



# Portfolio Risk Report

FRM-Based Analysis · Powered by PWS Analytics

Report Date: May 18, 2026

Analysis Period: 1y

Benchmark: SPY

Data as of: May 15, 2026

## Client Portfolio - 7 Positions

Total Capital: \$1,000,000 · Confidence: 95% · Risk-Free: 4.5%



**Alpha vs SPY: -2.8%**      Portfolio underperformed benchmark by 2.8% annualised      Corr with SPY: 0.78

Diversification Benefit: 27.7% (risk reduction from correlation)

### INDIVIDUAL HOLDINGS OVERVIEW

TICKER	ANN. RETURN	SHARPE	MAX DRAWDOWN	RISK CONTRIB	SECTOR
VTI	+25.7%	1.71	-8.9%	18.8%	Broad Market ETF
EFA	+20.9%	1.09	-11.4%	18.6%	Developed Market ETF
EEM	+44.5%	2.06	-13.5%	15.7%	Emerging Market ETF
GLD	+42.2%	1.41	-19.2%	24.0%	Gold
TLT	+1.4%	-0.31	-6.9%	5.8%	Long-Term Bond
BND	+4.4%	-0.03	-2.4%	2.8%	Aggregate Bond
IWM	+34.0%	1.53	-11.0%	14.3%	Small Cap ETF

## PORTFOLIO VALUE AT RISK (VaR)

<p>95% DAILY VAR</p> <p><b>\$11,017</b></p> <p>1.10% of capital</p>	<p>ANNUAL VOLATILITY</p> <p><b>10.6%</b></p> <p>Annualised std deviation</p>	<p>DIVERSIFICATION BENEFIT</p> <p><b>27.7%</b></p> <p>Risk saved by correlation</p>
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Roughly once every 20 trading days, daily loss is expected to exceed \$11,017 (1.10% of portfolio).

## CORRELATION MATRIX

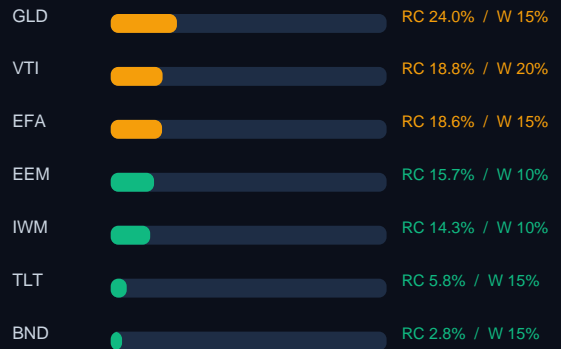
	VTI	EFA	EEM	GLD	TLT	BND	IWM
VTI	■	0.77	0.74	0.18	0.18	0.28	0.87
EFA	0.77	■	0.81	0.35	0.31	0.43	0.72
EEM	0.74	0.81	■	0.41	0.23	0.34	0.67
GLD	0.18	0.35	0.41	■	0.09	0.18	0.22
TLT	0.18	0.31	0.23	0.09	■	0.93	0.18
BND	0.28	0.43	0.34	0.18	0.93	■	0.28
IWM	0.87	0.72	0.67	0.22	0.18	0.28	■

■ > 0.7 High  
■ 0.5–0.7 Moderate  
■ 0.3–0.5 Low  
■ < 0.3 Minimal

## SECTOR CONCENTRATION



## RISK CONTRIBUTION PER POSITION



MINIMUM VARIANCE ALLOCATION SUGGESTION

Current Volatility	Optimised (Min-Variance)	Potential Reduction
<b>10.6%</b>	<b>3.9%</b>	<b>-6.7pp</b>
Mathematical optimum only. Ignores taxes, liquidity, and investment views. Use as directional reference.		
■ Optimiser suggests 95% in BND — result dominated by low volatility. Apply judgment before acting.		

ALLOCATION TABLE

TICKER	CURRENT WT	SUGGESTED WT	SUGG. AMOUNT	DIRECTION
<b>VTI</b>	20.0%	5.1%	\$51,000	▼ -14.9%
<b>EFA</b>	15.0%	0.0%	\$0	▼ -15.0%
<b>EEM</b>	10.0%	0.0%	\$0	▼ -10.0%
<b>GLD</b>	15.0%	0.0%	\$0	▼ -15.0%
<b>TLT</b>	15.0%	0.0%	\$0	▼ -15.0%
<b>BND</b>	15.0%	94.9%	\$949,000	▲ +79.9%
<b>IWM</b>	10.0%	0.0%	\$0	▼ -10.0%

KEY FINDINGS & OBSERVATIONS

**Benchmark Underperformance**

Portfolio underperformed SPY by 2.8% annualised. EEM (Sharpe 2.06) is the primary return driver.

**Well Diversified by Sector**

Largest sector Broad Market ETF at 20% — well spread across sectors.

**GLD Dominates Risk Budget**

GLD holds 15% of capital but drives 24.0% of portfolio risk (1.6x its weight). Slight risk asymmetry, monitor closely.

**High Correlation: TLT ↔ BND**

Correlation of 0.93 — these positions move nearly identically, consider reducing one.

**DISCLAIMER**

This report is for informational and educational purposes only. It does not constitute investment advice or a recommendation to buy or sell any security.