Portfolio Risk Analysis Report

Risk Assessment Summary

HIGH RISK (RED): 41 Assets
MEDIUM RISK (YELLOW): 0 Assets
LOW RISK (GREEN): 9 Assets

Executive Summary

This report presents a comprehensive risk analysis of a portfolio containing 50 assets with a combined market capitalization of $6130.2 billion. **Key Findings:** • 41 assets (82.0%) are rated as HIGH RISK (RED) • 0 assets (0.0%) are rated as MEDIUM RISK (YELLOW) • Average portfolio volatility: 31.5% • Maximum drawdown observed: -60.4% **Risk Concentration:** The analysis reveals significant risk concentration in 41 assets requiring immediate attention and potential portfolio rebalancing. **Sentiment Analysis:** • 28 RED-flagged assets show negative market sentiment • Average sentiment score for flagged assets: -0.332 • News coverage indicates heightened market concern for these positions

Portfolio Overview

Sector Allocation

Sector	Assets	Market Cap ($B)	Percentage
Healthcare	7	2061.06	33.6%
Technology	5	782.38	12.8%
Energy	4	610.04	10.0%
Real Estate	7	484.13	7.9%
Materials	3	468.99	7.7%
Industrial	6	448.62	7.3%
Financial Services	7	331.32	5.4%
Utilities	4	316.67	5.2%
Consumer Discretionary	5	313.70	5.1%
Consumer Staples	2	313.32	5.1%

Risk Analysis Results

Risk Distribution:
• HIGH RISK (RED): 41 assets
• MEDIUM RISK (YELLOW): 0 assets
• LOW RISK (GREEN): 9 assets

High Risk Assets

Symbol	Sector	Risk Rating	Volatility	Max Drawdown	Risk Score
VOA	Utilities	RED	44.7%	-38.0%	5
XZO	Materials	RED	41.3%	-48.7%	4
ADE	Industrial	RED	41.4%	-39.0%	4
AL	Healthcare	RED	24.9%	-32.8%	3
CH	Technology	RED	45.5%	-60.4%	3

DFK	Technology	RED	33.3%	-25.6%	3
GV	Healthcare	RED	30.8%	-42.4%	2
XOQJ	Healthcare	RED	40.3%	-21.3%	2
BBGL	Industrial	RED	25.9%	-28.8%	2
VENK	Healthcare	RED	16.6%	-23.1%	2
CV	Utilities	RED	40.6%	-42.7%	2
MGH	Healthcare	RED	44.5%	-21.9%	2
XTD	Real Estate	RED	18.8%	-35.6%	2
DJG	Technology	RED	19.6%	-32.7%	2
VGF	Materials	RED	19.1%	-22.0%	2
AV	Financial Services	RED	16.1%	-24.7%	2
NWJ	Industrial	RED	43.3%	-46.6%	2
PNZV	Industrial	RED	44.9%	-45.4%	2
DWR	Energy	RED	49.4%	-27.9%	2
AEUQ	Consumer Discretionary	RED	16.4%	-21.2%	2
CAHL	Industrial	RED	20.9%	-22.6%	2
SUK	Utilities	RED	43.0%	-34.5%	2
BEH	Healthcare	RED	30.3%	-35.7%	2
GAF	Real Estate	RED	24.5%	-34.2%	2
BW	Real Estate	RED	36.7%	-24.6%	1
VSDQ	Financial Services	RED	24.0%	-23.0%	1
BLRS	Consumer Staples	RED	37.5%	-27.0%	1
MIEY	Consumer Discretionary	RED	31.8%	-28.1%	1
SES	Energy	RED	35.8%	-41.3%	1
CZ	Real Estate	RED	37.8%	-39.9%	1
MMGQ	Consumer Staples	RED	34.5%	-35.1%	1
RYE	Energy	RED	20.6%	-22.5%	1
PVEN	Technology	RED	37.5%	-27.9%	1
DWU	Financial Services	RED	40.0%	-27.1%	1
CXO	Utilities	RED	27.9%	-31.8%	1
XR	Consumer Discretionary	RED	31.1%	-24.4%	1
ZA	Real Estate	RED	35.3%	-21.7%	1
NWI	Real Estate	RED	29.1%	-23.6%	1
AG	Financial Services	RED	25.2%	-23.5%	1
RTZB	Healthcare	RED	31.1%	-38.1%	1
NCF	Financial Services	RED	36.5%	-24.6%	1

