

INVESTMENT POLICY STATEMENT

Portfolio Analysis & Advisory Report

Institutional-Grade Construction · Adviser CMAs · Strategic Policy Construction
Monte Carlo GBM (3000 Paths) · Euler Risk Decomposition · Basel III VaR/CVaR

PREPARED EXCLUSIVELY FOR

Sergio L

REPORT DATE

02 August 2026

RISK PROFILE

Growth

HORIZON

30 Years

STRATEGY

Strategic Policy

§ 0 – INVESTMENT MANDATE

Investment Policy Statement

This Investment Policy Statement establishes the investment objectives, risk parameters, and operational guidelines governing the management of the above-named client portfolio. It serves as the foundational governance document for all portfolio construction decisions and is reviewed annually or upon material life event. All methodology follows CFA Institute standards and Basel III risk measurement conventions.

01 · INVESTMENT OBJECTIVE

Portfolio mandate: **Growth**. Risk aversion coefficient (revealed preference): **A = 3.3**. Utility function: $U = E(r) - \frac{1}{2}A\sigma^2$. The allocation is a **fixed strategic policy** set by the adviser to match this risk posture; the coefficient A frames the risk level but does not itself derive the weights.

02 · RISK MANDATE

Target annualised volatility: **16.1%**. Sharpe ratio: **0.81**. Sortino: **1.06**. Calmar: **0.57**. Long-only constraint. No leverage. Drawdowns $\leq 40.3\%$ are within mandate.

03 · RETURN TARGET

Target gross return: **17.0% p.a.** (adviser CMAs). Goal: **\$50.00M in 30 years**. Achievement probability: **44.4%** (3000 MC paths). Risk-free rate: **4.00%**.

04 · LIQUIDITY & HORIZON

Horizon: **30 years**. Initial capital: **\$300k**. Monthly contributions: **\$1k**. Structured for a long-term, buy-and-hold horizon. Rebalancing: annual or at $\pm 5\%$ drift from target weights.

05 · INVESTMENT CONSTRAINTS

Long-only (no short selling). No leverage. No derivatives unless separately approved. Universe: **QQQ, SPY, AGG, MSFT, BX, MO, GLD, CVX, GOOG**. Concentration: HHI = **1614 (Moderately Concentrated)**. Position sizes are set by strategic policy and monitored against the covariance risk model.

06 · GOVERNING FRAMEWORK

Adviser capital market assumptions · Ledoit-Wolf shrinkage covariance · Adviser strategic policy weights (fixed) · 3000-path Monte Carlo GBM · VaR/CVaR per Basel III · CFA Institute methodology · Annual rebalancing cadence.

Adviser Attestation: This analysis has been prepared by Anton Ladnyi, CFA (A.L. Capital Advisory) using institutional quantitative methods consistent with CFA Institute standards. All projections are probabilistic estimates. Past performance is not indicative of future results. Not regulated financial advice.

ANTON LADNYI, CFA · ADVISER · A.L. CAPITAL ADVISORY

CLIENT ACKNOWLEDGEMENT · DATE

§ 1 – PORTFOLIO OVERVIEW

Strategic Policy Portfolio Summary

EXPECTED RETURN

17.0%

p.a. · B-L posterior

VOLATILITY

16.1%

Annualised MVO

SHARPE RATIO

0.81

Risk-adjusted return

GOAL PROBABILITY

44.4%

Monte Carlo · 3000 paths

SORTINO RATIO

1.06

Downside-adj. return

CALMAR RATIO

0.57

Return / max drawdown

VAR 95% (1M)

5.9%

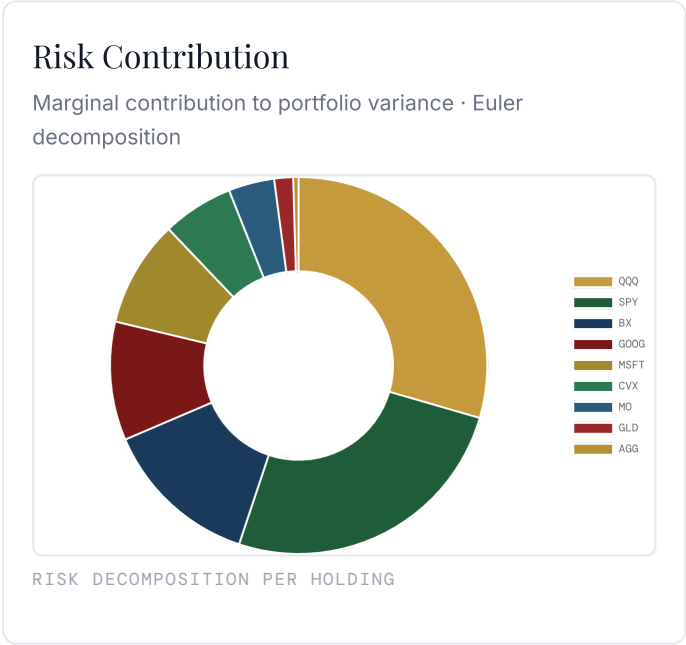
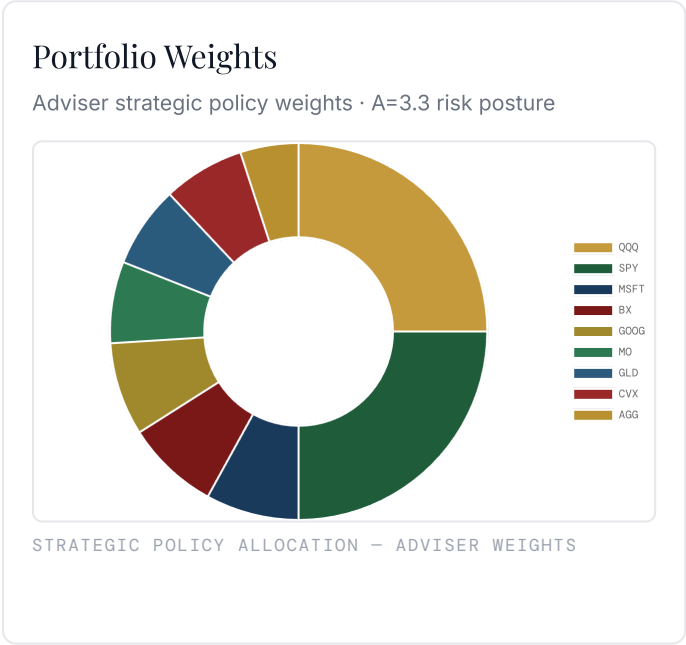
Monthly 5th %ile loss

