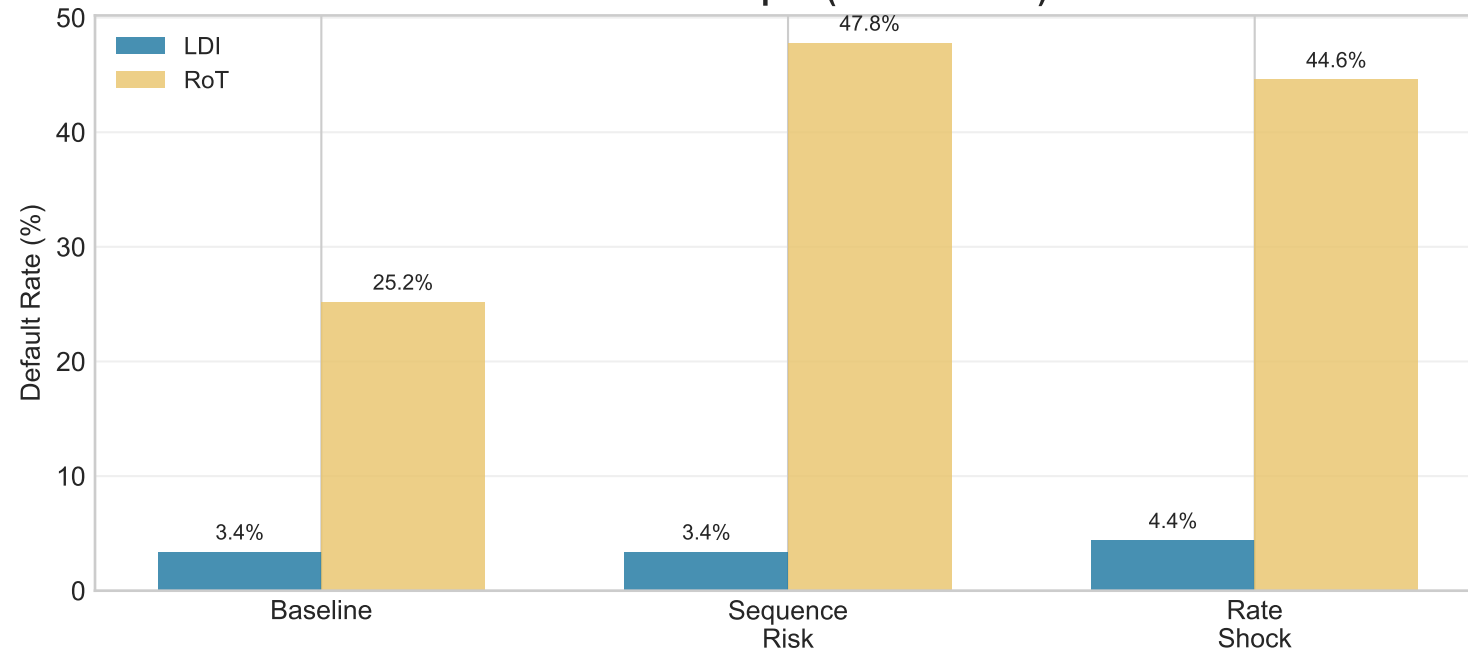
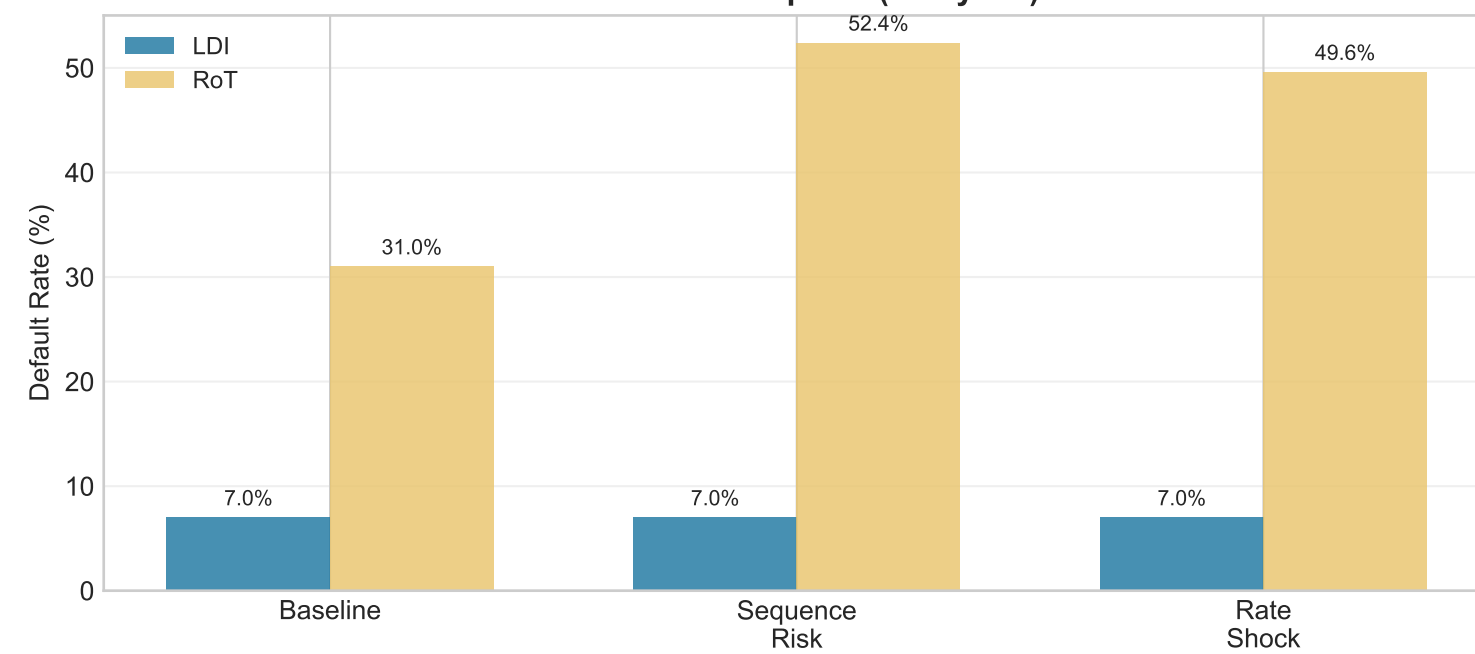


# LDI vs Rule-of-Thumb: Strategy Comparison Across Scenarios

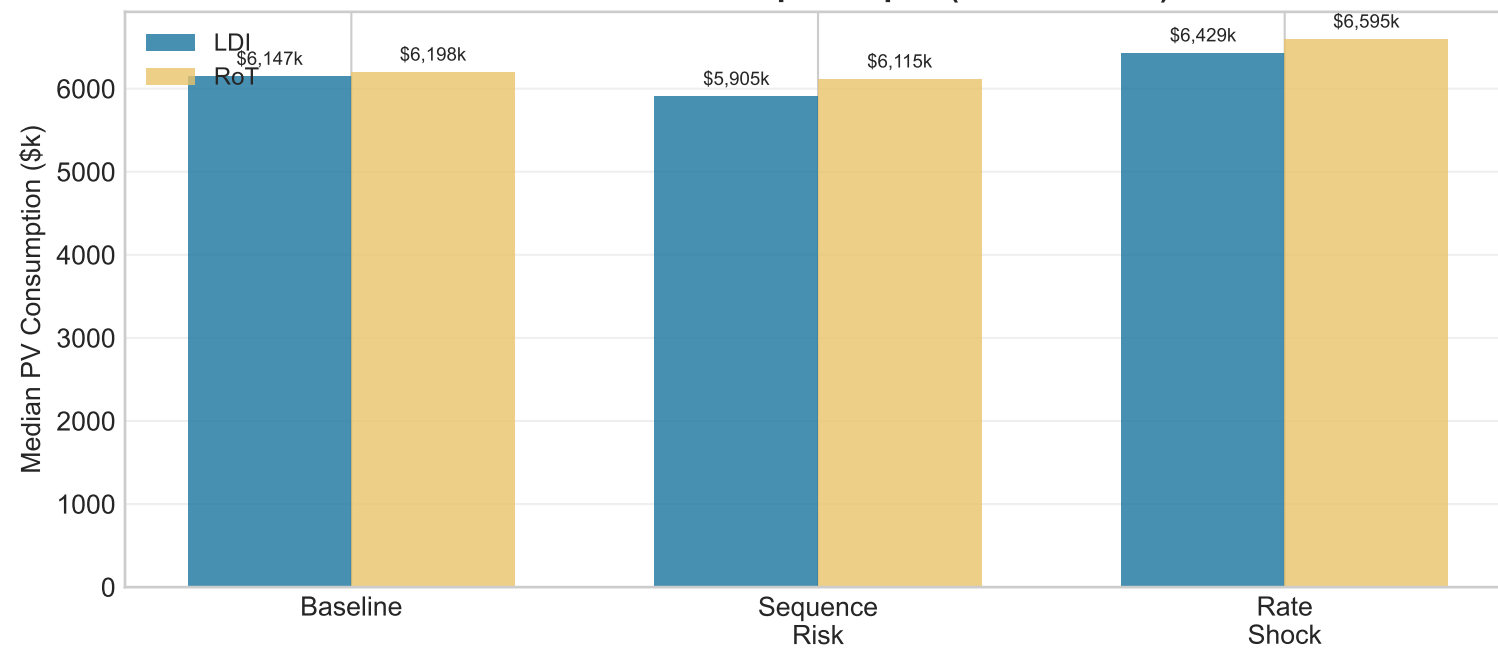
## Default Rates - $\beta=0$ (Bond-like HC)



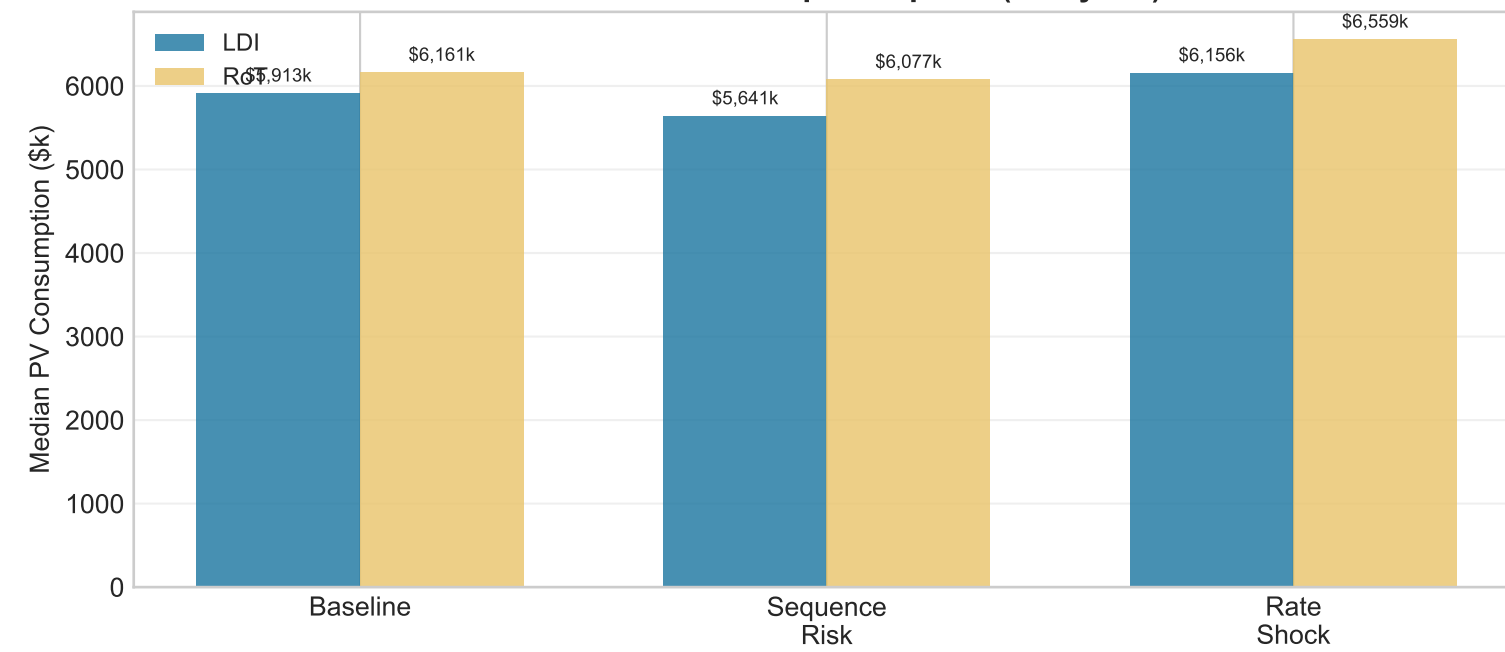
## Default Rates - $\beta=0.4$ (Risky HC)



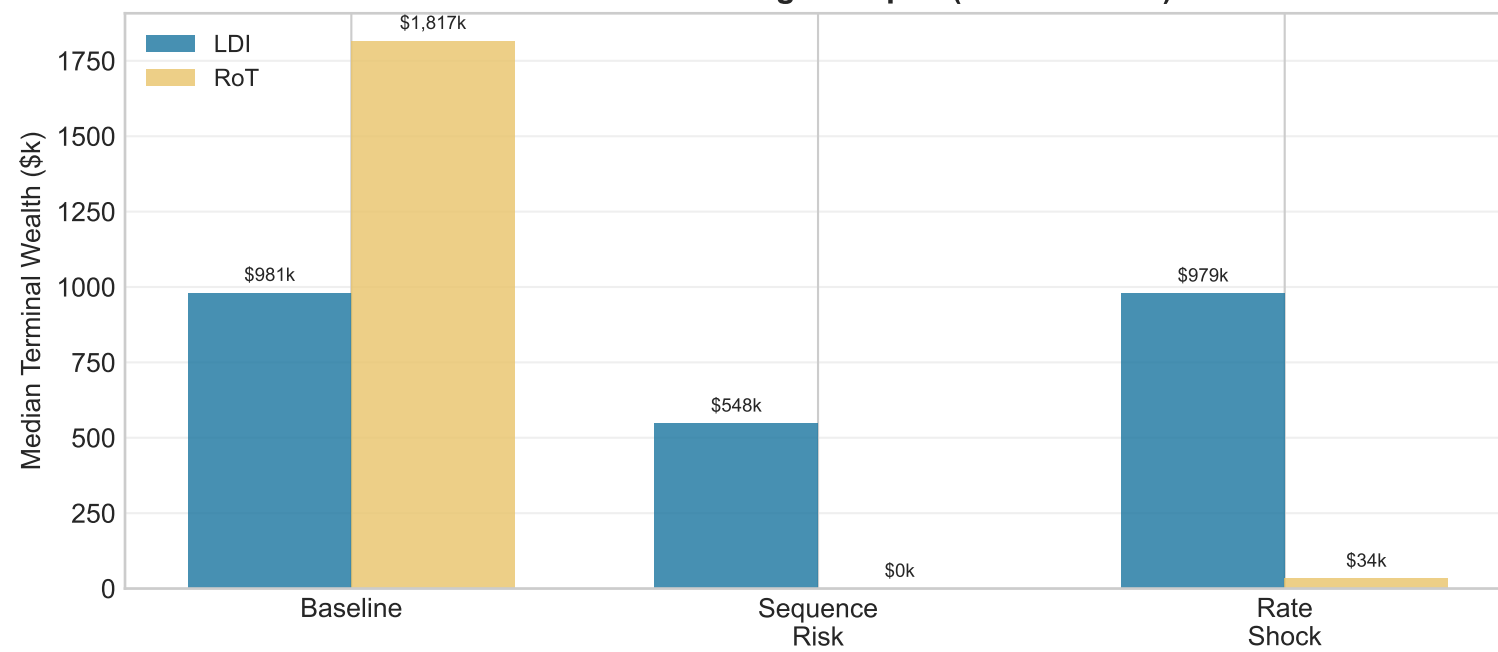
## PV Lifetime Consumption - $\beta=0$ (Bond-like HC)



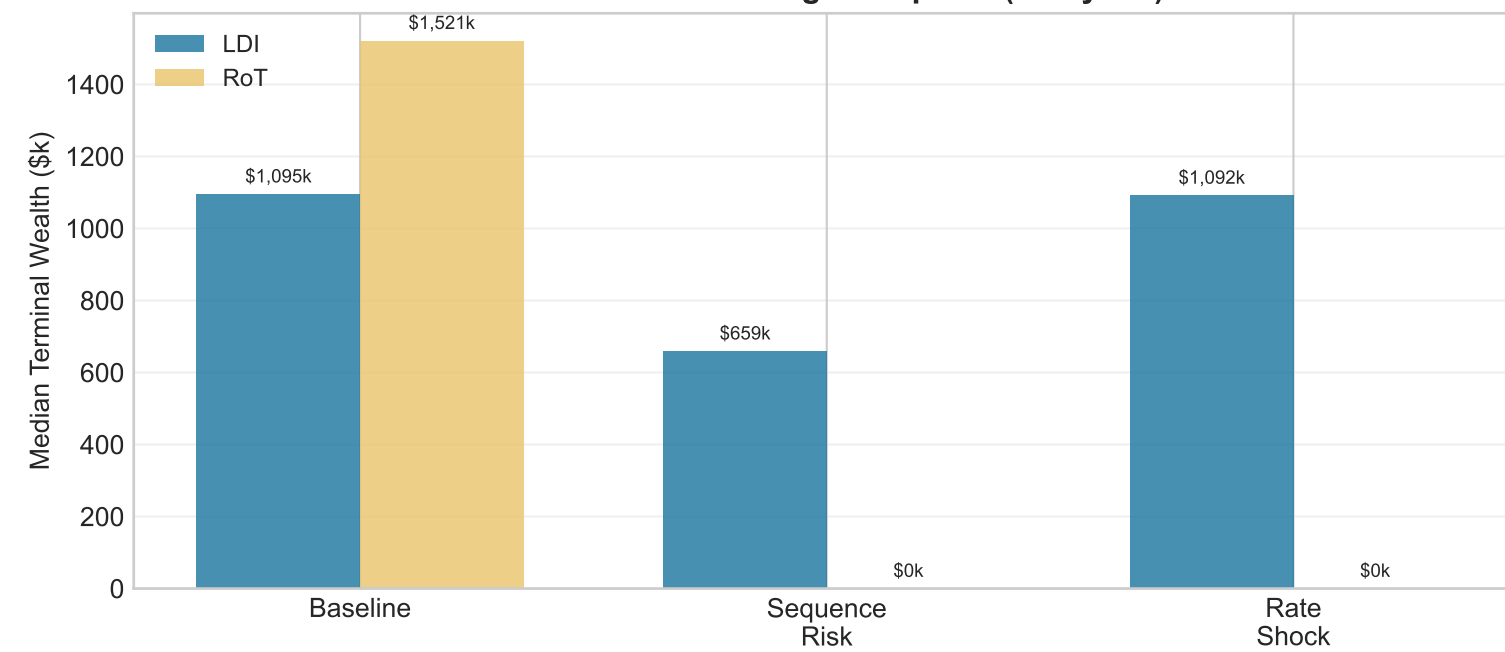
## PV Lifetime Consumption - $\beta=0.4$ (Risky HC)