Machine Learning Analysis

Advanced machine learning techniques were applied to identify anomalies and predict future risk ratings. **Anomaly Detection Summary:**
• Total Anomalies Detected: 8
• Critical Anomalies: 3
• High Risk Anomalies: 4
• Anomaly Rate: 16.0%
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

• 3 assets show critical anomalous behavior requiring immediate review
• Anomaly detection identified 8 assets with unusual patterns
• Key risk drivers: Max Drawdown, Sharpe Ratio, Volatility

Critical Anomalies Detected

Symbol	Sector	Anomaly Score	Severity	Recommendation
CH	Technology	100.0	CRITICAL	Critical anomaly - Consider immediate po...
MMGQ	Consumer Staples	91.8	CRITICAL	Critical anomaly - Consider immediate po...
VOA	Utilities	86.5	CRITICAL	Critical anomaly - Consider immediate po...
DWR	Energy	79.9	HIGH	Significant anomaly - Conduct thorough d...
AL	Healthcare	75.2	HIGH	Significant anomaly - Conduct thorough d...
NWJ	Industrial	71.9	HIGH	Significant anomaly - Conduct thorough d...
XZO	Materials	66.5	HIGH	Significant anomaly - Conduct thorough d...

Top Risk Factors (Feature Importance)

1. Max Drawdown: 55.8% importance
2. Sharpe Ratio: 19.1% importance
3. Volatility: 7.6% importance
4. Price Change 3M: 5.5% importance
5. Price Change 6M: 5.0% importance

ML Validation Results

Overall Validation Status: WARNING
Checks Passed: 3 / 4

✓ **Anomaly Detection Validation:** PASS
total_assets: 50, anomalies_detected: 8, anomaly_rate: 16.0
■ **Risk Prediction Validation:** WARNING
model_accuracy: 100.0, predictions_made: 50, rating_changes: 0
✓ **Feature Quality Validation:** PASS
features_checked: 9, nan_features: 0, total_samples: 50
✓ **Feature Importance Validation:** PASS
total_importance: 100.0, top_feature: Max Drawdown, top_importance: 55.8

Sentiment Analysis

Sentiment analysis was conducted on 41 RED-flagged assets using financial news from the past 12 months. **Key Findings:**
• Average sentiment score: -0.332
• Assets with negative sentiment: 28/41
• Total news articles analyzed: 895