HEALTH SCORE

56.6/100

Moderate

Portfolio quality index



§ 2 – HOLDINGS

Portfolio Holdings & Fundamentals

Full Holdings Table

All positions · Yahoo Finance live fundamentals · strategic policy weights

Ticker	Name	Sector	Weight	Beta	P/E	Div Yield	Mkt Cap
QQQ	Invesco QQQ Trust	ETF	25.0%	—	30.5×	0.41%	—
SPY	State Street SPDR S&P 500 ET	ETF	25.0%	—	26.9×	1.01%	—
AGG	iShares Core U.S. Aggregate	ETF	5.0%	—	124.2×	3.97%	—
MSFT	Microsoft Corporation	Technology	8.0%	1.13	25.9×	0.78%	\$3.45T
BX	Blackstone Inc.	Financial Services	8.0%	1.58	28.6×	4.09%	\$159.0B
MO	Altria Group, Inc.	Consumer Defensive	7.0%	0.49	14.4×	6.21%	\$114.1B
GLD	SPDR Gold Shares	ETF	7.0%	—	—	—	—
CVX	Chevron Corporation	Energy	7.0%	0.49	18.9×	3.62%	\$392.0B
GOOG	Alphabet Inc.	Communication Services	8.0%	1.25	17.9×	0.25%	\$4.36T

PORTFOLIO BETA

Weighted-average market beta: **1.01**. High market exposure — portfolio amplifies market moves.

CONCENTRATION (HHI)

Herfindahl-Hirschman Index: **1614** → **Moderately Concentrated**. HHI < 1,000 = well diversified; 1,000–1,800 = moderate; > 1,800 = high. Lower is better for idiosyncratic risk reduction.

§ 3 – MONTE CARLO SIMULATION

Probability Analysis & Wealth Projection

GOAL ACHIEVEMENT PROBABILITY

44%

Below Target ▲

30-year horizon • 3000 Monte Carlo paths

\$24.64M

25TH PERCENTILE

Lower quartile

\$43.80M

MEDIAN

Most Likely

\$80.55M

75TH PERCENTILE

Upper quartile

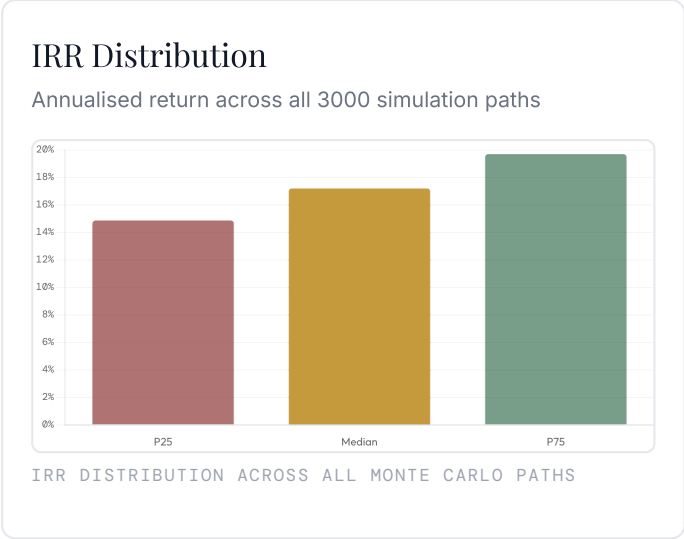
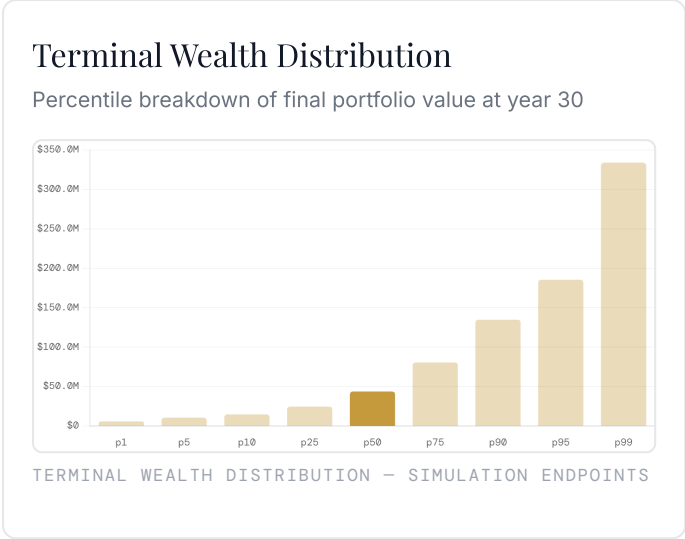
MEDIAN MAX DRAWDOWN

Expected worst drawdown across simulation paths: **-29.9%**. This is the median peak-to-trough loss observed across all 3000 Monte Carlo scenarios — tail risk should be sized accordingly.

SIMULATION PARAMETERS

3000 Geometric Brownian Motion paths • 30-year horizon
• Monthly compounding • Initial investment: **\$300k** •
Monthly contribution: **\$1k** • Risk-free: **4.00%**

