

Portfolio Risk Analysis Report

Report Date: October 14, 2025
Portfolio Size: 25 Assets
Analysis Period: 12 Months
Generated by: Automated Risk Analysis Pipeline

Risk Assessment Summary

HIGH RISK (RED): 17 Assets
MEDIUM RISK (YELLOW): 0 Assets
LOW RISK (GREEN): 8 Assets

Executive Summary

This report presents a comprehensive risk analysis of a portfolio containing 25 assets with a combined market capitalization of \$3102.1 billion. **Key Findings:** • 17 assets (68.0%) are rated as HIGH RISK (RED) • 0 assets (0.0%) are rated as MEDIUM RISK (YELLOW) • Average portfolio volatility: 30.5% • Maximum drawdown observed: -57.3% **Risk Concentration:** The analysis reveals significant risk concentration in 17 assets requiring immediate attention and potential portfolio rebalancing. **Sentiment Analysis:** • 10 RED-flagged assets show negative market sentiment • Average sentiment score for flagged assets: -0.286 • News coverage indicates heightened market concern for these positions

Portfolio Overview

Sector Allocation

Sector	Assets	Market Cap (\$B)	Percentage
Industrial	3	621.51	20.0%
Financial Services	4	611.45	19.7%
Utilities	5	424.72	13.7%
Technology	1	412.80	13.3%
Materials	3	386.20	12.4%
Energy	4	247.03	8.0%
Consumer Discretionary	1	139.68	4.5%
Consumer Staples	3	134.88	4.3%
Real Estate	1	123.88	4.0%

Risk Analysis Results

Risk Distribution:

- HIGH RISK (RED): 17 assets
- MEDIUM RISK (YELLOW): 0 assets
- LOW RISK (GREEN): 8 assets

High Risk Assets

Symbol	Sector	Risk Rating	Volatility	Max Drawdown	Risk Score
RPY	Consumer Staples	RED	41.3%	-46.7%	4
AEU	Utilities	RED	40.2%	-25.0%	3
ZG	Financial Services	RED	30.6%	-48.2%	3
NHGW	Materials	RED	26.8%	-36.0%	2
PNG	Energy	RED	39.4%	-40.2%	2
TNW	Utilities	RED	44.9%	-50.3%	2

TDD	Consumer Discretionary	RED	22.4%	-42.5%	2
DW	Utilities	RED	41.6%	-26.5%	2
RUP	Consumer Staples	RED	28.1%	-57.3%	2
MVO	Energy	RED	42.6%	-37.0%	2
DJMJ	Energy	RED	29.9%	-35.0%	2
NBS	Energy	RED	22.0%	-28.1%	2
AJZ	Financial Services	RED	43.9%	-31.7%	2
RWR	Utilities	RED	31.3%	-33.0%	1
AFG	Financial Services	RED	39.9%	-36.5%	1
XNM	Real Estate	RED	29.0%	-28.5%	1
MXU	Industrial	RED	35.3%	-38.5%	1

Sentiment Analysis

Sentiment analysis was conducted on 17 RED-flagged assets using financial news from the past 12 months. **Key Findings:**

- Average sentiment score: -0.286
- Assets with negative sentiment: 10/17
- Total news articles analyzed: 393

Sentiment Analysis Results

Symbol	Sentiment Score	Label	News Count	Trend	Key Themes
NHGW	-0.405	NEGATIVE	17	DETERIORATING	financial_health, operations, earnings
RUP	-0.398	NEGATIVE	20	DETERIORATING	earnings, regulatory, management
PNG	-0.362	NEGATIVE	23	STABLE	market_share, financial_health, regulatory
DJMJ	-0.346	NEGATIVE	24	STABLE	earnings, financial_health, regulatory
AJZ	-0.324	NEGATIVE	20	IMPROVING	earnings, regulatory, market_share
ZG	-0.310	NEGATIVE	23	STABLE	earnings, regulatory, operations
AFG	-0.304	NEGATIVE	21	DETERIORATING	earnings, regulatory, operations
RPY	-0.304	NEGATIVE	22	IMPROVING	earnings, management, market_share
DW	-0.302	NEGATIVE	26	STABLE	regulatory, market_share, growth
AEU	-0.302	NEGATIVE	26	IMPROVING	earnings, regulatory, operations
TNW	-0.282	NEUTRAL	22	IMPROVING	management, operations, earnings
NBS	-0.249	NEUTRAL	27	STABLE	financial_health, regulatory, earnings
MXU	-0.248	NEUTRAL	27	IMPROVING	earnings, regulatory, financial_health
RWR	-0.241	NEUTRAL	30	IMPROVING	earnings, regulatory, management
TDD	-0.195	NEUTRAL	20	IMPROVING	regulatory, operations, growth
MVO	-0.167	NEUTRAL	26	DETERIORATING	earnings, financial_health, growth
XNM	-0.116	NEUTRAL	19	STABLE	earnings, regulatory, operations