Sentiment Analysis Results

Symbol	Sentiment Score	Label	News Count	Trend	Key Themes
BW	-0.466	NEGATIVE	15	IMPROVING	regulatory, financial_health, market_share
MMGQ	-0.447	NEGATIVE	15	IMPROVING	regulatory, earnings, financial_health
RTZB	-0.444	NEGATIVE	15	STABLE	earnings, regulatory, financial_health
DWR	-0.439	NEGATIVE	23	IMPROVING	regulatory, earnings, financial_health
VOA	-0.424	NEGATIVE	19	DETERIORATING	earnings, financial_health, operations
DWU	-0.420	NEGATIVE	15	IMPROVING	regulatory, earnings, market_share
BEH	-0.418	NEGATIVE	25	STABLE	regulatory, financial_health, earnings
NCF	-0.408	NEGATIVE	21	DETERIORATING	earnings, management, regulatory
MGH	-0.398	NEGATIVE	27	DETERIORATING	regulatory, earnings, financial_health
PVEN	-0.397	NEGATIVE	16	IMPROVING	earnings, regulatory, management
CZ	-0.380	NEGATIVE	23	IMPROVING	earnings, regulatory, financial_health
DFK	-0.373	NEGATIVE	28	STABLE	financial_health, regulatory, operations
BLRS	-0.348	NEGATIVE	24	DETERIORATING	regulatory, earnings, market_share
AL	-0.346	NEGATIVE	27	IMPROVING	earnings, regulatory, financial_health
CXO	-0.346	NEGATIVE	18	IMPROVING	operations, earnings, regulatory
RYE	-0.342	NEGATIVE	22	STABLE	regulatory, financial_health, earnings
VENK	-0.340	NEGATIVE	27	DETERIORATING	market_share, financial_health, earnings
XOQJ	-0.340	NEGATIVE	18	DETERIORATING	regulatory, financial_health, earnings
XZO	-0.339	NEGATIVE	20	IMPROVING	regulatory, earnings, management
AEUQ	-0.331	NEGATIVE	25	DETERIORATING	financial_health, earnings, management
CV	-0.326	NEGATIVE	18	IMPROVING	earnings, financial_health, operations
XTD	-0.322	NEGATIVE	26	STABLE	regulatory, financial_health, operations
SES	-0.319	NEGATIVE	29	IMPROVING	regulatory, financial_health, earnings
AG	-0.315	NEGATIVE	29	DETERIORATING	earnings, financial_health, management
MIEY	-0.314	NEGATIVE	17	DETERIORATING	operations, earnings, regulatory

SUK	-0.313	NEGATIVE	16	STABLE	regulatory, financial_health, market_share
DJG	-0.308	NEGATIVE	26	IMPROVING	earnings, regulatory, financial_health
GAF	-0.307	NEGATIVE	21	IMPROVING	regulatory, earnings, management
ADE	-0.297	NEUTRAL	20	IMPROVING	earnings, regulatory, management
AV	-0.296	NEUTRAL	15	STABLE	regulatory, market_share, earnings
ZA	-0.287	NEUTRAL	15	DETERIORATING	earnings, financial_health, growth
BBGL	-0.283	NEUTRAL	28	DETERIORATING	earnings, regulatory, market_share
PNZV	-0.276	NEUTRAL	22	IMPROVING	earnings, regulatory, financial_health
NWJ	-0.267	NEUTRAL	24	IMPROVING	earnings, regulatory, market_share
VGF	-0.266	NEUTRAL	28	STABLE	earnings, regulatory, operations
CH	-0.262	NEUTRAL	20	DETERIORATING	earnings, regulatory, market_share
CAHL	-0.255	NEUTRAL	16	DETERIORATING	operations, earnings, regulatory
GV	-0.230	NEUTRAL	24	IMPROVING	earnings, regulatory, financial_health
XR	-0.227	NEUTRAL	26	IMPROVING	earnings, market_share, operations
VSDQ	-0.212	NEUTRAL	28	IMPROVING	financial_health, regulatory, earnings
NWI	-0.189	NEUTRAL	24	STABLE	earnings, regulatory, management

Detailed Asset Analysis

Asset: VOA

Sector: Utilities
Current Price: $69.31
Market Cap: $79.12B
Risk Rating: RED
Risk Metrics:
• Volatility: 44.7%
• Maximum Drawdown: -38.0%
• Beta: 0.14
• Sharpe Ratio: -0.37
• RSI: 39.5
Performance:
• 1-Month Return: -19.4%
• 3-Month Return: -33.8%
• 6-Month Return: -20.5%
Risk Flags:
• High Volatility, Extreme Drawdown, Severe Decline, Extended Decline, Momentum Breakdown
Market Sentiment:
• Sentiment Score: -0.424 (NEGATIVE)
• News Articles: 19
• Trend: DETERIORATING

