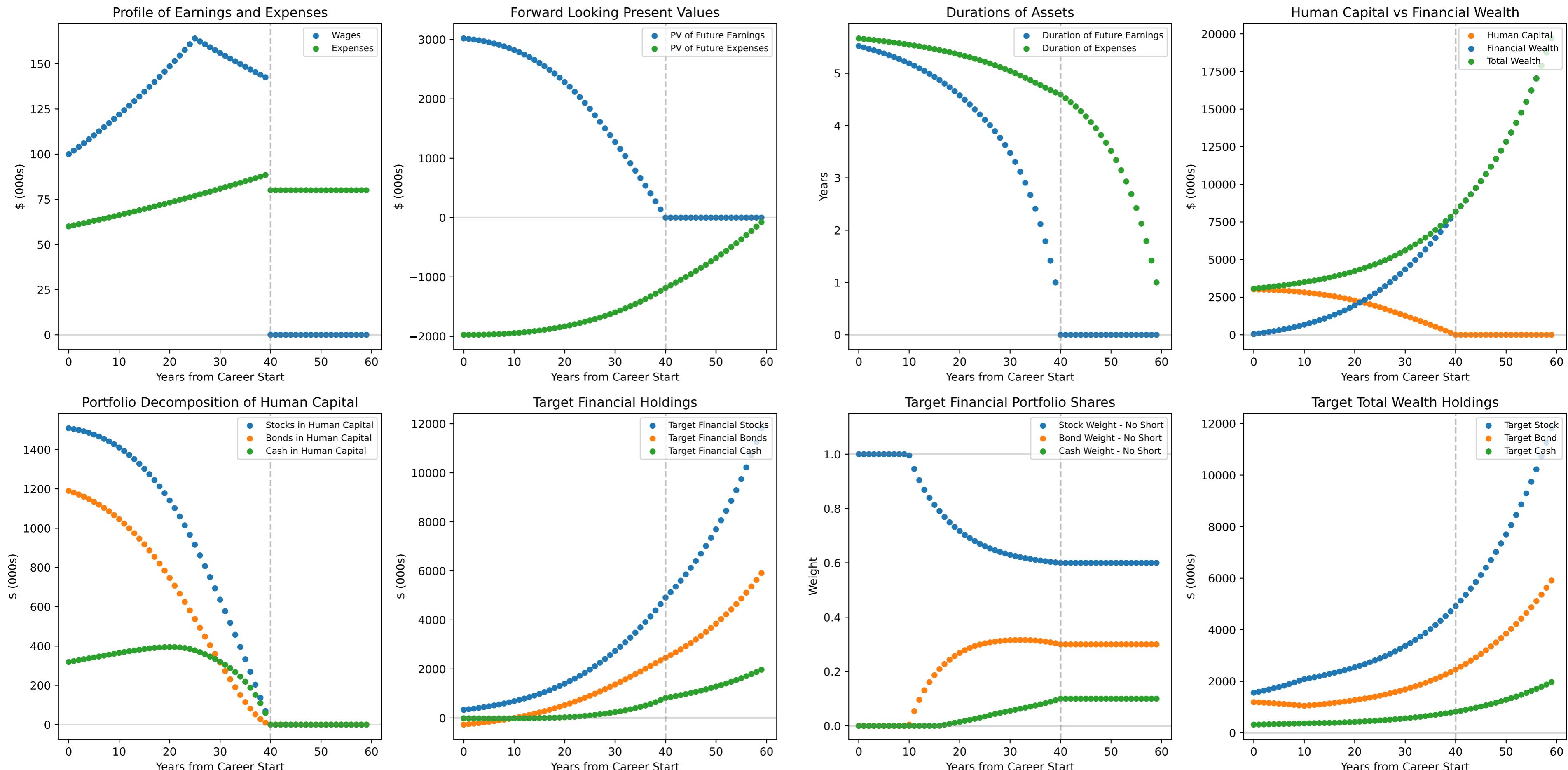
