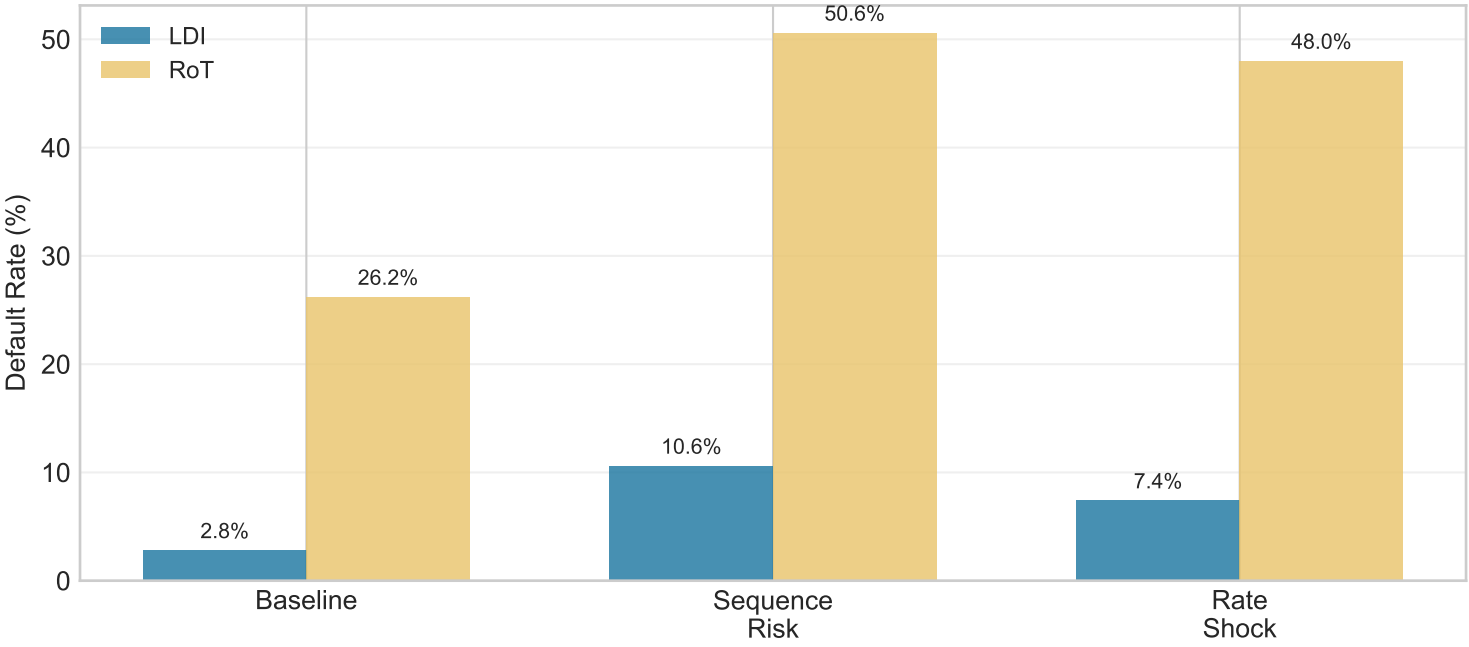
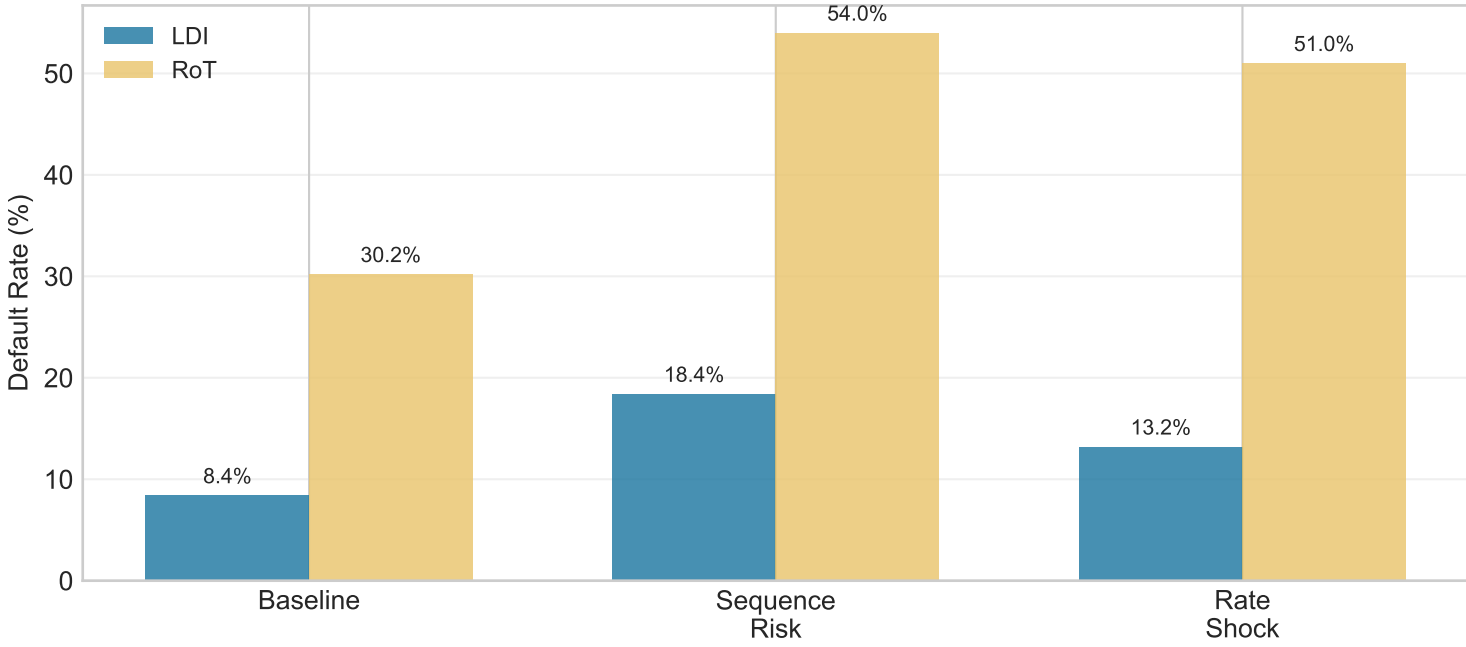


LDI vs Rule-of-Thumb: Strategy Comparison Across Scenarios

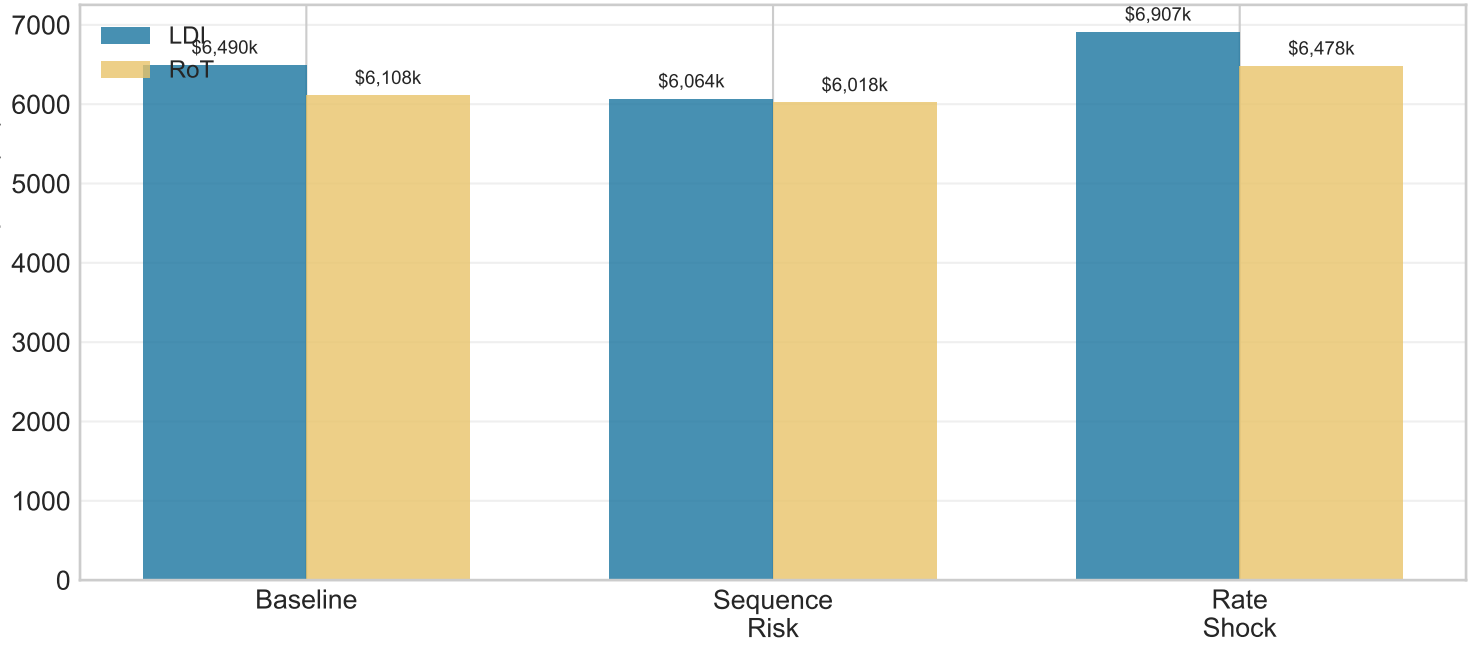
Default Rates -  $\beta=0$  (Bond-like HC)



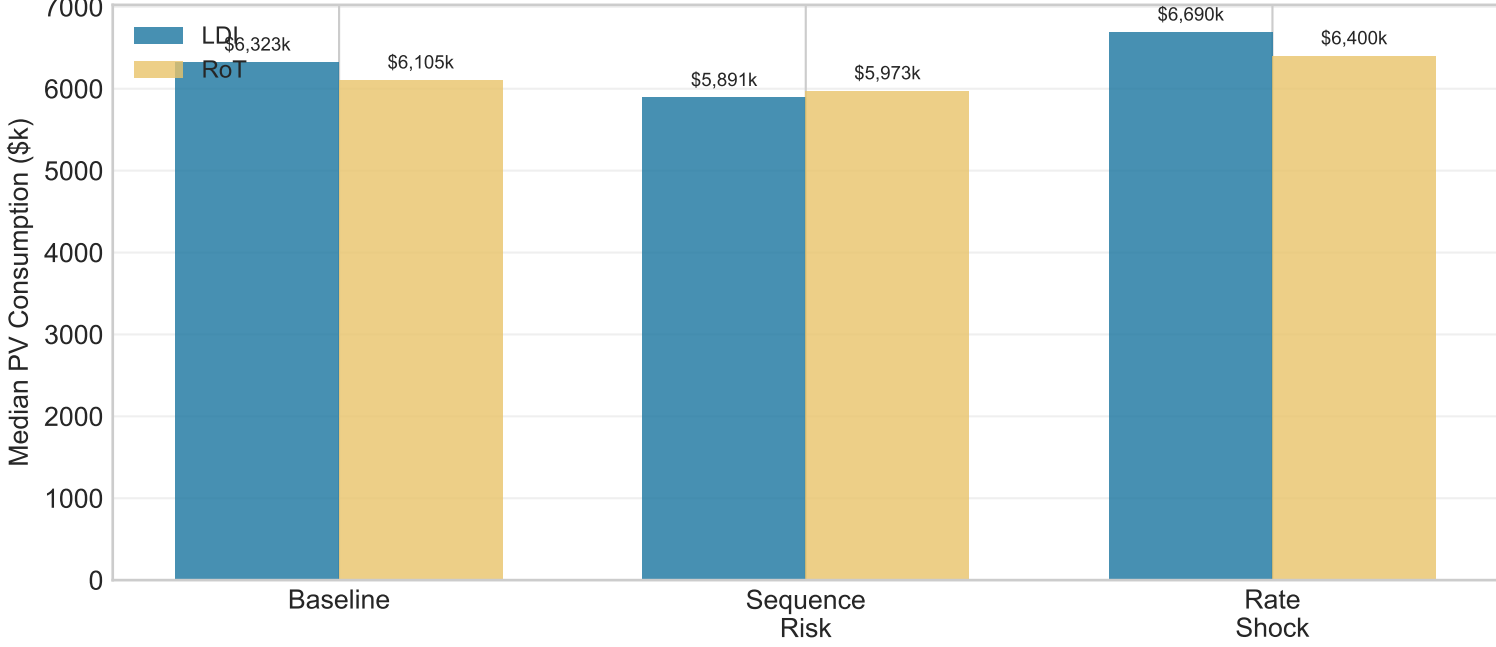
Default Rates -  $\beta=0.3$  (Risky HC)



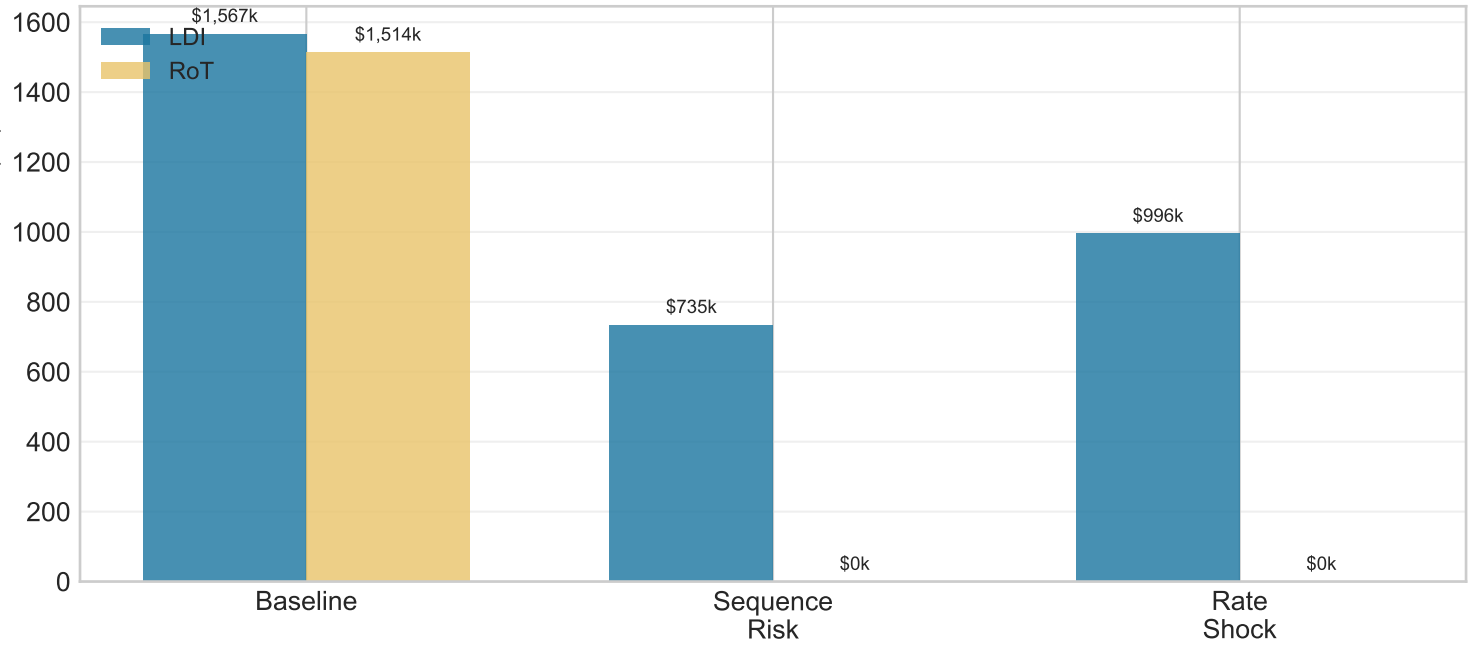
PV Lifetime Consumption -  $\beta=0$  (Bond-like HC)