Asset: XZO

Sector: Materials
Current Price: $56.01
Market Cap: $88.18B
Risk Rating: RED

Risk Metrics:
• Volatility: 41.3%
• Maximum Drawdown: -48.7%
• Beta: -0.16
• Sharpe Ratio: -0.98
• RSI: 46.0
Performance:
• 1-Month Return: -10.2%
• 3-Month Return: -24.1%
• 6-Month Return: -46.0%
Risk Flags:
• High Volatility, Extreme Drawdown, Poor Risk Return, Momentum Breakdown
Market Sentiment:
• Sentiment Score: -0.339 (NEGATIVE)
• News Articles: 20
• Trend: IMPROVING

Asset: ADE

Sector: Industrial
Current Price: $46.49
Market Cap: $38.05B
Risk Rating: RED
Risk Metrics:
• Volatility: 41.4%
• Maximum Drawdown: -39.0%
• Beta: 0.02
• Sharpe Ratio: -1.04
• RSI: 39.3
Performance:
• 1-Month Return: -9.2%
• 3-Month Return: -29.8%
• 6-Month Return: -26.1%
Risk Flags:
• High Volatility, Extreme Drawdown, Extended Decline, Poor Risk Return
Market Sentiment:
• Sentiment Score: -0.297 (NEUTRAL)
• News Articles: 20
• Trend: IMPROVING

Asset: AL

Sector: Healthcare
Current Price: $64.20
Market Cap: $63.37B
Risk Rating: RED
Risk Metrics:
• Volatility: 24.9%
• Maximum Drawdown: -32.8%
• Beta: -0.01
• Sharpe Ratio: -1.20
• RSI: 9.7
Performance:
• 1-Month Return: -14.9%
• 3-Month Return: -21.1%
• 6-Month Return: -30.4%
Risk Flags:
• Extreme Drawdown, Poor Risk Return, Momentum Breakdown

Market Sentiment:
• Sentiment Score: -0.346 (NEGATIVE)
• News Articles: 27
• Trend: IMPROVING

Asset: CH

Sector: Technology
Current Price: $121.40
Market Cap: $82.58B
Risk Rating: RED
Risk Metrics:
• Volatility: 45.5%
• Maximum Drawdown: -60.4%
• Beta: -0.06
• Sharpe Ratio: -0.99
• RSI: 59.6
Performance:
• 1-Month Return: 27.0%
• 3-Month Return: 34.3%
• 6-Month Return: 13.4%
Risk Flags:
• High Volatility, Extreme Drawdown, Poor Risk Return
Market Sentiment:
• Sentiment Score: -0.262 (NEUTRAL)
• News Articles: 20
• Trend: DETERIORATING

Recommendations

Based on the comprehensive risk analysis, the following recommendations are provided:
Immediate Actions (RED-flagged assets):
1. Consider reducing position sizes for 41 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 28 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: $-0.3 \leq$ Score ≤ 0.3

Report Generation Details:
• Generated: 2025-10-15 07:13:07
• Analysis Period: 12 months
• Total Assets Analyzed: 50
• Pipeline Version: 1.0

Test Data - Portfolio Details

This section contains the complete test data used in the analysis. The data below can be used for further analysis, verification, and detailed review.