## Terminal Wealth at Age 95 - $\beta=0$ (Bond-like HC)

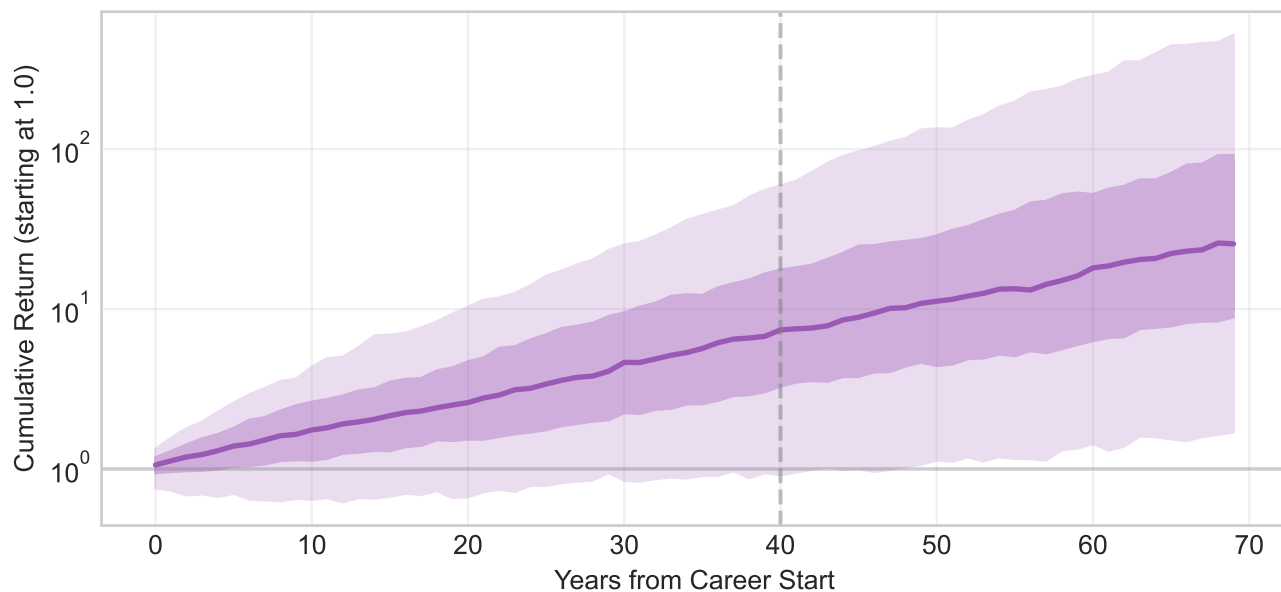


## Terminal Wealth at Age 95 - $\beta=0.4$ (Risky HC)

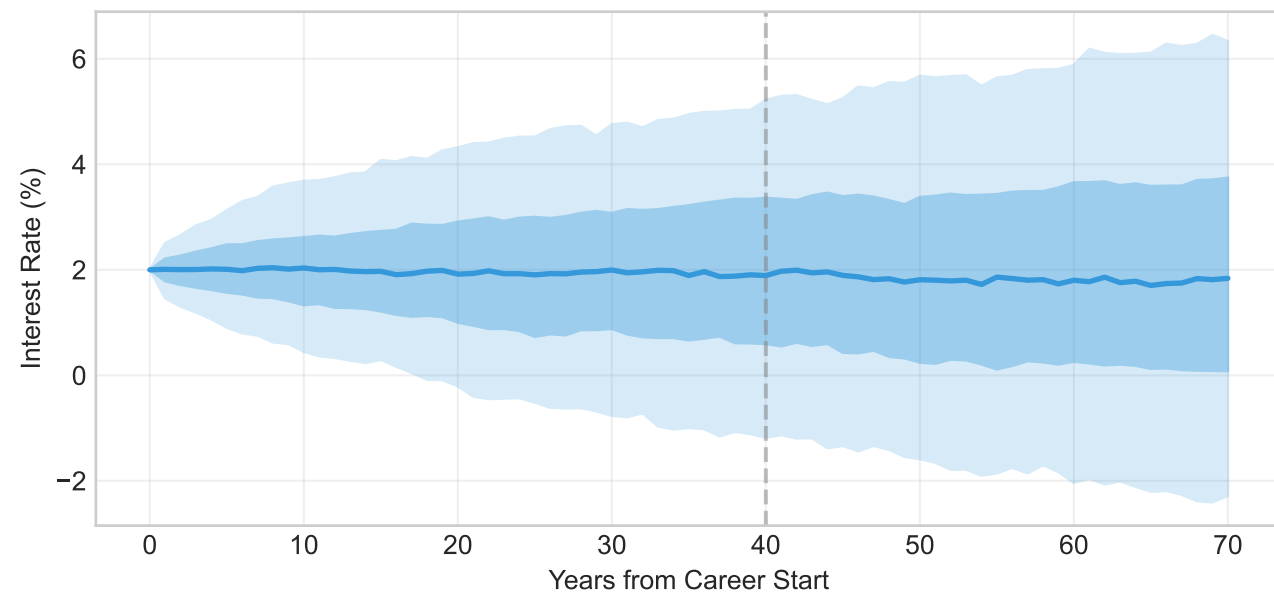


Baseline: Normal Monte Carlo ( $\beta=0$ , Bond-like HC)  
Standard random shocks - no scenario manipulation

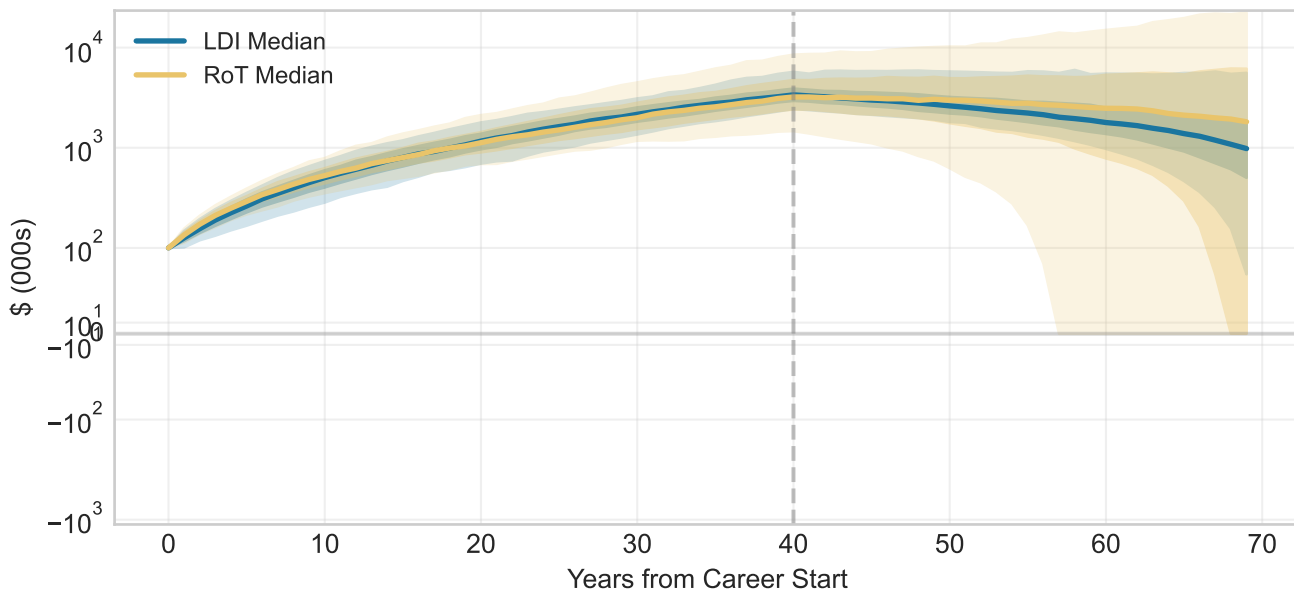
Cumulative Stock Market Returns



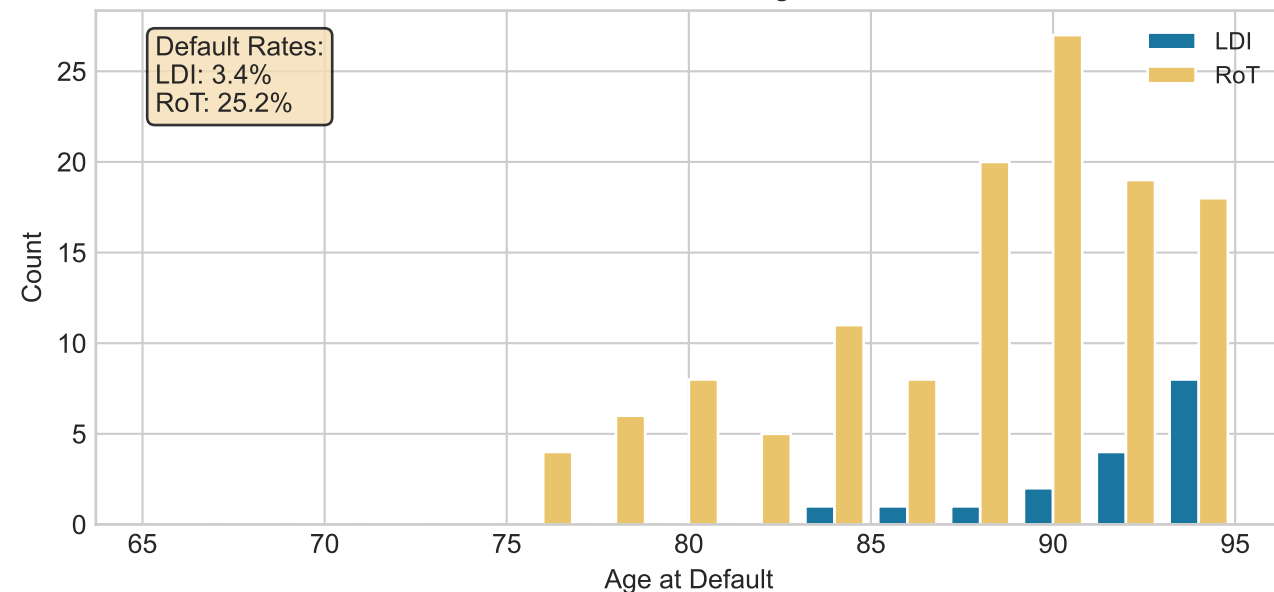
Interest Rate Paths



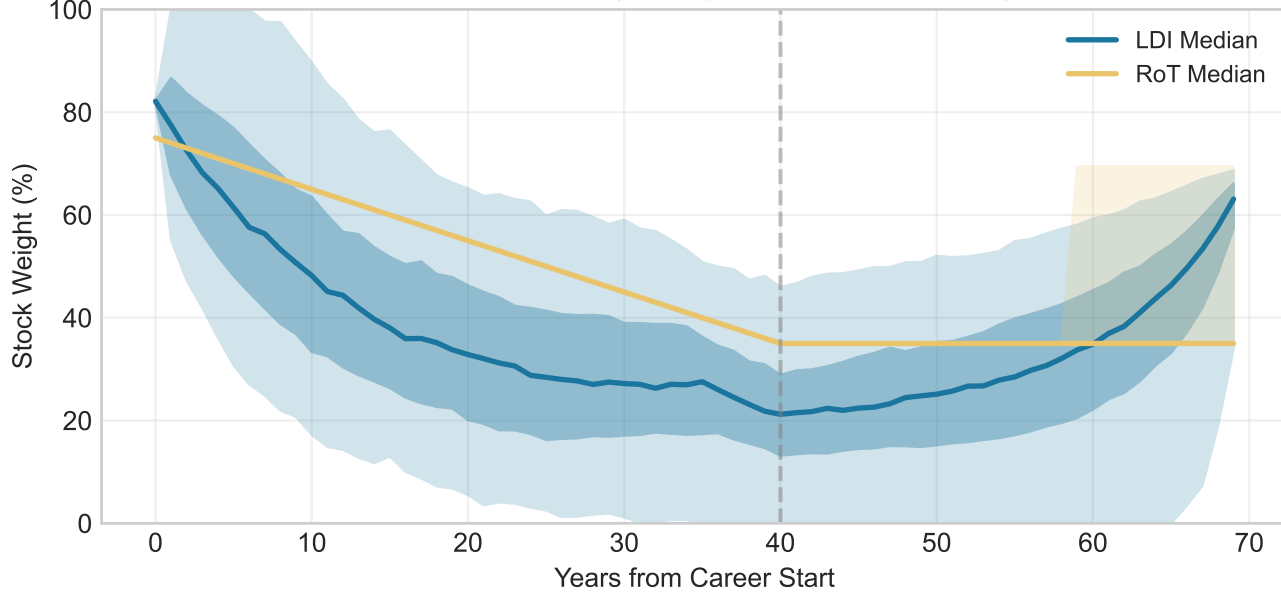
Financial Wealth



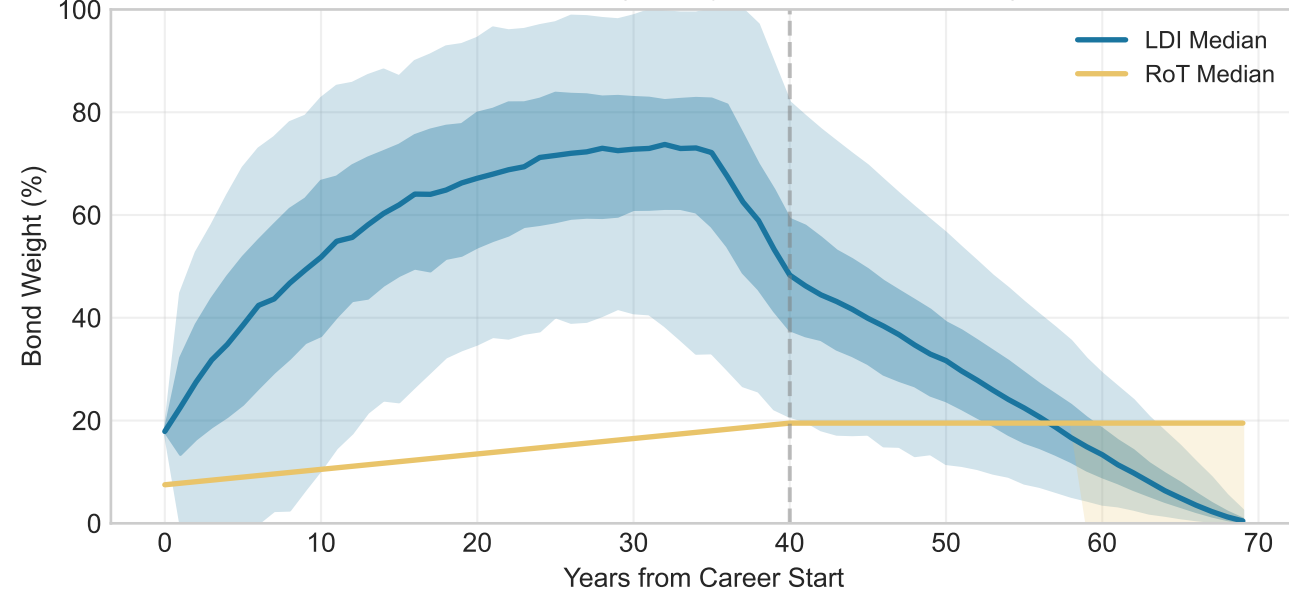
Default Timing



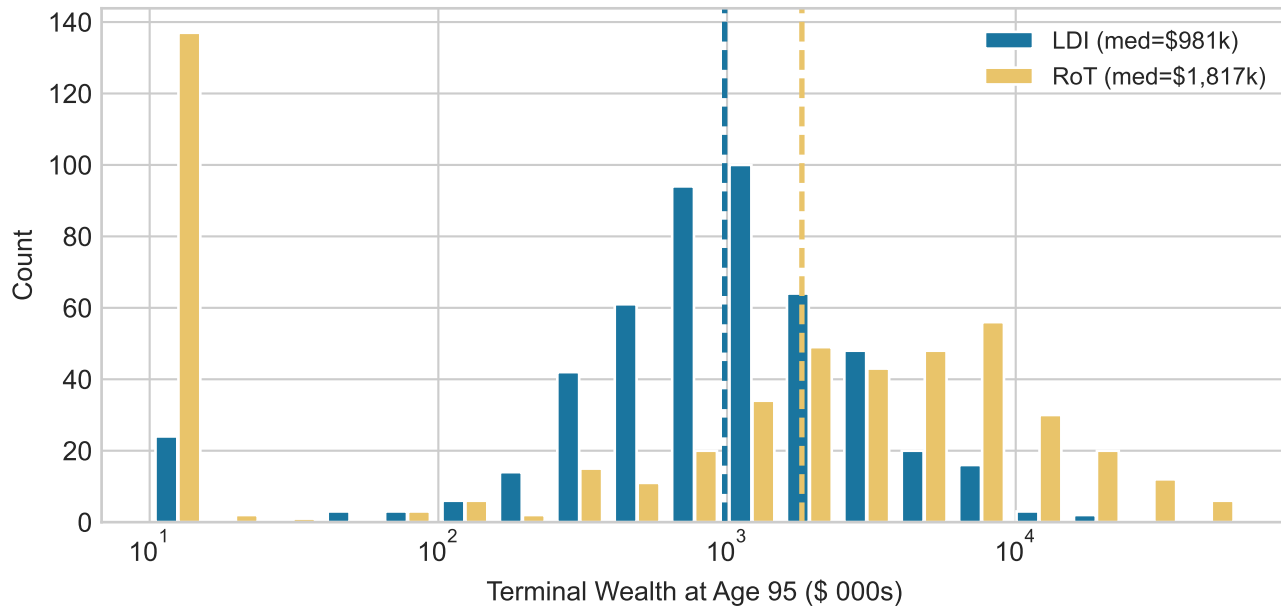
Stock Allocation (LDI Dynamic vs RoT Static)