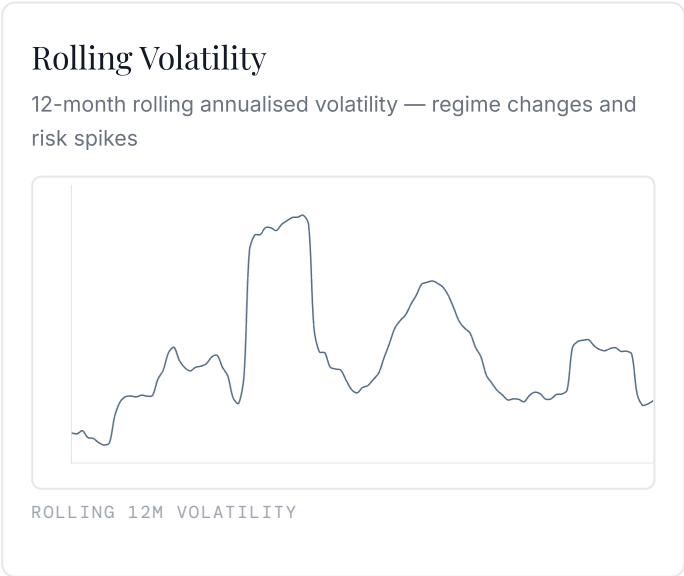
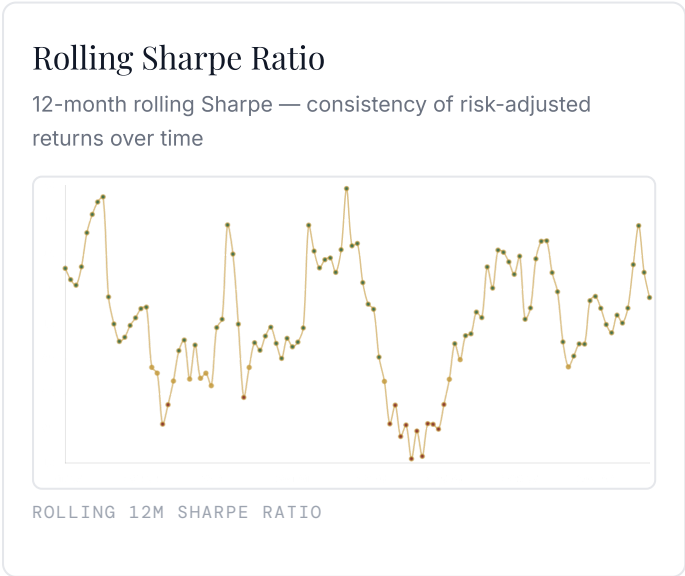
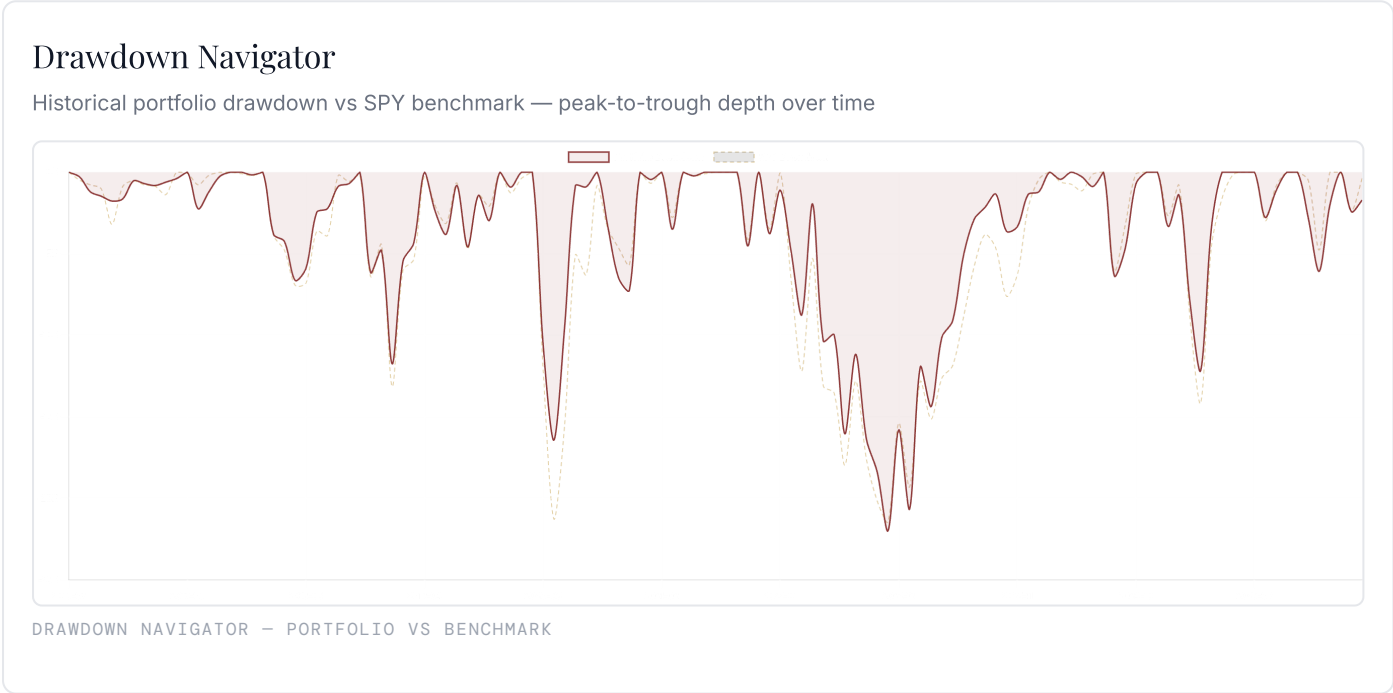




§ 4 – RISK ANALYSIS

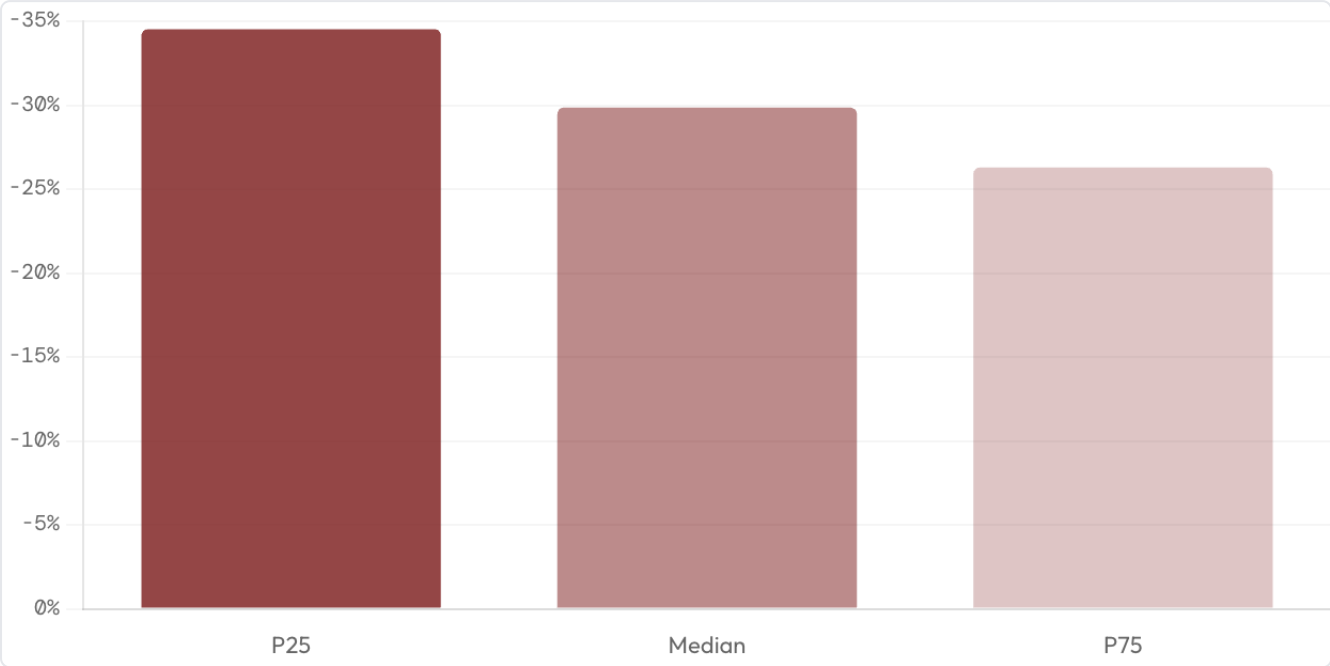
VaR, CVaR, Drawdown & Rolling Metrics

SHARPE RATIO 0.81 Return / volatility	SORTINO RATIO 1.06 Return / downside vol	CALMAR RATIO 0.57 Return / max drawdown	PORTFOLIO BETA 1.01 vs. S&P 500
VAR 95% (1M) 5.9% Monthly 5th %ile loss	CVAR 95% (1M) 7.7% Expected shortfall	MAX DD (MEDIAN) -29.9% Peak-to-trough, MC	HISTORICAL MAX DD -29.9% on 2020-03-23