Complete Portfolio Data

Symbol	Company	Sector	Price	Market Cap ($B)	P/E Ratio	Dividend Yield
RTZB	First Services	Healthcare	$358.22	701.52	N/A	5.07%
XOQJ	Regional Industries	Healthcare	$258.99	435.14	12.60	0.78%
MGH	International Global	Healthcare	$328.14	403.44	16.27	2.39%
DJG	First Systems	Technology	$268.12	352.93	19.28	4.67%
VGF	First Capital	Materials	$176.63	319.74	28.43	2.09%
GV	Regional Holdings	Healthcare	$291.55	294.02	29.83	0.00%
RYE	Alliance Corp	Energy	$138.92	219.17	12.05	4.72%
MMGQ	Metro Capital	Consumer Staples	$115.69	212.78	18.57	2.54%
DFK	Superior Corp	Technology	$362.84	190.04	16.52	3.24%
XR	American LLC	Consumer Discretionary	$170.55	187.78	25.56	4.86%
DWR	Global Group	Energy	$147.30	187.63	N/A	0.00%
CFD	Metro Holdings	Industrial	$112.73	176.09	N/A	4.54%
CXO	First Global	Utilities	$109.65	168.57	18.69	2.35%
AG	Global International	Financial Services	$99.88	150.12	12.39	0.00%
BBGL	Regional Internation...	Industrial	$162.41	122.12	30.43	0.62%
CZ	Dynamic Capital	Real Estate	$155.07	116.06	10.65	4.96%
BEH	Global Inc	Healthcare	$240.88	108.15	15.41	1.35%
SES	Dynamic Holdings	Energy	$143.09	104.23	27.72	2.09%
BLRS	Premier Holdings	Consumer Staples	$108.70	100.54	N/A	1.50%
NWJ	American Holdings	Industrial	$190.49	100.03	N/A	0.31%
VDW	Dynamic Systems	Energy	$103.95	99.01	13.84	5.66%
PVEN	Metro Enterprises	Technology	$79.91	96.59	14.68	0.72%
XZO	First Inc	Materials	$56.01	88.18	20.49	0.00%
NWI	Consolidated Service...	Real Estate	$53.27	85.54	16.67	0.00%
CH	Pacific Solutions	Technology	$121.40	82.58	20.59	2.38%
SE	First Holdings	Consumer Discretionary	$77.64	81.81	16.63	0.61%
VOA	Regional LLC	Utilities	$69.31	79.12	9.60	5.34%
GAF	Metro Capital	Real Estate	$45.92	74.40	24.73	0.00%
ZA	Strategic Inc	Real Estate	$155.54	71.29	28.98	0.00%
BW	Innovative Technolog...	Real Estate	$129.99	71.17	17.56	5.20%
AL	Pacific Holdings	Healthcare	$64.20	63.37	N/A	0.00%
BVOC	American Corp	Materials	$131.30	61.07	17.12	4.68%
GSQ	Strategic Holdings	Technology	$104.61	60.24	N/A	1.10%

SUK	Superior Technologie...	Utilities	$55.21	59.61	27.07	4.52%
AV	Dynamic Systems	Financial Services	$126.64	57.64	8.42	3.40%
ROK	Premier Technologies	Financial Services	$109.05	56.77	25.87	4.98%
VENK	Regional Corp	Healthcare	$371.78	55.42	10.66	0.00%
ADE	Consolidated Global	Industrial	$46.49	38.05	27.89	0.28%
XTD	American Technologie...	Real Estate	$44.80	35.04	24.19	4.26%
MMS	Alliance Resources	Real Estate	$39.57	30.62	20.90	4.20%
DWU	Dynamic Group	Financial Services	$75.11	25.21	31.28	3.77%
VSDQ	United Holdings	Financial Services	$70.61	24.09	N/A	0.60%
AEUQ	Premier Services	Consumer Discretionary	$167.02	23.46	20.17	0.98%
MIEY	Superior Group	Consumer Discretionary	$68.16	13.09	30.36	2.24%
ZYQ	First Corp	Financial Services	$103.45	12.14	22.76	2.97%
CV	Advanced Industries	Utilities	$44.60	9.37	N/A	3.06%
CAHL	Regional Holdings	Industrial	$54.09	8.03	11.66	3.40%
CDBQ	Superior Internation...	Consumer Discretionary	$124.82	7.55	N/A	3.60%
NCF	Strategic Inc	Financial Services	$38.42	5.36	14.88	2.87%
PNZV	United Systems	Industrial	$64.29	4.30	13.91	6.00%

