

Portfolio Optimization Solutions

Core Service Offering:

Provide clients with bespoke portfolio optimization based on their investment universe and constraints.

Deliverable:

A detailed report on optimized allocations, the efficient frontier, and risk-adjusted return estimates.

Alternative Optimization Techniques:

- ✓ Mean-Variance Optimization (MVO)
- ✓ Black-Litterman Model
- ✓ Risk Parity
- ✓ Conditional Value-at-Risk (CVaR) Optimization
- ✓ Mean-Conditional Value-at-Risk (Mean-CVaR)
- ✓ Monte Carlo Simulation
- ✓ Factor-Based Optimization
- ✓ Hierarchical Risk Parity (HRP)
- ✓ Bayesian Optimization
- ✓ Equal Risk Contribution (ERC)
- ✓ Liability-Driven Investment (LDI) Optimization

Customization Options:

- Adjust input data (historical vs. forward-looking returns, volatilities, and correlations).
- Modify constraints (e.g., asset exclusions, max/min allocations).
- Integrate client-specific risk tolerance, preferences, or ethical screening.



RISK MITIGATION STRATEGIES

- Hedging strategies (e.g., FX hedging or options overlays)
- Adjust allocations for less-correlated assets to cushion against volatility



DATA & TECHNOLOGY INTEGRATION

- Full automation solution that clients can deploy internally, with regular maintenance/support options.



Service Offering	Tier 1	Tier 2	Tier 3	Tier 4
	\$	\$\$	\$\$\$	\$\$\$ \$
Initial Assessment & Data Collection	✓	✓	✓	✓
Data Engineering		✓	✓	✓
Optimization Model Development	✓	✓	✓	✓
Automation & Visualization		✓	✓	✓
Advanced Scenario Testing			✓	✓
Stress Testing (Tail Risks)			✓	✓
Fully Automated Data Pipeline			✓	✓
Customized Reporting & Visualization			✓	✓
Process Documentation (Python/R)				✓
Ongoing Monitoring & Rebalancing				*

FLEXIBLE ENGAGEMENT OPTIONS

**PROJECT
BASED MODEL**

(PREFERRED)

**DEDICATED
STAFF MODEL**

(STEADY
WORKFLOW)

**BLOCK OF
HOURS MODEL**

(VARIABLE
WORKFLOW)



QUANDOYEN
Bespoke Quantitative Expertise

info@quandoyen.com