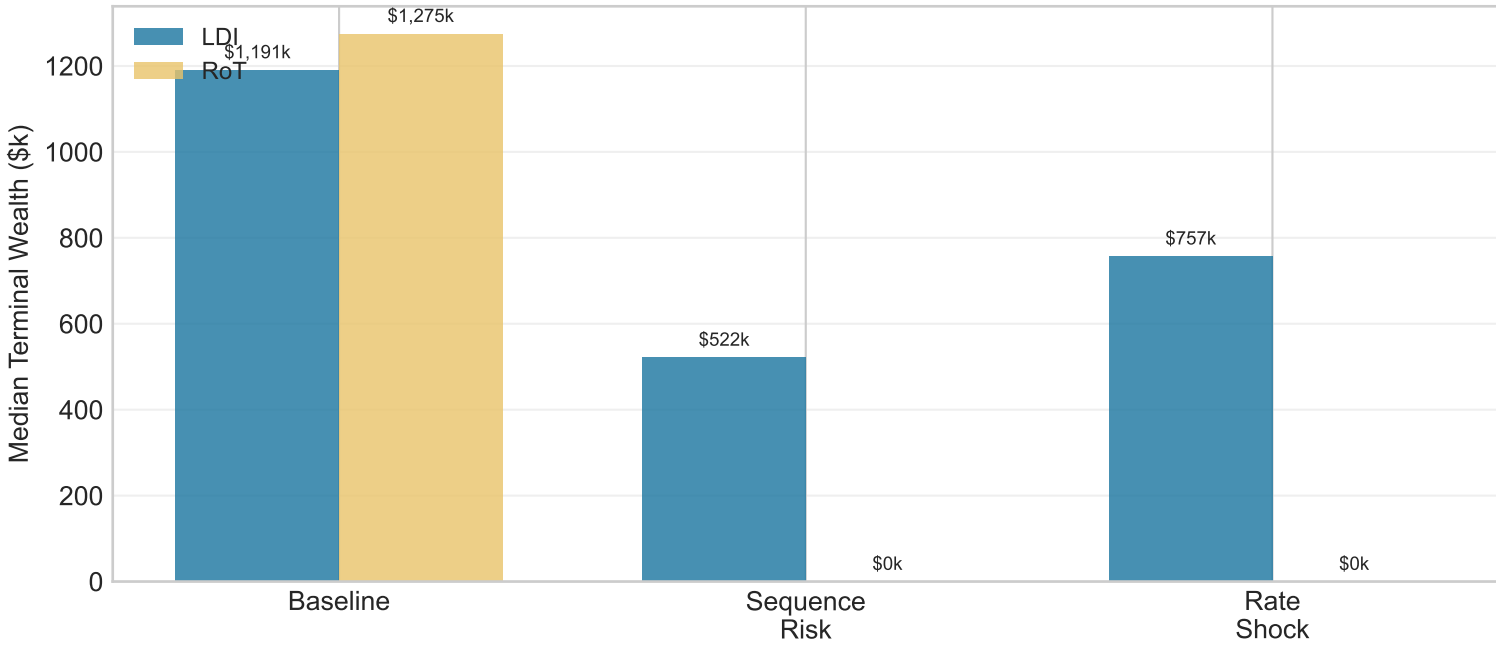
PV Lifetime Consumption -  $\beta=0.3$  (Risky HC)



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

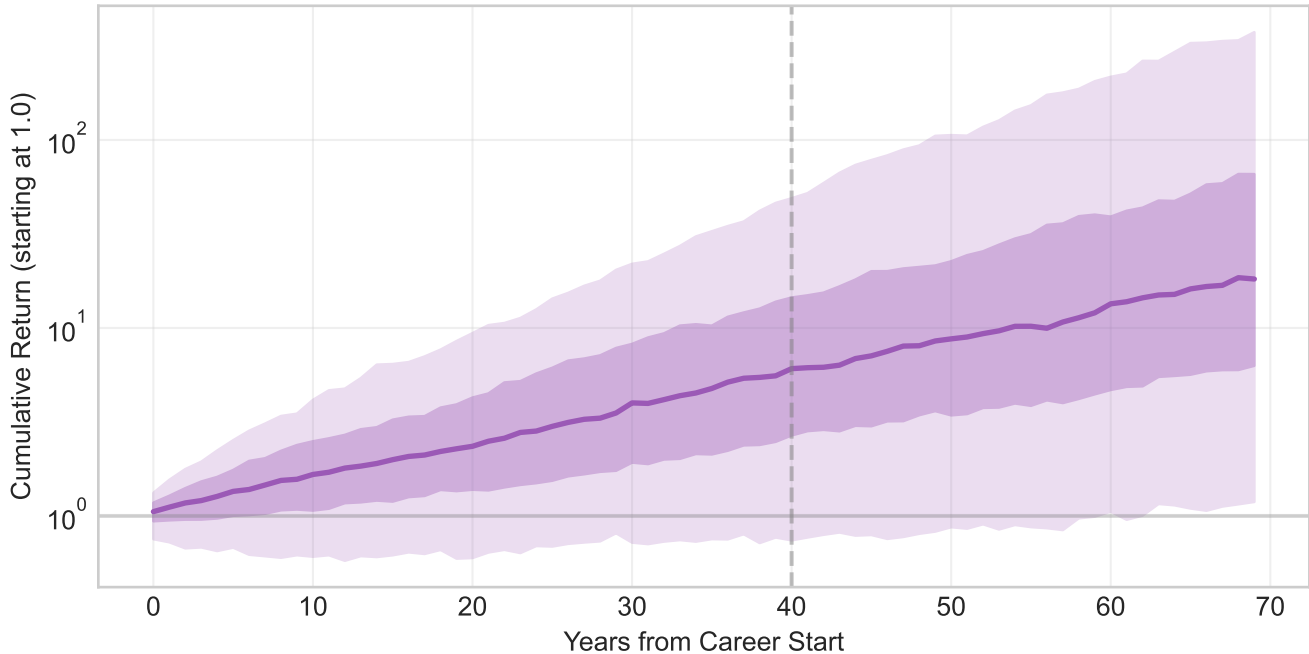


Terminal Wealth at Age 95 -  $\beta=0.3$  (Risky HC)

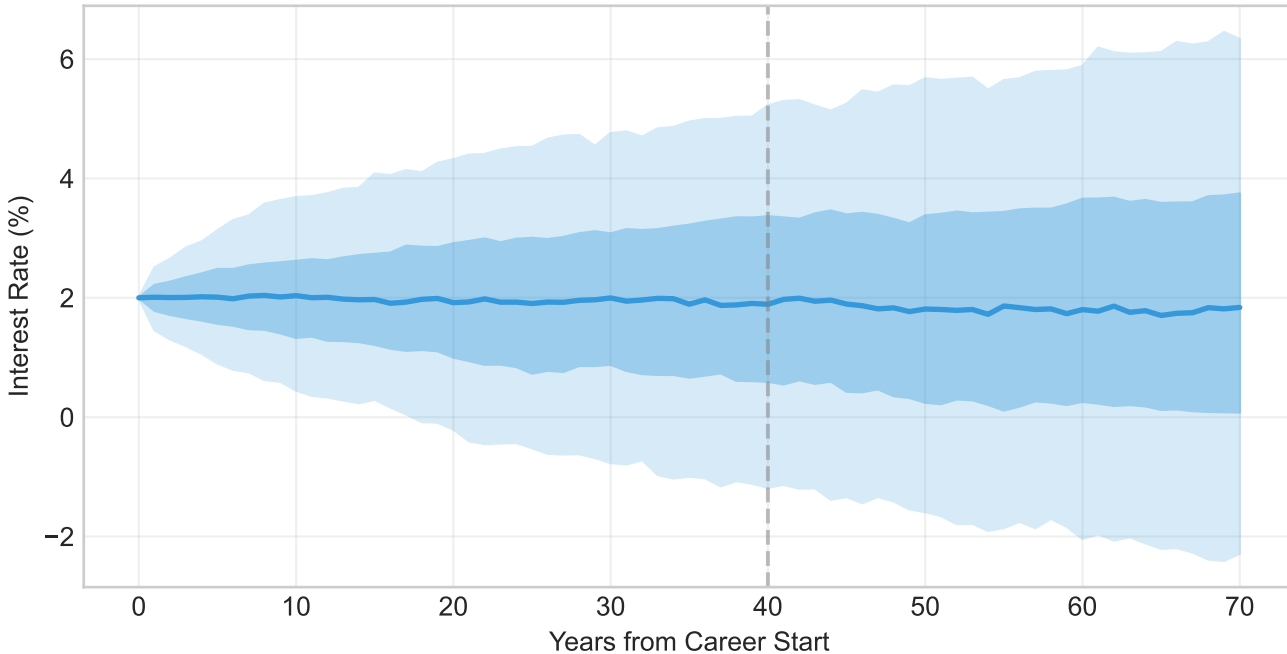


Baseline: Normal Monte Carlo ( $\beta=0$ , Bond-like HC)  
Standard random shocks - no scenario manipulation