Complete Risk Analysis Results

Symbol	Risk Rating	Risk Score	Volatility	Max DD	Beta	Sharpe	RSI
VOA	RED	5	44.7%	-38.0%	0.14	-0.37	39.5
XZO	RED	4	41.3%	-48.7%	-0.16	-0.98	46.0
ADE	RED	4	41.4%	-39.0%	0.02	-1.04	39.3
AL	RED	3	24.9%	-32.8%	-0.01	-1.20	9.7
CH	RED	3	45.5%	-60.4%	-0.06	-0.99	59.6
DFK	RED	3	33.3%	-25.6%	-0.10	0.15	32.0
GV	RED	2	30.8%	-42.4%	0.19	-1.03	58.1
XOQJ	RED	2	40.3%	-21.3%	-0.06	2.54	44.4
BBGL	RED	2	25.9%	-28.8%	0.09	-0.74	45.4
VENK	RED	2	16.6%	-23.1%	-0.11	-1.58	31.6
CV	RED	2	40.6%	-42.7%	-0.06	-0.35	51.7
MGH	RED	2	44.5%	-21.9%	-0.04	0.92	77.0
XTD	RED	2	18.8%	-35.6%	0.01	-2.30	20.3
DJG	RED	2	19.6%	-32.7%	0.04	-1.80	35.8
VGF	RED	2	19.1%	-22.0%	-0.01	-0.64	50.4
AV	RED	2	16.1%	-24.7%	-0.09	-1.34	25.0
NWJ	RED	2	43.3%	-46.6%	0.26	0.30	68.9
PNZV	RED	2	44.9%	-45.4%	-0.04	0.30	40.5
DWR	RED	2	49.4%	-27.9%	-0.08	1.87	45.9
AEUQ	RED	2	16.4%	-21.2%	-0.09	-1.35	38.3
CAHL	RED	2	20.9%	-22.6%	-0.07	-0.81	47.0
SUK	RED	2	43.0%	-34.5%	-0.26	-0.29	48.0
BEH	RED	2	30.3%	-35.7%	0.04	-0.89	30.5
GAF	RED	2	24.5%	-34.2%	0.05	-0.86	69.2
BW	RED	1	36.7%	-24.6%	0.08	0.68	85.3
VSDQ	RED	1	24.0%	-23.0%	-0.02	-0.05	66.1
BLRS	RED	1	37.5%	-27.0%	-0.07	0.51	75.5
MIEY	RED	1	31.8%	-28.1%	0.06	0.48	31.5
SES	RED	1	35.8%	-41.3%	-0.15	-0.47	28.7
CZ	RED	1	37.8%	-39.9%	0.12	0.17	53.1
MMGQ	RED	1	34.5%	-35.1%	0.17	0.83	64.0
RYE	RED	1	20.6%	-22.5%	0.02	0.09	48.2
PVEN	RED	1	37.5%	-27.9%	0.04	0.09	64.6
DWU	RED	1	40.0%	-27.1%	-0.05	1.71	64.5
CXO	RED	1	27.9%	-31.8%	-0.09	0.13	85.3
XR	RED	1	31.1%	-24.4%	-0.02	1.18	25.6
ZA	RED	1	35.3%	-21.7%	0.02	1.57	9.3
NWI	RED	1	29.1%	-23.6%	0.02	-0.02	33.1

AG	RED	1	25.2%	-23.5%	-0.03	0.01	40.9
RTZB	RED	1	31.1%	-38.1%	-0.14	0.01	78.2
NCF	RED	1	36.5%	-24.6%	0.12	1.18	68.9
CFD	GREEN	0	32.9%	-14.2%	0.05	1.33	34.4
SE	GREEN	0	18.7%	-10.0%	0.03	1.18	75.6
ZYQ	GREEN	0	18.1%	-14.0%	0.04	0.43	32.2
ROK	GREEN	0	31.4%	-15.0%	-0.02	2.32	36.8
CDBQ	GREEN	0	22.2%	-17.9%	0.02	0.38	43.8
VDW	GREEN	0	35.9%	-19.4%	0.13	1.14	63.2
MMS	GREEN	0	22.3%	-16.2%	0.09	1.30	65.2
BVOC	GREEN	0	35.7%	-18.1%	-0.12	1.62	67.3
GSQ	GREEN	0	31.3%	-18.8%	0.11	1.71	38.4