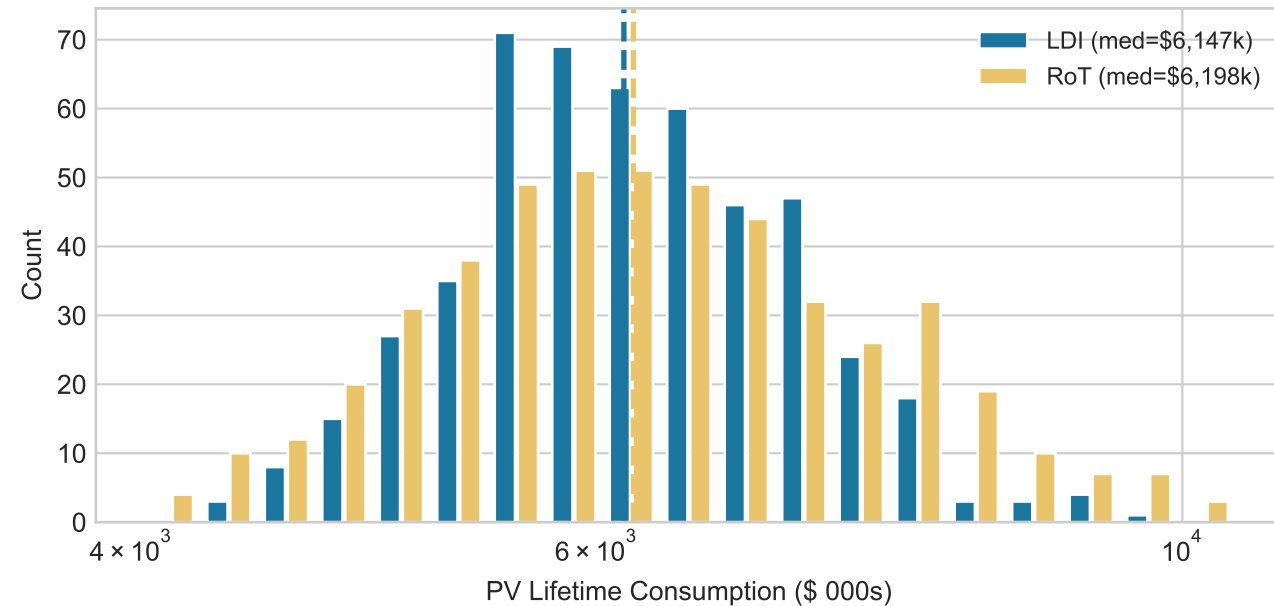
Bond Allocation (LDI Dynamic vs RoT Static)



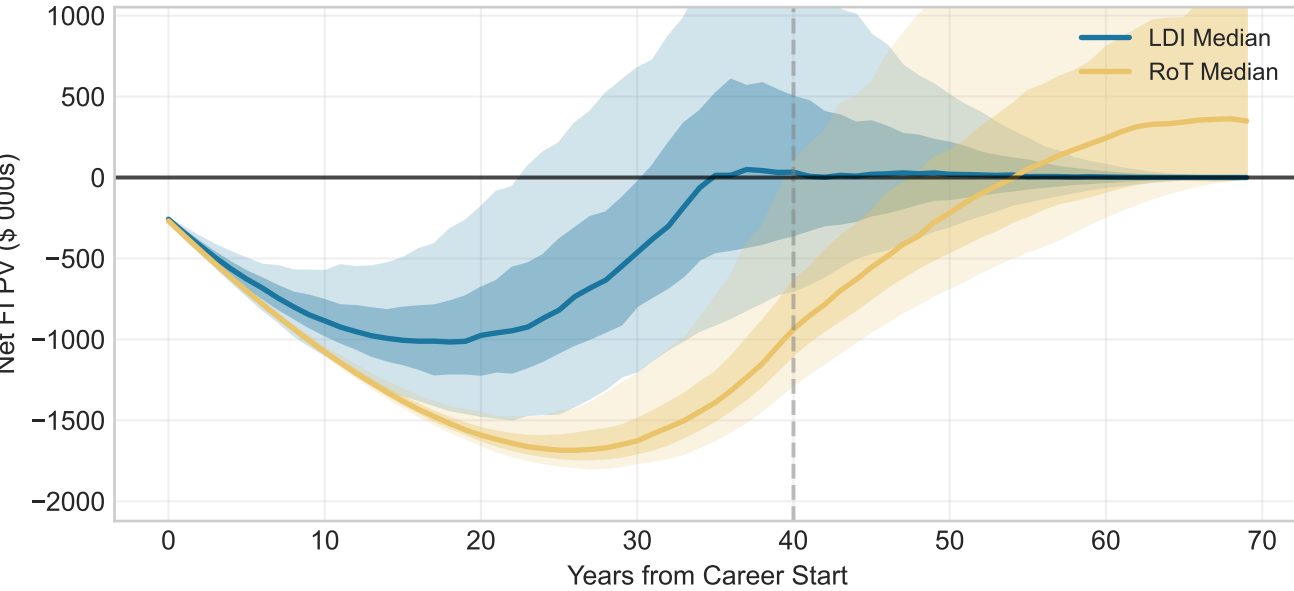
Terminal Wealth Distribution



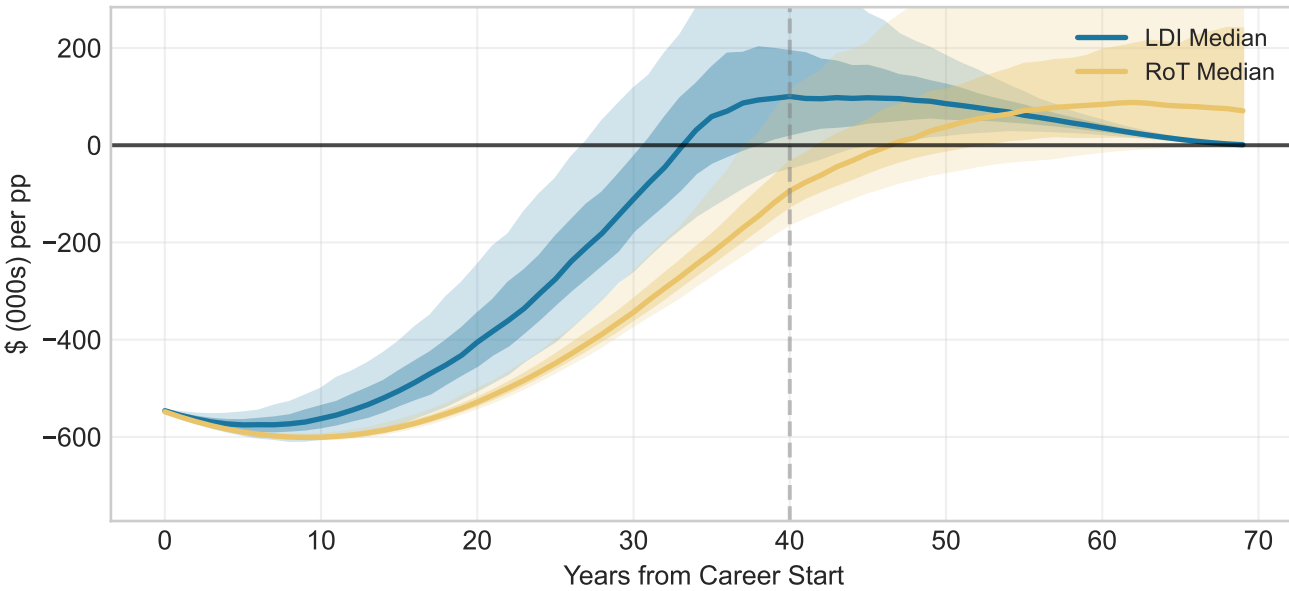
PV Consumption (Realized Rates)



Net Fixed Income PV (Bonds + HC - Expense Liability)

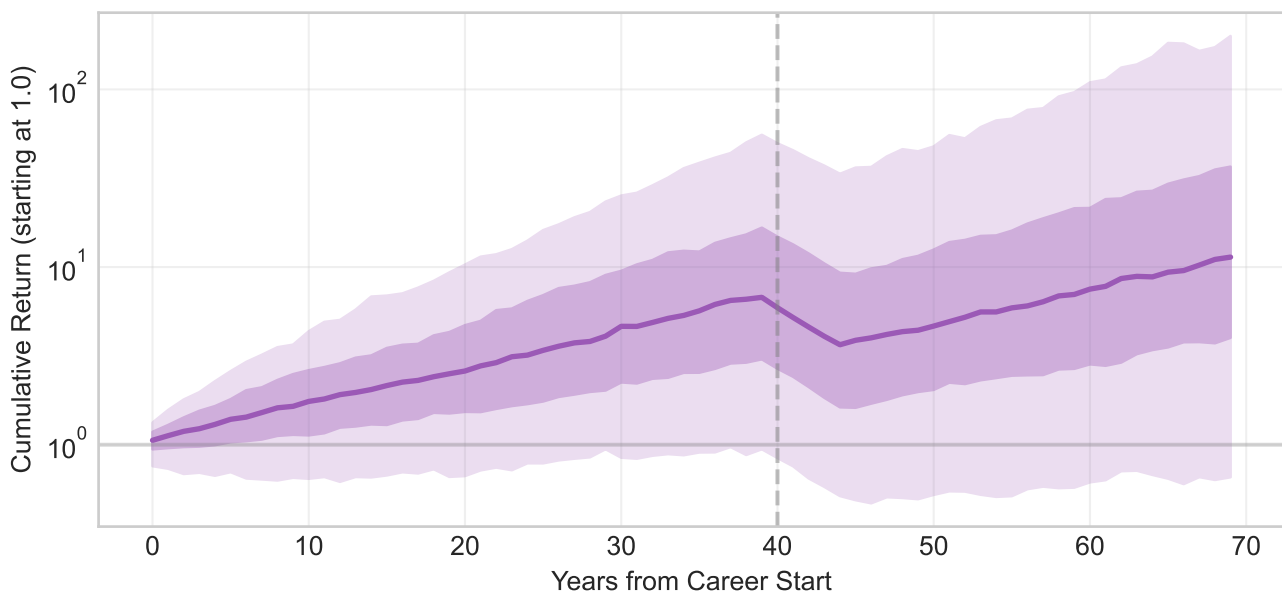


Interest Rate Sensitivity (\$ gain per 1pp rate drop)