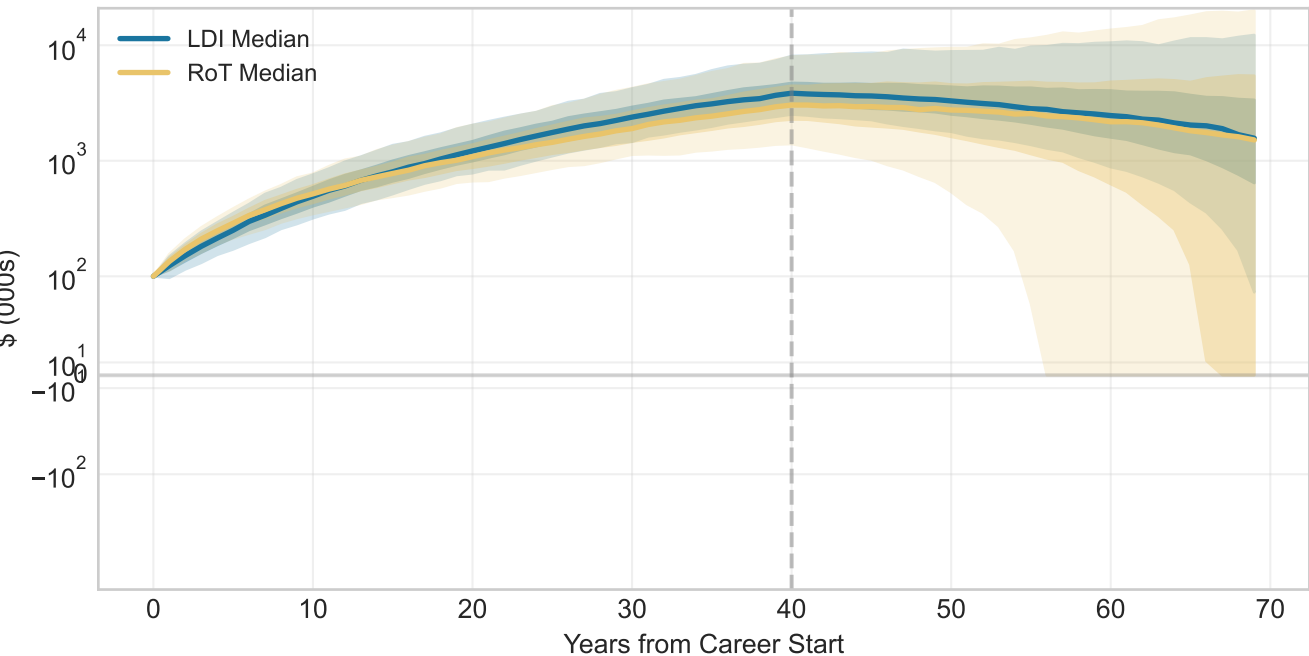
Cumulative Stock Market Returns



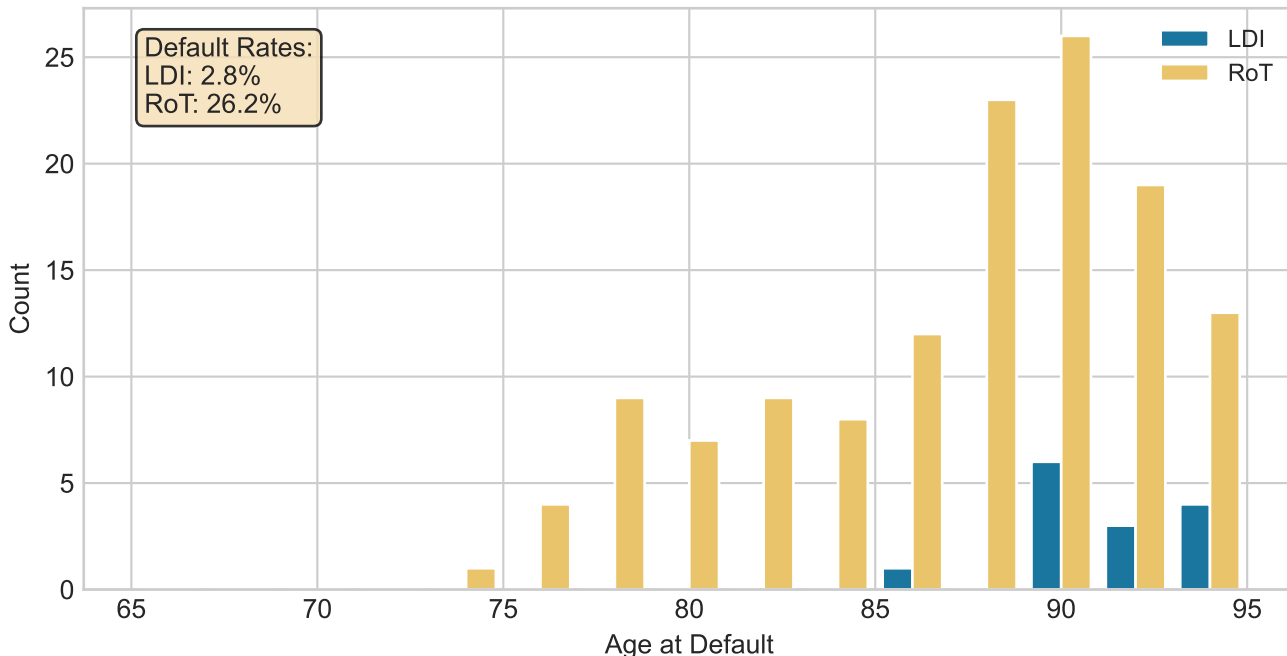
Interest Rate Paths



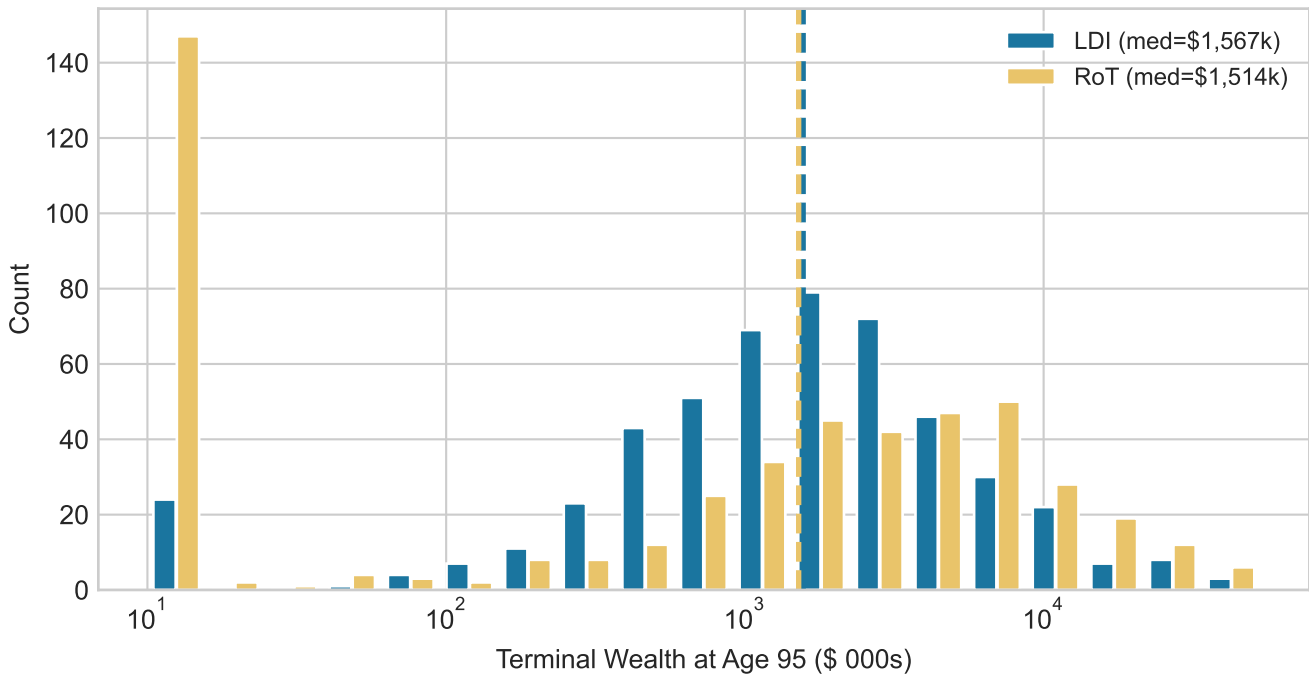
Financial Wealth



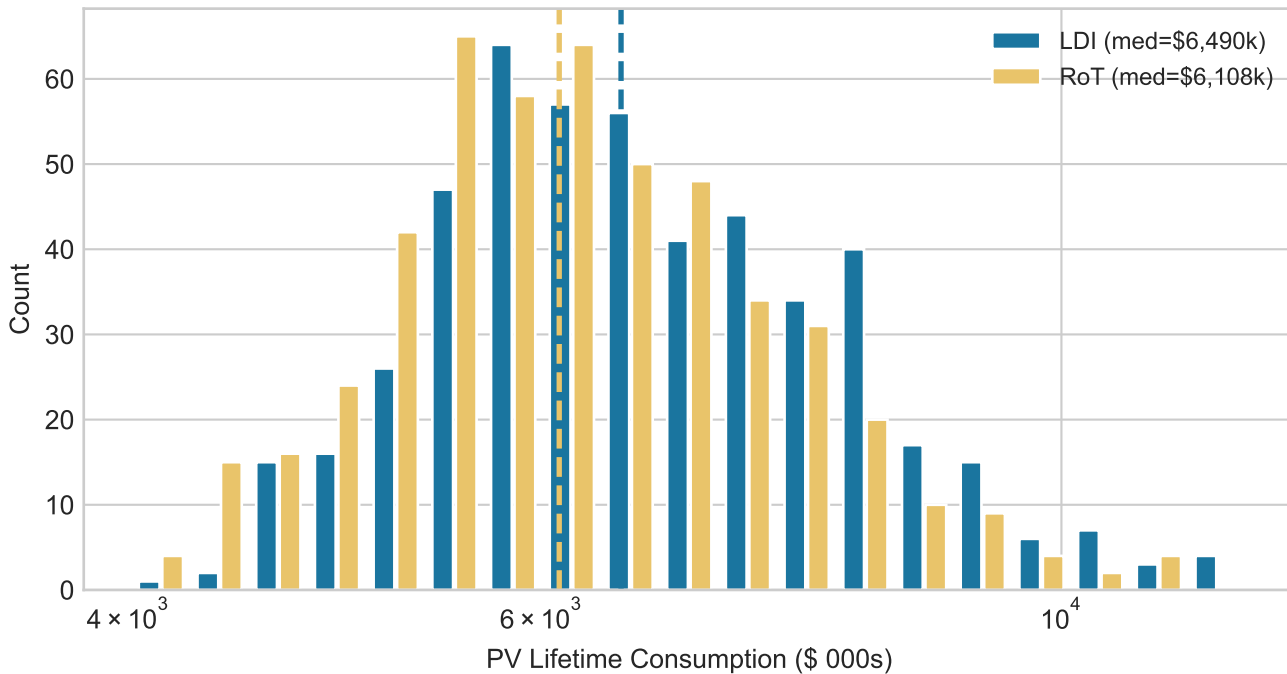
Default Timing



Terminal Wealth Distribution

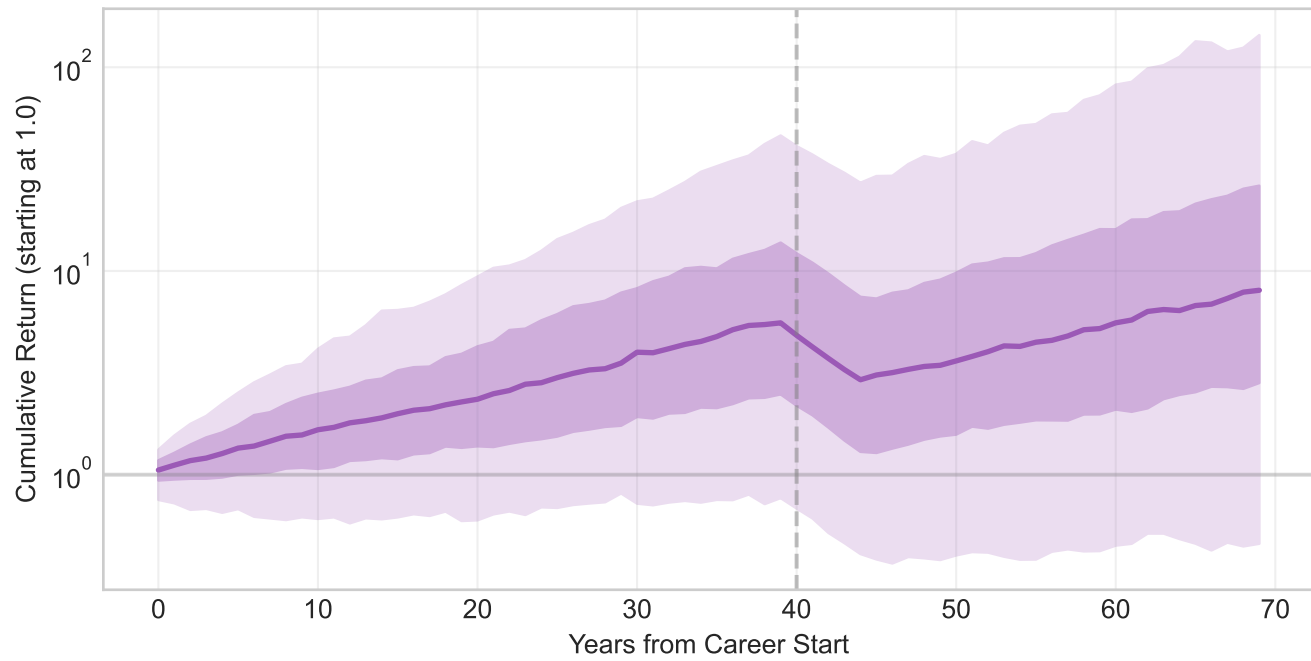


PV Consumption (Realized Rates)

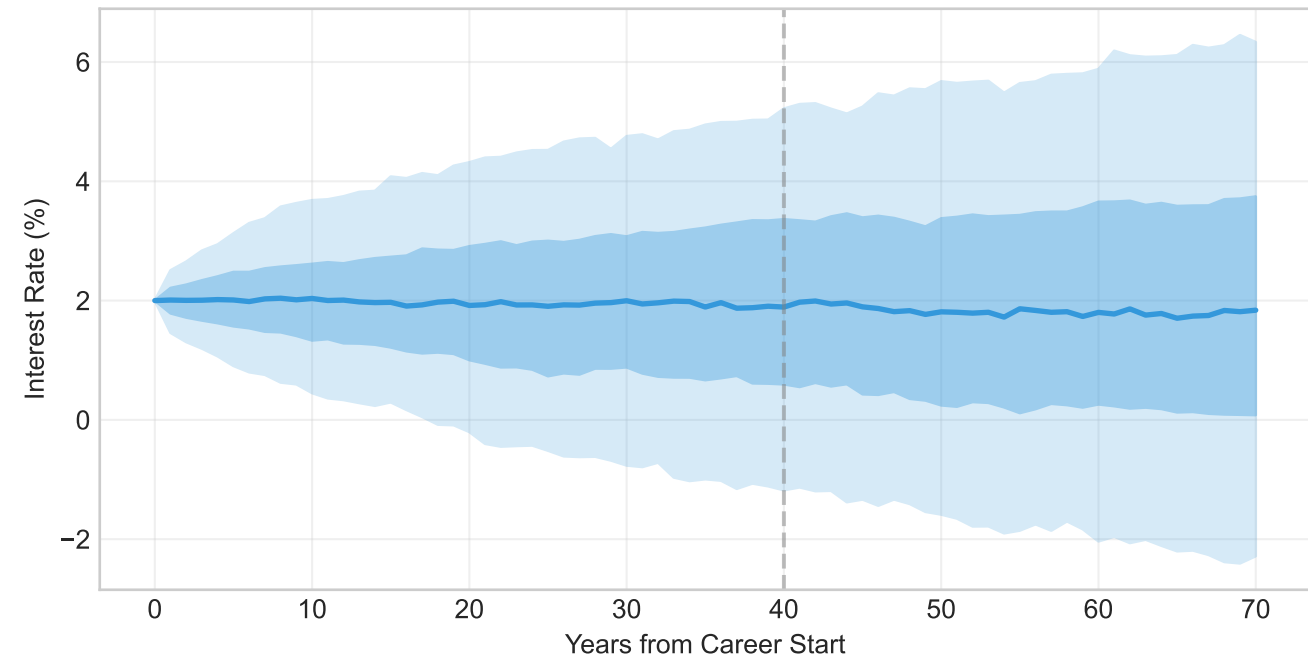


Sequence-of-Returns Risk ( $\beta=0$ , Bond-like HC)  
Bad stock returns (~-12%/yr) in first 5 years of retirement

