3.4%	-2.3%	-7.9%	-0.8%	0.20
NKLR	0.8%	0.3%	8.9%	1.0%	0.36
NR	-0.9%	-20.2%	-22.3%	-13.3%	-0.99
NTSM	-10.1%	32.7%	51.8%	-12.2%	0.62
NZP	-0.9%	-12.7%	-20.9%	8.7%	0.33
PEG	-3.6%	-1.2%	-1.2%	-3.4%	-0.59
PEW	-6.0%	-24.5%	-41.2%	1.9%	-0.88
PN	-14.8%	-5.4%	-13.4%	-8.0%	-0.75
PO	8.9%	18.7%	54.8%	7.8%	2.09
PPD	12.5%	7.5%	-18.8%	5.6%	-0.62
PTYU	1.4%	14.2%	28.8%	1.2%	0.33
PU	-6.9%	15.5%	28.7%	7.5%	1.59
PUQ	-13.2%	-14.5%	-7.7%	-10.8%	-0.65
PWIF	12.1%	-3.5%	-2.6%	12.1%	-0.53
RBFB	-3.7%	-3.0%	-8.2%	1.8%	-1.00
RDR	-12.1%	9.3%	-0.2%	-6.6%	0.12
RDZ	9.6%	15.3%	8.4%	3.0%	1.40
RJ	22.7%	12.9%	45.7%	-2.5%	1.01
RM	16.7%	14.2%	12.5%	-9.2%	0.25
RPZ	-8.8%	-11.6%	-17.0%	-2.6%	-1.63
RRRV	-1.7%	-6.5%	-4.0%	0.1%	-0.53
RRYU	-11.1%	-5.4%	-6.8%	4.5%	0.91
RU	9.9%	20.0%	2.0%	0.0%	0.95
RW	0.1%	15.9%	21.7%	1.7%	0.90
SB	-9.2%	-28.3%	-27.8%	13.1%	-0.18
SGO	-13.6%	-13.5%	-3.3%	-6.2%	0.53
SHL	0.1%	-1.1%	1.5%	0.9%	0.23
SIDF	-0.9%	5.8%	6.1%	-2.0%	1.60
SLW	-12.6%	9.1%	41.8%	-9.0%	1.08

SN	1.1%	13.7%	20.0%	-4.7%	1.18
STA	5.0%	33.7%	57.6%	-0.3%	1.40
SUH	8.3%	-1.9%	-23.2%	1.7%	-0.38
SV	-1.9%	-8.9%	-7.1%	-7.4%	0.58
SY	-3.2%	-5.1%	11.0%	7.6%	-0.10
TADM	0.7%	4.6%	14.1%	-0.7%	0.02
TANZ	-3.7%	6.5%	-2.1%	3.5%	0.27
TFX	-6.7%	7.9%	-12.3%	2.3%	-0.82
TIPX	1.4%	-2.9%	-2.9%	-0.7%	-0.89
TIQB	-12.0%	-24.1%	-6.8%	1.9%	-0.56
TM	-5.3%	-0.8%	-35.3%	-2.8%	0.14
TROU	-1.6%	12.0%	-22.6%	11.1%	-1.61
TTE	23.9%	33.2%	33.4%	-5.8%	1.08
TUBY	-8.9%	1.1%	-8.0%	-3.9%	-1.07
TUUY	-0.5%	6.8%	26.4%	-7.0%	1.30
VDJ	6.1%	15.5%	23.0%	-0.9%	1.09
VFX	-3.0%	-0.7%	-16.9%	1.6%	-1.46
VKH	-8.9%	-0.5%	4.0%	-6.9%	-0.01
VLP	-18.4%	-21.0%	-12.7%	6.0%	-0.86
VXB	10.3%	13.0%	28.6%	2.1%	1.41
VYCI	17.9%	-3.3%	-7.2%	-0.4%	-1.14
XAQO	-0.4%	7.5%	26.8%	-4.3%	0.59
XBER	6.6%	11.9%	12.9%	7.0%	0.47
XI	0.2%	-13.9%	-12.5%	5.2%	-1.45
XLA	-0.6%	11.6%	-13.1%	16.0%	-0.09
XW	9.9%	12.0%	7.0%	-3.8%	0.02
ZNK	-2.9%	-9.4%	-11.4%	6.0%	-0.54
ZP	-0.7%	-2.5%	0.9%	11.1%	-0.43
ZTB	-24.5%	-26.4%	-28.9%	2.3%	-0.79

Risk Flags Details

Symbol	High Vol	Ext. DD	Vol Collapse	Severe Dec	Ext. Dec	Poor Sharpe	Mom. Break
GI	✓	✓	✗	✓	✓	✓	✓
GQ	✓	✓	✗	✓	✓	✓	✓
ZTB	✗	✓	✗	✓	✓	✓	✓
TIQB	✓	✓	✗	✗	✗	✓	✓
VLP	✗	✓	✗	✓	✗	✓	✓
PUQ	✗	✓	✗	✗	✗	✓	✓
AIHM	✓	✓	✗	✗	✓	✗	✗