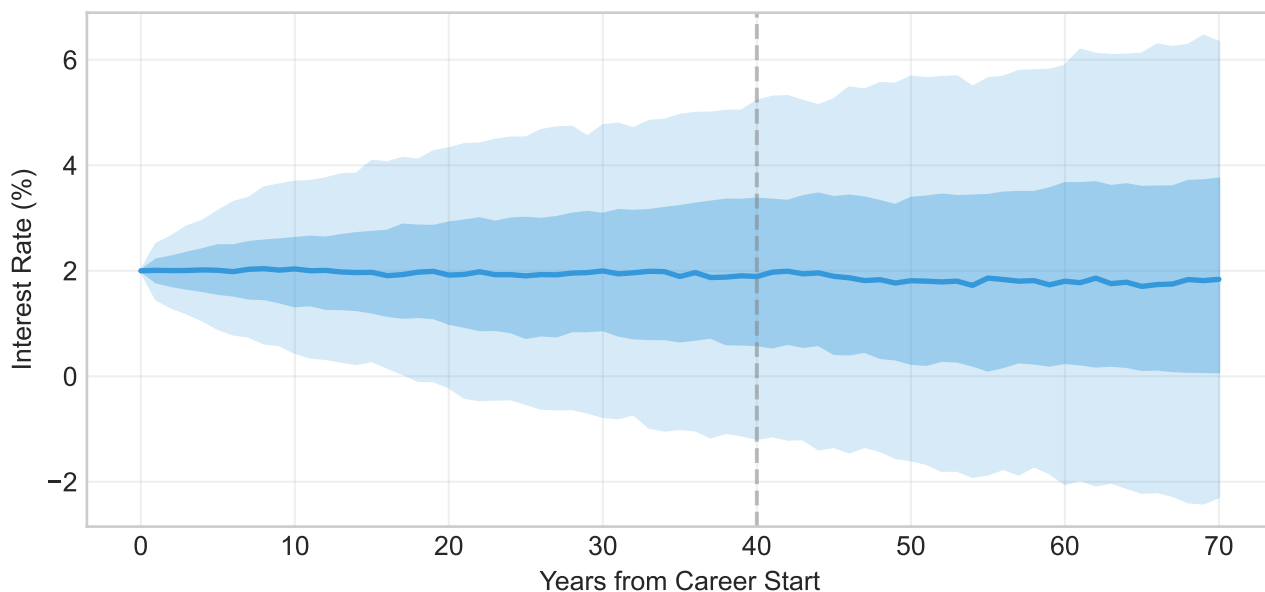


# Sequence-of-Returns Risk ( $\beta=0$ , Bond-like HC) Bad stock returns (~-12%/yr) in first 5 years of retirement

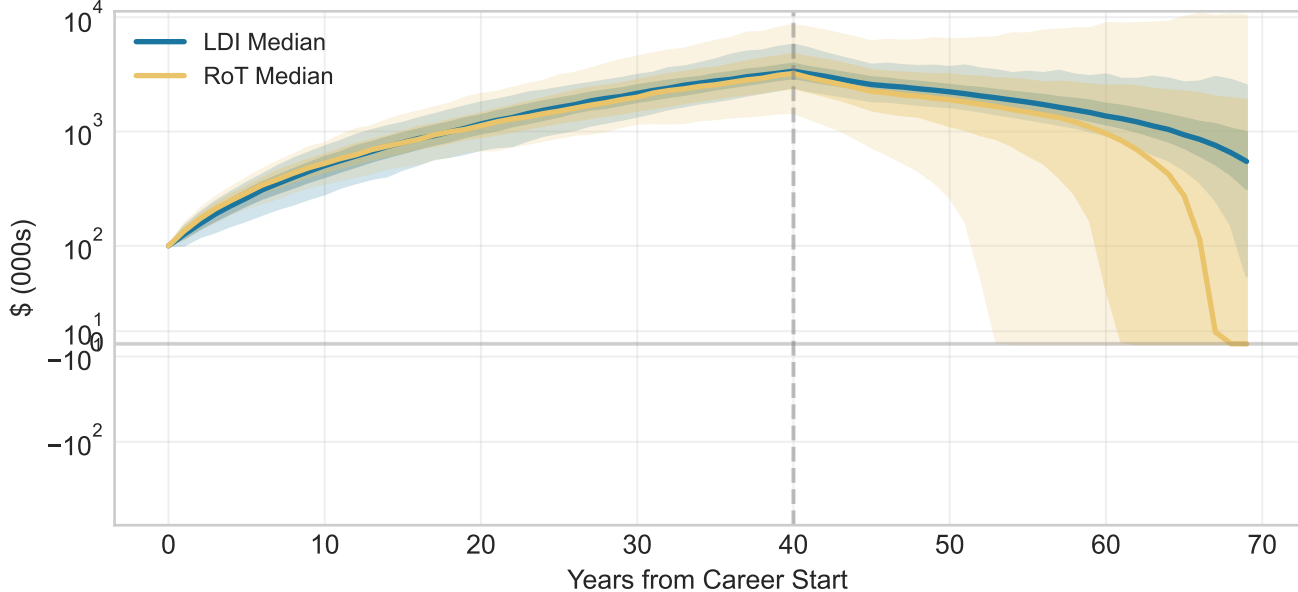
Cumulative Stock Market Returns



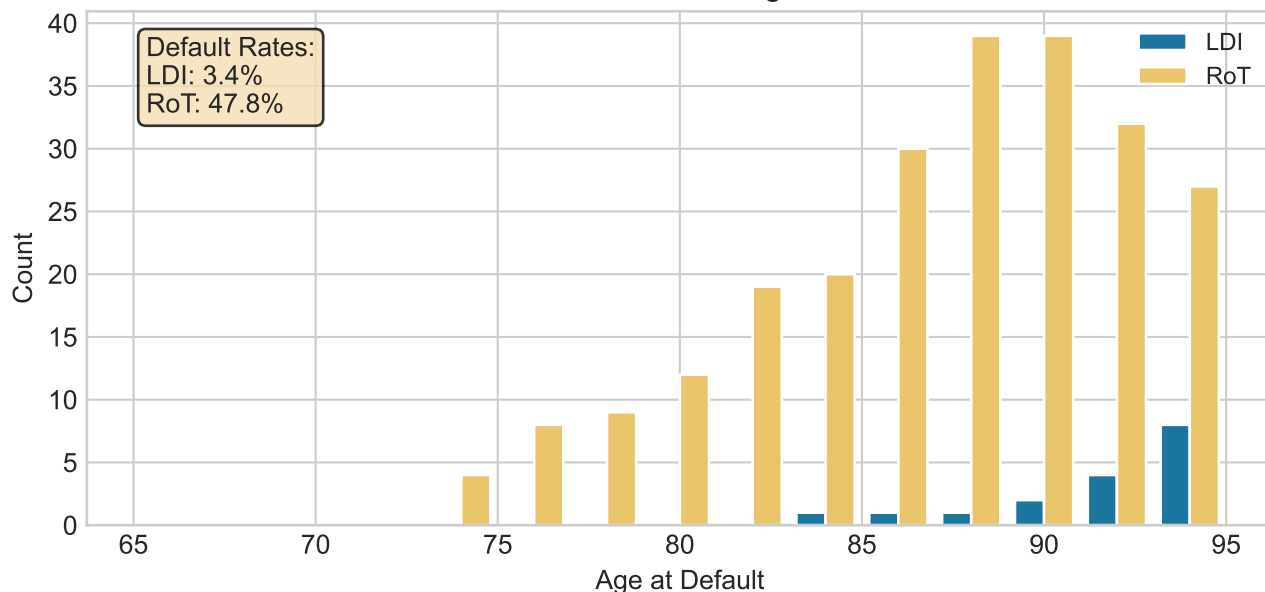
Interest Rate Paths



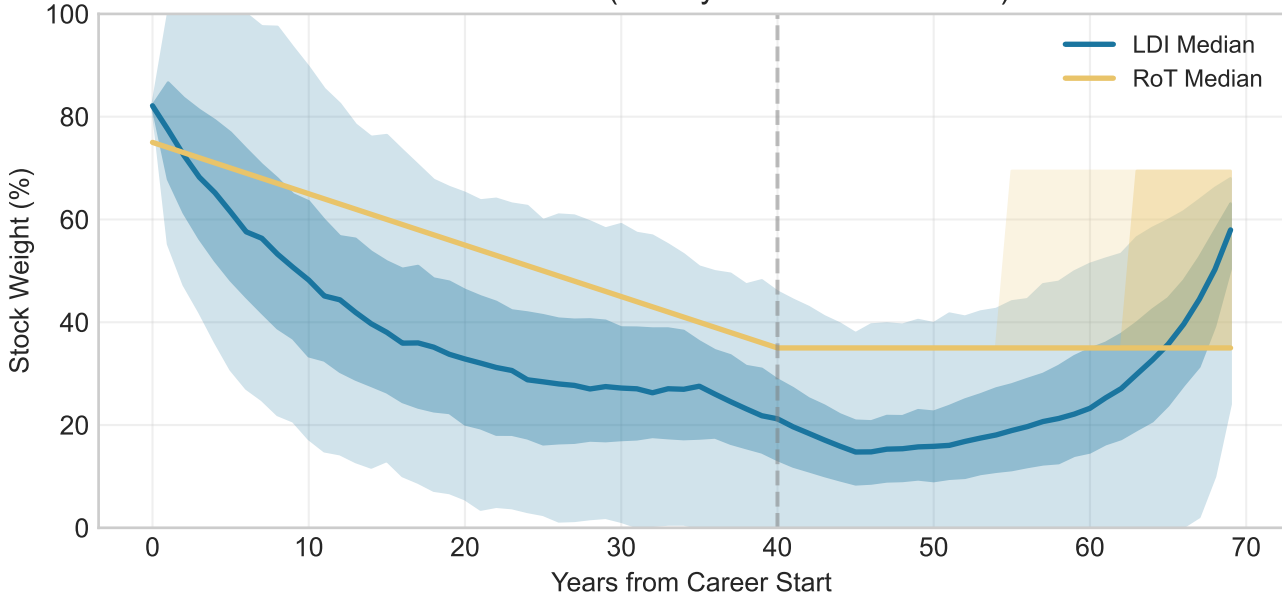
Financial Wealth



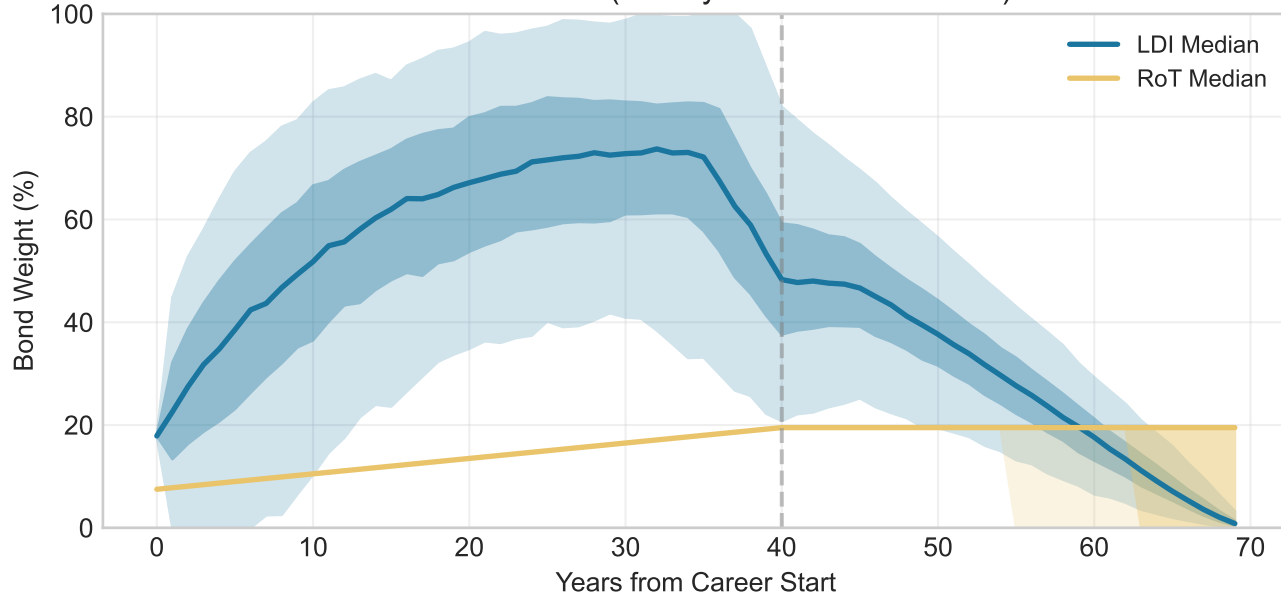
Default Timing



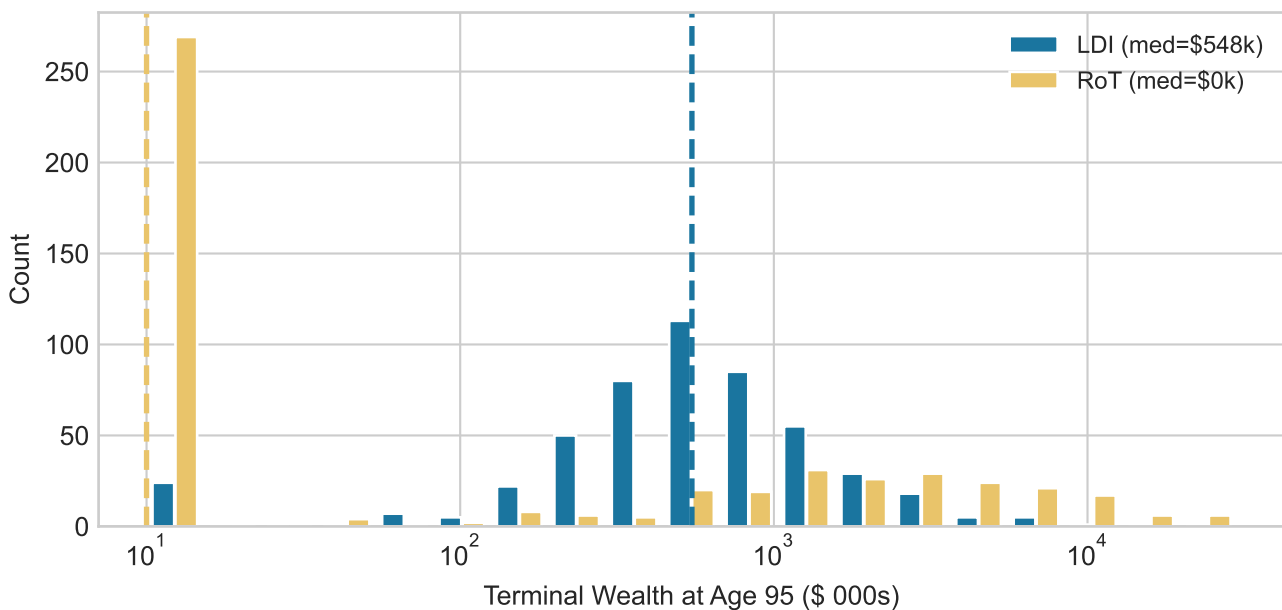
Stock Allocation (LDI Dynamic vs RoT Static)



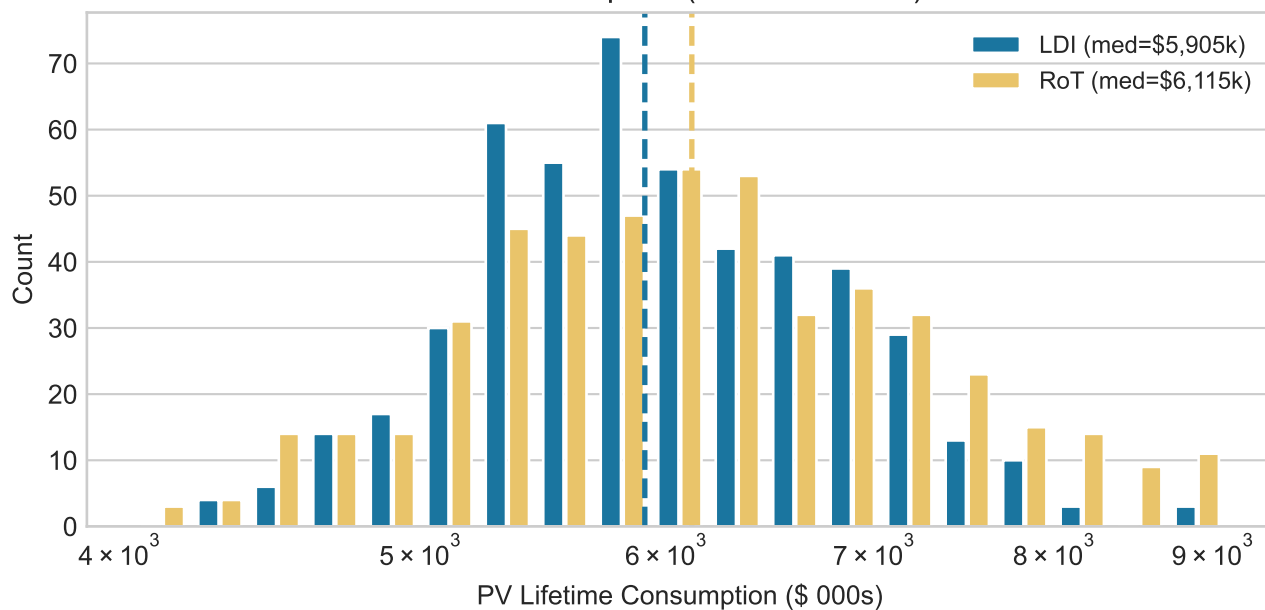
Bond Allocation (LDI Dynamic vs RoT Static)



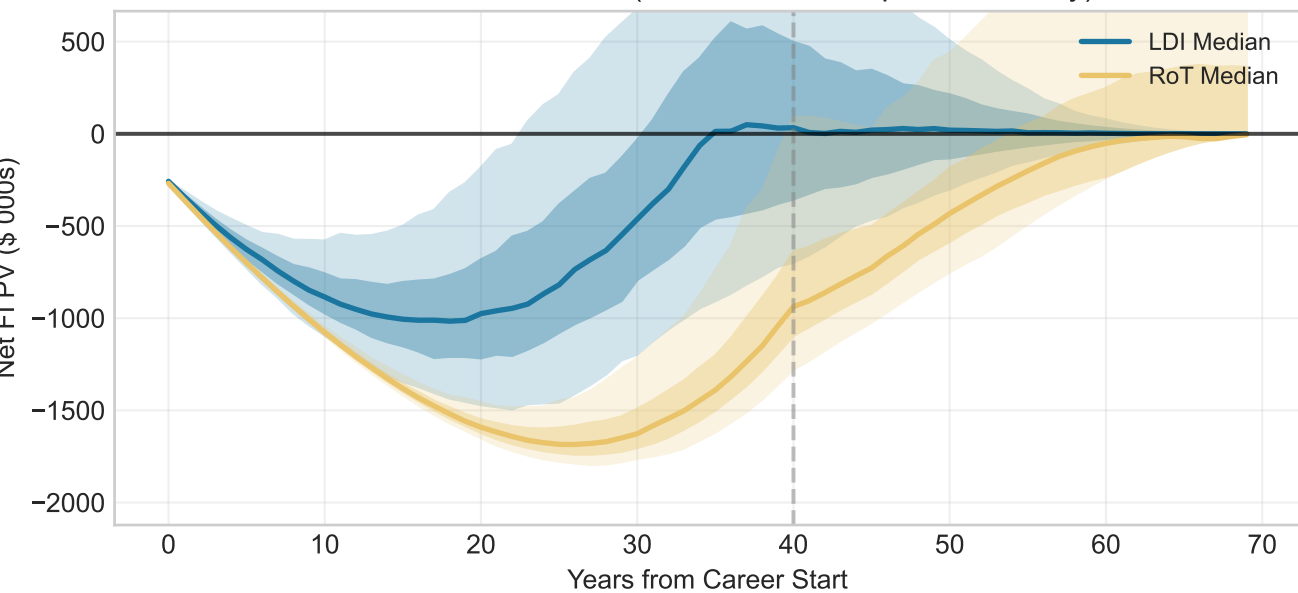
Terminal Wealth Distribution



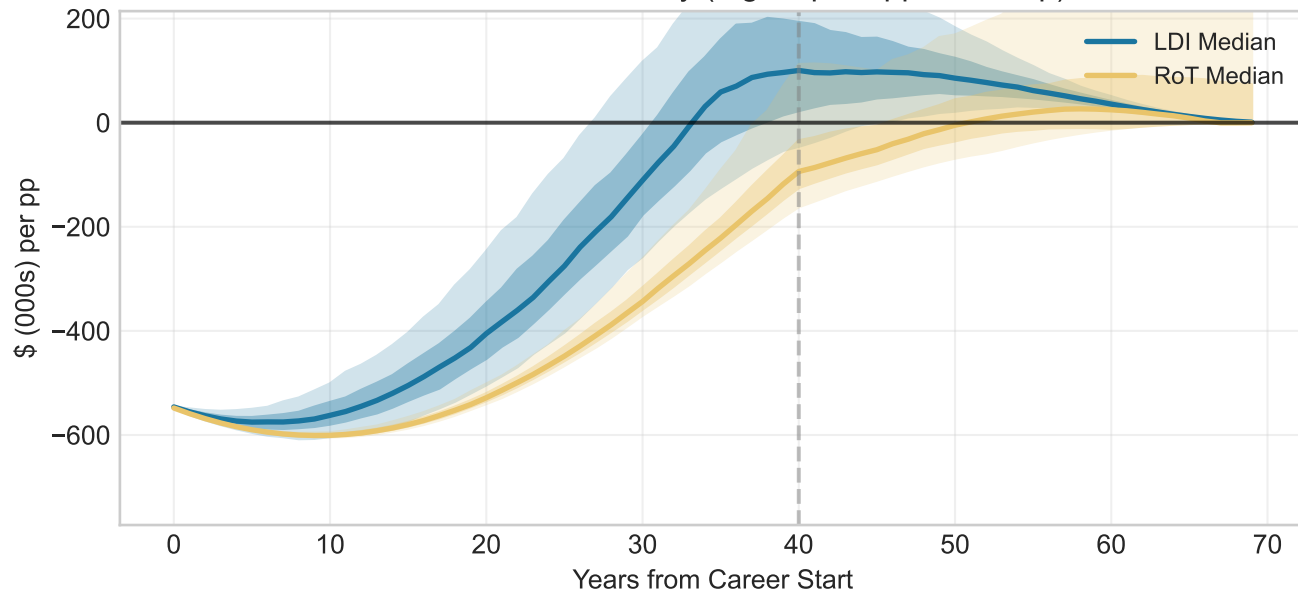
PV Consumption (Realized Rates)



Net Fixed Income PV (Bonds + HC - Expense Liability)

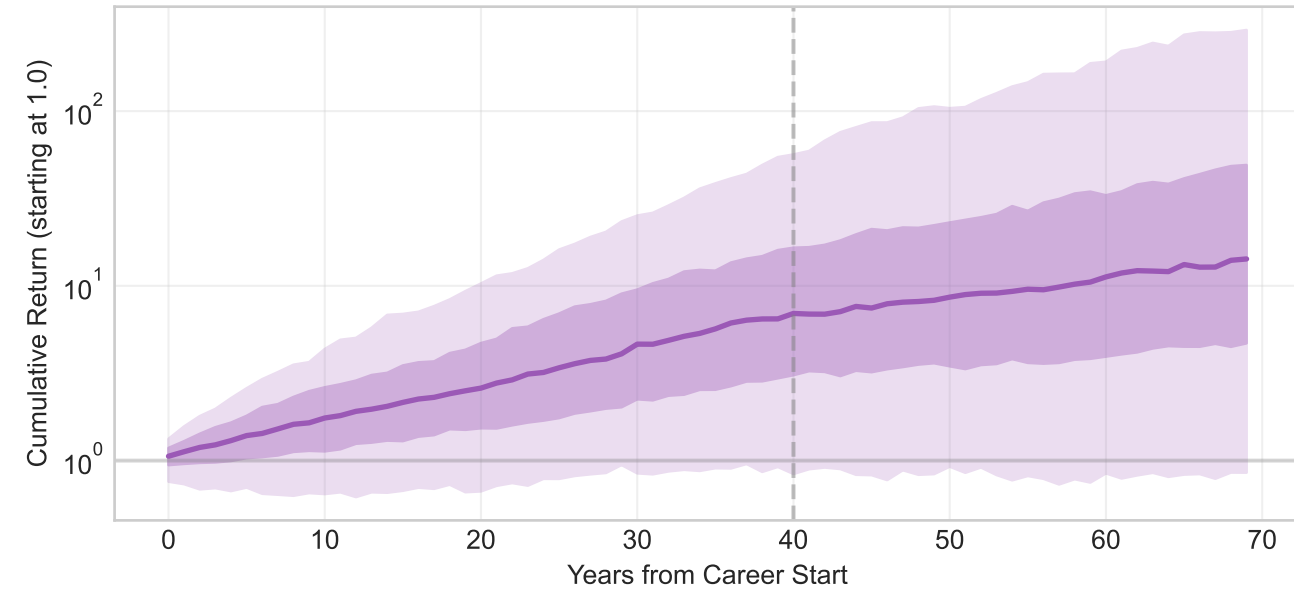


Interest Rate Sensitivity (\$ gain per 1pp rate drop)