Maximum Drawdown Distribution

Per-path drawdown across all 3000 MC simulations — full tail-risk profile



MC DRAWDOWN DISTRIBUTION — PER-PATH PEAK-TO-TROUGH

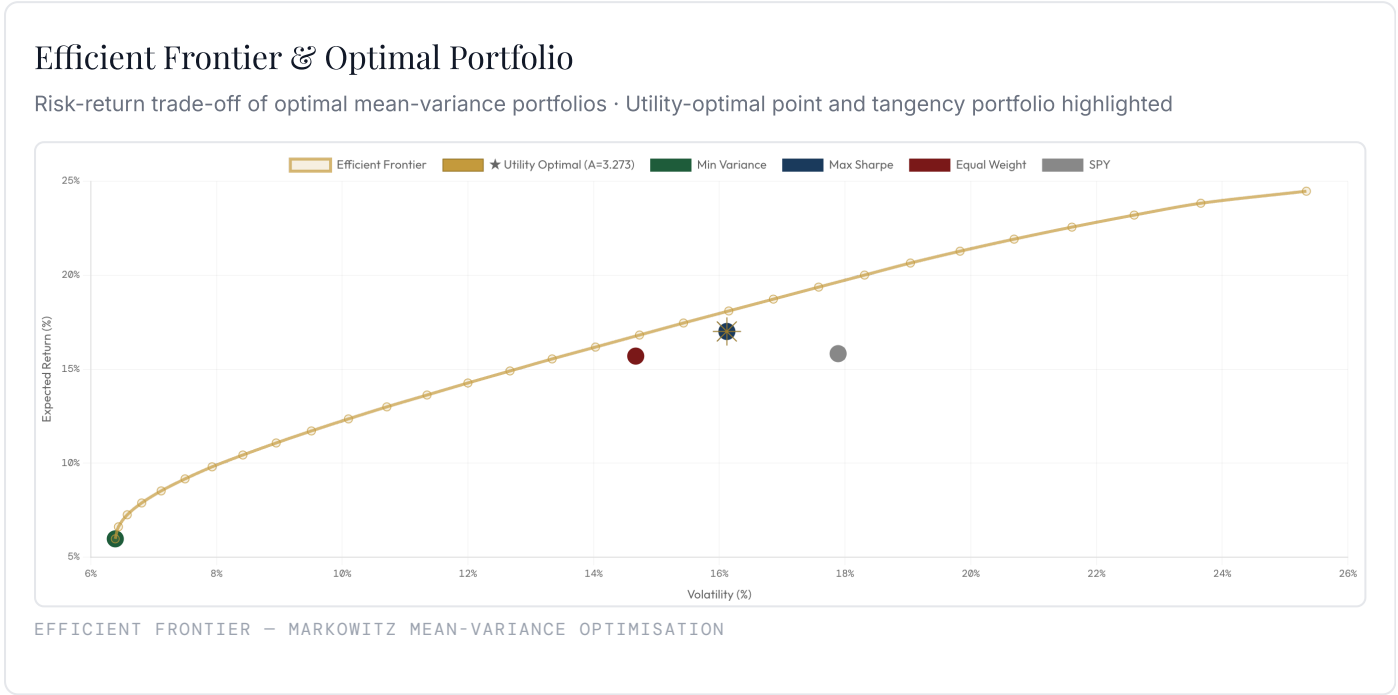
Calendar Year Returns

Annual portfolio return vs SPY benchmark — active return per year

Year	Portfolio	SPY Benchmark	Active Return
2026	+9.4%	+10.1%	-0.7%
2025	+22.6%	+17.7%	+4.8%
2024	+24.9%	+24.9%	-0.0%
2023	+34.9%	+26.2%	+8.7%
2022	-18.8%	-18.2%	-0.6%
2021	+35.4%	+28.7%	+6.7%
2020	+24.6%	+18.3%	+6.2%
2019	+35.0%	+31.2%	+3.7%
2018	-1.9%	-4.6%	+2.7%
2017	+24.5%	+21.7%	+2.8%
2016	+8.1%	+7.7%	+0.4%

§ 5 – EFFICIENT FRONTIER

MVO Optimisation & Capital Market Line



PORTFOLIO POSITION

Expected return: **17.0%** · Volatility: **16.1%** · Sharpe: **0.81**.

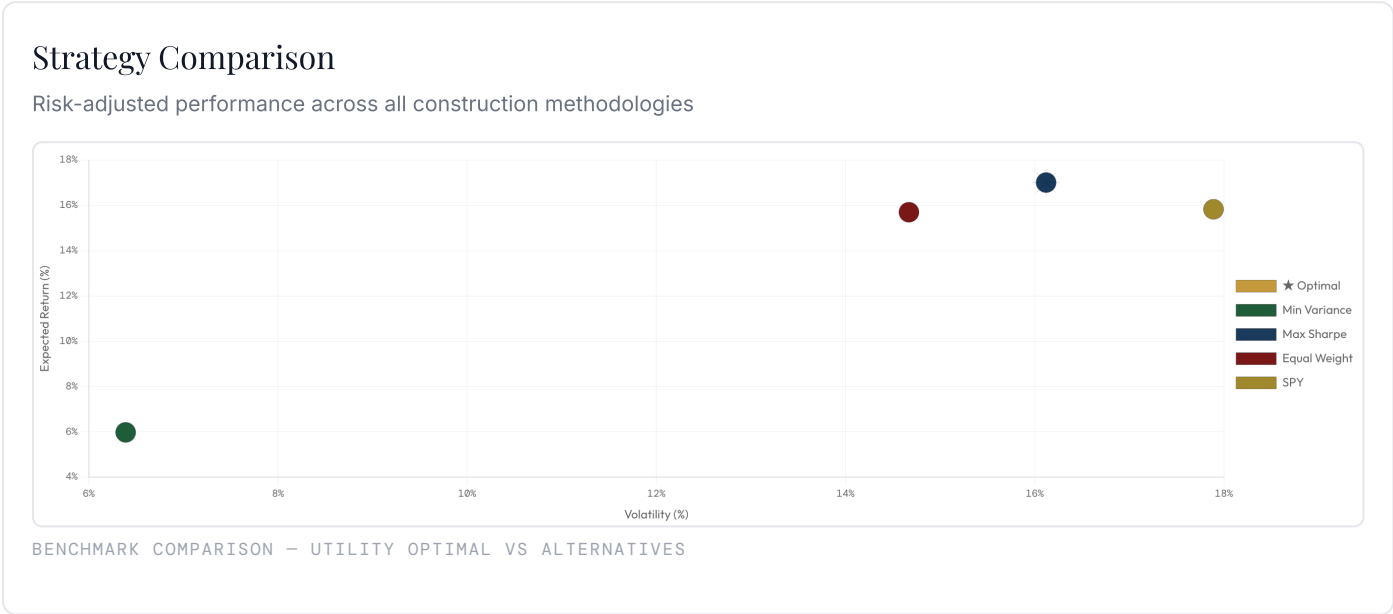
The strategic policy portfolio is plotted against the efficient frontier for reference; as a fixed-weight allocation it is not required to sit on the frontier, and any gap to it is the deliberate cost of the policy constraints (tax, liquidity, diversification).