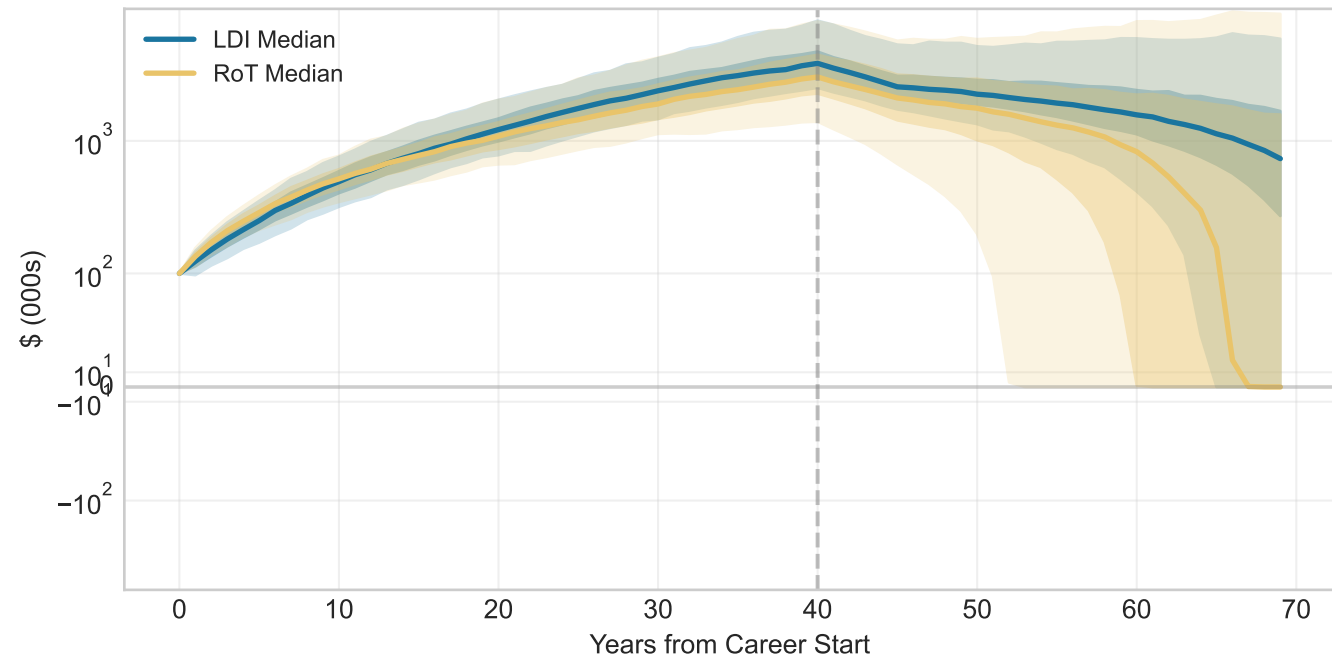
Cumulative Stock Market Returns



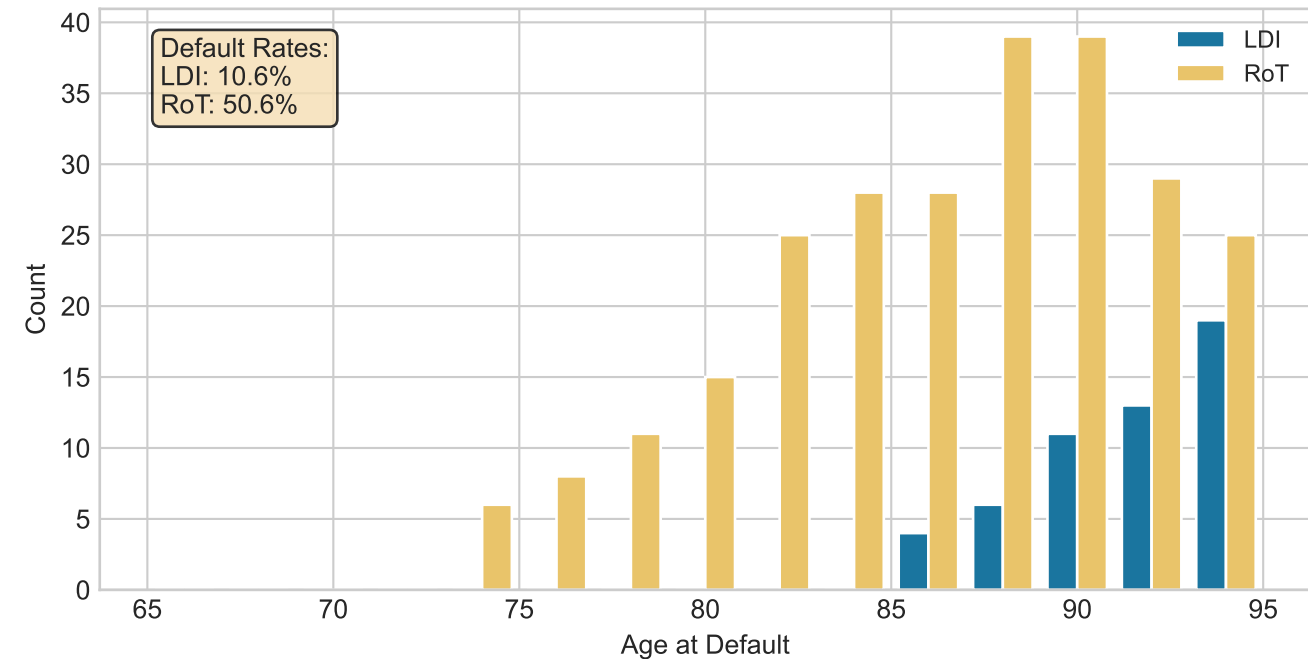
Interest Rate Paths



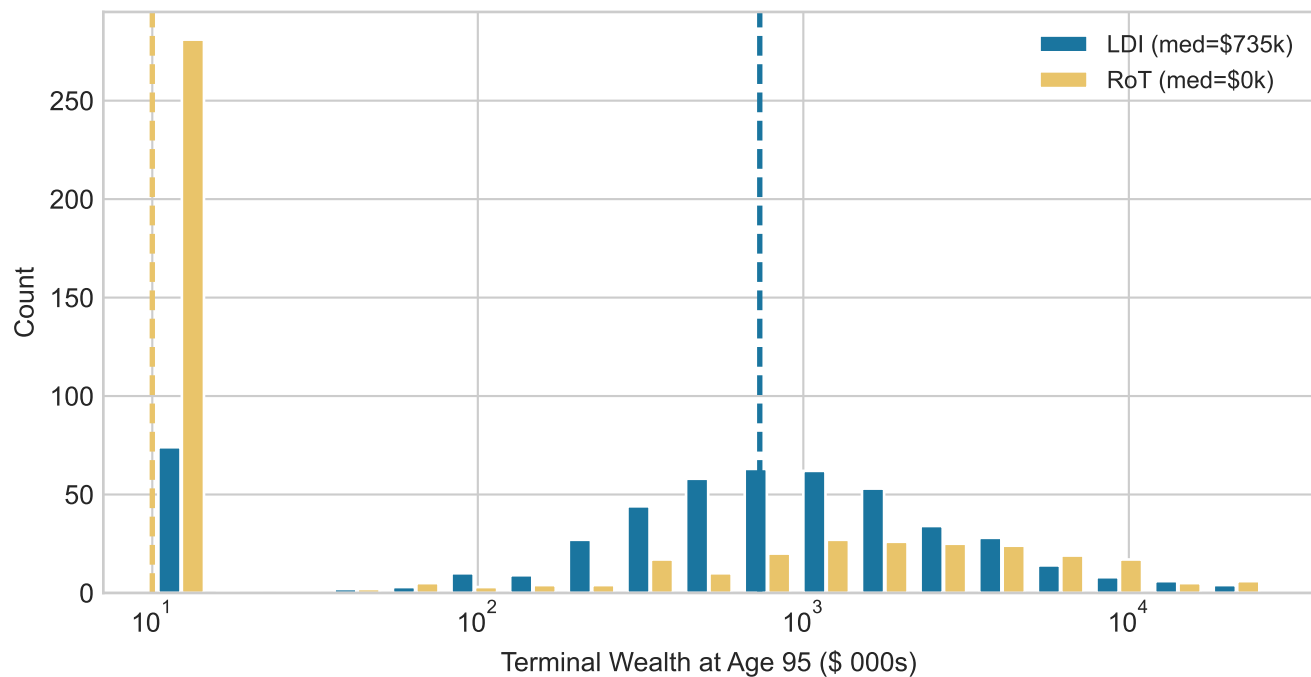
Financial Wealth



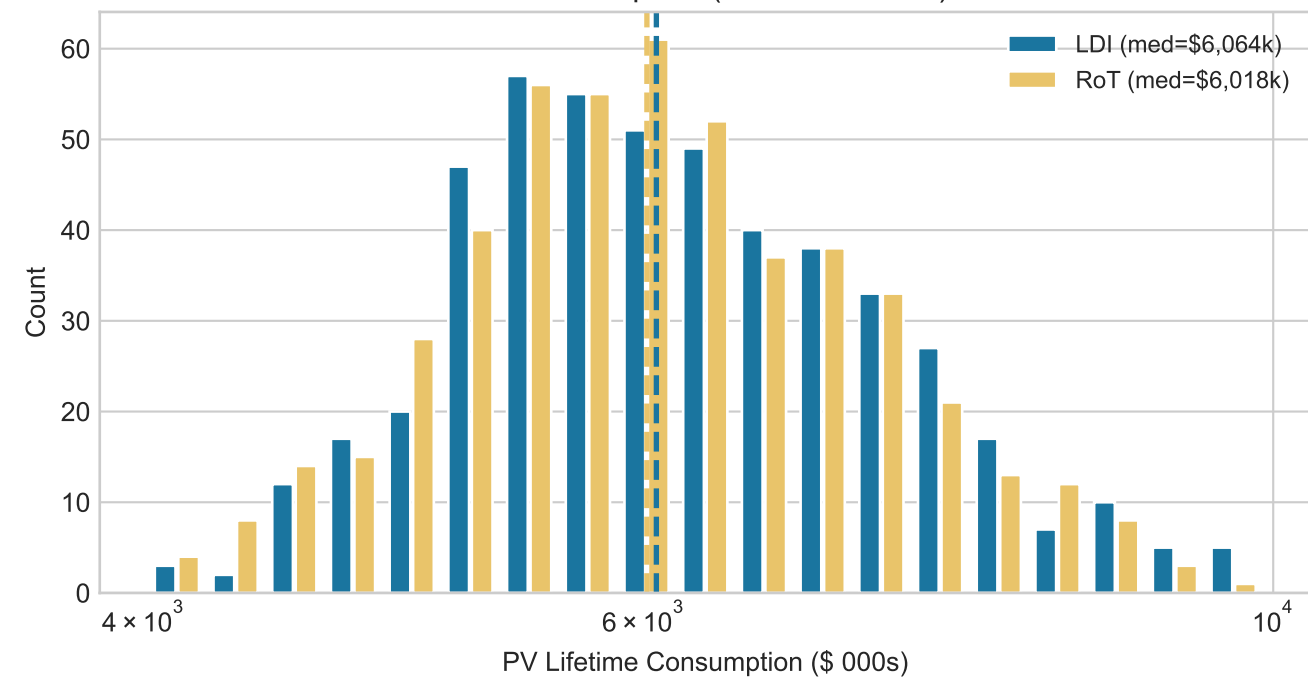
Default Timing



Terminal Wealth Distribution

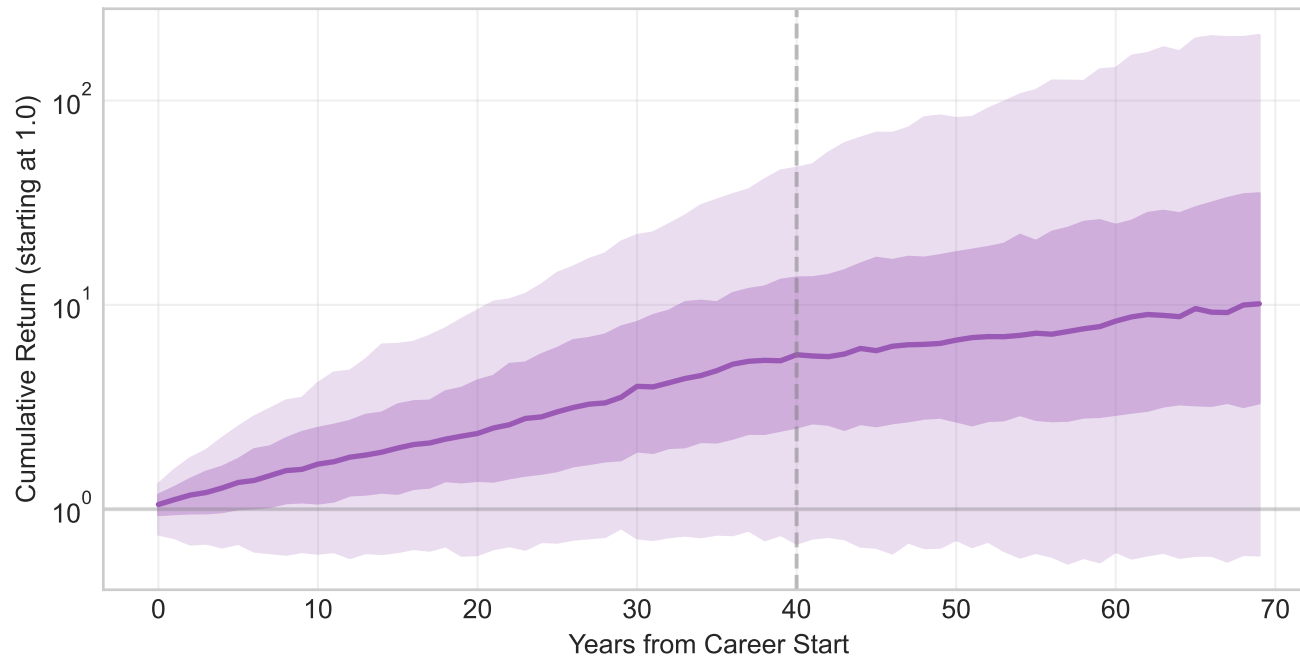


PV Consumption (Realized Rates)

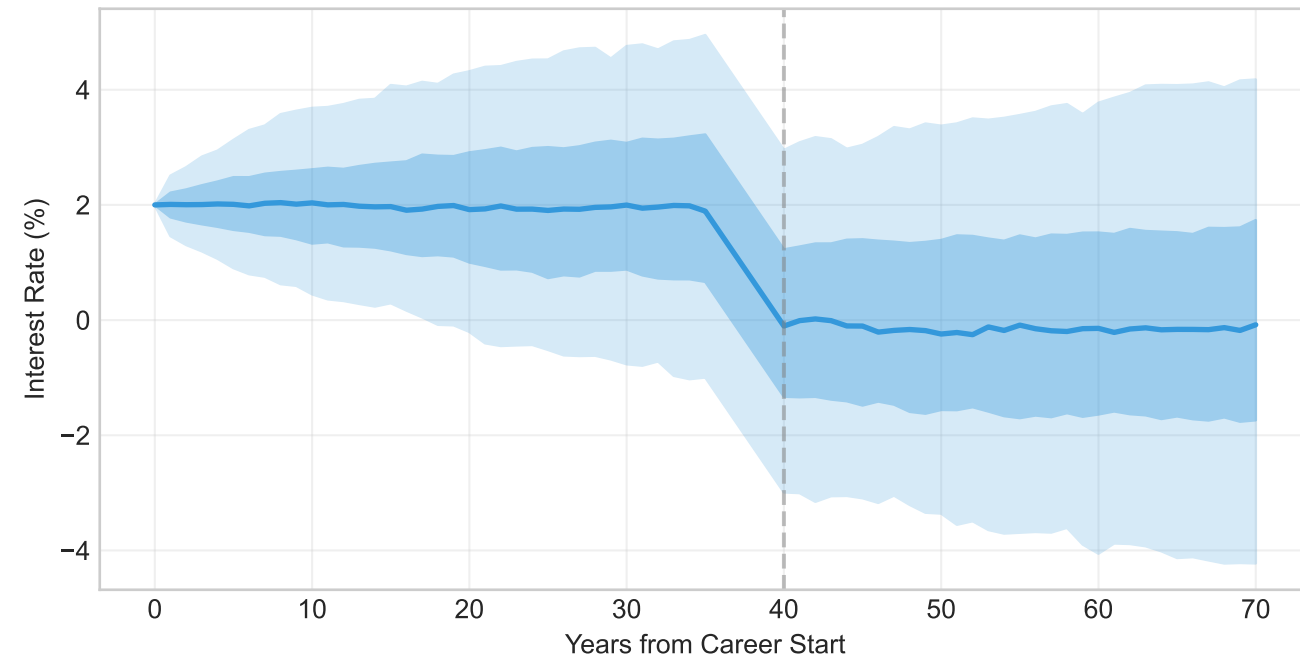


**Pre-Retirement Rate Shock ( $\beta=0$ , Bond-like HC)**  
**Interest rate drop (~4% cumulative) in 5 years before retirement**