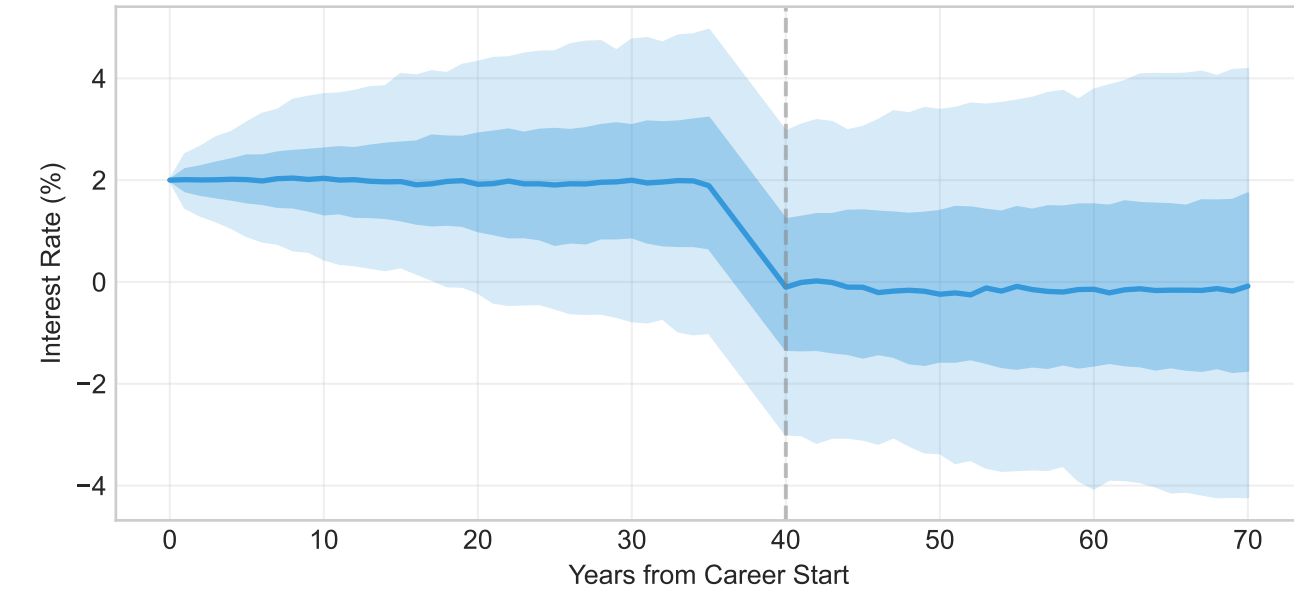


Pre-Retirement Rate Shock ( $\beta=0$ , Bond-like HC)  
Interest rate drop (~4% cumulative) in 5 years before retirement

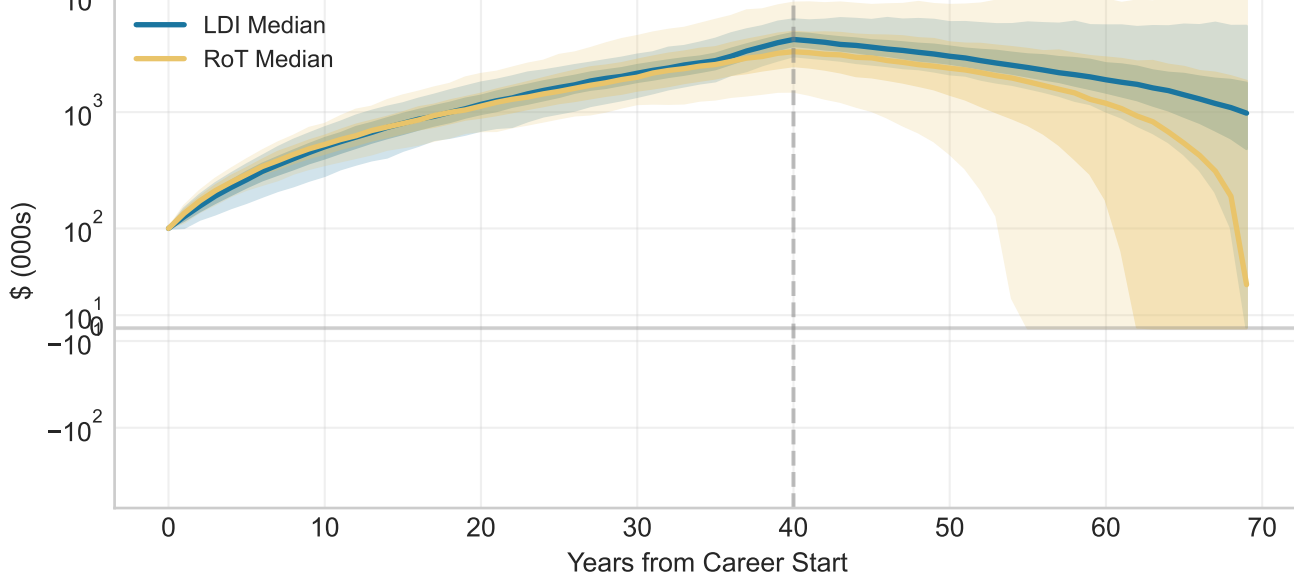
Cumulative Stock Market Returns



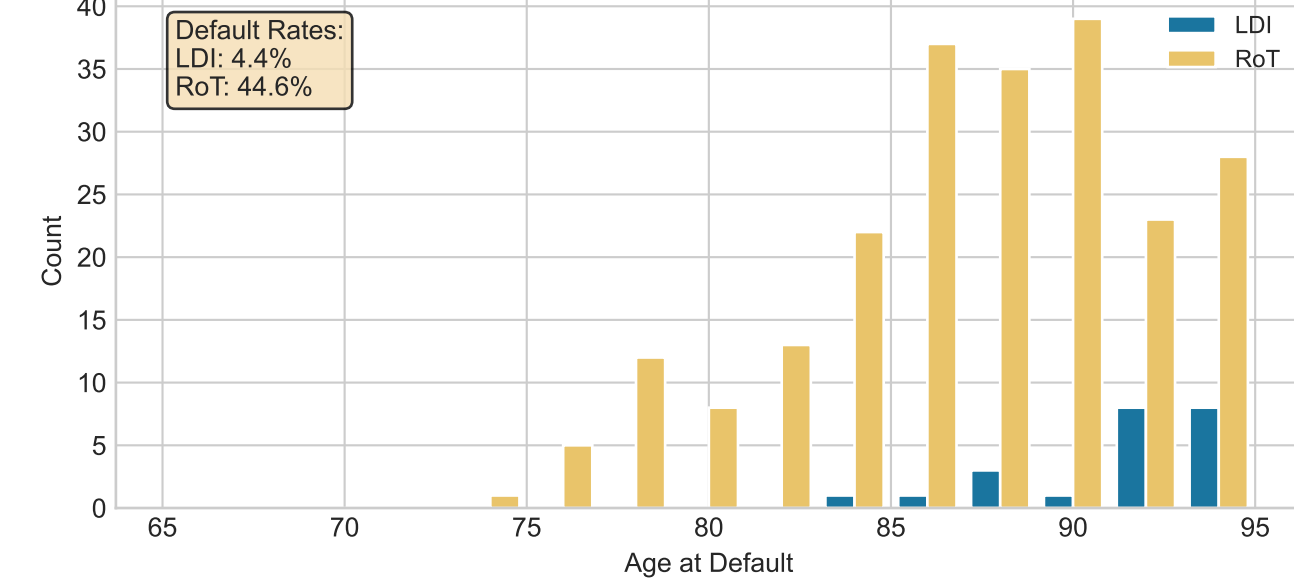
Interest Rate Paths



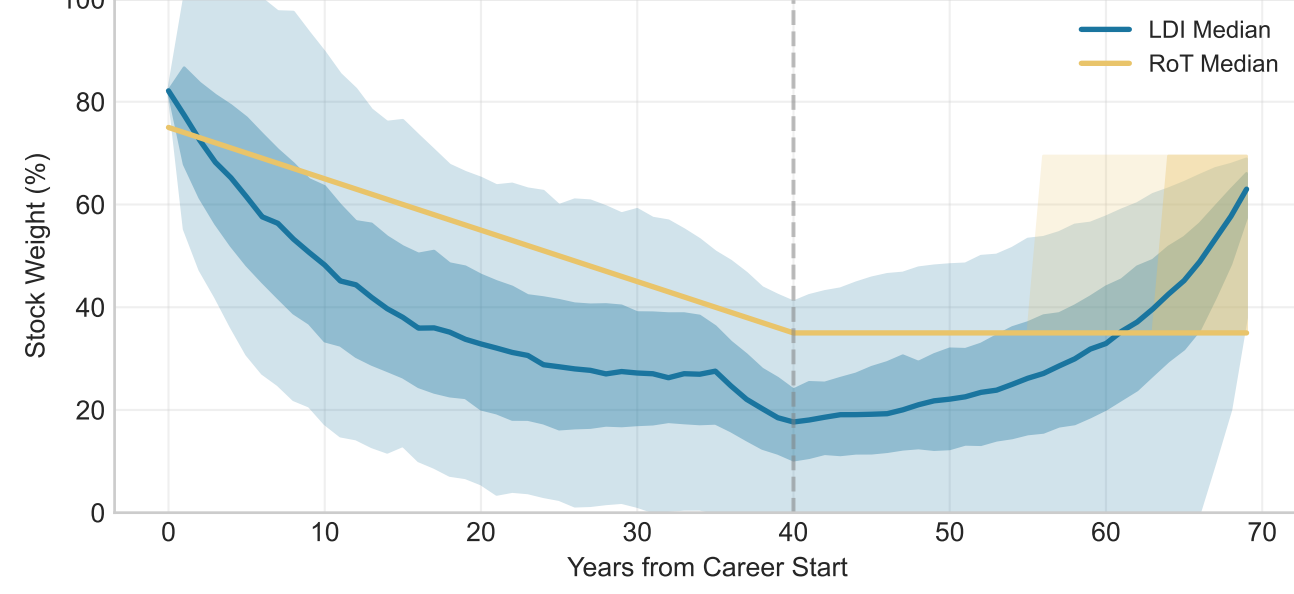
Financial Wealth



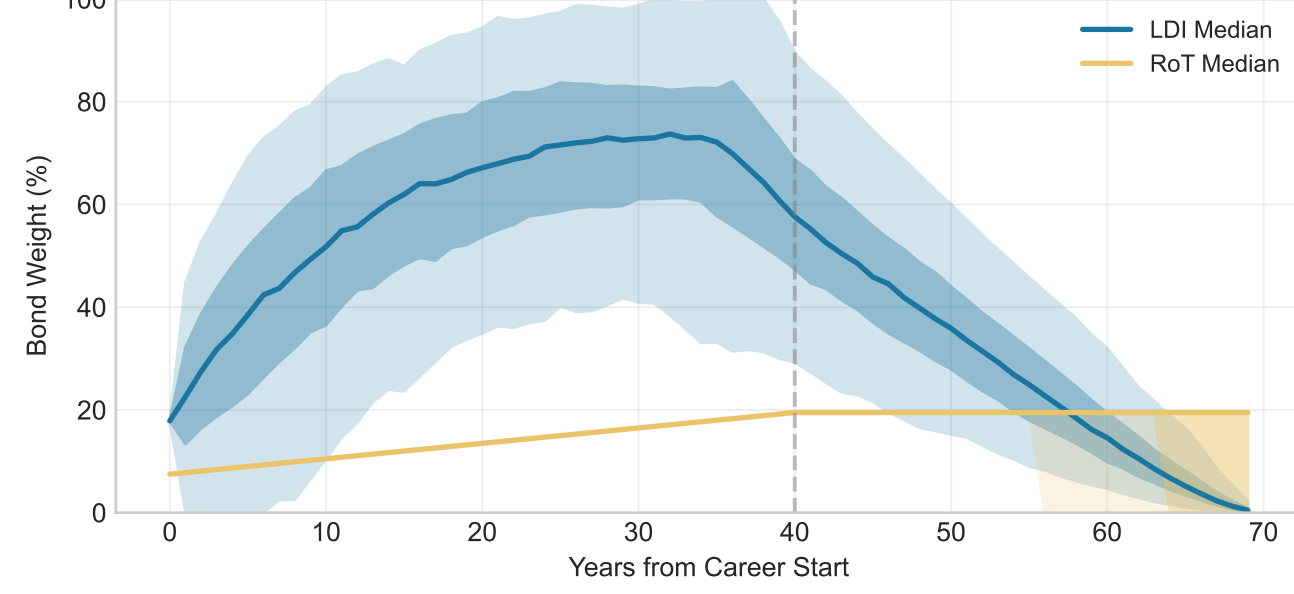
Default Timing



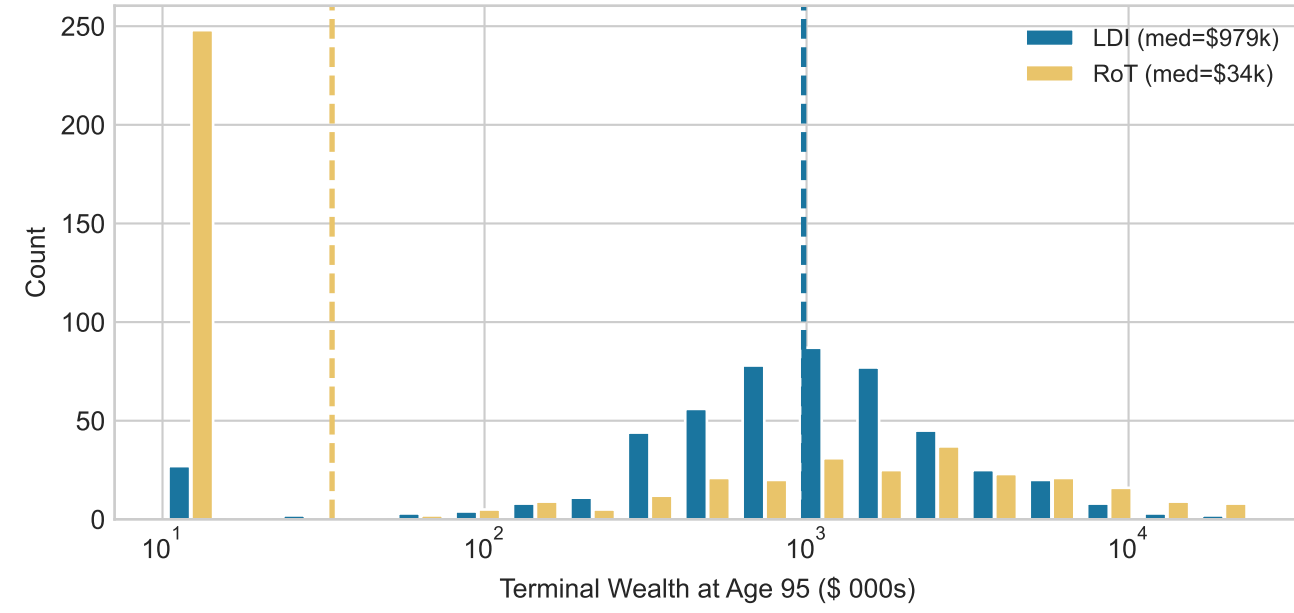
Stock Allocation (LDI Dynamic vs RoT Static)



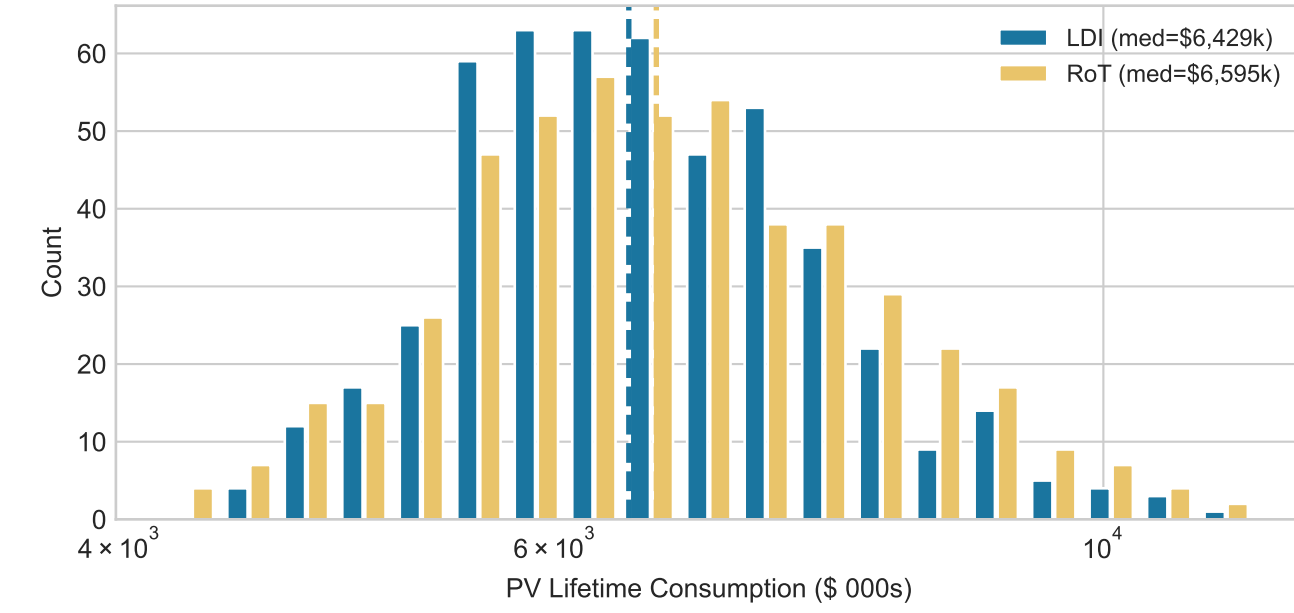
Bond Allocation (LDI Dynamic vs RoT Static)



