

**The Impact of Auto Portability on Increased  
Accumulations and Decreased Retirement Deficits:  
Evidence from EBRI's Retirement Security  
Projection Model**

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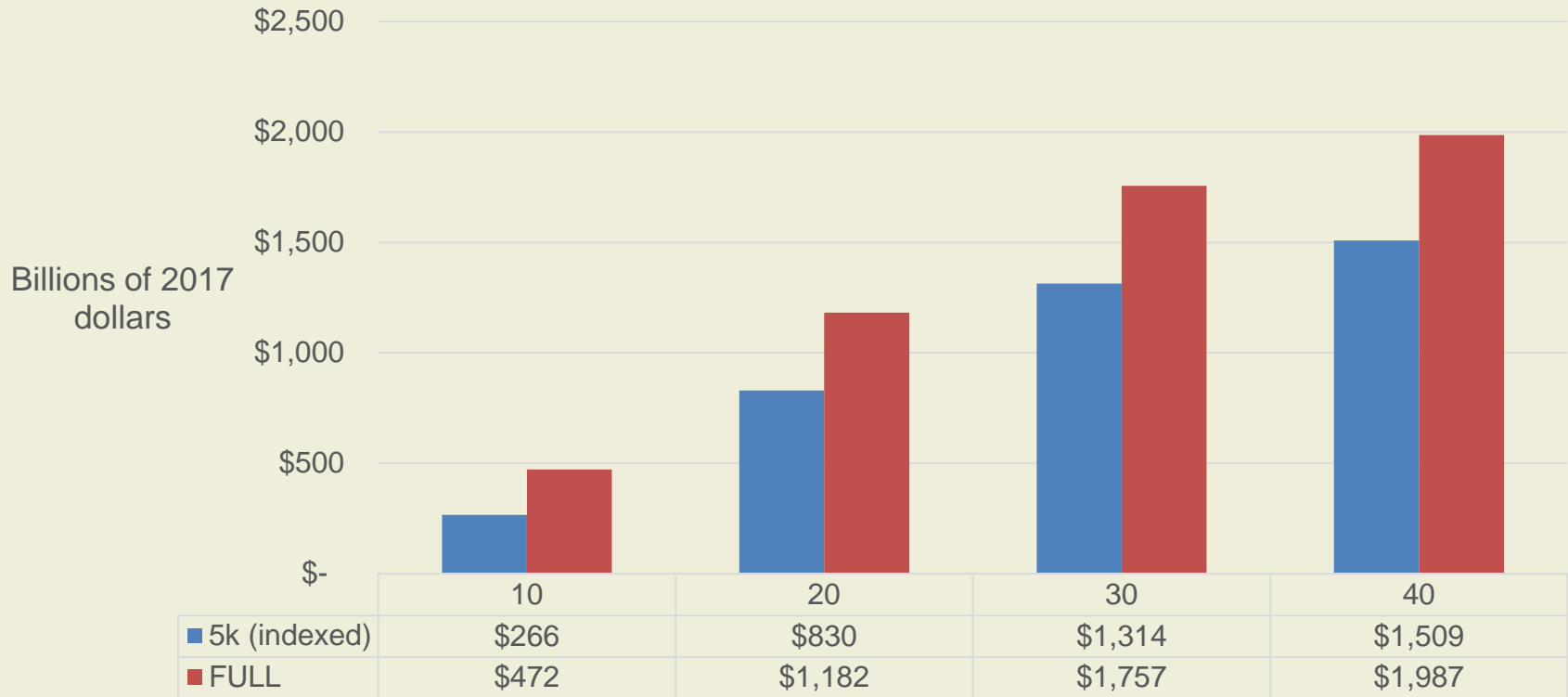
# Overview