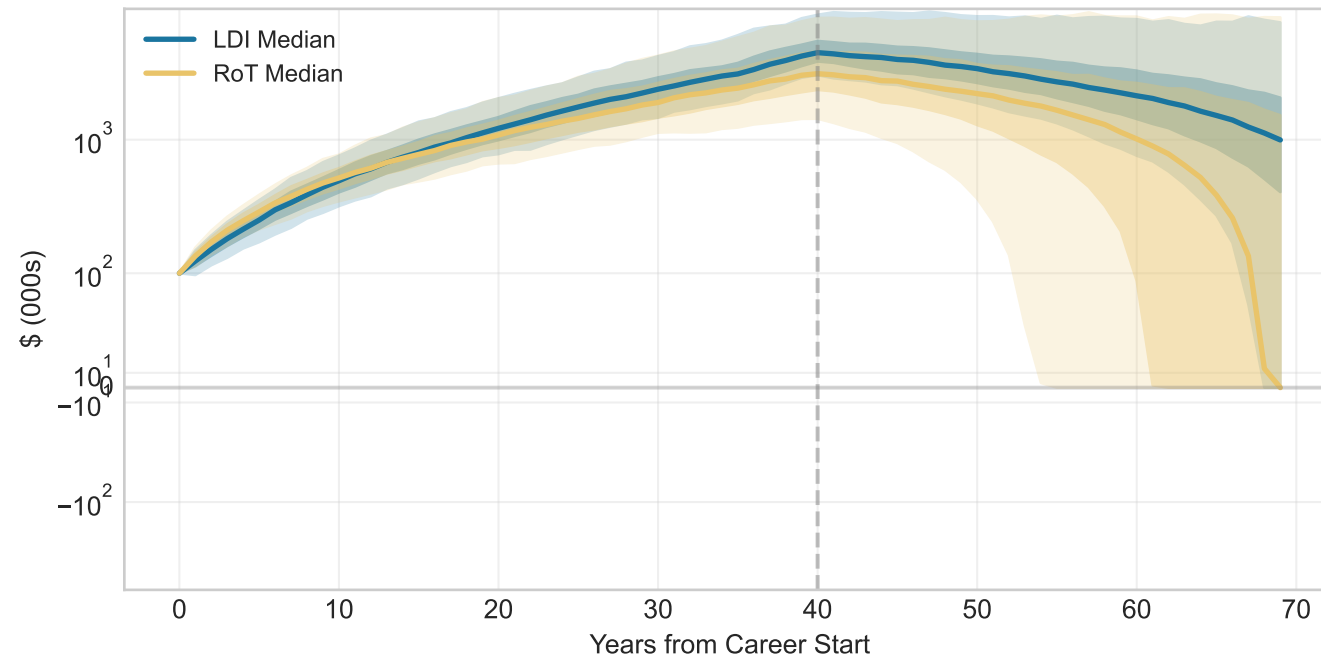
Cumulative Stock Market Returns



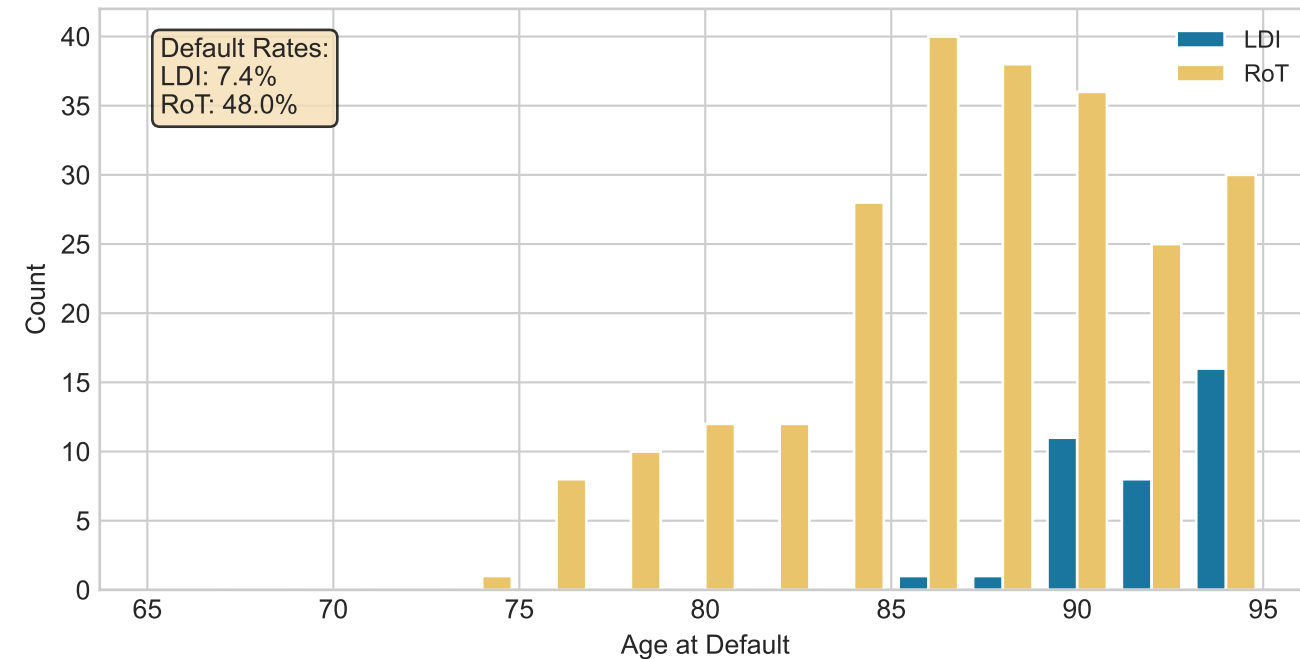
Interest Rate Paths



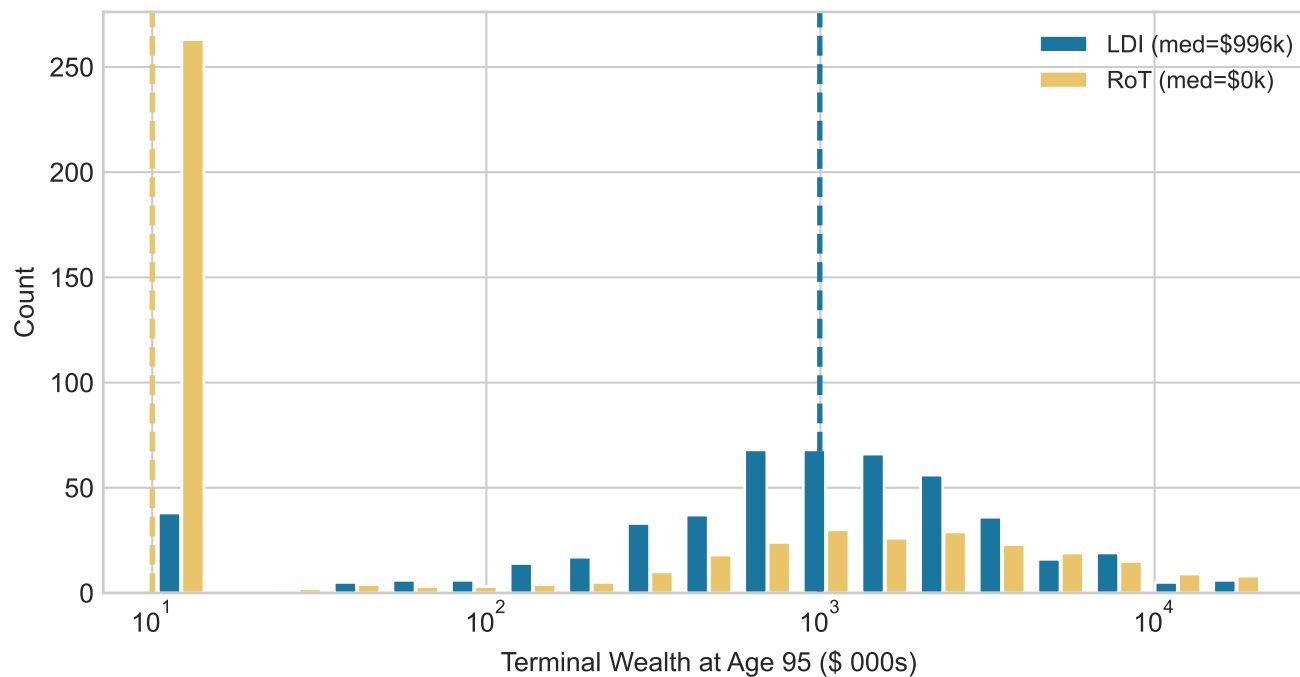
Financial Wealth



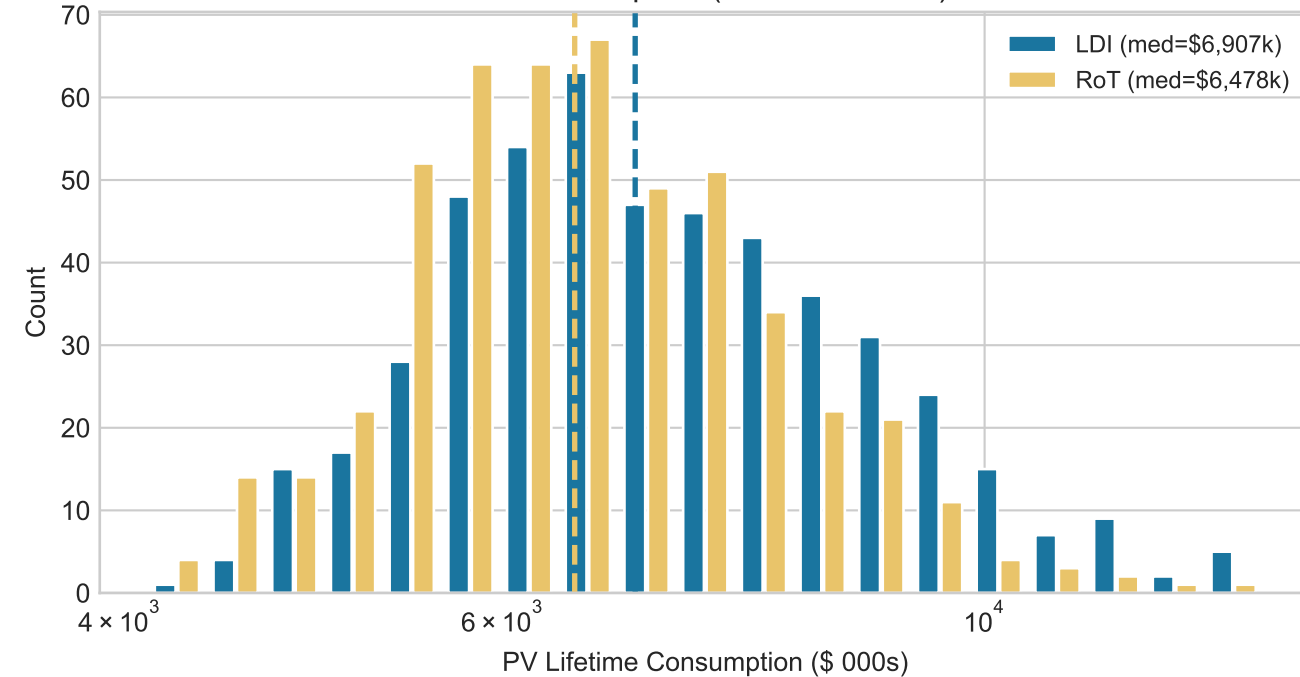
Default Timing



Terminal Wealth Distribution

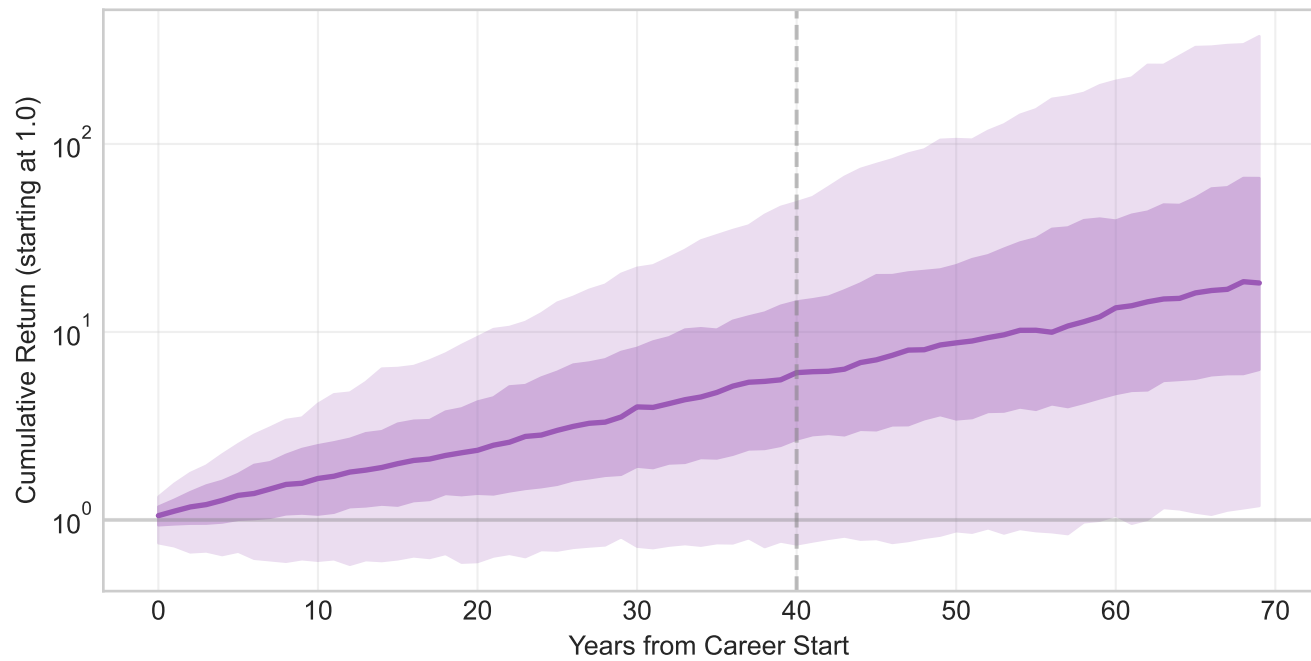


PV Consumption (Realized Rates)