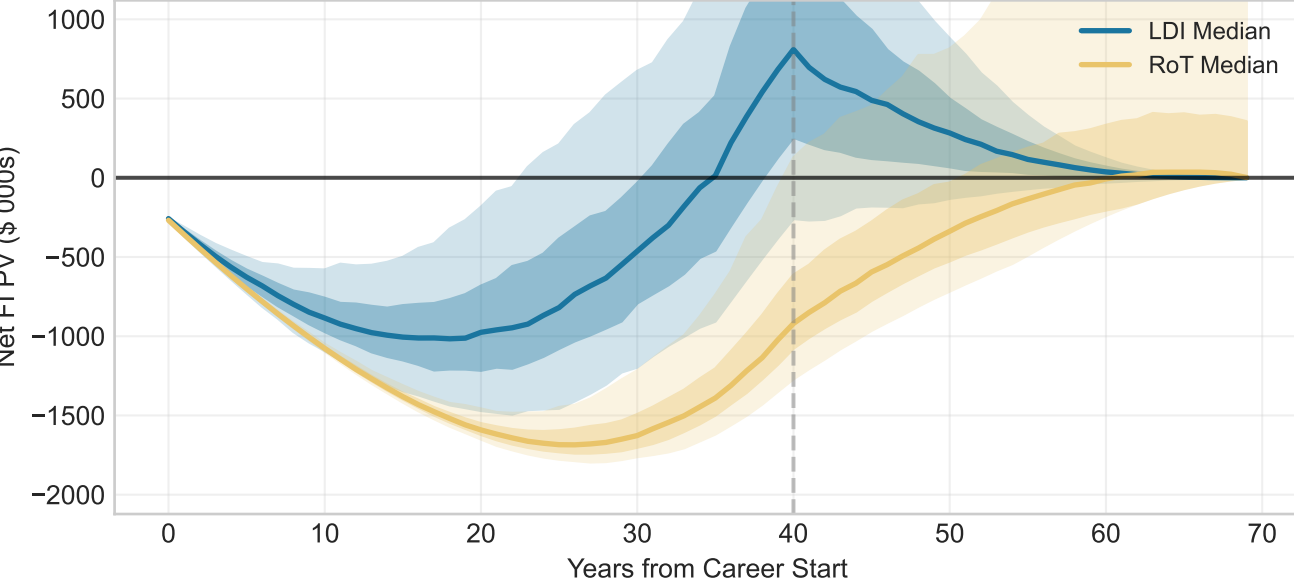
Terminal Wealth Distribution



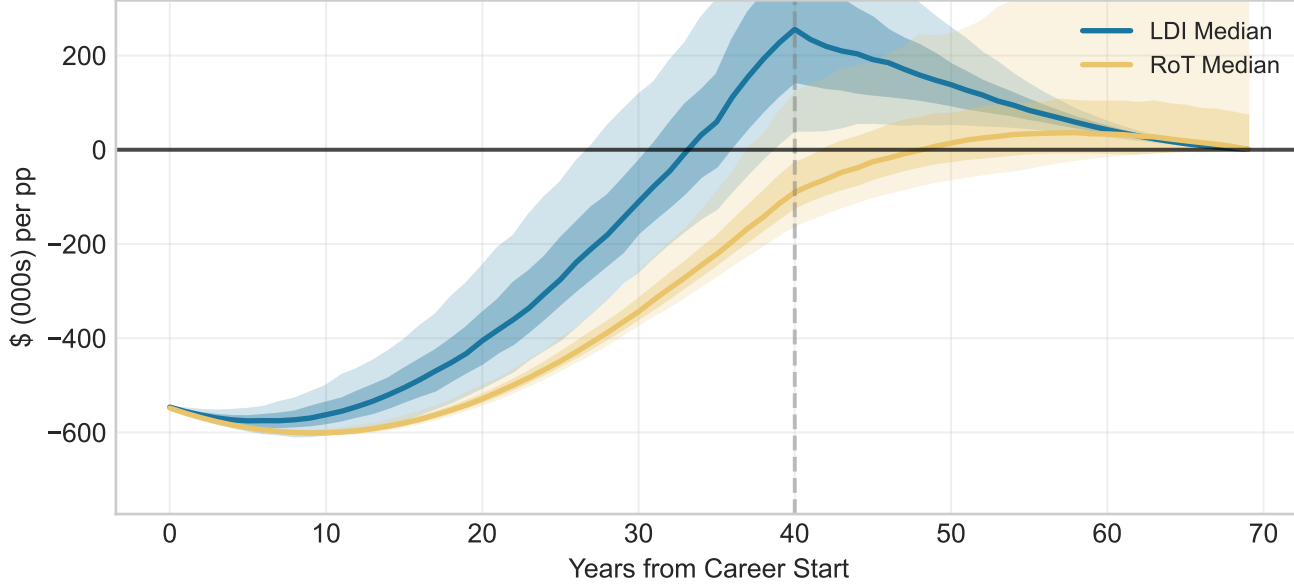
PV Consumption (Realized Rates)



Net Fixed Income PV (Bonds + HC - Expense Liability)

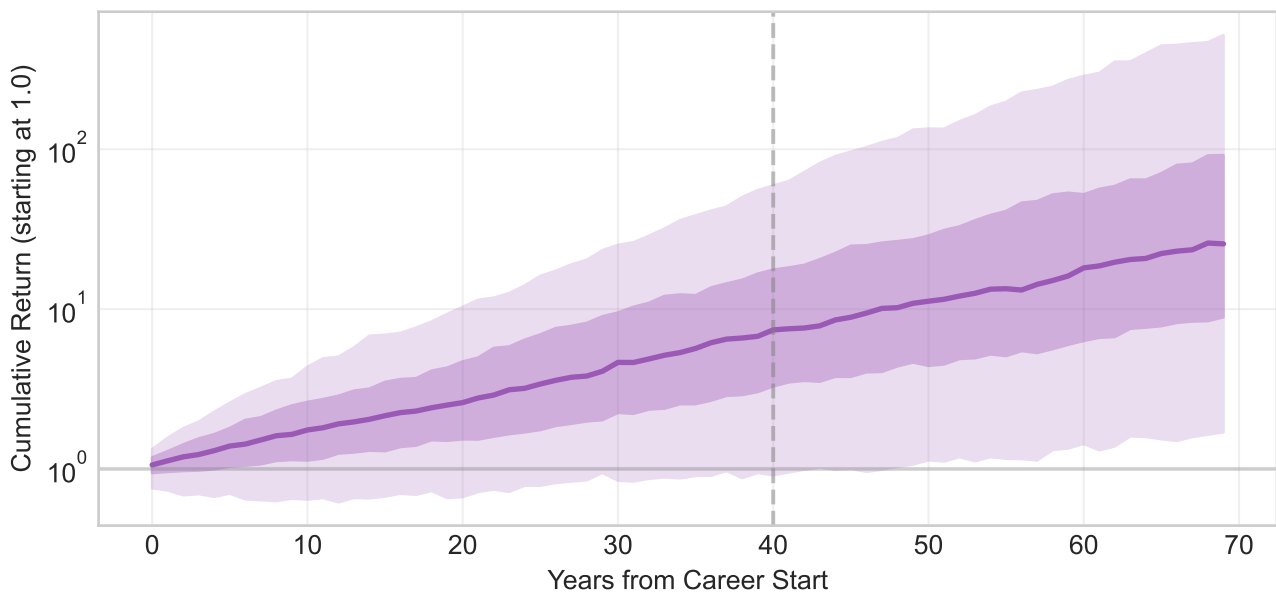


Interest Rate Sensitivity (\$ gain per 1pp rate drop)

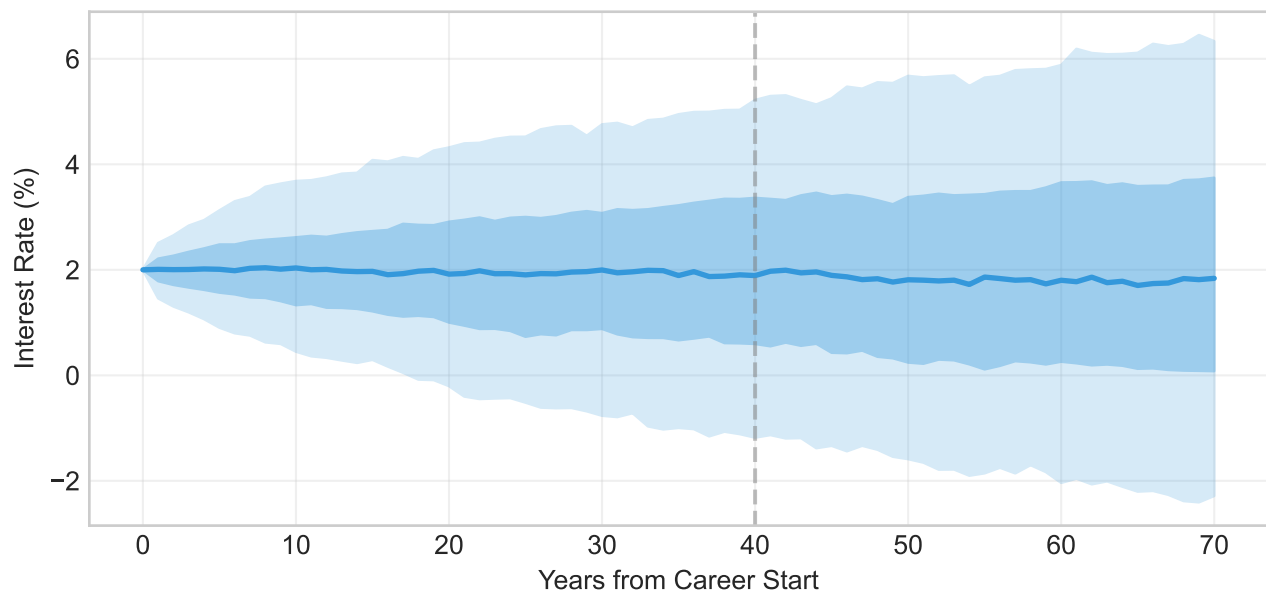


Baseline: Normal Monte Carlo ( $\beta=0.4$ )  
Standard random shocks - no scenario manipulation