CONSTRUCTION METHOD

Weights solved via SLSQP to maximise utility function $U = E(r) - \frac{1}{2} \cdot A \cdot \sigma^2$, subject to long-only ($w_i \geq 0$) and full-investment ($\sum w_i = 1$) constraints. Black-Litterman posterior returns used as $E(r)$ input. Ledoit-Wolf covariance as σ input.

§ 6 – BENCHMARK COMPARISON

Portfolio vs Min-Var, Equal-Weight & SPY



STRATEGIC POLICY

Expected return: **17.0%** · Vol: **16.1%** · Sharpe: **0.81**.
Adviser strategic policy allocation matched to an A=3.3 risk posture. Recommended implementation.

INTERPRETATION

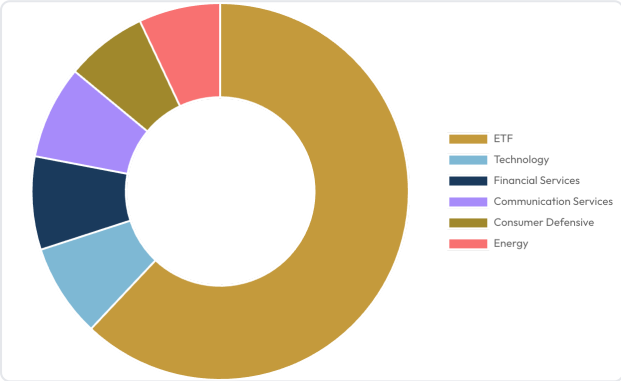
The strategic policy allocation is set by the adviser to reflect the client's objectives and constraints (income, tax, diversification), with the A=3.3 coefficient defining the risk posture. Portfolios to the left on the efficient frontier offer lower return with lower risk; portfolios to the right offer higher return with commensurately higher risk.

§ 7 – SECTOR ATTRIBUTION

GICS Sector Analysis & Brinson-Hood-Beebower Attribution

Sector Allocation

Portfolio weight by GICS economic sector · fund-level view — each ETF is shown as a single class; no look-through to the underlying sector mix



SECTOR ALLOCATION – WEIGHT BY GICS SECTOR

Beta-Adjusted Risk

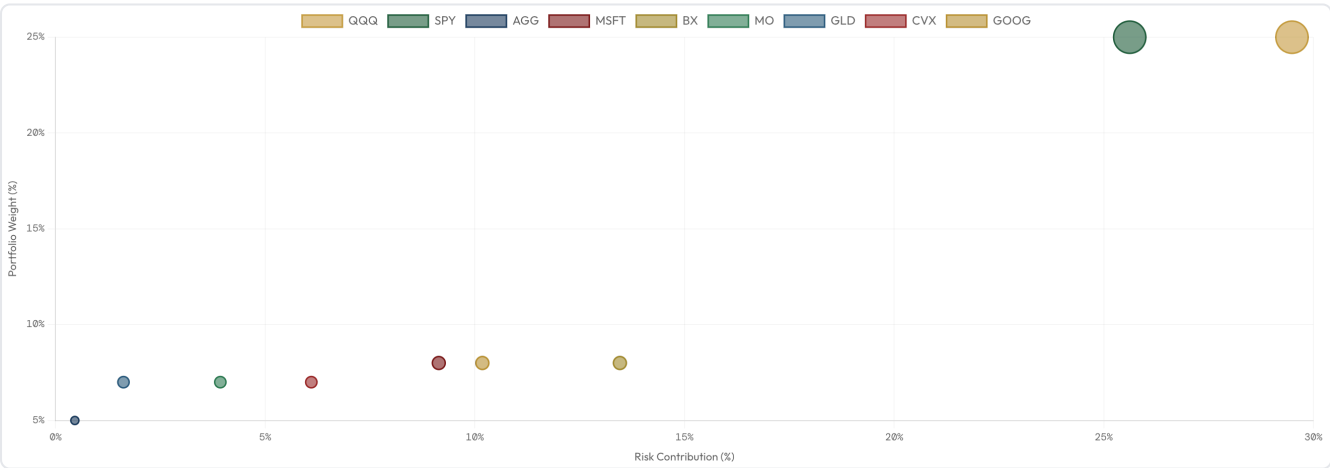
Market sensitivity × weight per holding — red = risk > allocation



BETA-ADJUSTED RISK CONTRIBUTION BY HOLDING

Weight vs. Risk Contribution

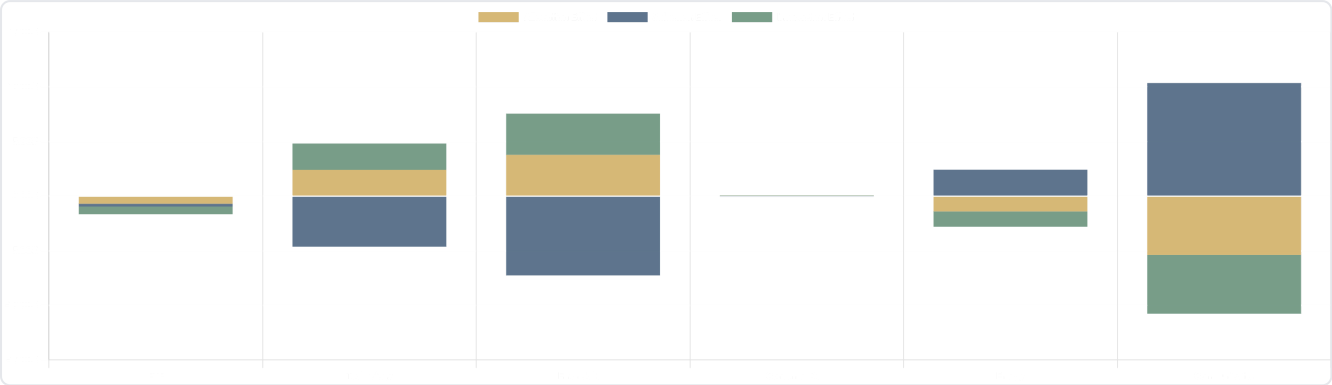
Holdings above the diagonal are risk-disproportionate — candidates for trimming