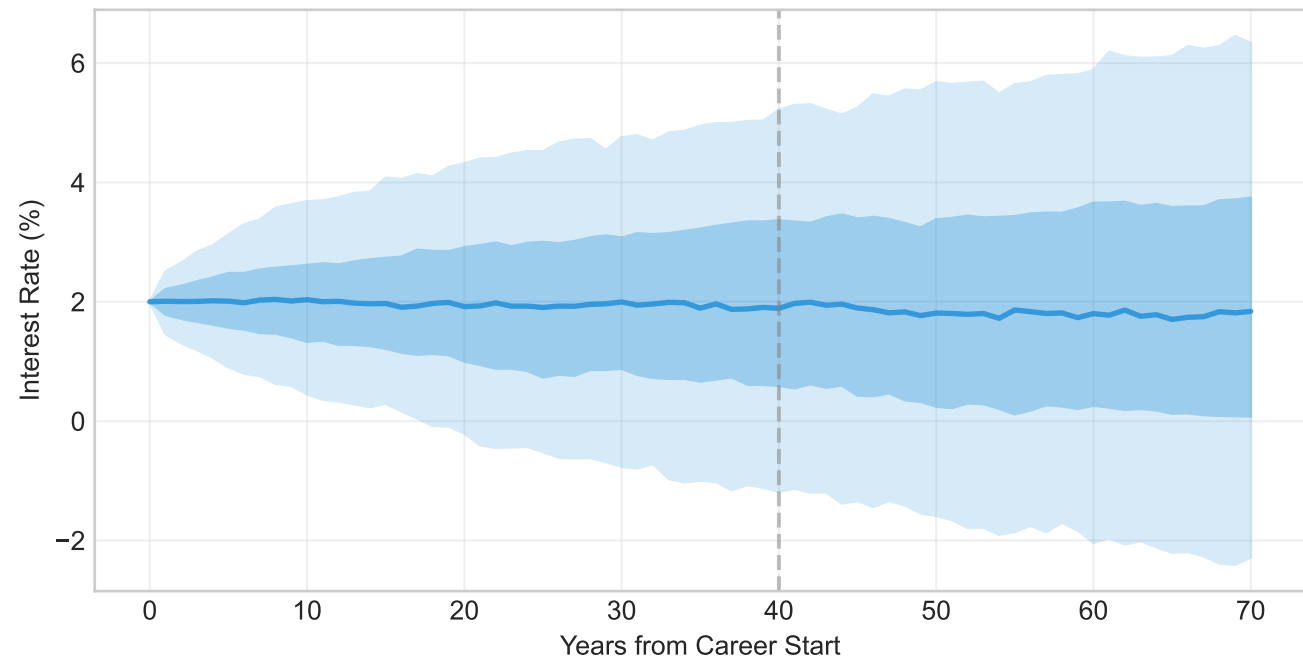


**Baseline: Normal Monte Carlo ( $\beta=0.3$ )**  
**Standard random shocks - no scenario manipulation**

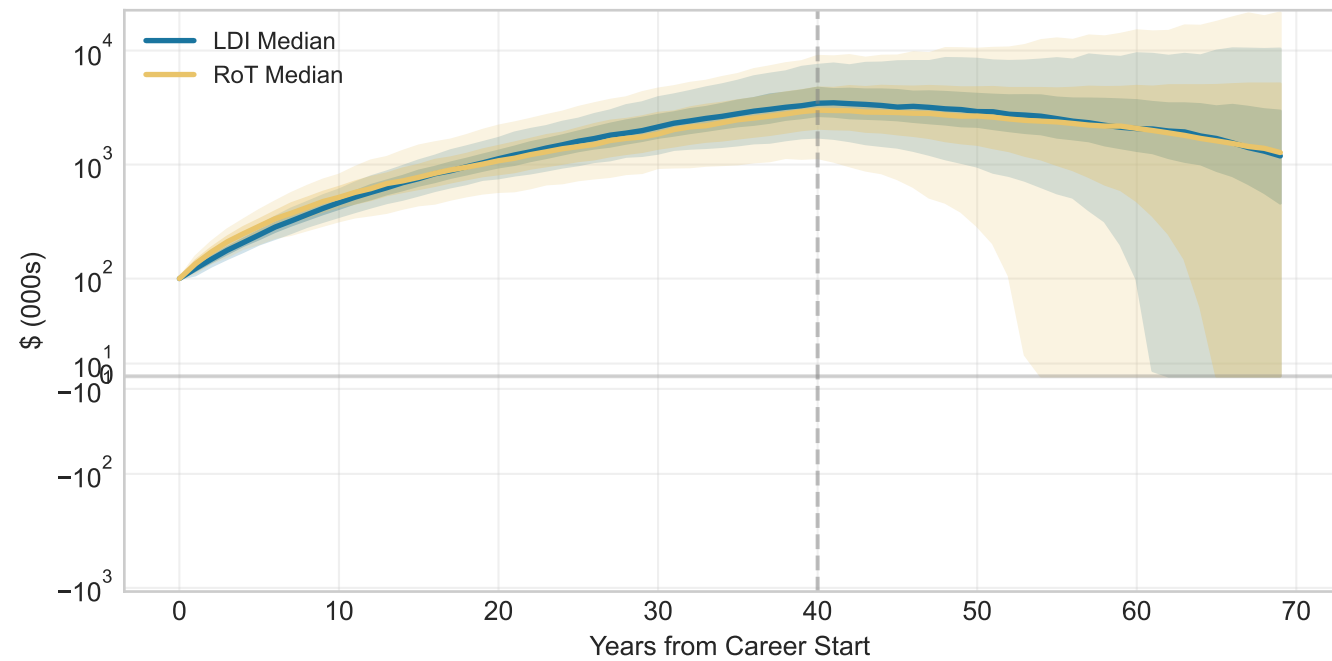
Cumulative Stock Market Returns



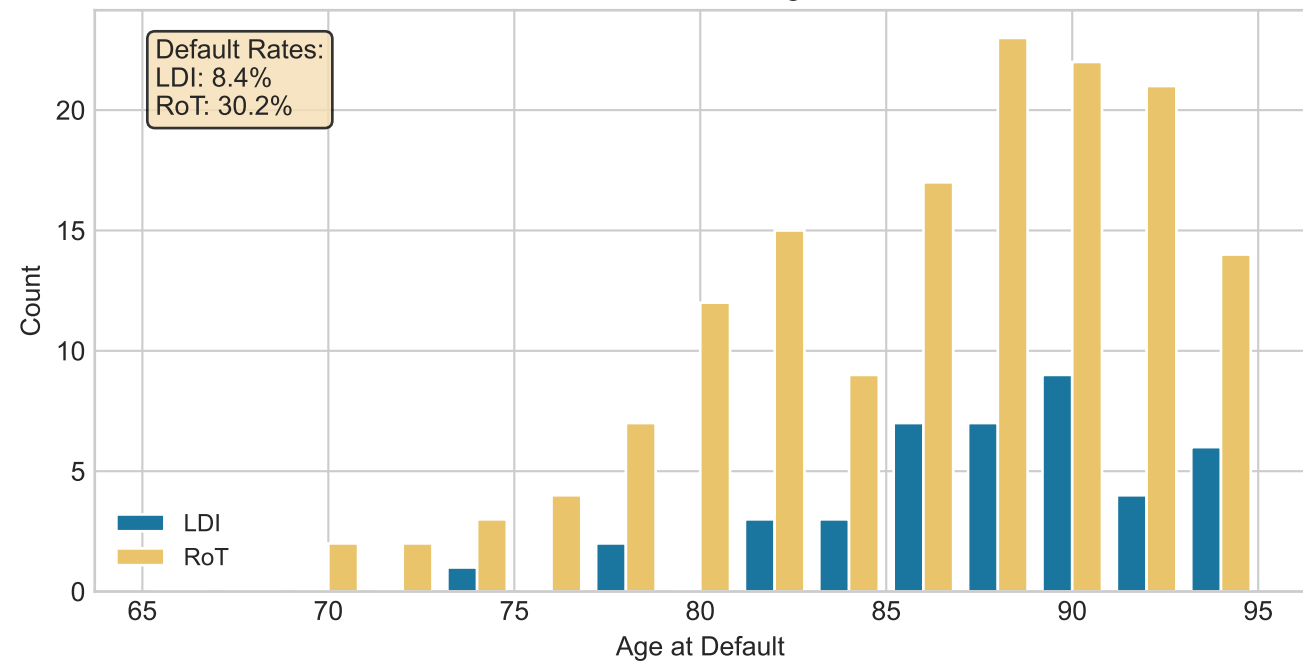
Interest Rate Paths



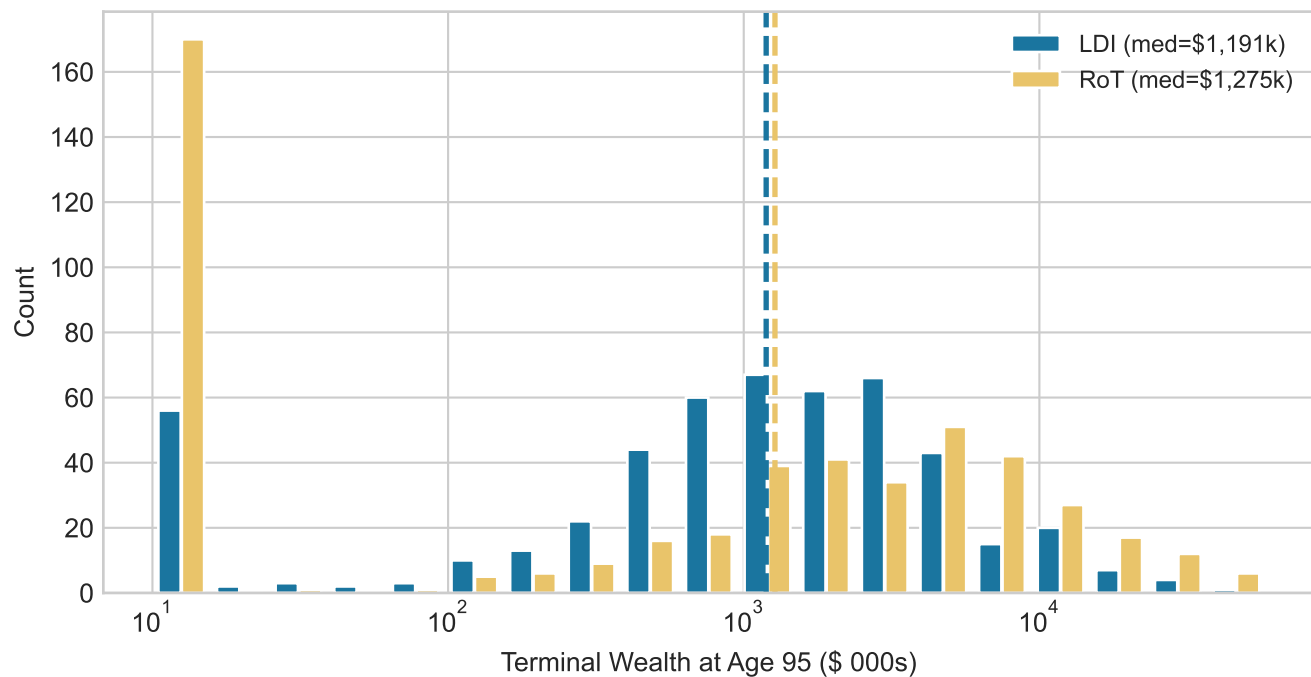
Financial Wealth



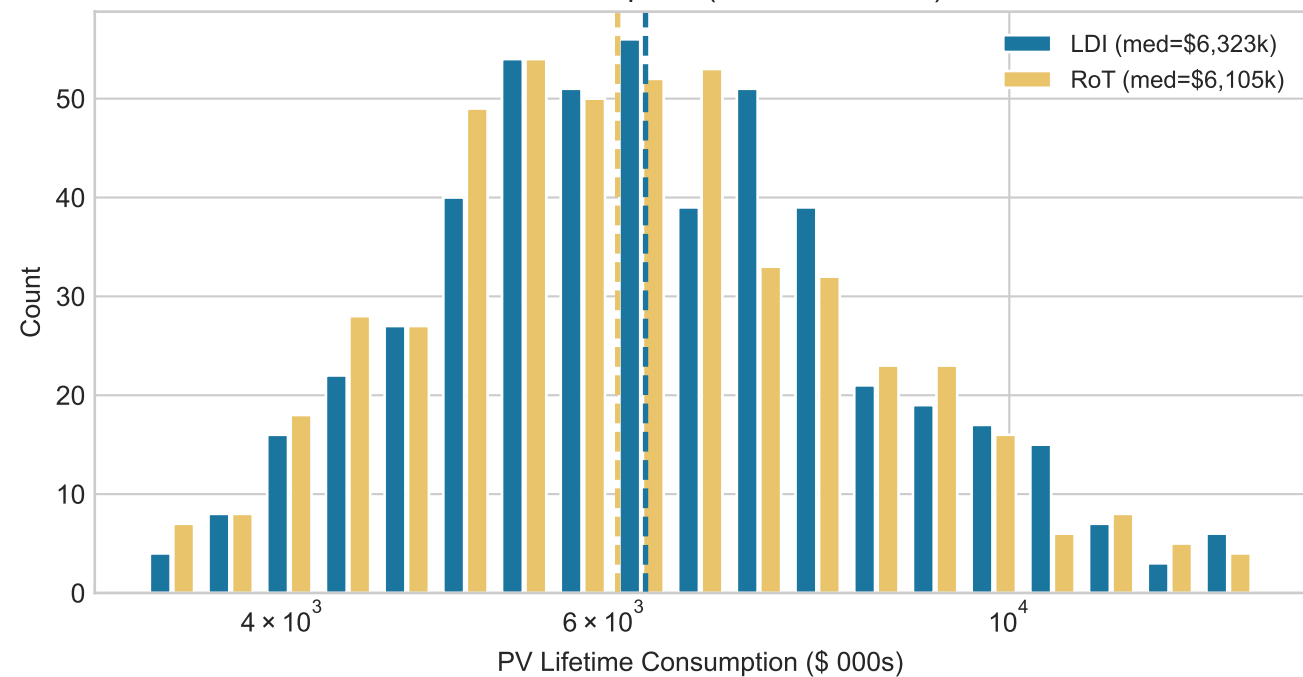
Default Timing



Terminal Wealth Distribution



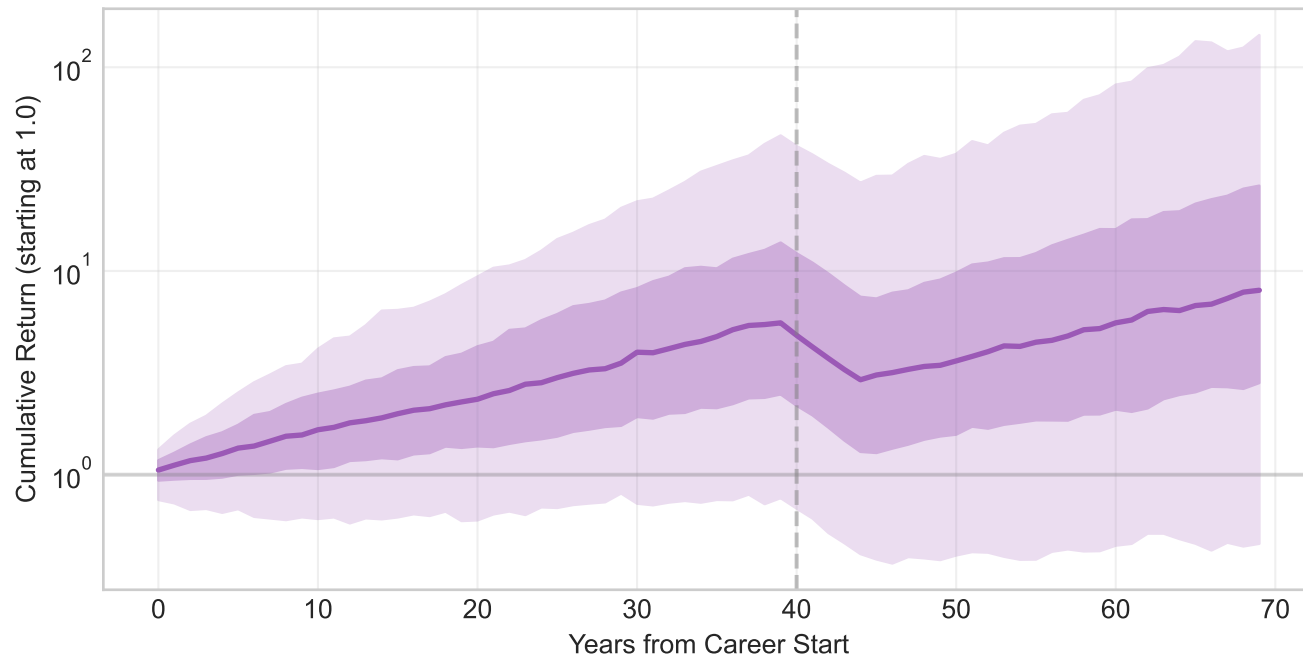
PV Consumption (Realized Rates)