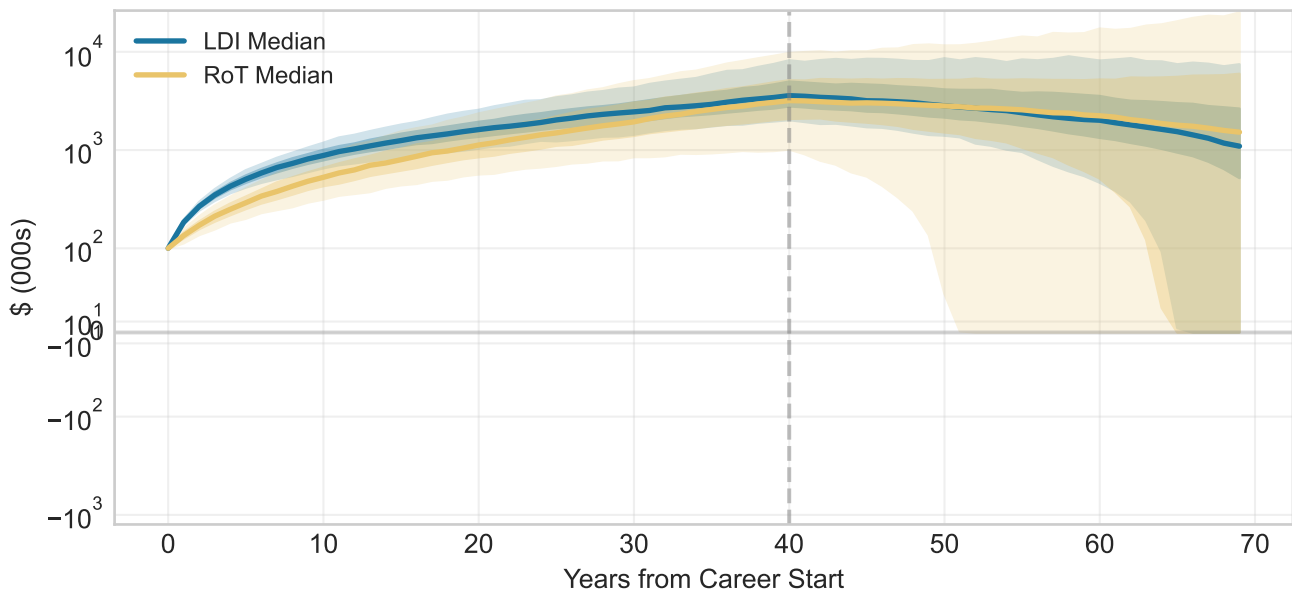
Cumulative Stock Market Returns



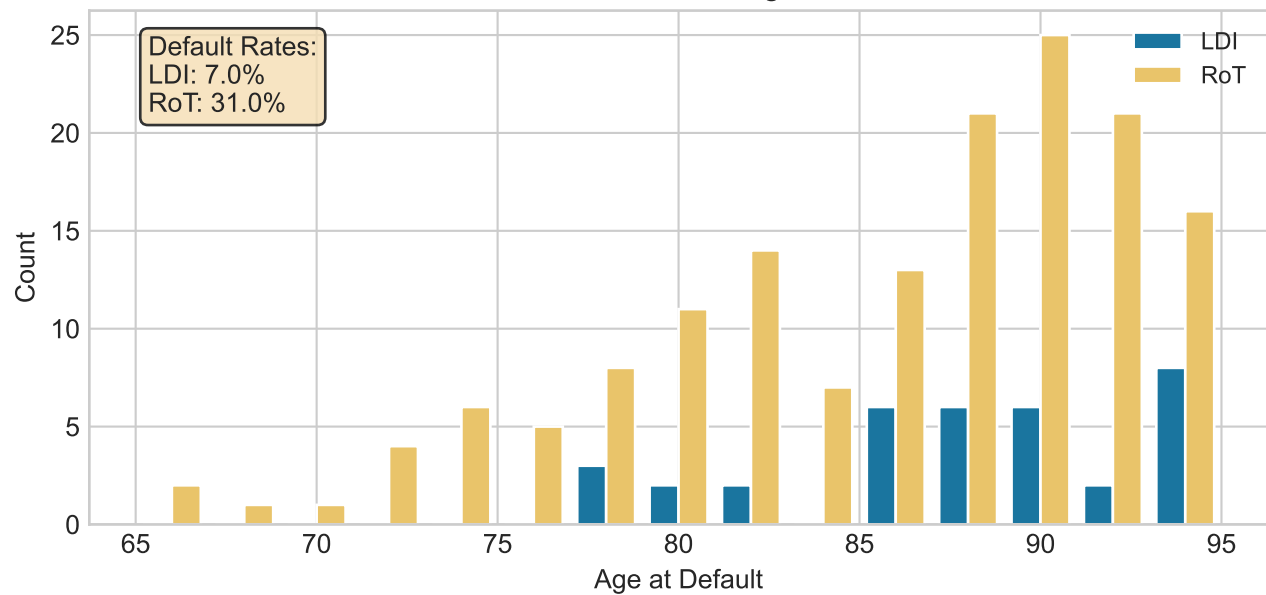
Interest Rate Paths



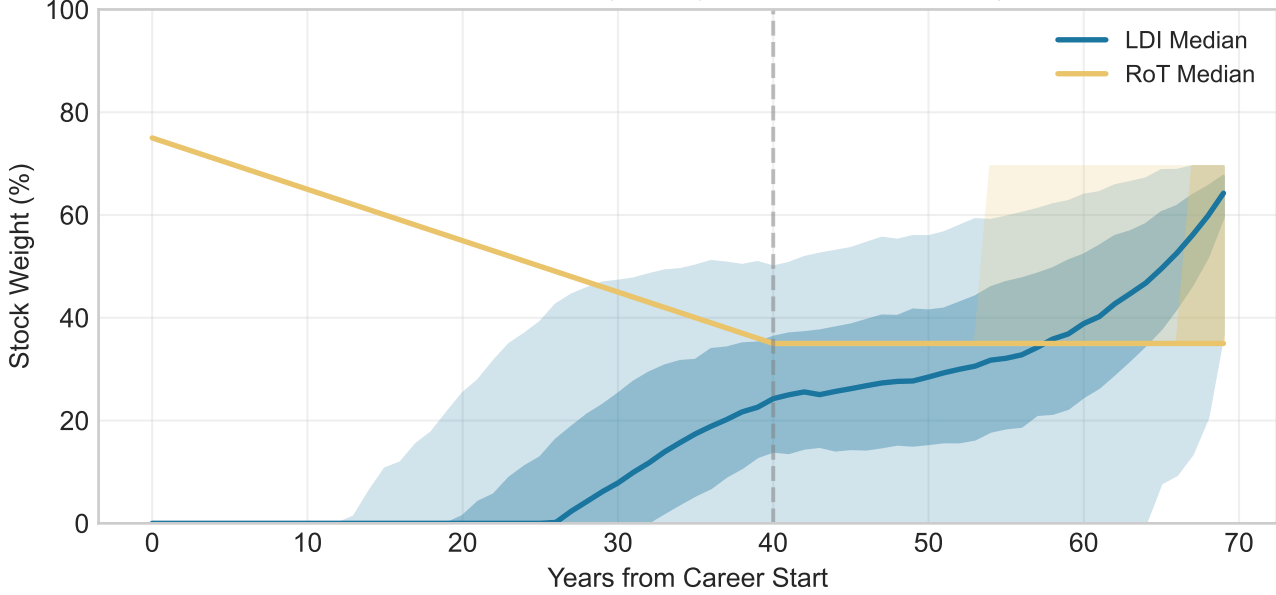
Financial Wealth



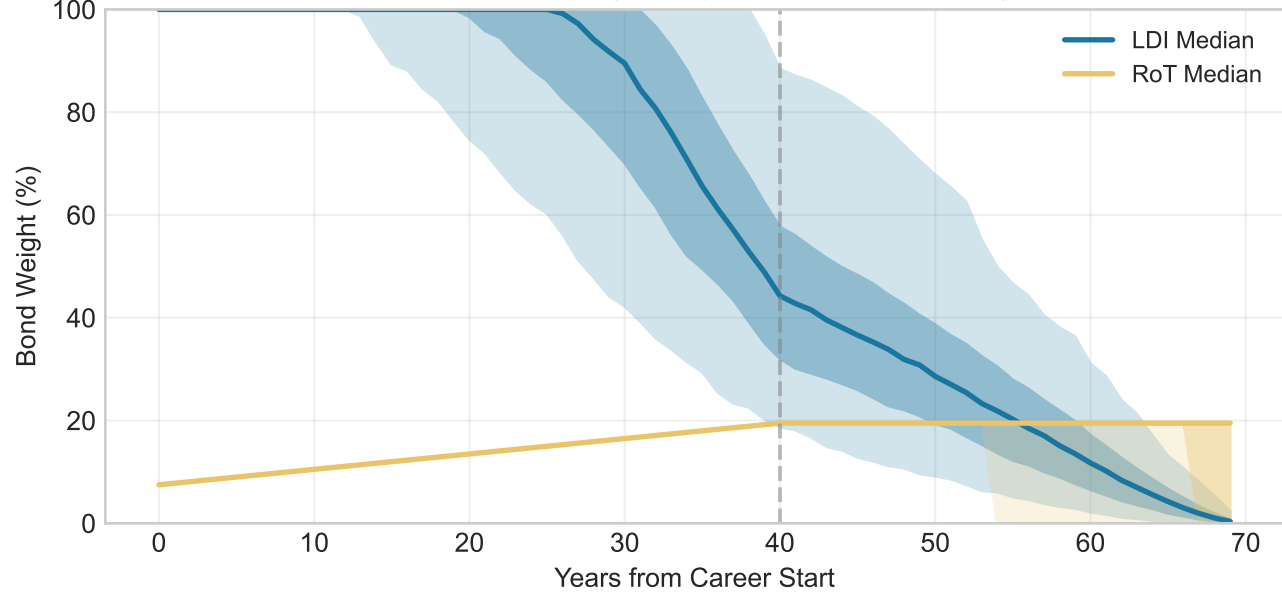
Default Timing



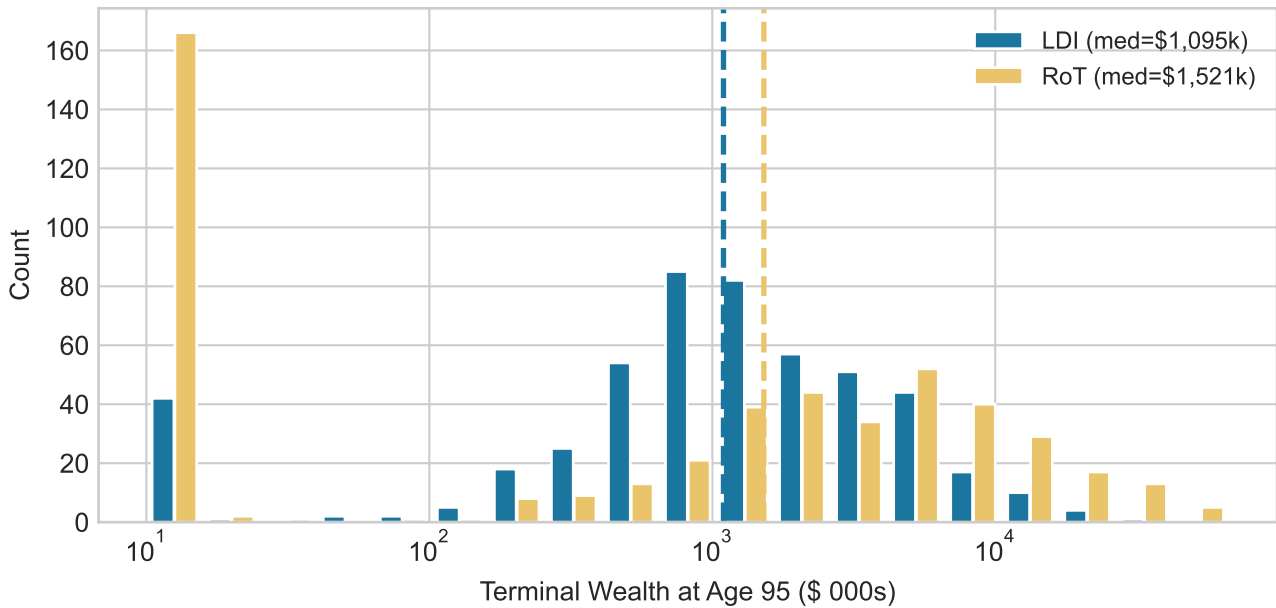
Stock Allocation (LDI Dynamic vs RoT Static)



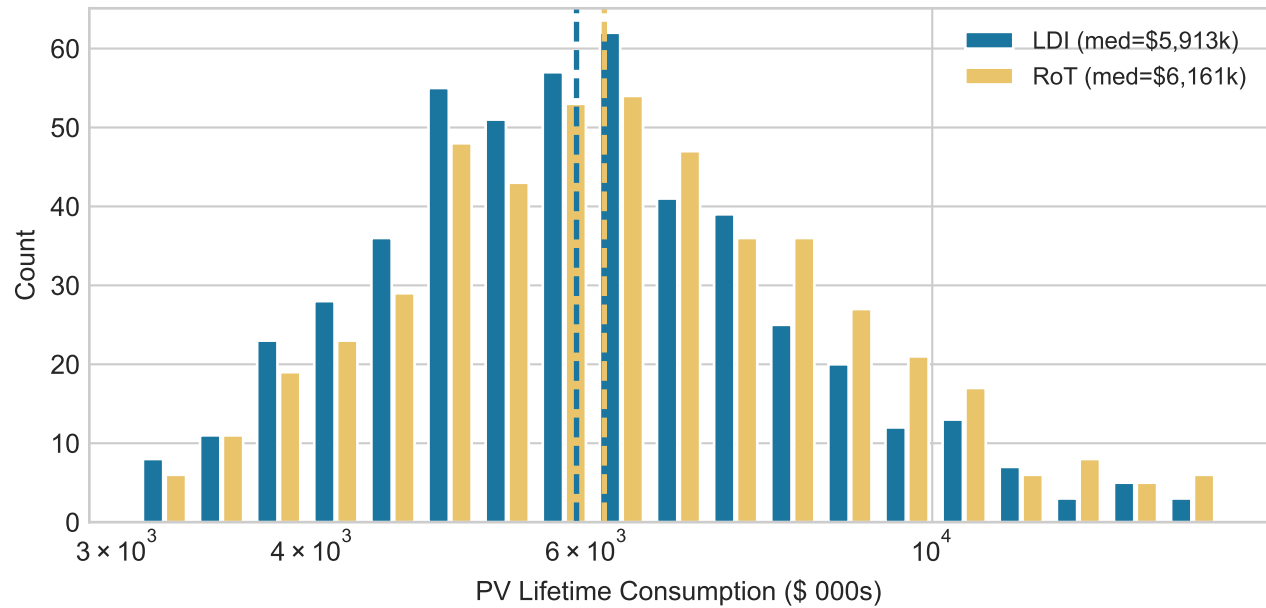
Bond Allocation (LDI Dynamic vs RoT Static)



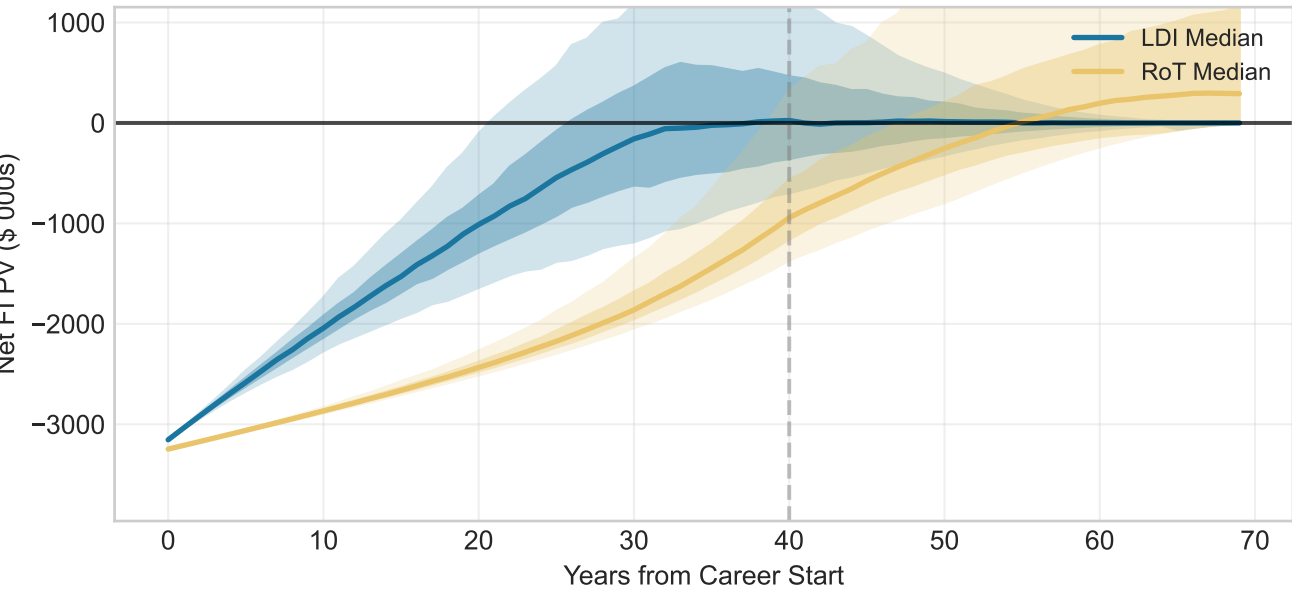
Terminal Wealth Distribution



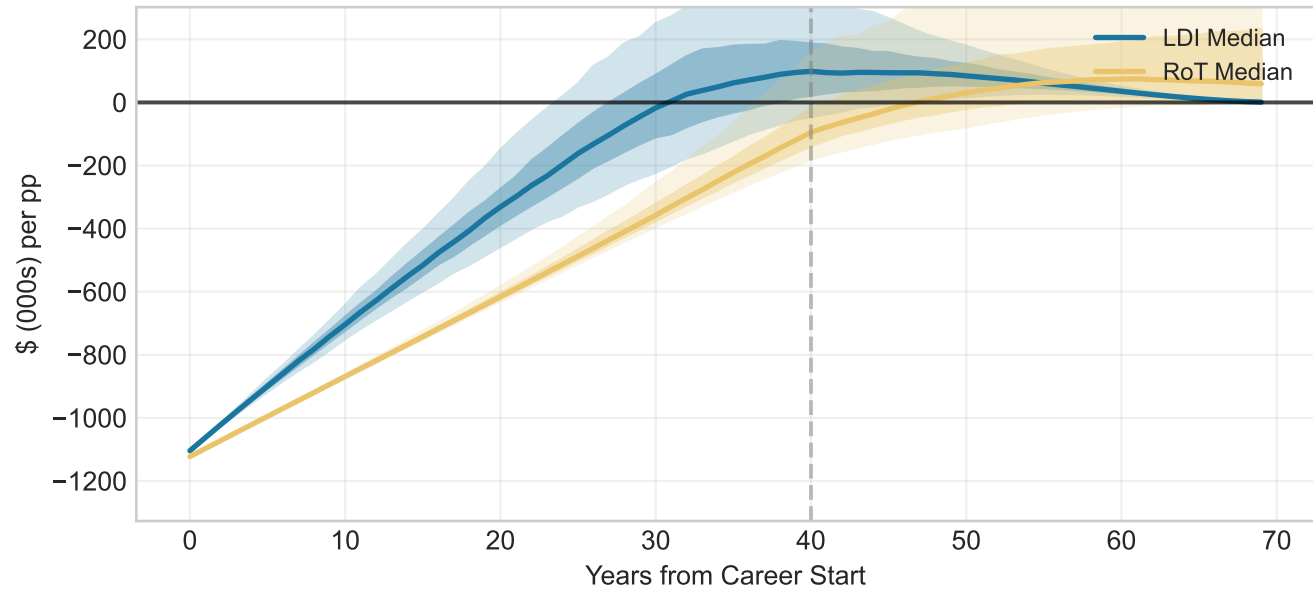
PV Consumption (Realized Rates)



Net Fixed Income PV (Bonds + HC - Expense Liability)



Interest Rate Sensitivity (\$ gain per 1pp rate drop)

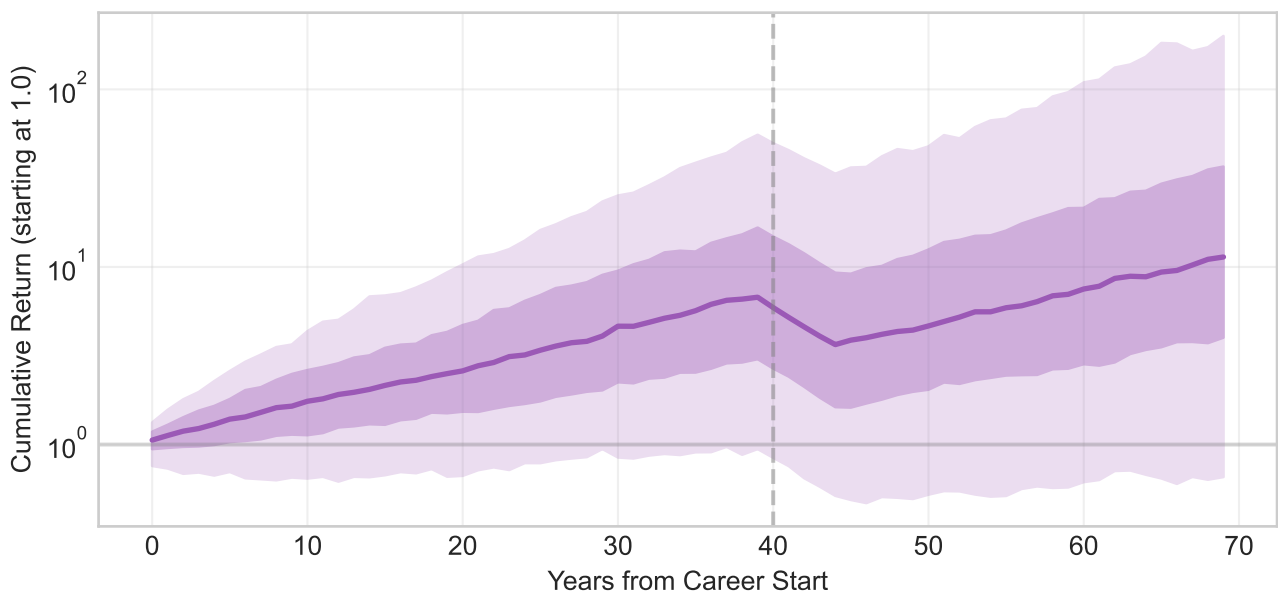




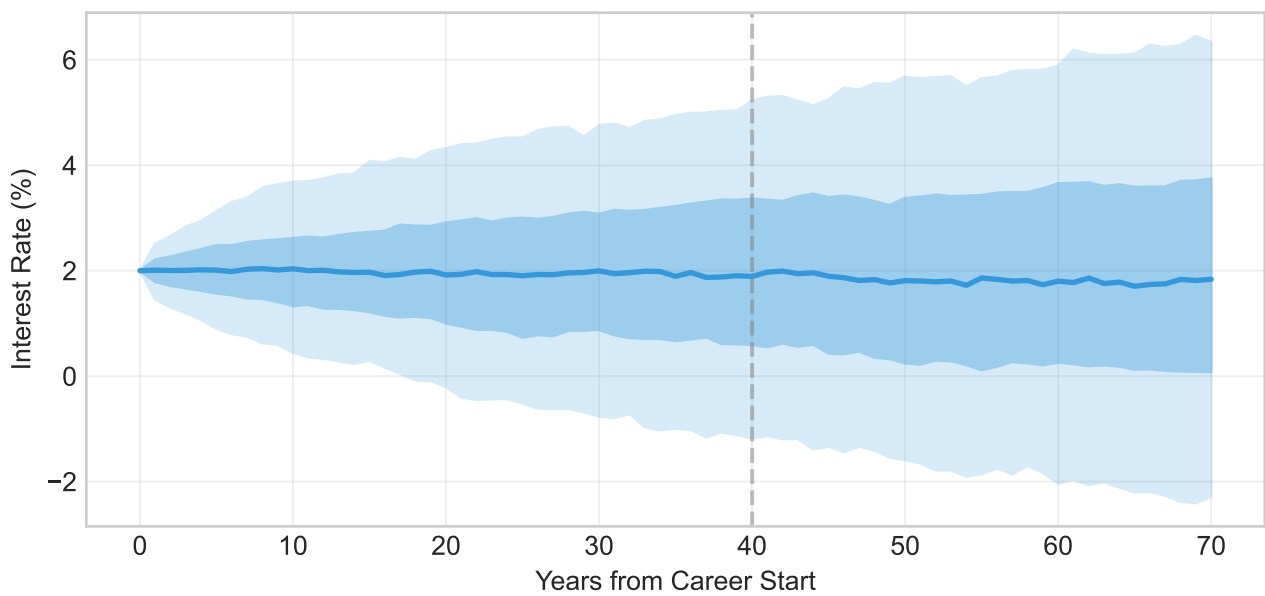
# Sequence-of-Returns Risk ( $\beta=0.4$ )

