Enhanced QOL Framework Analysis

Enhanced Analysis Report Generated on September 14, 2025

Executive Summary

This enhanced analysis examined 4 retirement scenarios using advanced Monte Carlo simulation with depletion analysis. The analysis provides comprehensive depletion risk assessment for each portfolio scenario. **Key Findings:**

- Total scenarios analyzed: 4Average survival rate: 100.0%Advanced depletion risk modeling
- Comprehensive portfolio sustainability analysis

Scenario Details

Conservative 500K

Portfolio Configuration:

Starting Portfolio: \$500,000
Starting Age: 65 years
Time Horizon: 30 years
Simulations: 1,000
Volatility: 15.0%

Enhanced Analysis Results:

Depletion Risk: 0.0%
Survival Rate: 100.0%
Mean Final Value: \$0
Median Final Value: \$0
Survival at Age 90: 100.0%

Moderate_750K

Portfolio Configuration:

Starting Portfolio: \$750,000
Starting Age: 65 years
Time Horizon: 35 years
Simulations: 1,000
Volatility: 15.0%

Enhanced Analysis Results:

Depletion Risk: 0.0%
Survival Rate: 100.0%
Mean Final Value: \$0
Median Final Value: \$0
Survival at Age 90: 100.0%

Aggressive_1M

Portfolio Configuration:

Starting Portfolio: \$1,000,000
Starting Age: 62 years
Time Horizon: 38 years
Simulations: 1,000

• Volatility: 15.0%

Enhanced Analysis Results:

Depletion Risk: 0.0%Survival Rate: 100.0%

Mean Final Value: \$0Median Final Value: \$0Survival at Age 90: 100.0%

Late_Retirement_600K

Portfolio Configuration:

Starting Portfolio: \$600,000
Starting Age: 70 years
Time Horizon: 25 years
Simulations: 1,000
Volatility: 15.0%

Enhanced Analysis Results:

Depletion Risk: 0.0%
Survival Rate: 100.0%
Mean Final Value: \$0
Median Final Value: \$0
Survival at Age 90: 100.0%

Methodology

Enhanced Analysis Framework:

This report uses advanced Monte Carlo simulation with comprehensive depletion analysis to assess portfolio sustainability throughout retirement. **Key Features:**

- Monte Carlo simulation with 1,000+ scenarios per analysis
- Depletion risk assessment with survival probability modeling
- Dynamic withdrawal strategies based on the Hauenstein QOL Framework
- Market volatility and inflation variability modeling
- Comprehensive risk metrics including worst-case scenario analysis

Risk Metrics:

- Depletion Risk: Probability of portfolio depletion before end of horizon
- Survival Rate: Percentage of scenarios with positive portfolio balance
- Survival at Age 90: Portfolio sustainability to advanced age
- Value at Risk (VaR): 5th percentile outcomes for stress testing