Performance Metrics Data

Symbol	1M Return	3M Return	6M Return	Vol Decline	Sharpe Ratio
ADE	-9.2%	-29.8%	-26.1%	-8.3%	-1.04
AEUQ	-4.5%	-6.1%	-3.7%	1.0%	-1.35
AG	0.1%	-4.0%	11.2%	2.8%	0.01
AL	-14.9%	-21.1%	-30.4%	-7.6%	-1.20
AV	-4.6%	-7.8%	-9.2%	-13.3%	-1.34
BBGL	-3.4%	-12.0%	-20.9%	-0.6%	-0.74
BEH	-4.3%	-9.1%	-25.7%	2.4%	-0.89
BLRS	17.8%	20.9%	4.5%	-3.7%	0.51
BVOC	3.6%	20.3%	43.7%	1.4%	1.62
BW	22.7%	7.9%	6.7%	5.5%	0.68
CAHL	0.6%	-1.3%	3.5%	9.7%	-0.81
CDBQ	-0.9%	7.9%	6.7%	0.3%	0.38
CFD	-3.6%	2.4%	24.4%	-0.2%	1.33
CH	27.0%	34.3%	13.4%	0.6%	-0.99
CV	-8.1%	1.8%	20.4%	-4.1%	-0.35
CXO	8.4%	6.9%	-7.1%	0.4%	0.13
CZ	1.5%	36.2%	48.7%	-6.5%	0.17
DFK	-15.7%	-23.4%	-7.3%	-6.9%	0.15
DJG	-6.8%	-13.3%	-17.7%	4.8%	-1.80
DWR	-5.8%	31.6%	64.1%	-3.9%	1.87
DWU	8.2%	-6.8%	18.1%	13.6%	1.71
GAF	6.2%	-5.4%	-18.3%	12.3%	-0.86
GSQ	-6.2%	17.6%	12.9%	-5.0%	1.71
GV	3.5%	-4.0%	-10.3%	5.1%	-1.03

MGH	11.1%	-0.7%	16.2%	3.0%	0.92
MIEY	-12.7%	6.9%	12.3%	-4.5%	0.48
MMGQ	9.5%	38.6%	79.9%	-12.6%	0.83
MMS	2.4%	19.5%	33.5%	3.8%	1.30
NCF	8.4%	16.0%	1.5%	0.1%	1.18
NWI	-3.4%	-1.1%	1.1%	-2.3%	-0.02
NWJ	-2.2%	-17.5%	-11.6%	4.8%	0.30
PNZV	5.8%	0.5%	15.8%	1.0%	0.30
PVEN	4.0%	2.2%	-10.8%	4.1%	0.09
ROK	9.3%	22.7%	21.0%	5.6%	2.32
RTZB	16.2%	7.9%	8.3%	5.6%	0.01
RYE	-6.1%	-12.6%	-10.9%	-6.2%	0.09
SE	9.9%	8.2%	19.6%	1.2%	1.18
SES	-2.9%	19.1%	18.4%	-3.3%	-0.47
SUK	5.4%	10.4%	14.5%	-4.7%	-0.29
VDW	1.6%	10.9%	28.1%	0.2%	1.14
VENK	-4.0%	-3.7%	-13.9%	2.3%	-1.58
VGF	3.9%	1.3%	-15.1%	-8.5%	-0.64
VOA	-19.4%	-33.8%	-20.5%	0.1%	-0.37
VSDQ	4.2%	13.4%	17.1%	-11.9%	-0.05
XOQJ	-5.4%	1.0%	57.8%	-3.4%	2.54
XR	-1.4%	6.4%	48.0%	-8.4%	1.18
XTD	-7.0%	-20.8%	-25.6%	3.2%	-2.30
XZO	-10.2%	-24.1%	-46.0%	-7.2%	-0.98
ZA	-8.3%	-12.3%	6.5%	-3.6%	1.57
ZYQ	-2.1%	-3.9%	-6.0%	2.6%	0.43