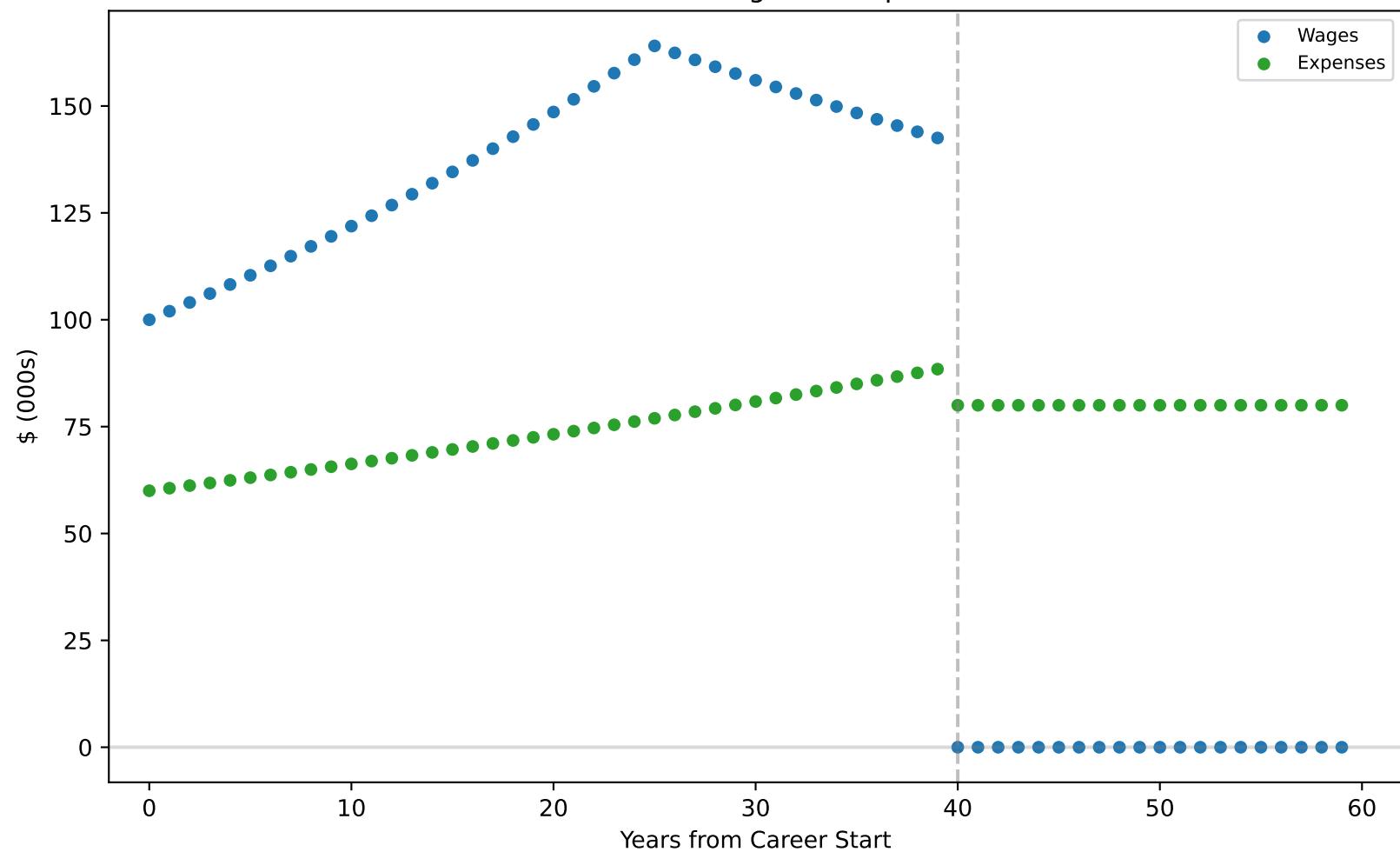