- Three scenarios simulated:
  - 1. FULL auto portability: Every participant consolidates their savings in their new employer plan every time they change jobs, i.e. all participants arrive at age 65 with one account.
    - Leakage limited to hardship withdrawals
  - 2. Partial auto portability: Every participant with less than \$5,000 (indexed for inflation) consolidates their savings in their new employer plan every time they change jobs
    - Leakage limited to hardship withdrawals
  - 3. Baseline: status quo
    - In addition to hardship withdrawals, there is a participant-specific probability of cashing out and loan default leakage at job change
- Compare present value of accumulations at age 65 (or end of time horizon if earlier) under FULL and PARTIAL auto portability with STATUS QUO
  - Segmentation by
    - Age cohorts
    - Age-specific income quartiles
    - Time horizons (10, 20, 30, 40 years)
- Compare retirement deficit reduction for FULL auto portability with alternative reform scenarios

# RESULTS: ACCUMULATION INCREASES

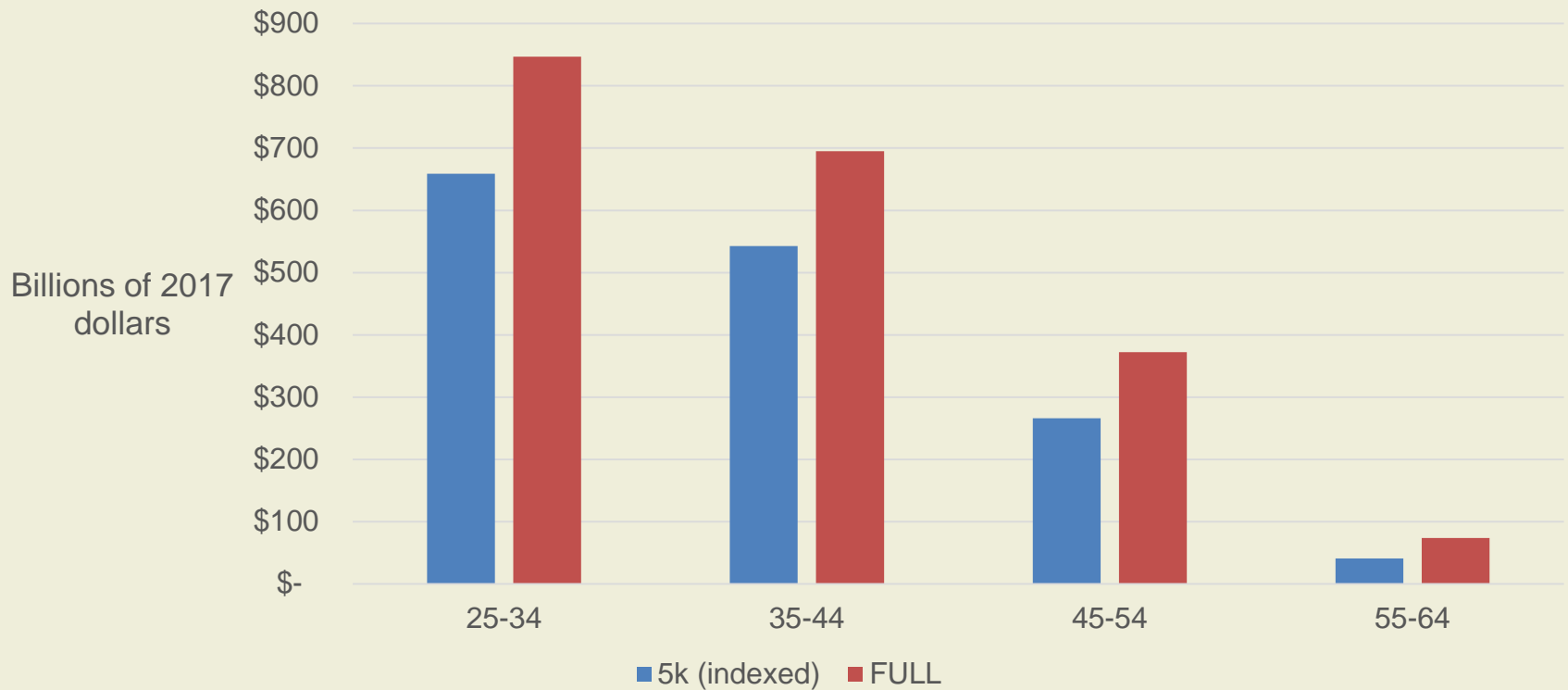
# Impact of auto portability over time

Present Value of additional savings at age 65 (or end of time horizon if earlier): Full vs. partial auto portability