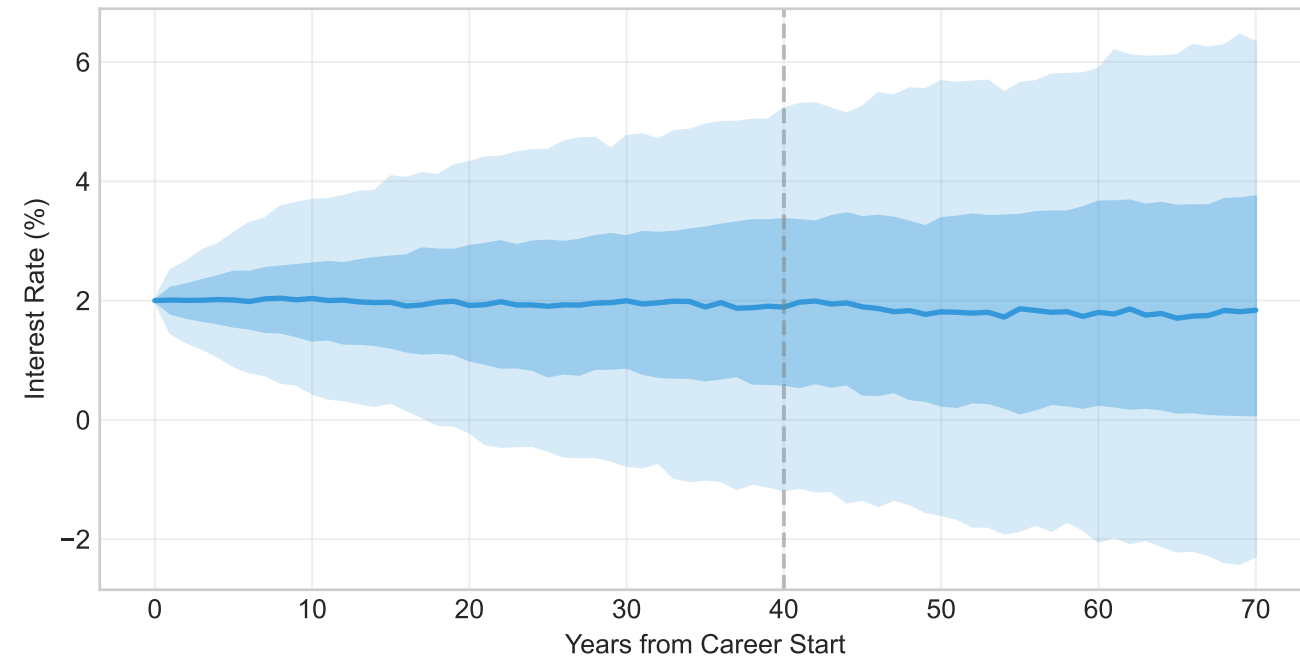
# Sequence-of-Returns Risk ( $\beta=0.3$ )