## Bad stock returns (~-12%/yr) in first 5 years of retirement

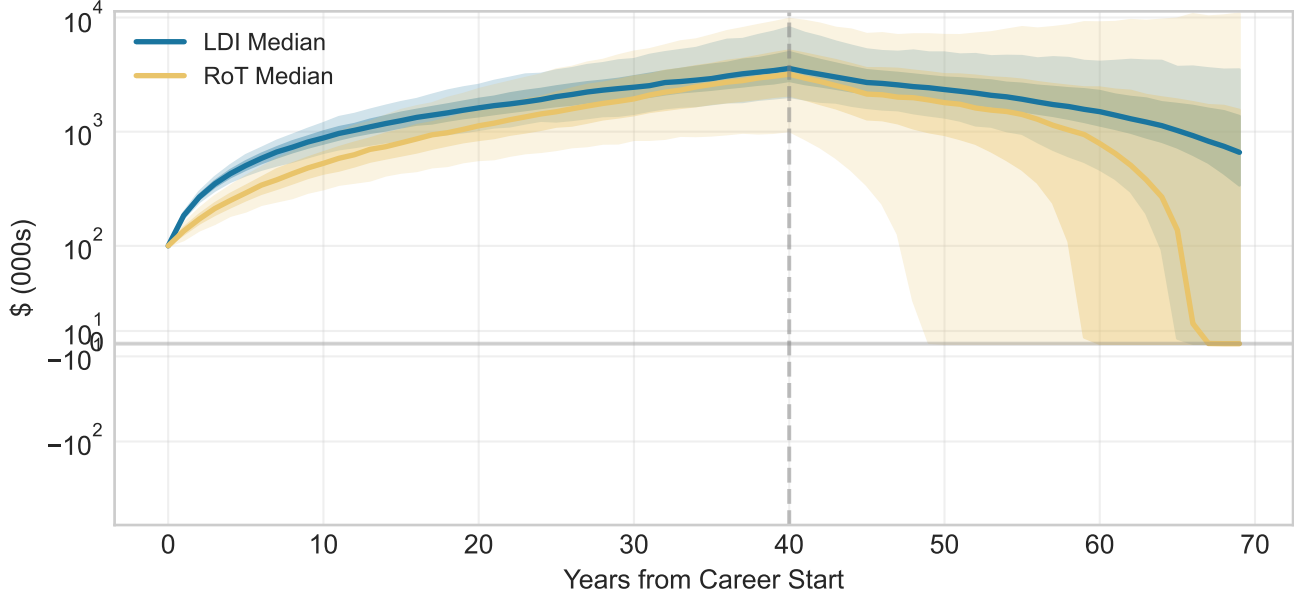
Cumulative Stock Market Returns



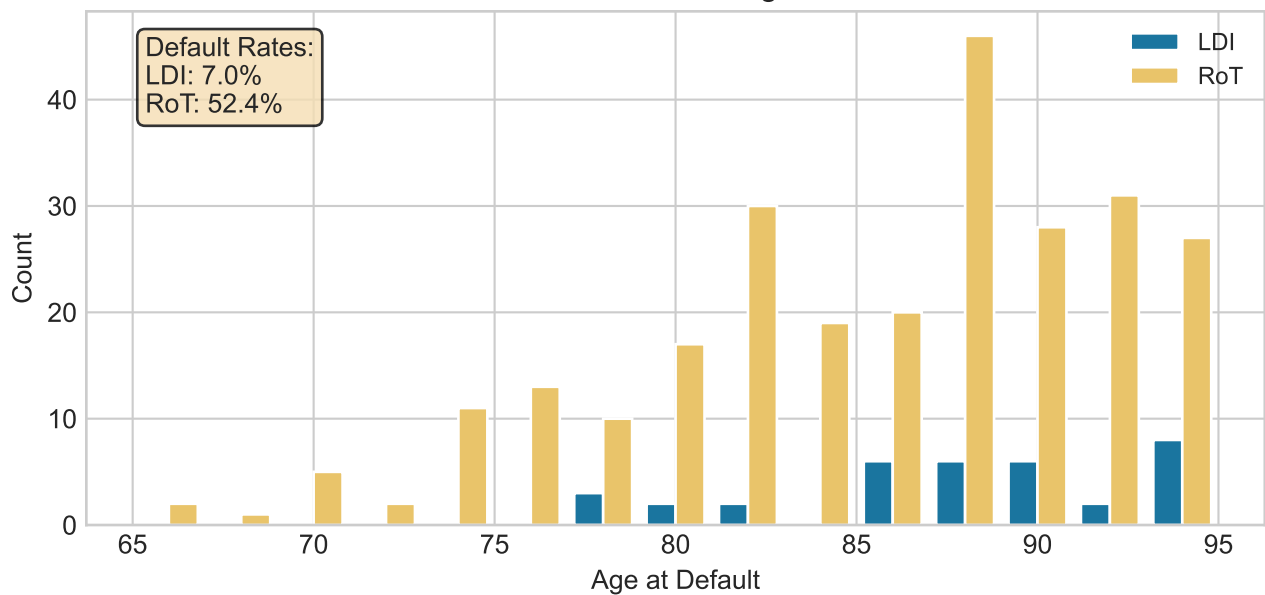
Interest Rate Paths



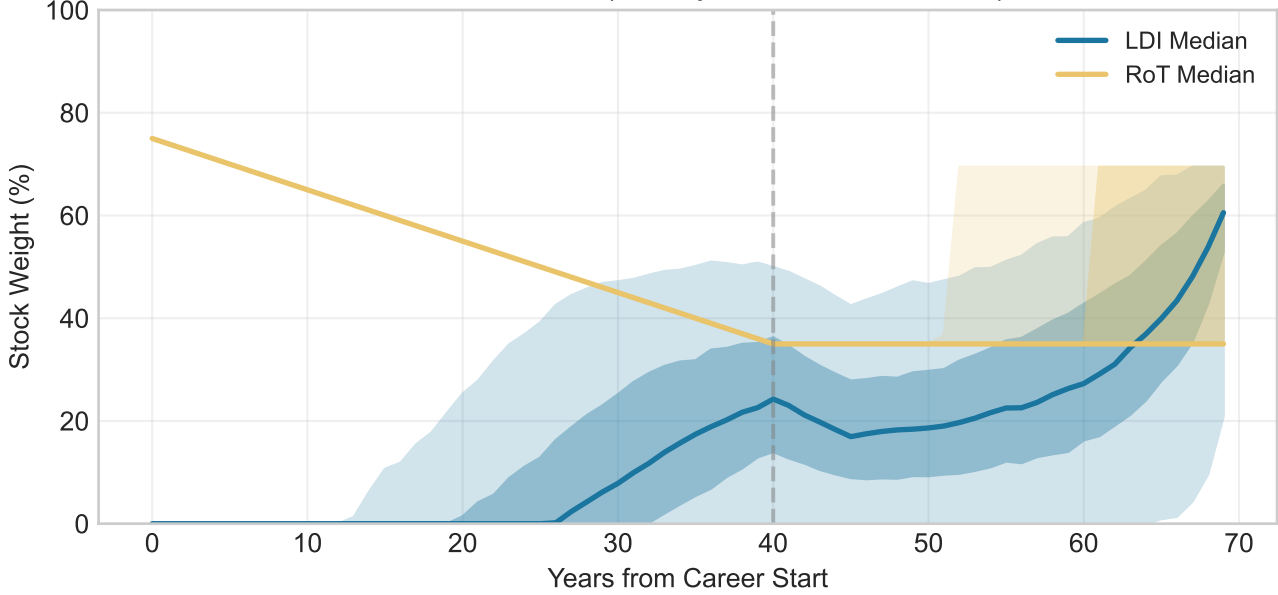
Financial Wealth



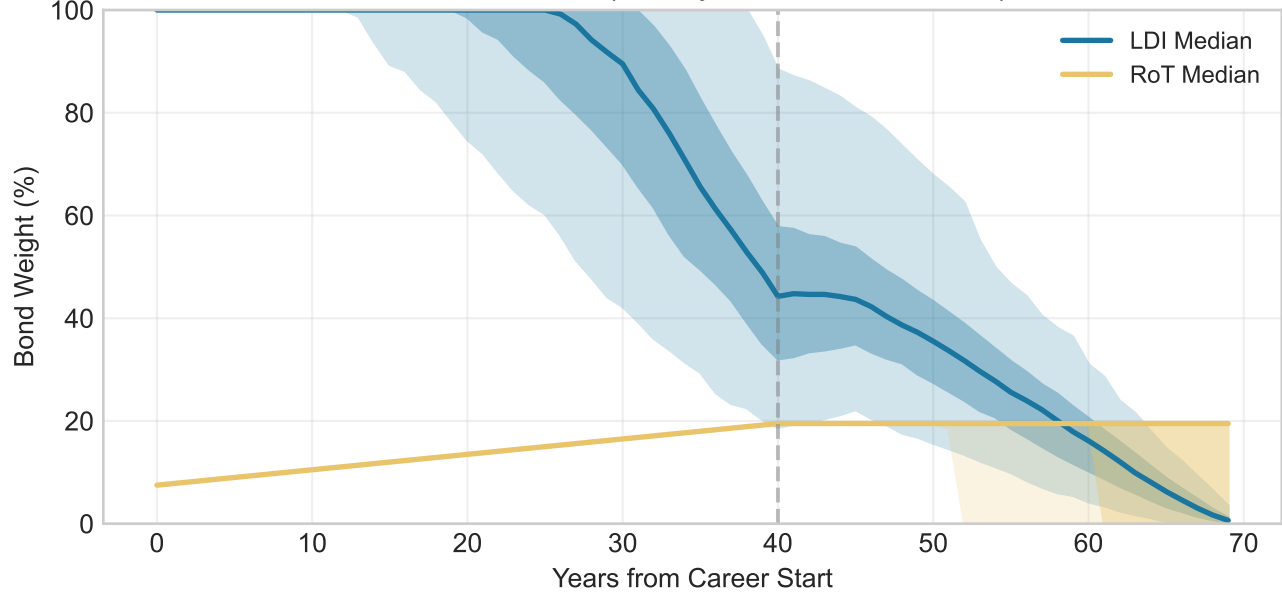
Default Timing



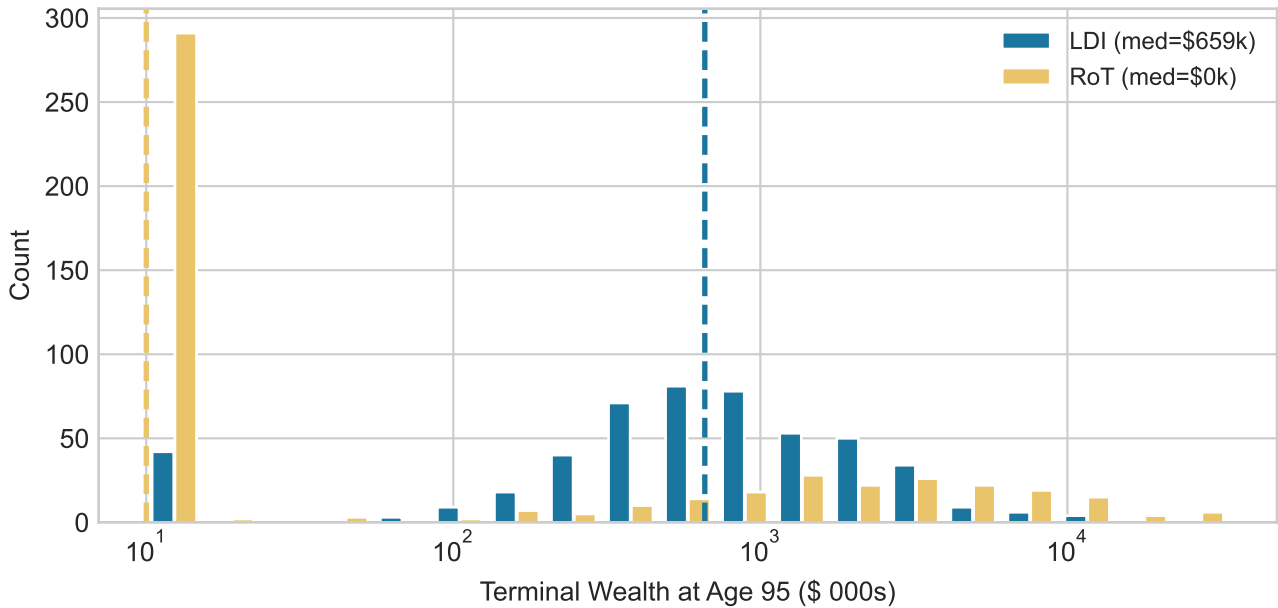
Stock Allocation (LDI Dynamic vs RoT Static)



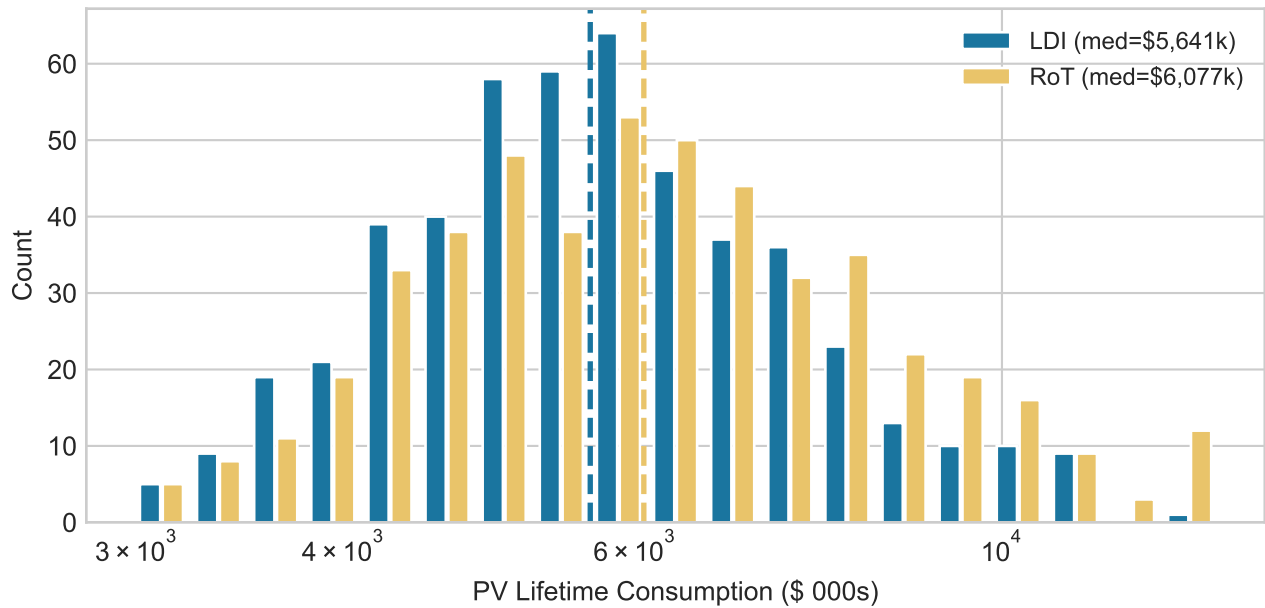
Bond Allocation (LDI Dynamic vs RoT Static)



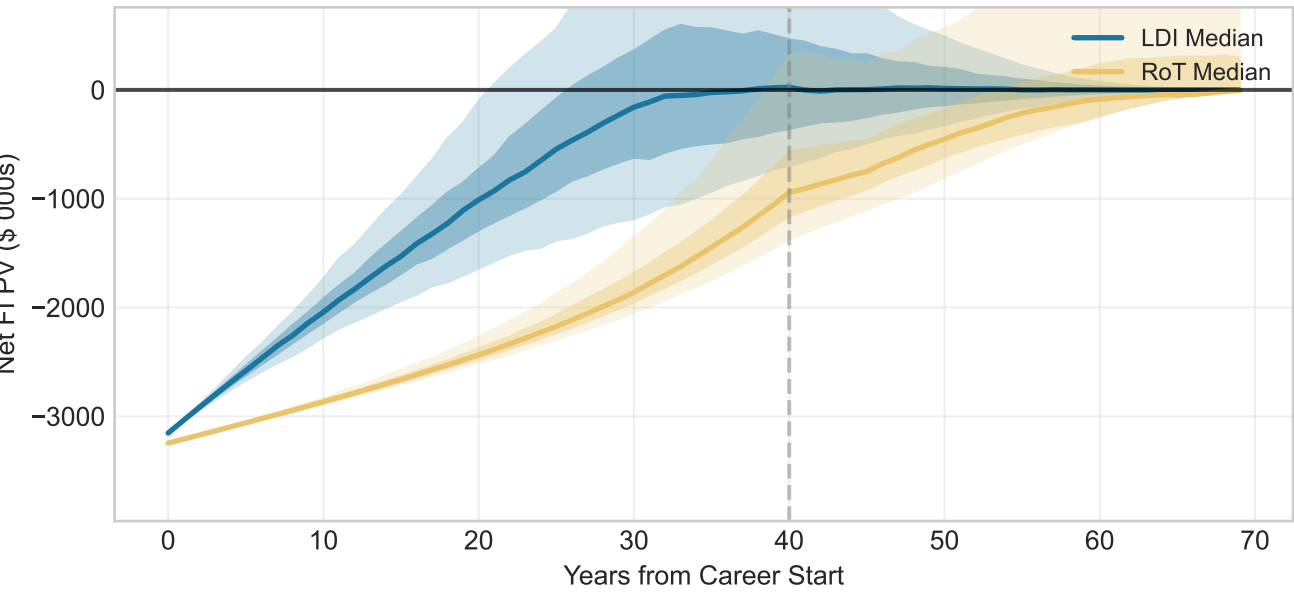
Terminal Wealth Distribution



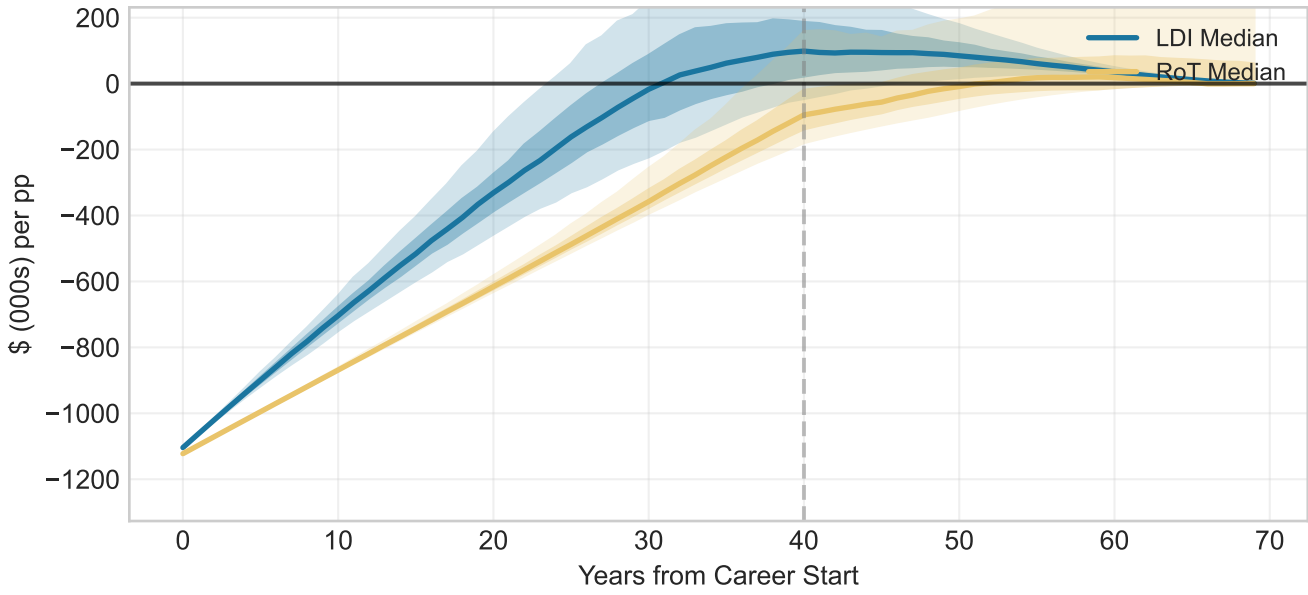
PV Consumption (Realized Rates)



Net Fixed Income PV (Bonds + HC - Expense Liability)



Interest Rate Sensitivity (\$ gain per 1pp rate drop)



Pre-Retirement Rate Shock ( $\beta=0.4$ )  
Interest rate drop (~4% cumulative) in 5 years before retirement