# Lifecycle Investment Strategy - Median Path Analysis



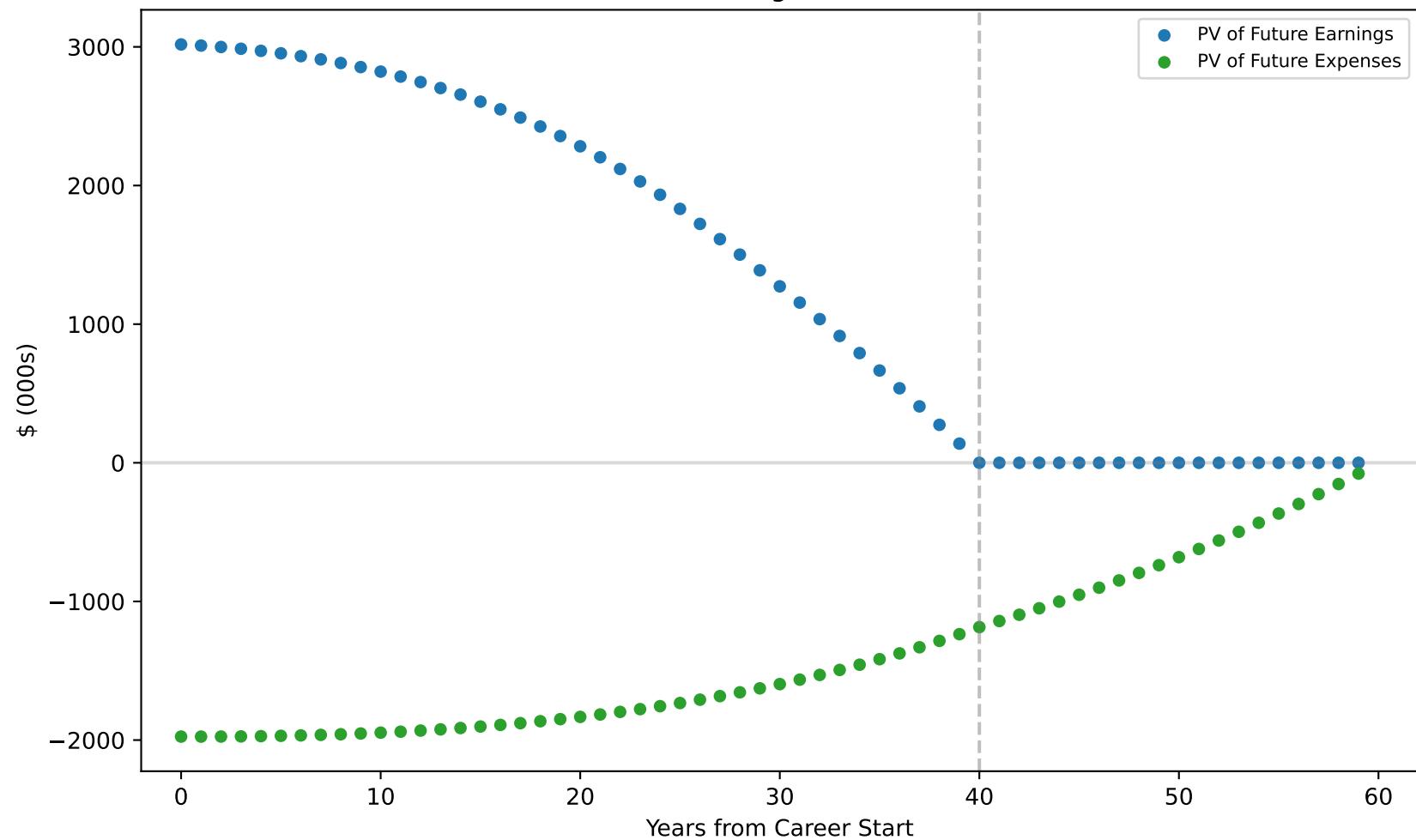
# Earnings and Expenses Profile

## Profile