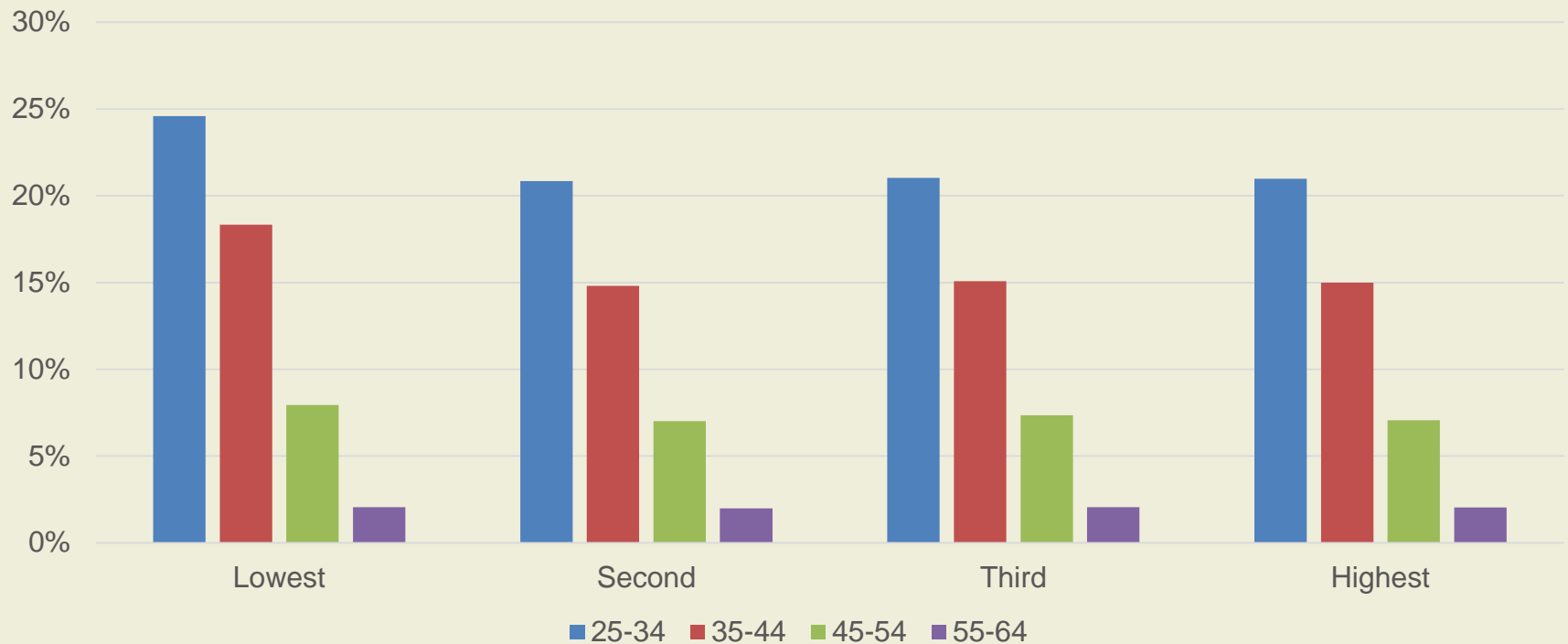
# Impact of auto portability by current age