SGO	✗	✓	✗	✗	✗	✗	✓
SV	✓	✓	✗	✗	✗	✗	✗
ZNK	✗	✓	✗	✗	✗	✓	✗
PWIF	✗	✓	✗	✗	✗	✓	✗
TUUY	✓	✓	✗	✗	✗	✗	✗
RBFB	✗	✓	✗	✗	✗	✓	✗
TROU	✗	✓	✗	✗	✗	✓	✗
PN	✗	✓	✗	✗	✗	✓	✗
SB	✗	✓	✗	✗	✓	✗	✗
VYCI	✗	✓	✗	✗	✗	✓	✗
XW	✓	✓	✗	✗	✗	✗	✗
AY	✗	✓	✗	✗	✗	✓	✗
TFX	✗	✓	✗	✗	✗	✓	✗
XI	✗	✓	✗	✗	✗	✓	✗
PPD	✗	✓	✗	✗	✗	✓	✗
GEY	✗	✓	✗	✗	✗	✓	✗
AHT	✗	✓	✗	✗	✗	✓	✗
GOS	✗	✓	✗	✗	✗	✓	✗
SIDF	✓	✓	✗	✗	✗	✗	✗
RPZ	✗	✓	✗	✗	✗	✓	✗
VFX	✗	✓	✗	✗	✗	✓	✗
PEW	✗	✓	✗	✗	✗	✓	✗
DX	✗	✓	✗	✗	✗	✓	✗
RDR	✓	✓	✗	✗	✗	✗	✗
DYK	✗	✓	✗	✗	✗	✓	✗
GJ	✓	✓	✗	✗	✗	✗	✗
TADM	✓	✓	✗	✗	✗	✗	✗
MBTT	✓	✓	✗	✗	✗	✗	✗
CS	✓	✓	✗	✗	✗	✗	✗
RJ	✓	✓	✗	✗	✗	✗	✗
TM	✓	✓	✗	✗	✗	✗	✗
GXNC	✗	✓	✗	✗	✗	✓	✗
NR	✗	✓	✗	✗	✗	✓	✗
DOV	✗	✓	✗	✗	✗	✓	✗
TUBY	✗	✓	✗	✗	✗	✓	✗
MWO	✗	✓	✗	✗	✗	✗	✓
GH	✗	✓	✗	✗	✗	✗	✗
AYLE	✗	✓	✗	✗	✗	✗	✗
TIPX	✗	✗	✗	✗	✗	✓	✗
DDJP	✗	✓	✗	✗	✗	✗	✗
XLA	✗	✓	✗	✗	✗	✗	✗

MMUH	✗	✓	✗	✗	✗	✗	✗
NTSM	✗	✓	✗	✗	✗	✗	✗
XAQO	✗	✓	✗	✗	✗	✗	✗
PTYU	✗	✓	✗	✗	✗	✗	✗
PEG	✗	✗	✗	✗	✗	✓	✗
TANZ	✗	✓	✗	✗	✗	✗	✗
SUH	✗	✓	✗	✗	✗	✗	✗
NBE	✗	✓	✗	✗	✗	✗	✗
STA	✗	✓	✗	✗	✗	✗	✗
ZP	✗	✓	✗	✗	✗	✗	✗
SY	✗	✓	✗	✗	✗	✗	✗
ASK	✗	✓	✗	✗	✗	✗	✗
RU	✗	✓	✗	✗	✗	✗	✗
DQY	✗	✓	✗	✗	✗	✗	✗
CY	✗	✓	✗	✗	✗	✗	✗
AG	✗	✓	✗	✗	✗	✗	✗
XBER	✗	✓	✗	✗	✗	✗	✗
RM	✗	✓	✗	✗	✗	✗	✗
NZP	✗	✓	✗	✗	✗	✗	✗
DNUJ	✗	✓	✗	✗	✗	✗	✗
NKLR	✗	✓	✗	✗	✗	✗	✗
DWM	✗	✓	✗	✗	✗	✗	✗
RRRV	✗	✗	✗	✗	✗	✓	✗
NJW	✗	✓	✗	✗	✗	✗	✗
COZ	✗	✓	✗	✗	✗	✗	✗
AIY	✗	✓	✗	✗	✗	✗	✗
SHL	✗	✓	✗	✗	✗	✗	✗
SLW	✗	✓	✗	✗	✗	✗	✗
CJ	✗	✓	✗	✗	✗	✗	✗
VKH	✗	✗	✗	✗	✗	✗	✗
VDJ	✗	✗	✗	✗	✗	✗	✗
SN	✗	✗	✗	✗	✗	✗	✗
GZTE	✗	✗	✗	✗	✗	✗	✗
RDZ	✗	✗	✗	✗	✗	✗	✗
DA	✗	✗	✗	✗	✗	✗	✗
BJ	✗	✗	✗	✗	✗	✗	✗
RW	✗	✗	✗	✗	✗	✗	✗
VXB	✗	✗	✗	✗	✗	✗	✗
TTE	✗	✗	✗	✗	✗	✗	✗
DMR	✗	✗	✗	✗	✗	✗	✗
RRYU	✗	✗	✗	✗	✗	✗	✗

DIM	✗	✗	✗	✗	✗	✗	✗
NJI	✗	✗	✗	✗	✗	✗	✗
CEQA	✗	✗	✗	✗	✗	✗	✗
PU	✗	✗	✗	✗	✗	✗	✗
BCOK	✗	✗	✗	✗	✗	✗	✗
CVL	✗	✗	✗	✗	✗	✗	✗
CTK	✗	✗	✗	✗	✗	✗	✗
AYU	✗	✗	✗	✗	✗	✗	✗
MCX	✗	✗	✗	✗	✗	✗	✗
DJI	✗	✗	✗	✗	✗	✗	✗
PO	✗	✗	✗	✗	✗	✗	✗

Data Summary:
• Total Assets: 100
• Data Generated: 2025-10-15 10:08:41
• Note: This test data is provided for further analysis, validation, and detailed review purposes.
• All metrics are calculated from 252 trading days of historical data.