of Earnings and Expenses



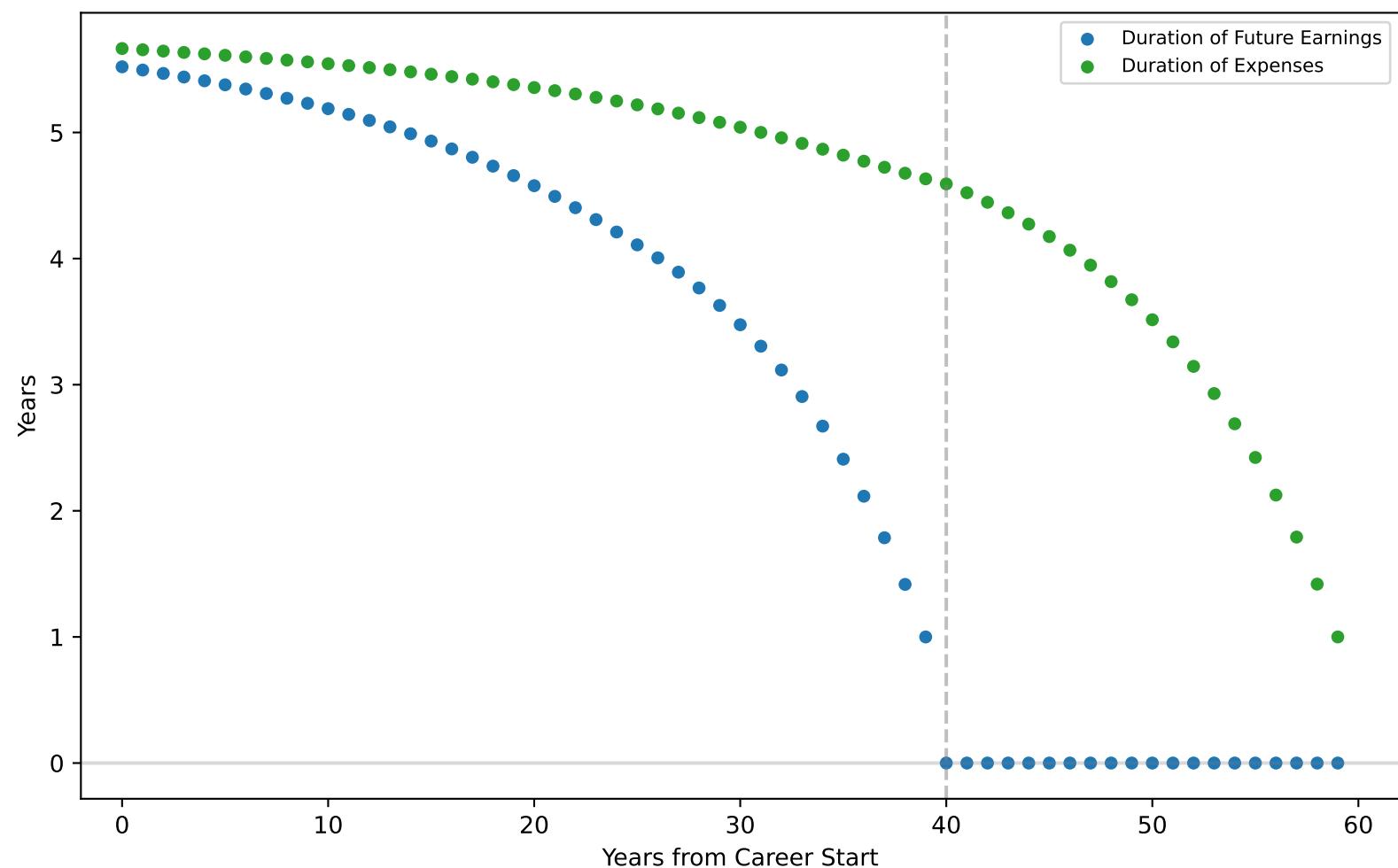
# Forward Looking Present Values

## Forward Looking Present Values