Detailed Asset Analysis

Asset: RPY

Sector: Consumer Staples

Current Price: \$45.63

Market Cap: \$13.54B

Risk Rating: RED

Risk Metrics:

- Volatility: 41.3%
- Maximum Drawdown: -46.7%
- Beta: -0.38
- Sharpe Ratio: -1.34
- RSI: 39.8

Performance:

- 1-Month Return: -2.0%
- 3-Month Return: -27.7%
- 6-Month Return: -30.6%

Risk Flags:

- High Volatility, Extreme Drawdown, Extended Decline, Poor Risk Return

Market Sentiment:

- Sentiment Score: -0.304 (NEGATIVE)
- News Articles: 22
- Trend: IMPROVING

Asset: AEU

Sector: Utilities

Current Price: \$87.02

Market Cap: \$24.72B

Risk Rating: RED

Risk Metrics:

- Volatility: 40.2%
- Maximum Drawdown: -25.0%
- Beta: -0.04
- Sharpe Ratio: 0.58
- RSI: 45.7

Performance:

- 1-Month Return: -12.5%
- 3-Month Return: -15.4%
- 6-Month Return: 24.1%

Risk Flags:

- High Volatility, Extreme Drawdown, Momentum Breakdown

Market Sentiment:

- Sentiment Score: -0.302 (NEGATIVE)
- News Articles: 26
- Trend: IMPROVING

Asset: ZG

Sector: Financial Services

Current Price: \$117.61

Market Cap: \$223.84B

Risk Rating: RED

Risk Metrics:

- Volatility: 30.6%
- Maximum Drawdown: -48.2%
- Beta: 0.05
- Sharpe Ratio: -0.92
- RSI: 33.3

Performance:

- 1-Month Return: -13.1%
- 3-Month Return: -13.4%
- 6-Month Return: -16.7%

Risk Flags:

- Extreme Drawdown, Poor Risk Return, Momentum Breakdown

Market Sentiment:

- Sentiment Score: -0.310 (NEGATIVE)
- News Articles: 23
- Trend: STABLE

Asset: NHGW

Sector: Materials

Current Price: \$57.16

Market Cap: \$88.99B

Risk Rating: RED

Risk Metrics:

- Volatility: 26.8%
- Maximum Drawdown: -36.0%
- Beta: -0.05
- Sharpe Ratio: -0.55
- RSI: 41.9

Performance:

- 1-Month Return: -5.9%
- 3-Month Return: 17.3%
- 6-Month Return: -0.8%

Risk Flags:

- Extreme Drawdown, Poor Risk Return

Market Sentiment:

- Sentiment Score: -0.405 (NEGATIVE)
- News Articles: 17
- Trend: DETERIORATING

Asset: PNG

Sector: Energy

Current Price: \$37.30

Market Cap: \$60.93B

Risk Rating: RED

Risk Metrics:

- Volatility: 39.4%
- Maximum Drawdown: -40.2%
- Beta: 0.17
- Sharpe Ratio: 0.43
- RSI: 52.4

Performance:

- 1-Month Return: -6.1%
- 3-Month Return: -32.8%
- 6-Month Return: 8.7%

Risk Flags:

- Extreme Drawdown, Extended Decline

Market Sentiment:

- Sentiment Score: -0.362 (NEGATIVE)
- News Articles: 23
- Trend: STABLE

Recommendations

Based on the comprehensive risk analysis, the following recommendations are provided:

Immediate Actions (RED-flagged assets):

1. Consider reducing position sizes for 17 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 10 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: $-0.3 \leq \text{Score} \leq 0.3$

Report Generation Details:

- Generated: 2025-10-14 08:44:05
- Analysis Period: 12 months
- Total Assets Analyzed: 25
- Pipeline Version: 1.0