WEIGHT VS RISK CONTRIBUTION QUADRANT CHART

BHB Attribution Chart

Brinson-Hood-Beebower decomposition — allocation, selection and interaction effects vs SPY · fund-level classification; attribution is indicative only for an ETF/fund mandate



BHB ATTRIBUTION – SECTOR-LEVEL ACTIVE RETURN DECOMPOSITION

Brinson-Hood-Beebower Attribution Table

Portfolio: **19.48%** · Benchmark (SPY): **19.05%** · Active return: **+0.44%** · *fund-level sectors — indicative only*

Sector	Port Wt	Bench Wt	Selection Effect	Interaction Effect	Total Effect
ETF	62.0%	16.7%	-0.258%	-0.700%	-1.658%
Technology	8.0%	16.7%	-4.630%	+2.407%	+0.184%
Financial Services	8.0%	16.7%	-7.257%	+3.774%	+0.291%
Consumer Defensive	7.0%	16.7%	-0.068%	+0.039%	+0.010%
Energy	7.0%	16.7%	+2.417%	-1.402%	-0.387%
Communication Services	8.0%	16.7%	+10.351%	-5.382%	-0.413%
TOTAL ACTIVE RETURN			+0.555%	-1.264%	+0.44%

§ 8 – STRESS TEST ANALYSIS

Historical Crisis Scenarios & Portfolio Resilience

WORST SCENARIO

-51.0%

Global Financial Crisis ·
portfolio drawdown

BEST VS MARKET

+5.8%

vs market · Global Financial

AVG OUTPERFORMANCE

+3.4%

vs market · all 6 scenarios

PORTFOLIO BETA

1.01

Market sensitivity (β)

Historical Crisis Scenarios							
Portfolio drawdown vs market · relative performance · recovery estimate							
Scenario	Period	Portfolio DD	Market DD	vs Market	Trough Value	Recovery	Severity
1970s Stagflation	1973 – 1974	-45.4%	-48.2%	+2.8%	\$164k	88 mo.	Catastrophic
Black Monday	Aug – Dec 1987	-30.9%	-33.5%	+2.6%	\$207k	22 mo.	Severe
Dot-com Bust	Mar 2000 – Oct 2002	-44.0%	-49.1%	+5.1%	\$168k	75 mo.	Severe
Global Financial Crisis	Oct 2007 – Mar 2009	-51.0%	-56.8%	+5.8%	\$147k	58 mo.	Catastrophic
COVID-19 Crash	Feb – Mar 2020	-30.4%	-33.9%	+3.5%	\$209k	4 mo.	Severe
2022 Rate Shock	Jan – Oct 2022	-24.8%	-25.4%	+0.6%	\$226k	24 mo.	Moderate

Per-Holding Impact by Scenario

Dollar and percentage impact per position in each historical crisis scenario

1970S STAGFLATION · 1973 - 1974 · PORTFOLIO: -45.4%

Holding	Weight	Beta	Shock	Dollar Impact
BX	8.0%	1.18	-69.2%	-\$16,616
QQQ	25.0%	1.30	-58.7%	-\$44,006
MSFT	8.0%	1.27	-54.8%	-\$13,141
GOOG	8.0%	1.32	-53.5%	-\$12,837
SPY	25.0%	1.00	-48.2%	-\$36,150
CVX	7.0%	0.48	-25.0%	-\$5,248
MO	7.0%	0.21	-19.0%	-\$3,992
GLD	7.0%	0.11	-13.8%	-\$2,904
AGG	5.0%	0.00	-9.1%	-\$1,370

BLACK MONDAY · AUG - DEC 1987 · PORTFOLIO: -30.9%

Holding	Weight	Beta	Shock	Dollar Impact
BX	8.0%	1.18	-42.1%	-\$10,116
GOOG	8.0%	1.32	-41.8%	-\$10,033
QQQ	25.0%	1.30	-40.6%	-\$30,440
MSFT	8.0%	1.27	-38.7%	-\$9,295
SPY	25.0%	1.00	-33.5%	-\$25,125
CVX	7.0%	0.48	-22.4%	-\$4,711
MO	7.0%	0.21	-11.3%	-\$2,368
GLD	7.0%	0.11	-3.1%	-\$644
AGG	5.0%	0.00	+0.5%	\$75

DOT-COM BUST · MAR 2000 - OCT 2002 · PORTFOLIO: -44.0%

Holding	Weight	Beta	Shock	Dollar Impact
BX	8.0%	1.18	-64.2%	-\$15,401
GOOG	8.0%	1.32	-58.5%	-\$14,029
QQQ	25.0%	1.30	-52.7%	-\$39,516
CVX	7.0%	0.48	-49.7%	-\$10,433
SPY	25.0%	1.00	-49.1%	-\$36,825
MSFT	8.0%	1.27	-48.9%	-\$11,727
MO	7.0%	0.21	-24.3%	-\$5,108
GLD	7.0%	0.11	+1.1%	\$232
AGG	5.0%	0.00	+5.8%	\$866

GLOBAL FINANCIAL CRISIS · OCT 2007 - MAR 2009 · PORTFOLIO: -51.0%

Holding	Weight	Beta	Shock	Dollar Impact
BX	8.0%	1.18	-86.6%	-\$20,779
CVX	7.0%	0.48	-62.2%	-\$13,058
GOOG	8.0%	1.32	-57.3%	-\$13,748
SPY	25.0%	1.00	-56.8%	-\$42,600
QQQ	25.0%	1.30	-55.8%	-\$41,856
MSFT	8.0%	1.27	-49.0%	-\$11,757
MO	7.0%	0.21	-37.8%	-\$7,938
GLD	7.0%	0.11	-5.6%	-\$1,183
AGG	5.0%	0.00	-1.2%	-\$179

COVID-19 CRASH · FEB - MAR 2020 · PORTFOLIO: -30.4%

Holding	Weight	Beta	Shock	Dollar Impact
BX	8.0%	1.18	-51.9%	-\$12,449
CVX	7.0%	0.48	-37.4%	-\$7,848
GOOG	8.0%	1.32	-34.0%	-\$8,163
SPY	25.0%	1.00	-33.9%	-\$25,425
QQQ	25.0%	1.30	-33.2%	-\$24,868
MSFT	8.0%	1.27	-29.0%	-\$6,970
MO	7.0%	0.21	-22.8%	-\$4,785
GLD	7.0%	0.11	-3.4%	-\$712
AGG	5.0%	0.00	-0.8%	-\$114