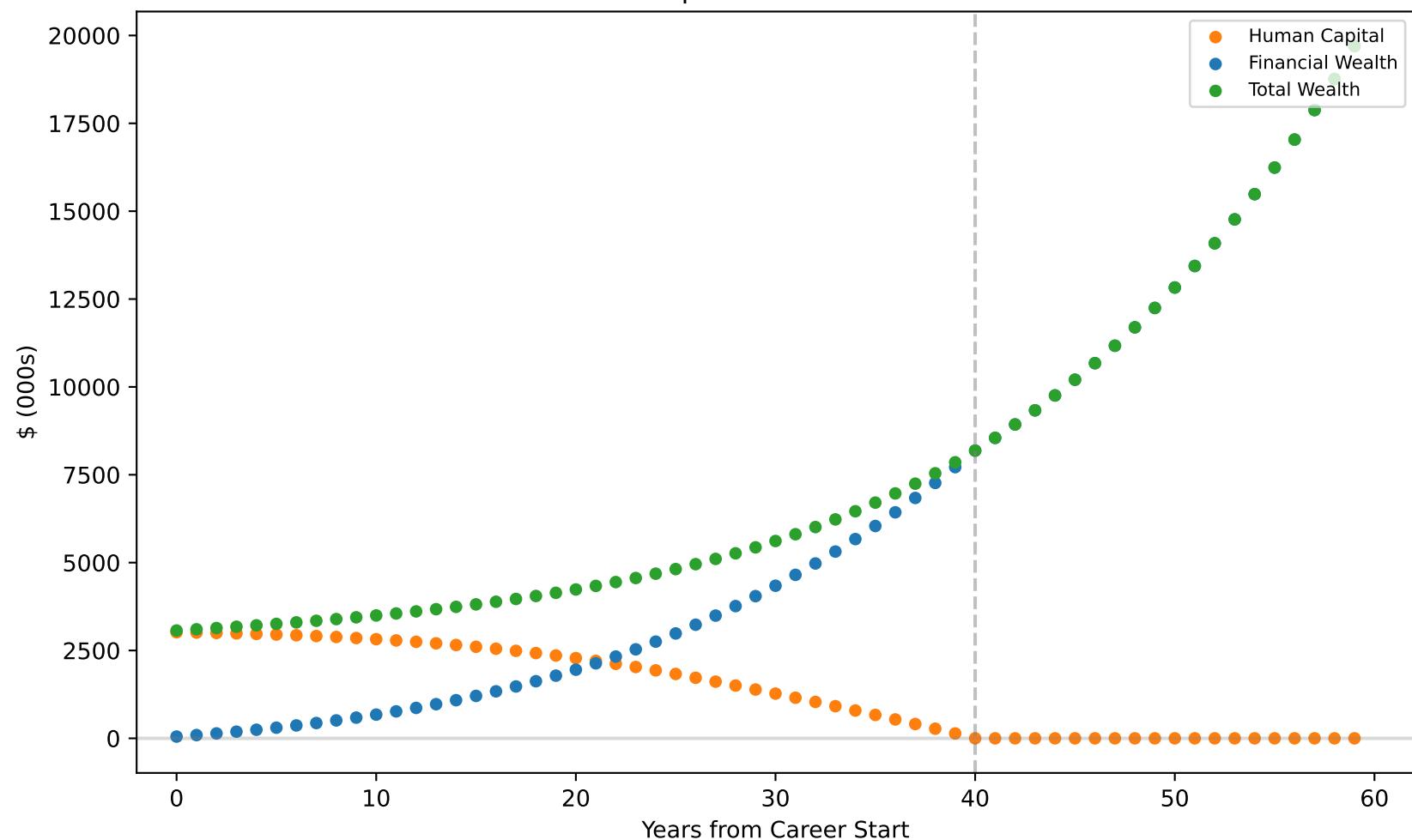
# Durations of Assets

## Durations of Assets



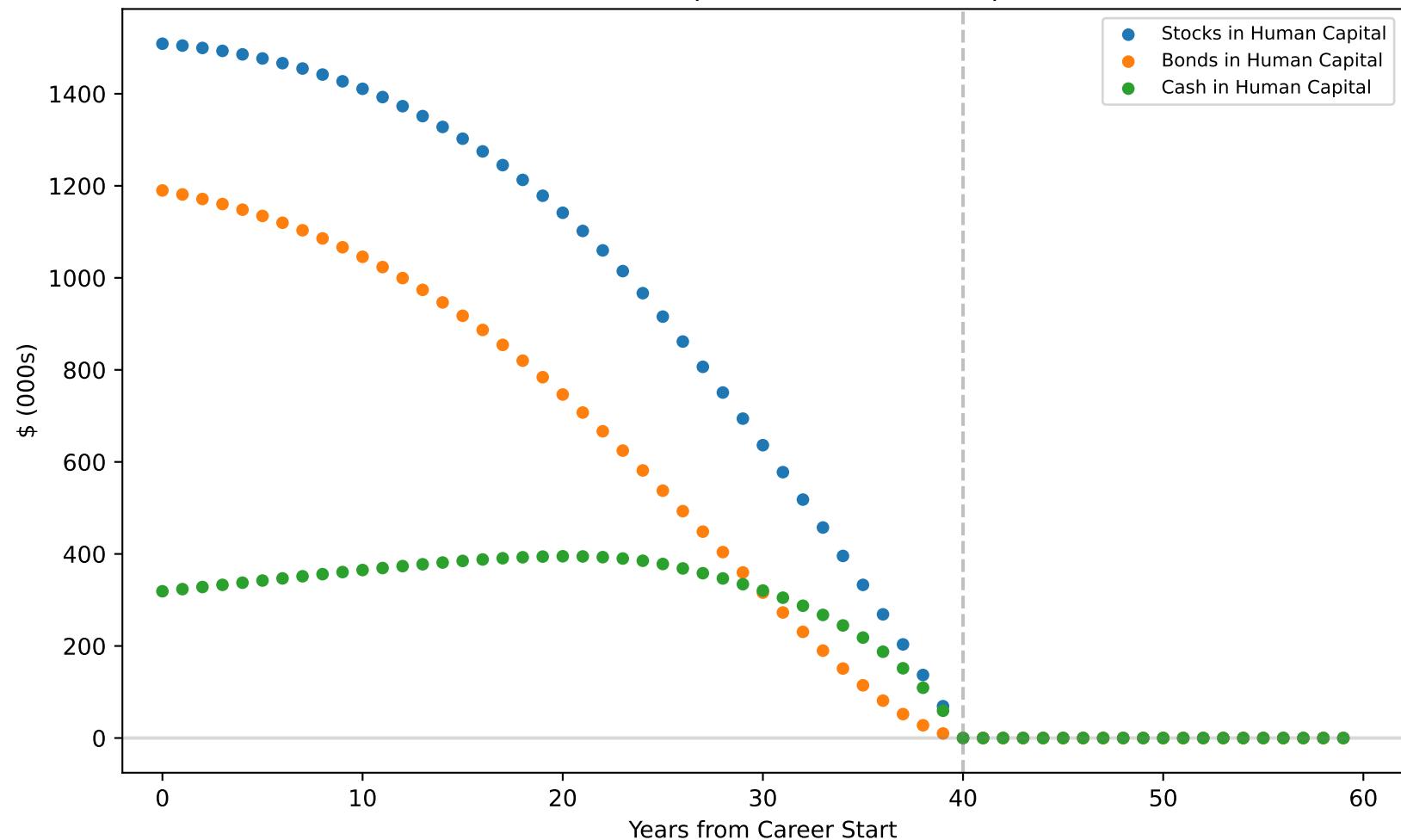