Risk Flags Details

Symbol	High Vol	Ext. DD	Vol Decline	Sharp Decline	Neg. Returns	Low Sharpe	Overbought
VOA	✓	✓	✗	✗	✗	✗	✗
XZO	✓	✓	✗	✗	✗	✗	✗
ADE	✓	✓	✗	✗	✗	✗	✗
AL	✗	✓	✗	✗	✗	✗	✗
CH	✓	✓	✗	✗	✗	✗	✗
DFK	✗	✓	✗	✗	✗	✗	✗
GV	✗	✓	✗	✗	✗	✗	✗
XOQJ	✓	✓	✗	✗	✗	✗	✗
BBGL	✗	✓	✗	✗	✗	✗	✗
VENK	✗	✓	✗	✗	✗	✗	✗

CV	✓	✓	✗	✗	✗	✗	✗
MGH	✓	✓	✗	✗	✗	✗	✗
XTD	✗	✓	✗	✗	✗	✗	✗
DJG	✗	✓	✗	✗	✗	✗	✗
VGF	✗	✓	✗	✗	✗	✗	✗
AV	✗	✓	✗	✗	✗	✗	✗
NWJ	✓	✓	✗	✗	✗	✗	✗
PNZV	✓	✓	✗	✗	✗	✗	✗
DWR	✓	✓	✗	✗	✗	✗	✗
AEUQ	✗	✓	✗	✗	✗	✗	✗
CAHL	✗	✓	✗	✗	✗	✗	✗
SUK	✓	✓	✗	✗	✗	✗	✗
BEH	✗	✓	✗	✗	✗	✗	✗
GAF	✗	✓	✗	✗	✗	✗	✗
BW	✗	✓	✗	✗	✗	✗	✗
VSDQ	✗	✓	✗	✗	✗	✗	✗
BLRS	✗	✓	✗	✗	✗	✗	✗
MIEY	✗	✓	✗	✗	✗	✗	✗
SES	✗	✓	✗	✗	✗	✗	✗
CZ	✗	✓	✗	✗	✗	✗	✗
MMGQ	✗	✓	✗	✗	✗	✗	✗
RYE	✗	✓	✗	✗	✗	✗	✗
PVEN	✗	✓	✗	✗	✗	✗	✗
DWU	✗	✓	✗	✗	✗	✗	✗
CXO	✗	✓	✗	✗	✗	✗	✗
XR	✗	✓	✗	✗	✗	✗	✗
ZA	✗	✓	✗	✗	✗	✗	✗
NWI	✗	✓	✗	✗	✗	✗	✗
AG	✗	✓	✗	✗	✗	✗	✗
RTZB	✗	✓	✗	✗	✗	✗	✗
NCF	✗	✓	✗	✗	✗	✗	✗
CFD	✗	✗	✗	✗	✗	✗	✗
SE	✗	✗	✗	✗	✗	✗	✗
ZYQ	✗	✗	✗	✗	✗	✗	✗
ROK	✗	✗	✗	✗	✗	✗	✗
CDBQ	✗	✗	✗	✗	✗	✗	✗
VDW	✗	✗	✗	✗	✗	✗	✗
MMS	✗	✗	✗	✗	✗	✗	✗
BVOC	✗	✗	✗	✗	✗	✗	✗
GSQ	✗	✗	✗	✗	✗	✗	✗

Data Summary:
• Total Assets: 50
• Data Generated: 2025-10-15 07:13:07
• 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.