Present Value of additional savings at age 65 by current age:  
Full vs. partial auto portability



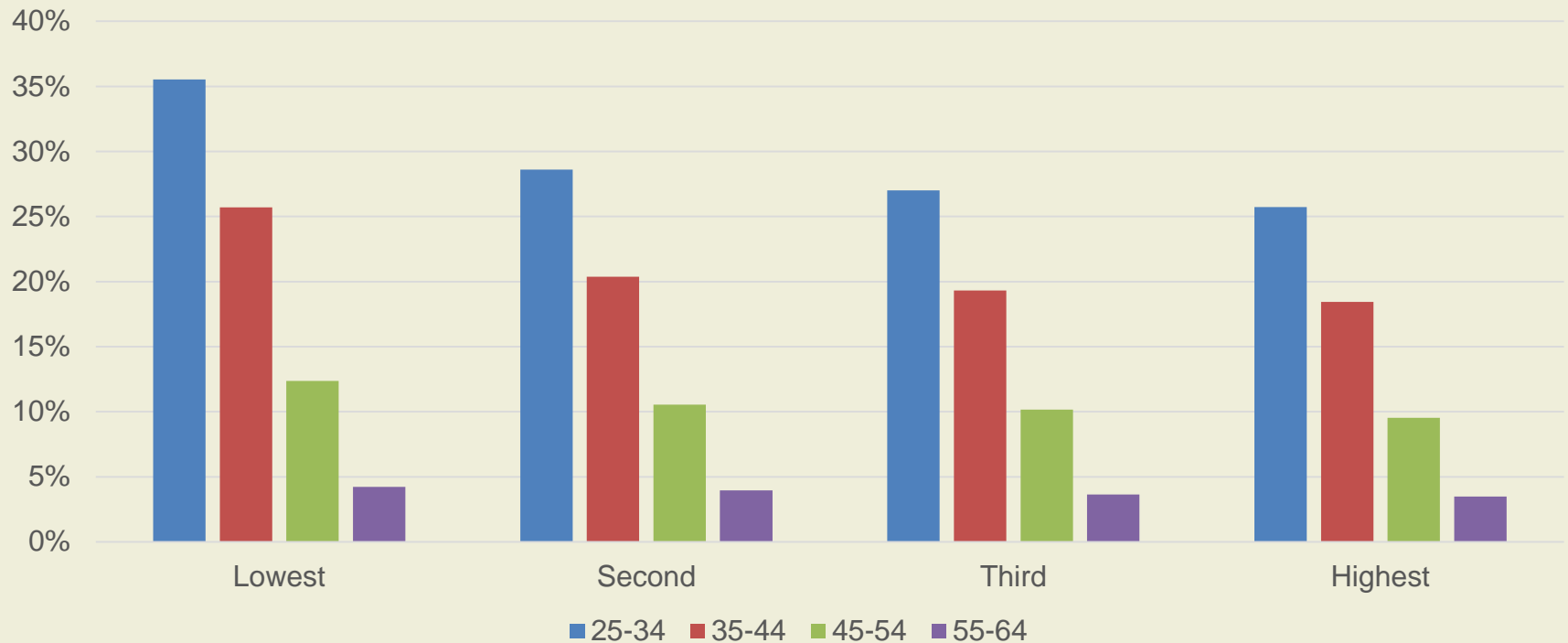
# Impact of PARTIAL auto portability by current age and age-specific income quartile

Increase in Aggregate Balances at Age 65 as a Result of Implementing APS with a \$5,000 (indexed) Threshold by Age and Age-Specific Income Quartile (40 Year Time Horizon)



# Impact of FULL auto portability by current age and age-specific income quartile

Increase in Aggregate Balances at Age 65 as a Result of Implementing APS with FULL Auto Portability by Age and Age-Specific Income Quartile (40 Year Time Horizon)