# Human Capital vs Financial Wealth

Human Capital vs Financial Wealth



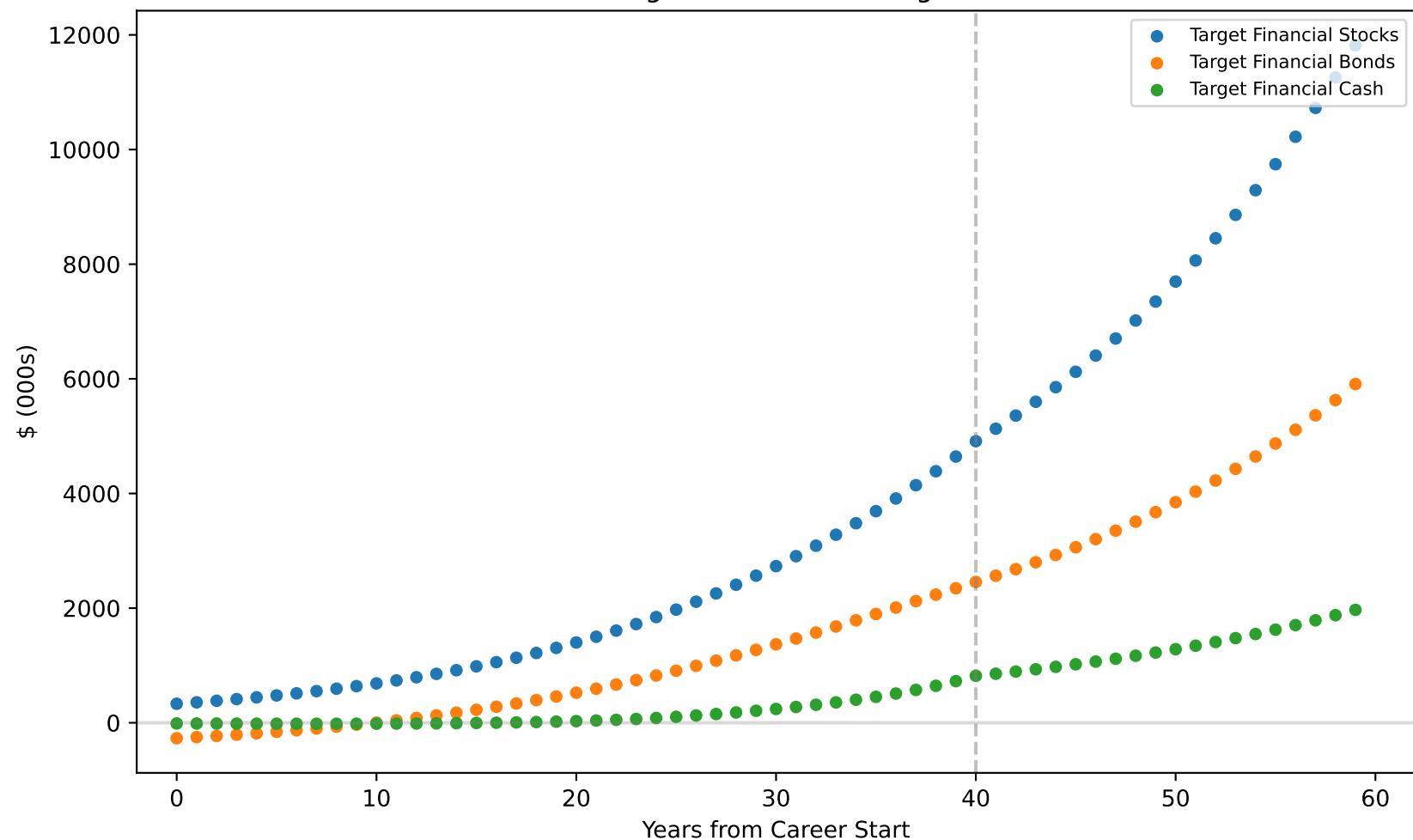
# Portfolio Decomposition of Human Capital