2022 RATE SHOCK · JAN - OCT 2022 · PORTFOLIO: -24.8%

Holding	Weight	Beta	Shock	Dollar Impact
BX	8.0%	1.18	-41.1%	-\$9,859
QQQ	25.0%	1.30	-32.4%	-\$24,311
MSFT	8.0%	1.27	-29.8%	-\$7,160
SPY	25.0%	1.00	-25.4%	-\$19,050
GOOG	8.0%	1.32	-24.8%	-\$5,956
GLD	7.0%	0.11	-13.9%	-\$2,926
AGG	5.0%	0.00	-11.6%	-\$1,740
MO	7.0%	0.21	-10.1%	-\$2,128
CVX	7.0%	0.48	-5.6%	-\$1,173

§ 9 – FUNDAMENTALS SCORECARD

Valuation Metrics & Signal Classification per Holding

WTD AVG P/E

30.8×

Trailing P/E · rated holdings

WTD AVG FWD P/E

17.9×

Forward P/E · where available

WTD AVG BETA

1.01

Market β · rated holdings

WTD AVG DIV YIELD

1.65%

Blended income yield

Fundamentals Scorecard								
Per-holding valuation metrics · green Fwd P/E = earnings growth priced in · beta <0.7 = defensive								
Ticker	Sector	Weight	Beta	P/E	Fwd P/E	EV/EBITDA	Div Yield	Signal
QQQ	ETF	25.0%	—	30.5×	—	—	0.41%	Moderate
SPY	ETF	25.0%	—	26.9×	—	—	1.01%	Moderate
AGG	ETF	5.0%	—	124.2×	—	—	3.97%	Fixed Income
MSFT	Technology	8.0%	1.13	25.9×	20.0×	18.0×	0.78%	Fair Value
BX	Financial Services	8.0%	1.58	28.6×	17.1×	—	4.09%	Fair Value
MO	Consumer Defensive	7.0%	0.49	14.4×	11.6×	8.7×	6.21%	Value
GLD	ETF	7.0%	—	—	—	—	—	—
CVX	Energy	7.0%	0.49	18.9×	15.4×	8.5×	3.62%	Value
GOOG	Communication Serv	8.0%	1.25	17.9×	24.2×	24.6×	0.25%	Fair Value

§ 10 – RISK DECOMPOSITION

Euler Risk Attribution per Holding

Euler Risk Attribution			
Euler risk contribution vs portfolio weight — red = disproportionate risk, green = risk-efficient			
Ticker	Weight	Risk Contribution	Risk Premium vs Weight
QQQ	25.0%	29.5%	+18.0%
SPY	25.0%	25.6%	+2.5%
BX	8.0%	13.5%	+68.3%
GOOG	8.0%	10.2%	+27.2%
MSFT	8.0%	9.1%	+14.3%
CVX	7.0%	6.1%	-12.9%
MO	7.0%	3.9%	-43.9%
GLD	7.0%	1.6%	-76.9%
AGG	5.0%	0.5%	-90.8%

§ 11 – STRATEGY COMPARISON

Utility Optimal vs All Alternative Strategies

Strategy Performance Comparison

Risk-return metrics across all construction methodologies

Strategy	Exp. Return	Volatility	Sharpe	Return/Vol
Utility Optimal★	17.0%	16.1%	0.81	1.06
Min Variance	6.0%	6.4%	0.31	0.94
Max Sharpe	17.0%	16.1%	0.81	1.06
Equal Weight	15.7%	14.7%	0.80	1.07
SPY	15.8%	17.9%	0.66	0.88

Alternative Portfolio Weights

Allocation per strategy — compare vs utility optimal

MAX SHARPE — WEIGHTS

QQQ 25.0%

SPY 25.0%

AGG 5.0%

MSFT 8.0%

BX 8.0%

MO 7.0%

GLD 7.0%

CVX 7.0%

GOOG 8.0%

EQUAL WEIGHT — WEIGHTS

QQQ 11.1%

SPY 11.1%

AGG 11.1%

MSFT 11.1%

BX 11.1%

MO 11.1%

GLD 11.1%

CVX 11.1%

GOOG 11.1%

§ 12 – CONCENTRATION ANALYSIS

Diversification Metrics & Portfolio Structure

HHI SCORE

1614

Moderately Concentrated

EFFECTIVE HOLDINGS

6.2 / 9

Equiv. equal-weight N

MAX POSITION

25.0%

Largest single holding

TOP 3 CONCENTRATION

58.0%

Combined weight, top 3

Concentration Detail		
Herfindahl-Hirschman Index analysis · effective number of holdings · top-N concentration		
Metric	Value	Interpretation
HHI (×10,000)	1614	Moderately Concentrated — below 1,000 = well diversified; 1,000–1,800 = moderate; above 1,800 = concentrated
Effective N	6.2 of 9	Portfolio behaves like 6.2 equal-weight holdings. Higher = more diversified.
Max Position	25.0%	Largest single holding by weight.
Top 3 Weight	58.0%	Within normal range for concentrated-growth mandates.
Top 5 Weight	74.0%	Moderate top-5 concentration.
Top 10 Weight	100.0%	Concentration in largest decile of holdings.
Total Holdings	9	Moderate breadth.

Investment Analysis & Adviser Letter · Anton Ladnyi, CFA

AL

Anton Ladnyi, CFA

SENIOR INVESTMENT ADVISOR · A.L. CAPITAL ADVISORY

GOLDMAN SACHS · J.P. MORGAN · CFA CHARTERHOLDER

PREPARED EXCLUSIVELY FOR

Sergio L

02 August 2026

RETURN

17.0%

B-L Posterior

VOLATILITY

16.1%

Annualised

SHARPE

0.81

Risk-Adj.

GOAL PROB.

44.4%

MC · 3000 paths

MEDIAN

\$43.80M

Terminal Wealth

VAR 95%

5.9%

Monthly

Dear Sergio L,

The current assessment of your investment mandate covers a comprehensive review of your risk profile, a Monte Carlo simulation based on 3000 iterations over a 30-year horizon, performance attribution, and concentration diagnostics as of 02 August 2026. This analysis evaluates your accumulation strategy, which began with an initial investment of \$300,000 supplemented by \$1,000 in monthly contributions, to determine the alignment between your current positioning and your long-term wealth objectives.

◆ PORTFOLIO OVERVIEW

: Your risk aversion coefficient of 3.3 indicates a growth-oriented mandate that prioritizes capital appreciation while maintaining a tolerance for market fluctuations. The portfolio is structured with 62.0% in ETFs, 8.0% in Technology, 8.0% in Financial Services, 8.0% in Communication Services, 7.0% in Consumer Defensive, and 7.0% in Energy. The overall health score of 56.6 out of 100 reflects a moderate standing, derived from a risk-adjusted return score of 10.8 out of 20, a drawdown profile of 5.8 out of 20, a goal probability of 8.1 out of 20, a concentration risk score of 17.4 out of 20, and a diversification score of 14.5 out of 20. Concentration risk is notably influenced by the divergence between weight and risk contribution, specifically in QQQ, which holds a 25.0% weight but contributes 29.49% to total risk, SPY, which holds a 25.0% weight and contributes 25.62% to risk, and BX, which holds an 8.0% weight and contributes 13.46% to risk.