# RESULTS: RETIREMENT DEFICIT REDUCTIONS



# EBRI Retirement Security Projection Model® (RSPM)

- Produces a Retirement Readiness Rating (RRR) and Retirement Savings Shortfall (RSS)
  - RRR: Percentage of simulated HH life-paths that do NOT run short of money in retirement
    - If all the retirement savings are exhausted and if the Social Security and defined benefit payments are not sufficient to pay expenses, the HH is designated as having run short of money at that point.
  - RSS: Present value of simulated retirement deficits at retirement age
    - NB: this only includes HHs simulated to have a deficit
    - E.g., If a HH is currently simulated to have no deficits, increasing their account balances at retirement will not change either RRR or RSS

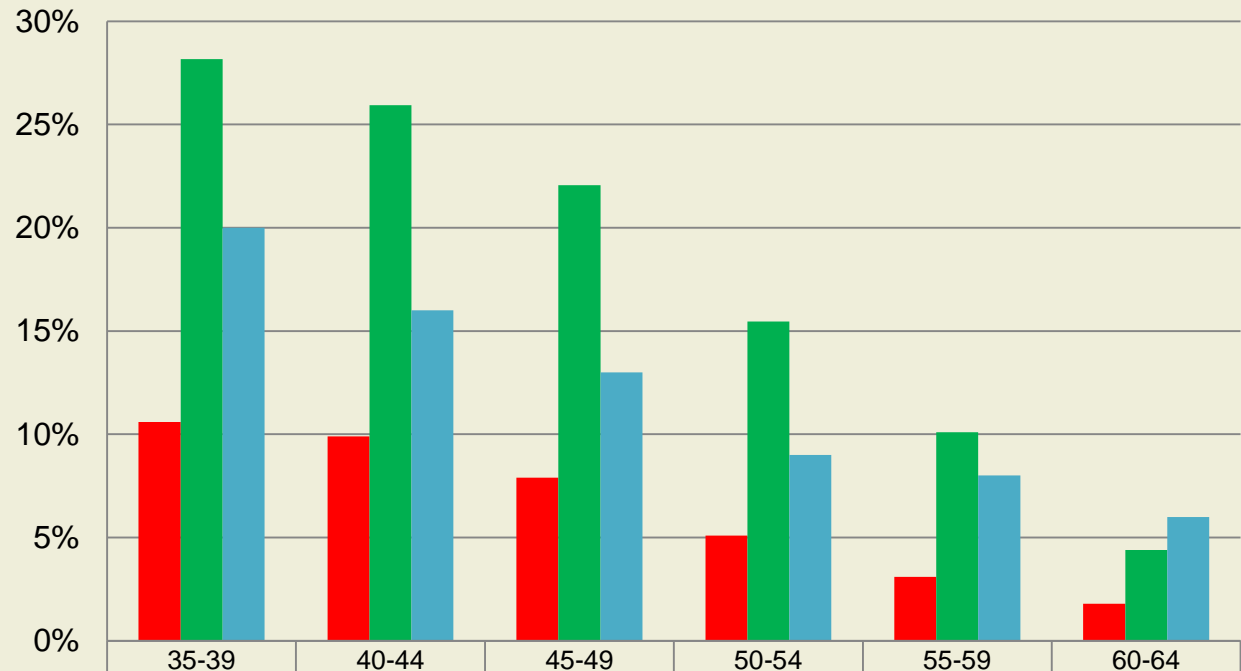
# Percentage Reductions in 2014 RSS With LTC Costs for HHs Ages 35-64 in Various Age and Reform Scenarios

## Auto IRA scenario:

- All employers (regardless of size) are required to provide DB/DC or Auto IRA
- No erosion from DC to Auto IRA
- Husband's employer size is used to categorize employer size for married HH
- 100% autocorrelation for employer size

## Universal DC scenario:

- assumes all employers not currently offering DB and/or DC start sponsoring a DC plan in 2015
- And they will choose one similar to employers in their size range