## Portfolio Decomposition of Human Capital



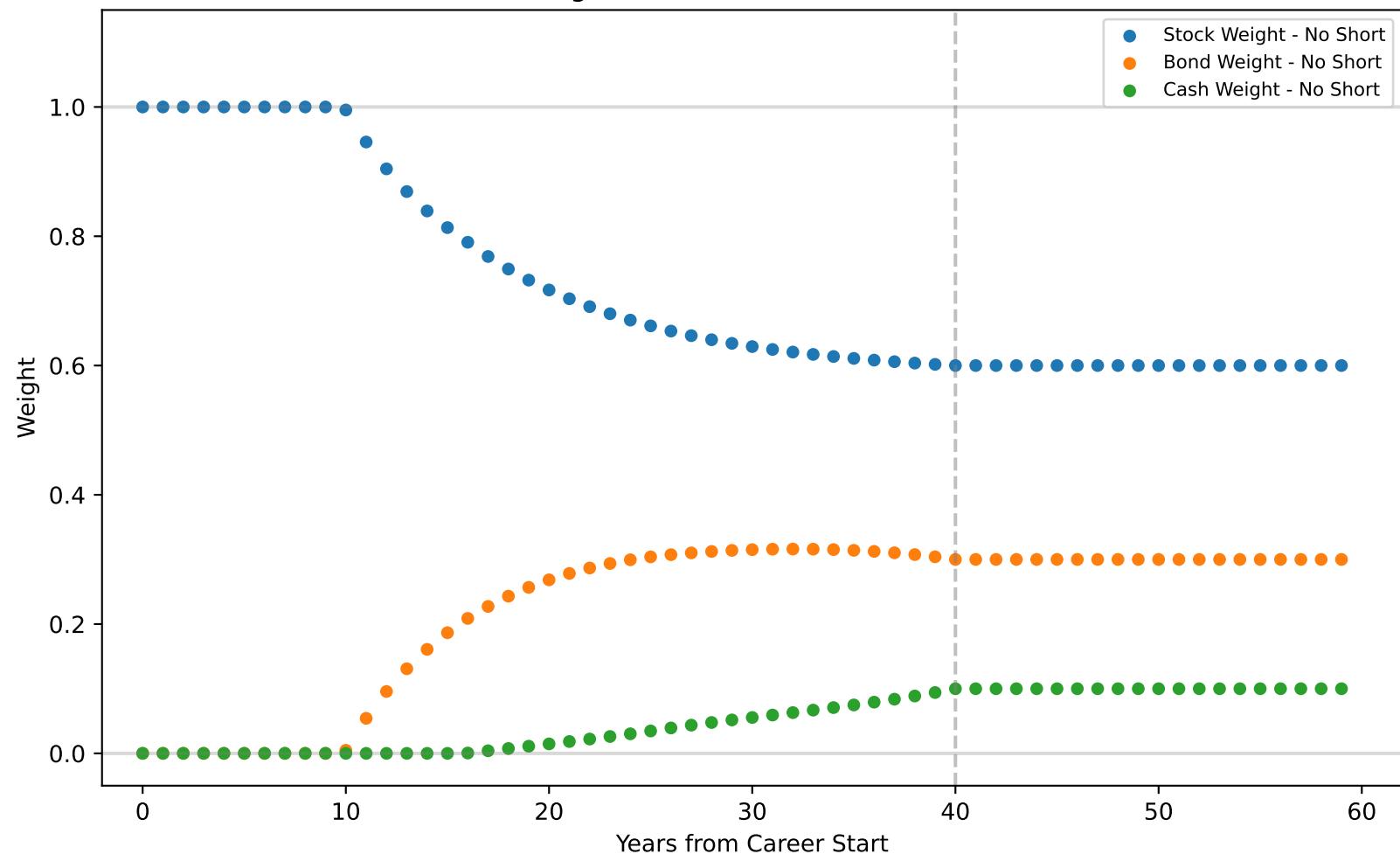
# Target Financial Holdings

## Target Financial Holdings



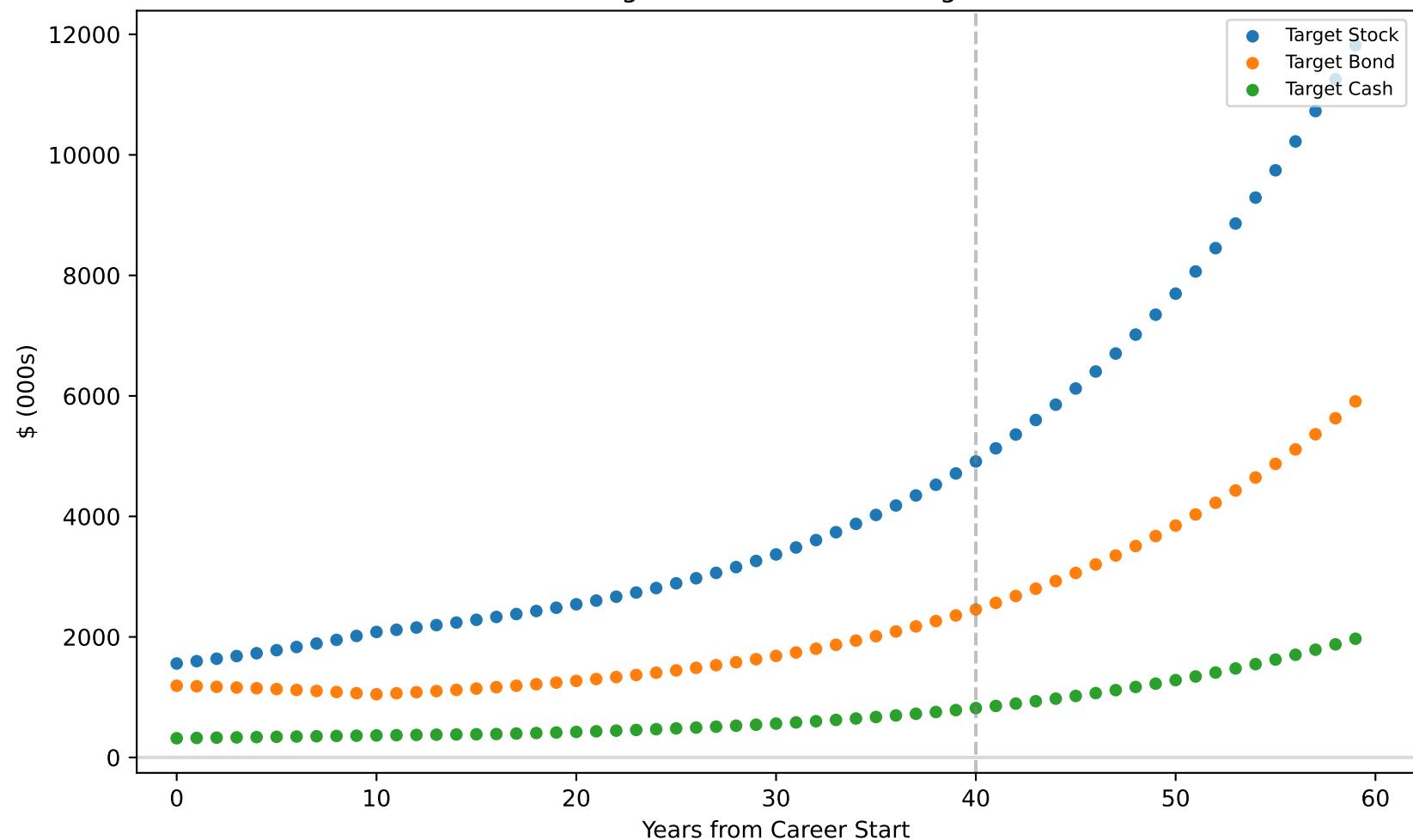
# Target Financial Portfolio Shares

## Target Financial Portfolio Shares



# Target Total Wealth Holdings

## Target Total Wealth Holdings



## Lifecycle Investment Strategy Parameters

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### Age Parameters:

- Career Start: 25
- Retirement Age: 65
- Planning Horizon: 85

### Income Parameters:

- Initial Earnings: \$100k
- Earnings Growth: 2.0%
- Peak Earnings Age: 50

### Expense Parameters:

- Base Expenses: \$60k
- Retirement Expenses: \$80k

### Human Capital Allocation:

- Stock Beta: 0.50
- Bond Duration Benchmark: 7.0 years
- Non-stock portion allocated to bonds/cash based on HC duration

### Target Total Wealth Allocation:

- Stocks: 60%
- Bonds: 30%
- Cash: 10%

### Economic Parameters:

- Risk-Free Rate: 3.0%
- Equity Risk Premium: 4.0%
- Rate Persistence (phi): 0.85

### Key Insights:

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1. Human capital is decomposed using stock beta for equity exposure and duration for fixed income allocation.
2. Stock component = HC \* stock\_beta (market correlation).
3. Non-stock portion allocated between bonds/cash based on duration: higher duration = more bond-like exposure.
4. As HC duration shortens near retirement, more of the non-stock portion shifts from bonds to cash.
5. This approach captures both market risk (via beta) and interest rate risk (via duration) in human capital.