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

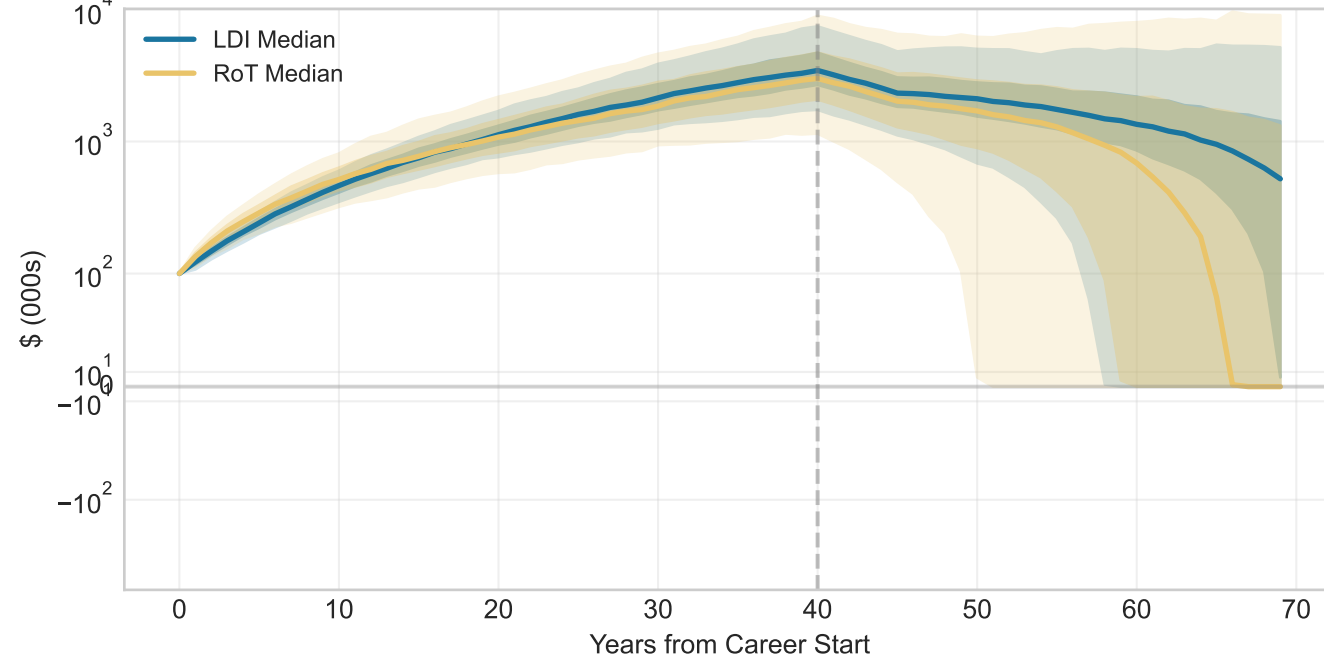
### Cumulative Stock Market Returns



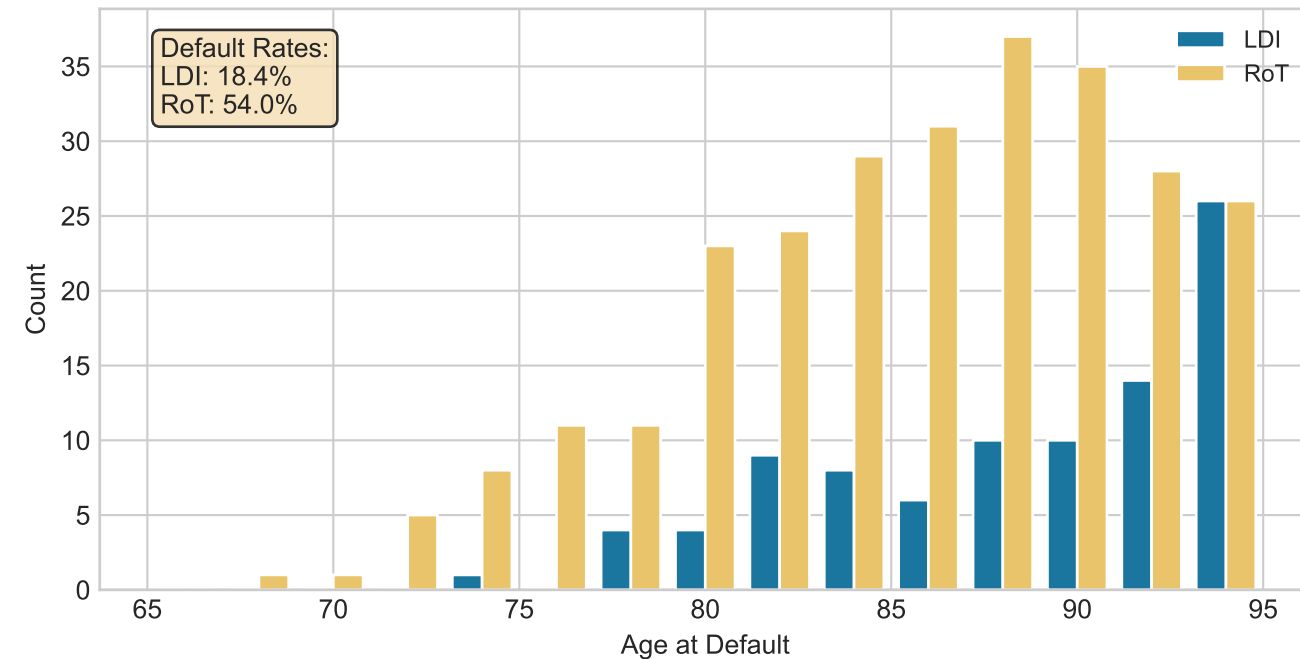
### Interest Rate Paths



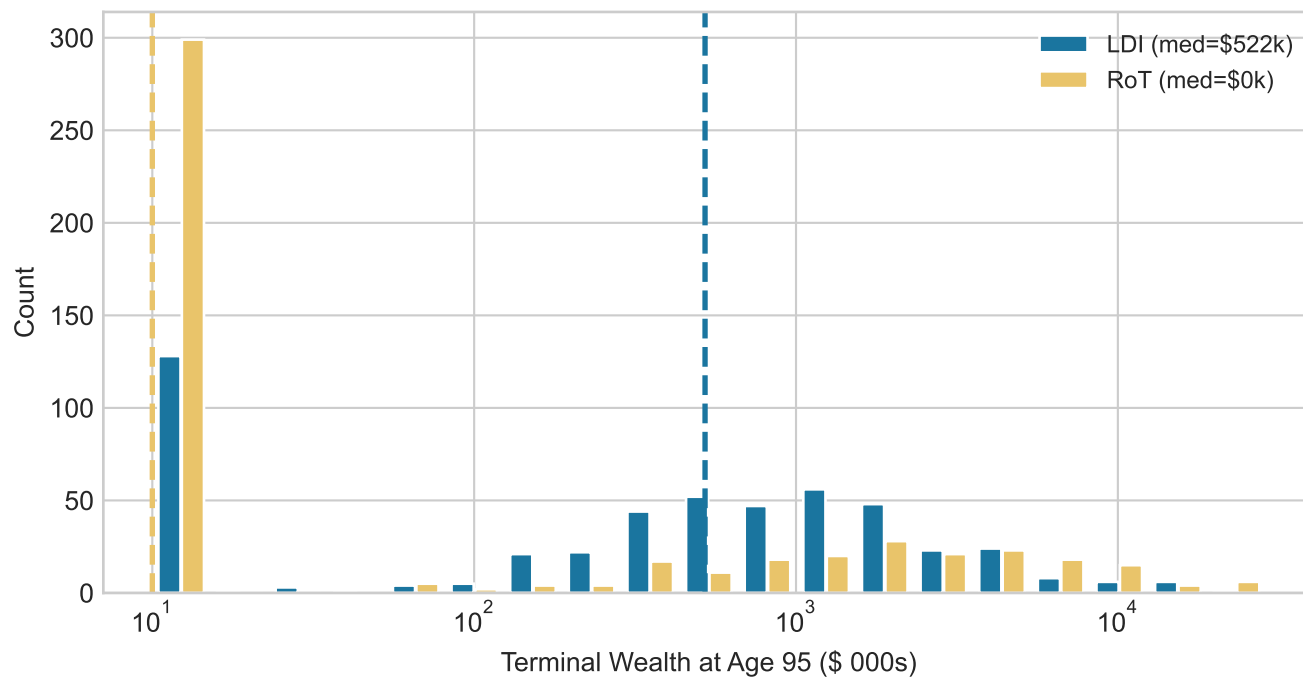
### Financial Wealth



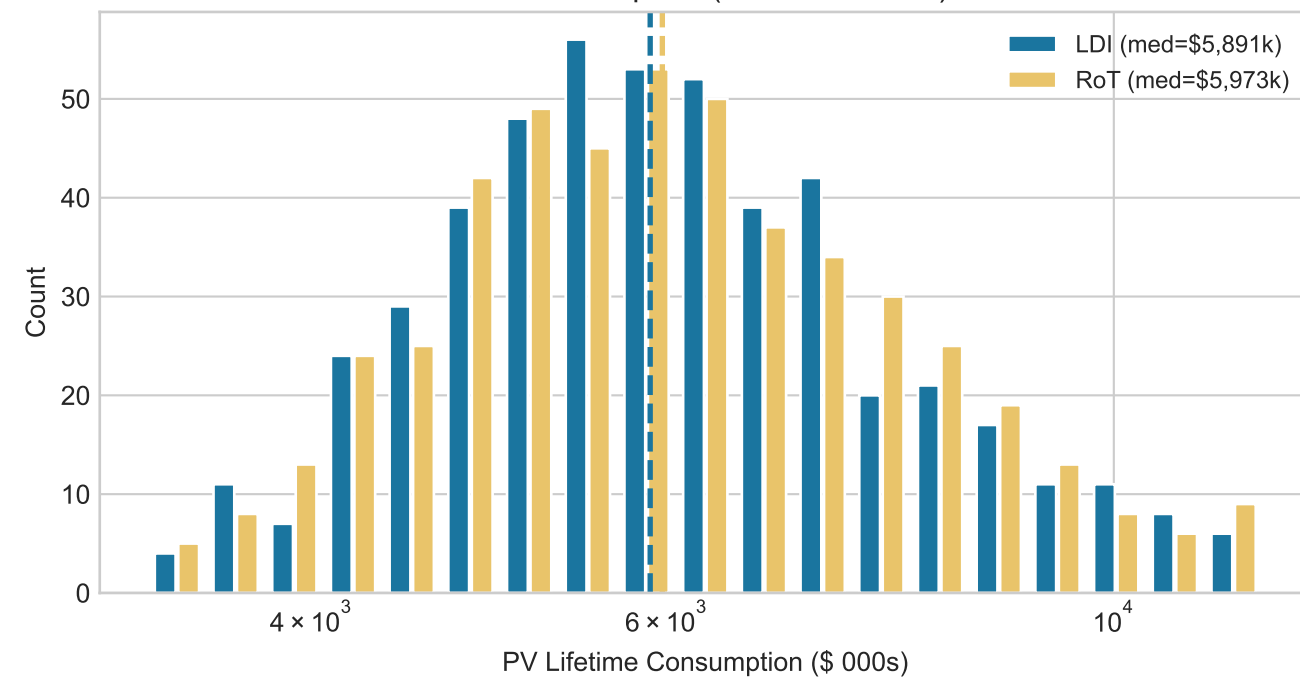
### Default Timing



### Terminal Wealth Distribution

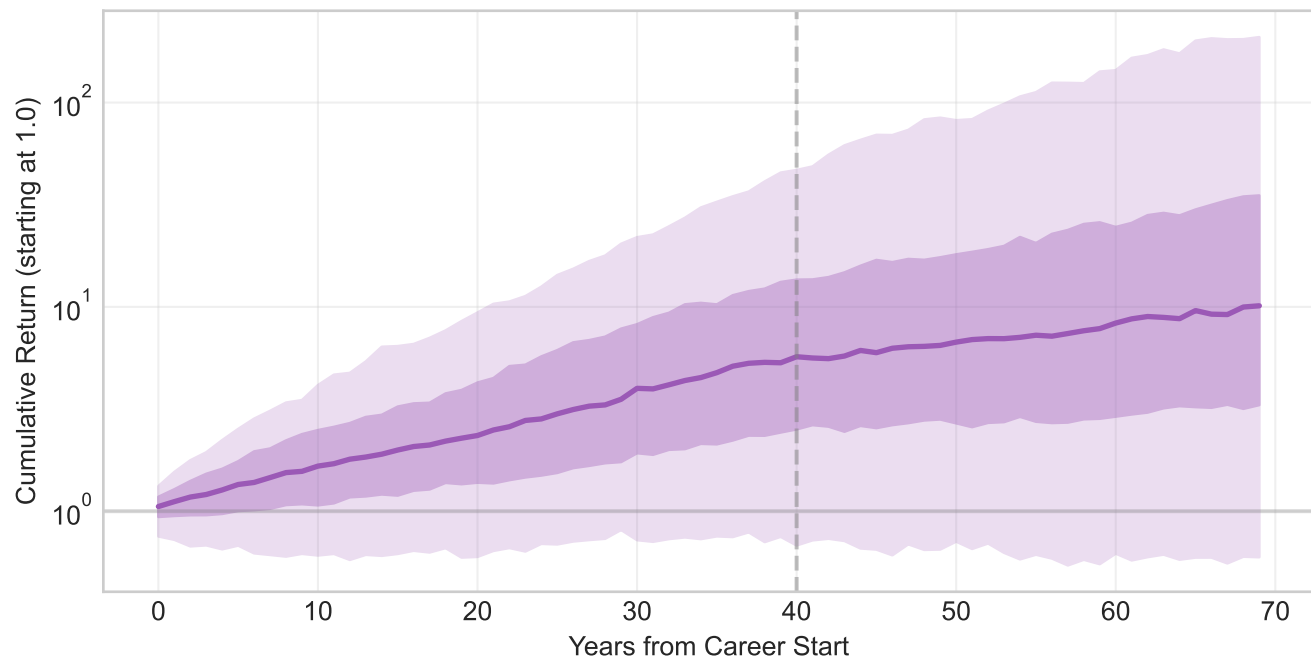


### PV Consumption (Realized Rates)

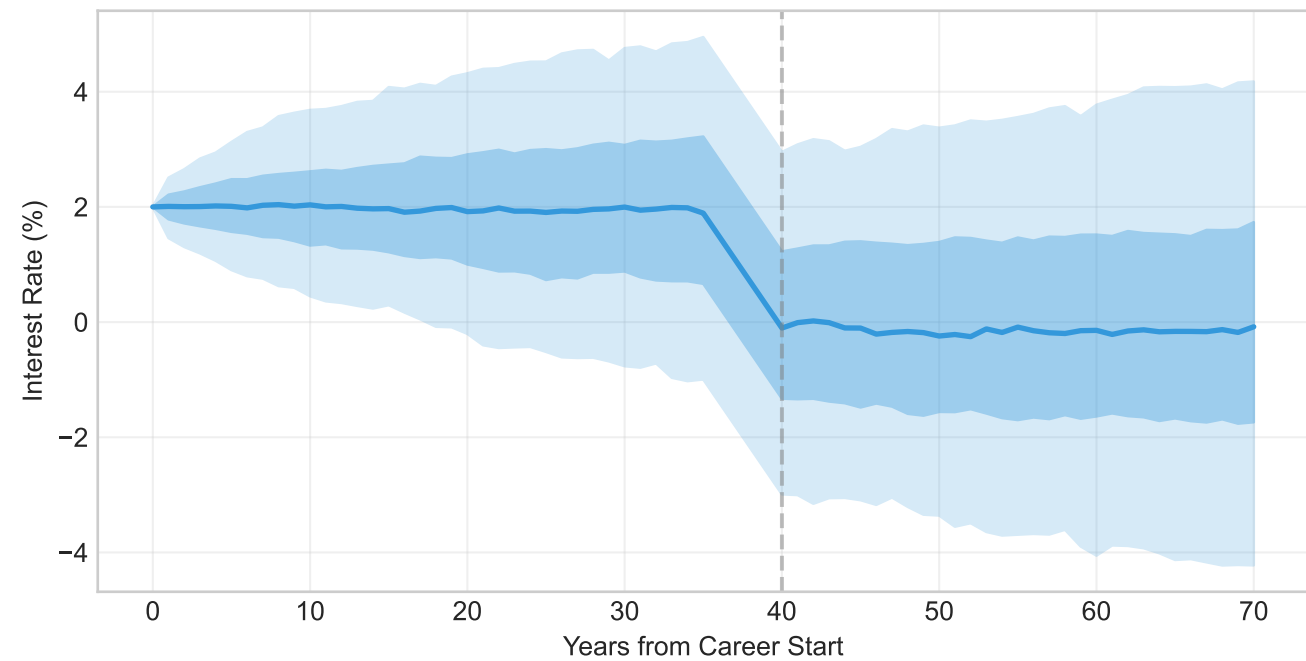


**Pre-Retirement Rate Shock ( $\beta=0.3$ )**  
**Interest rate drop (~4% cumulative) in 5 years before retirement**

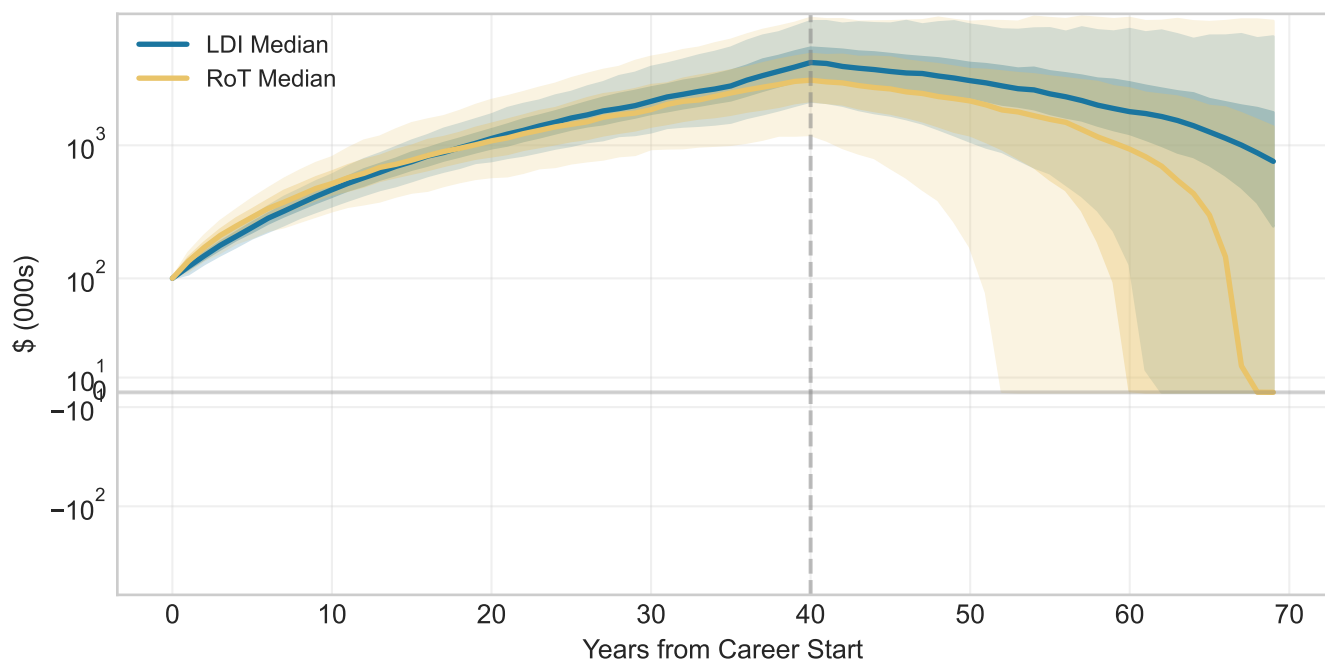
Cumulative Stock Market Returns



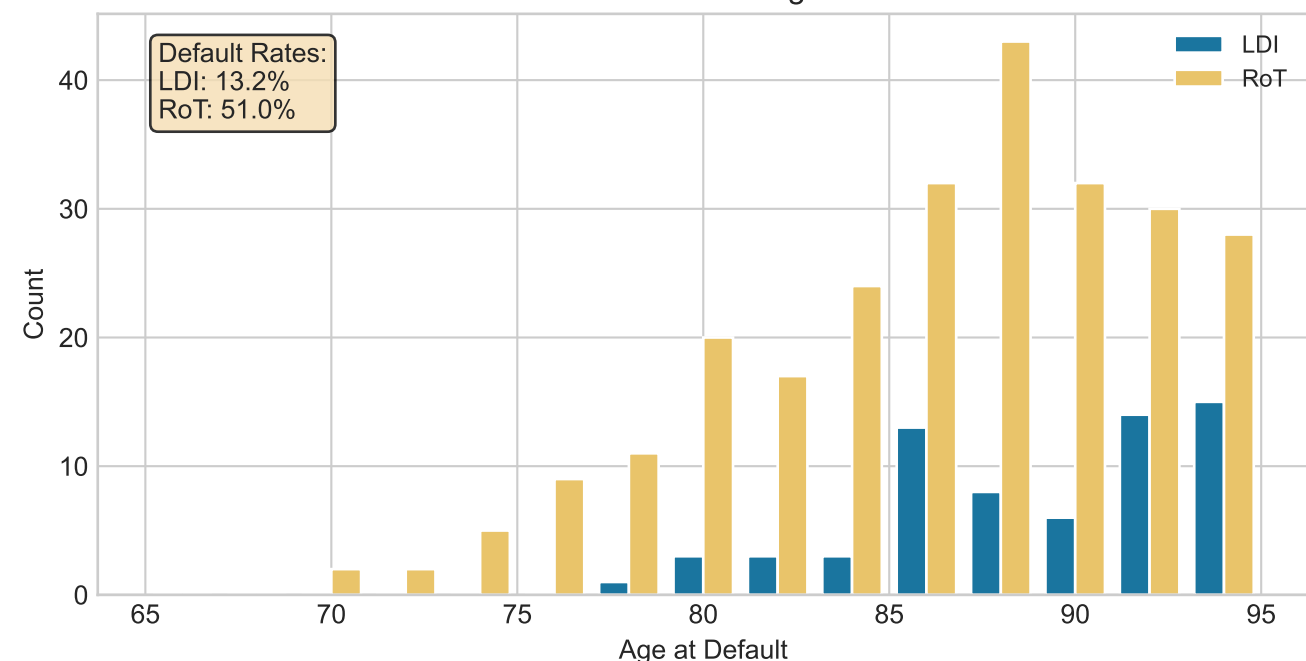
Interest Rate Paths



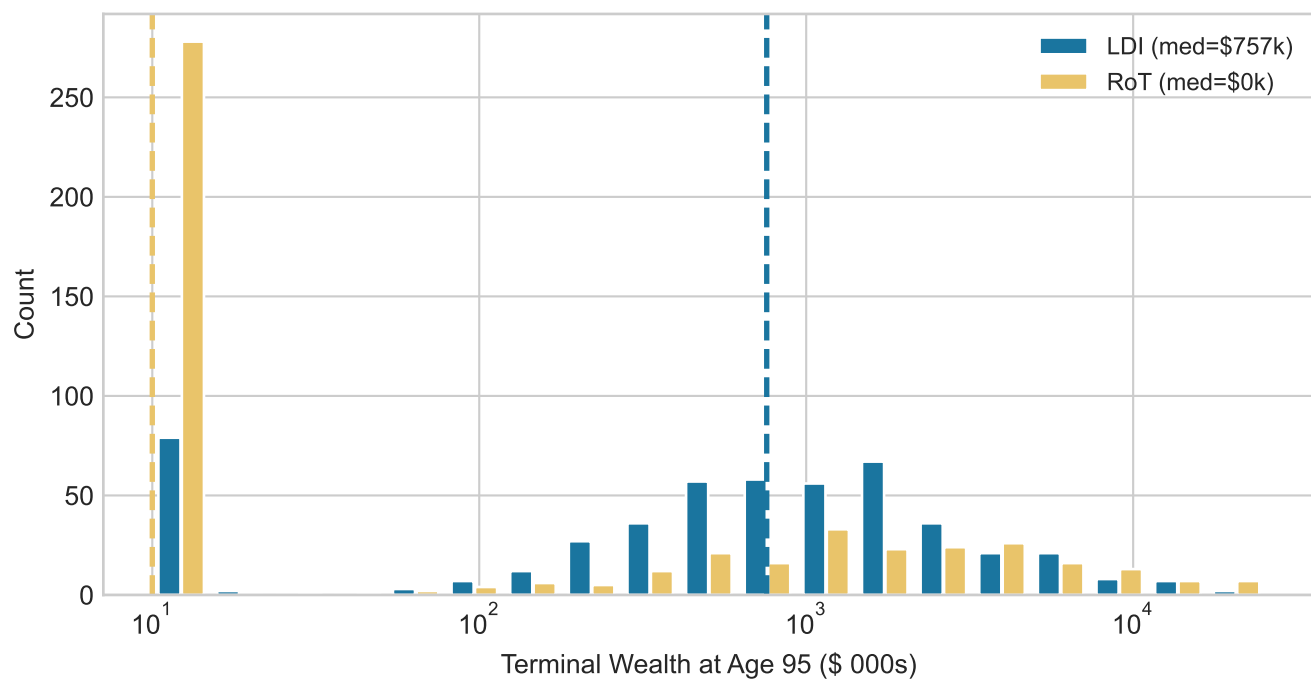
Financial Wealth



Default Timing



Terminal Wealth Distribution



PV Consumption (Realized Rates)