■ Auto IRA (default employee contribution of 3%; assumes no opt-out)	11%	10%	8%	5%	3%	2%
■ Universal DC (empirical contribution and optout rates)	28%	26%	22%	15%	10%	4%
■ Auto Portability (assumes no leakage from auto portability system)	20%	16%	13%	9%	8%	6%

# NEXT STEPS

# Future simulation work

- Alternative assumptions
  - Stochastic rates of return
  - Updated cash out assumptions
  - IRA withdrawal parameters
- Structural design
  - Alternative auto portability thresholds
  - Introduce auto portability leakage
- Behavioral assumptions
  - How would the existence of auto portability impact:
    - Participation activity
    - Contribution activity
    - Asset allocation activity
    - Plan design parameters

# APPENDIX

# EBRI Retirement Security Projection Model® (RSPM)

- Accumulation phase
  - Simulates retirement income/wealth to retirement age for HHs from defined contribution, defined benefit, IRA, Social Security and net housing equity
    - Pension plan parameters coded from a time series of several hundred plans.
    - 401(k) participant behavior based on individual administrative records
      - Annual linked records dating back to 1996
      - Social security based on current statutory benefits for baseline
        - But sensitivity analysis is provided for scenarios in which Trust Fund is exhausted
- Retirement phase
  - Simulates 1,000 alternative life-paths for each household, starting at 65
  - Deterministic modeling of costs for food, apparel and services, transportation, entertainment, reading and education, housing, and basic health expenditures.
  - Stochastic modeling of longevity risk, investment risk, long-term care (LTC) costs

# Leakages

- 401(k) cash outs, loan defaults, hardship withdrawals
  - Based on confidential industry data
  - Function of:
    - Age
    - Income
    - Account balance
    - Type of plan
- 401(k) loan behavior
  - Jack VanDerhei, Sarah Holden, Luis Alonso, and Steven Bass. “401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2014.” EBRI Issue Brief, no. 423, and ICI Research Perspective , Vol. 22, no. 2 (April 2016).
- IRA withdrawal behavior
  - Derived from “Accumulation and Distribution of Individual Retirement Arrangements, 2010” by Victoria L. Bryant and Jon Gober Internal Revenue Service Statistics of Income Bulletin, Fall 2013 Washington, D.C.

## Additional assumptions

- Rate of return assumptions:
  - Accumulation model:
    - Deterministic nominal returns of 6.45% for equity and 3.15% for non-equity
  - Retirement deficit model:
    - Stochastic returns with a higher geometric average (based on historical returns)
- Age/wage profiles:
  - Computed from EBRI/ICI longitudinal data



## When is a household considered to run short of money in EBRI's simulation model?

- If aggregate resources in retirement are not sufficient to meet average retirement expenditures
  - This version of the model is constructed to simulate retirement income adequacy
  - Alternative versions of the model allow similar analysis for replacement rates, standard-of-living calculations, and other ad hoc thresholds.
- The baseline version of the model used for this analysis assumes all workers:
  - retire at age 65
  - that they immediately begin drawing benefits from Social Security and defined benefit plans (if any)
  - to the extent that the sum of their expenses and uninsured medical expenses exceed the projected after-tax annual income from those sources
    - They immediately begin to withdraw money from their individual accounts (defined contribution and cash balance plans, as well as IRAs).

## When is a household considered to run short of money (continued)?

- If there is sufficient money to pay expenses without tapping into the tax-qualified individual accounts
  - those balances are assumed to be invested in a non-tax-advantaged account where the investment income is taxed as ordinary income.
- Individual accounts are tracked until the point at which they are depleted.
  - At that point, any net housing equity is assumed to be added to retirement savings in the form of a lump-sum distribution (not a reverse annuity mortgage (RAM)).
- If all the retirement savings are exhausted and if the Social Security and defined benefit payments are not sufficient to pay expenses, the household is designated as having run short of money at that point.