PORTFOLIO VITALS

17.0%

EXPECTED RETURN

16.1%

VOLATILITY

3.3

RISK AVERSION (A)

⚡ RISK & DRAWDOWN PROFILE

: The portfolio exhibits a Sharpe ratio of 0.810, a Sortino ratio of 1.060, and a Calmar ratio of 0.570, suggesting that while the portfolio generates returns above the risk-free rate, the compensation for downside volatility and maximum drawdown exposure remains a focal point for optimization. The 1-month VaR 95% of 5.91% indicates that in a worst-case monthly scenario, you should expect a potential loss of at least this magnitude. Your historical maximum drawdown of -29.9% occurred on 2020-03-23. The Monte Carlo median maximum drawdown of -29.9% suggests that you must remain prepared for significant cyclical volatility over your 30-year horizon, as this figure represents the expected peak-to-trough decline during market stress.

RISK METRICS

0.81

SHARPE RATIO

5.9%

VAR 95% (1M)

-29.9%

MAX DD (MEDIAN)

↗ LONG-TERM OUTLOOK

: The 3000-simulation Monte Carlo model projects a median terminal wealth of \$43.80M, with a P5 stress scenario of \$10.59M and a P95 upside scenario of \$185.45M. The median IRR is 17.2%, with an expected return of 17.01% p.a. and an expected volatility of 16.12% p.a. You currently have a 44.4% probability of hitting your \$50.0M target. This implies that there is a 55.6% probability of missing the target, which necessitates a disciplined adherence to your monthly contribution schedule and periodic rebalancing to mitigate the impact of volatility on your terminal wealth.

30-YEAR OUTLOOK

\$43.80M

MEDIAN TERMINAL

44.4%

GOAL PROBABILITY

\$185.45M

P95 UPSIDE

● PERFORMANCE ATTRIBUTION

: Your active return vs SPY is +0.44%, resulting from an allocation effect of -1.264%, a selection effect of +0.555%, and an interaction effect of -1.264%. Your portfolio return was +19.48% compared to the SPY return of +19.05%. Calendar year returns show 2026 at +9.45% vs SPY +10.13%, 2025 at +22.57% vs SPY +17.72%, 2024 at +24.88% vs SPY +24.89%, and 2023 at +34.86% vs SPY +26.18%. The dominant alpha drivers have been your selection decisions, which consistently outperformed the benchmark, though these gains were partially offset by the drag from allocation and interaction effects.

⚡ KEY RISKS & RECOMMENDATIONS

: The primary risks to your portfolio include the high concentration in QQQ at 25.0% weight and 29.49% risk contribution, the significant risk contribution of BX at 13.46% despite an 8.0% weight, and the overall 55.6% probability of failing to reach your \$50.0M target. To address these, I recommend first rebalancing the QQQ position to reduce its risk contribution below its weight percentage. Second, I advise reviewing the BX allocation to ensure it aligns with your long-term volatility constraints. Third, I suggest increasing your monthly contribution amount to improve the 44.4% probability of hitting your \$50.0M target.

I am available to discuss these findings and the necessary adjustments to your strategy at your earliest convenience.

RISK METRICS

0.81

SHARPE RATIO

5.9%

VAR 95% (1M)

-29.9%

MAX DD (MEDIAN)

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APPENDIX A – METHODOLOGY

Quantitative Framework & Model Descriptions

BLACK-LITTERMAN MODEL

Posterior expected returns derived using the B-L Bayesian framework, combining CAPM equilibrium market returns with forward-looking views. Blending parameter τ controls confidence in views vs. equilibrium. Produces more stable, better-diversified return vectors than pure historical means.

LEDOIT-WOLF COVARIANCE

Sample covariance regularised using Ledoit-Wolf analytical shrinkage. Reduces matrix condition number and eliminates the extreme eigenvalue problem that causes MVO to produce unstable, concentrated portfolios — especially with small samples.

MEAN-VARIANCE OPTIMISATION

Weights solved via SLSQP to maximise $U = E(r) - \frac{1}{2} \cdot A \cdot \sigma^2$ subject to $w_i \geq 0$ (long-only) and $\sum w_i = 1$ (fully invested). Black-Litterman returns and Ledoit-Wolf covariance as inputs. Solution is unique given A.

MONTE CARLO SIMULATION

3000 GBM paths over 30 years using optimised μ and σ . Each path compounds monthly with stated contributions. Terminal wealth distribution and goal achievement probability derived from full path ensemble. Fat tails and regime changes are NOT modelled.

VAR & CVAR (BASEL III)

Value-at-Risk (95%) = loss threshold exceeded in 5% of scenarios. CVaR / Expected Shortfall = average of worst 5% outcomes. Both computed from the full MC distribution (not parametric approximations), consistent with Basel III framework.

EULER RISK DECOMPOSITION

Marginal Contribution to Total Risk: $MCTR_i = \partial \sigma_p / \partial w_i$. Component attribution: $\rho_i = w_i \times MCTR_i$. By construction $\sum \rho_i = \sigma_p^2$. Enables precise identification of marginal risk impact per position.

SHARPE, SORTINO & CALMAR

Sharpe = $(E(r) - rf) / \sigma$. Sortino = $(E(r) - rf) / \sigma_{\text{downside}}$ (uses only negative deviations). Calmar = $E(r) / |\text{max_drawdown}|$. All ratios use annualised figures. Higher = better risk-adjusted return; Sortino penalises downside risk only.

HHI CONCENTRATION INDEX

Herfindahl-Hirschman Index = $\sum (w_i)^2 \times 10,000$. Pure cash = 10,000. Perfect equal weight $N=10 \rightarrow HHI=1,000$. Effective $N = 1 / \sum w_i^2$ = the number of equal-weight holdings that would produce the same HHI. A lower HHI and higher effective N indicate better diversification.

Risk Disclosure & Legal Notice: This Investment Policy Statement is prepared exclusively for the named client and contains proprietary quantitative analysis. All projections are probabilistic estimates, not guarantees. Monte Carlo simulations assume log-normal returns and constant volatility — they do not model fat-tail events, liquidity crises, regime changes, or correlation breakdown. Past performance is not indicative of future results. This document does not constitute regulated financial advice under MiFID II or any other regulatory framework. The client is encouraged to seek independent legal and tax counsel before implementing any strategy. © 2026 A.L. Capital Advisory. Reproduction prohibited without written consent. REF: ALC-IPS-20260802