Reorienting Retirement Risk Management

Discussion of Session I:

Revisiting Retirement Savings and Dissaving Advice

Jason S. Scott*

*Jason S. Scott is Managing Director, Retiree Research Center, Financial Engines, Inc. and Financial Engines Advisors L.L.C. (Financial Engines). The views expressed in this presentation are those of Dr. Scott and do not necessarily reflect those of Financial Engines, nor do they constitute an offer of any services.

Hammond and Richardson

"A New Look at Retirement Savings and Adequacy: Individual Risk Management and the Asset Salary Ratio"

Part 1 – Analysis of Asset\Salary Ratio (ASR)

- **Age**
  - ASR increases with age

- **Gender**
  - Male ASR > Female ASR for population older than 54

- **Tenure**
  - ASR increases with tenure
  - Male ASR > Female ASR for population with tenure > 29

- **Salary**
  - ASR increases modestly with salary

- **Contributions**
  - ASR increases with total contribution level (% of salary)

Part 1 – Thoughts / Suggestions

- **Gender ASR result interesting**
  - Univariate ➔ large gender gap in ASR
  - Multivariate ➔ small gender gap in ASR
  - Multivariate accounts for contributions, tenure, etc.
  - Results consistent with idea that gender may impact contributions and participation, but not results given that data.
  - Authors suggest data consistent with work stoppages for women.
  - Household decision making hypothesis: Female employed population higher incidence of dual earner households?

- **Lower ASRs + Older Age ➔ High contributions**
  - Suggestive of lifecycle hypothesis?

Part 2 – Analysis of Target ASR (TASR)

- **TASR requires A LOT of assumptions**

- **Determine income needed at retirement**
  - When is retirement? (65?)
  - What is income at retirement?
  - What is target replacement ratio? (50%?)

- **Determine wealth needed at retirement**
  - How is wealth translated into income? (Single life annuity)

- **Determine wealth needed currently**
  - Contributions between now and retirement? (fixed % of salary?)
  - Investment returns between now and retirement? (fixed? declining?)

Part 2 – Results / Thoughts / Suggestions

- **TASR at odds with Lifecycle Savings Hypothesis?**
  - TASR benchmark assumes fixed contribution rates
  - Lifecycle hypothesis suggests low or no saving when young (earnings < lifetime average consumption). Savings levels increase as a % of salary as income increases.
  - Lifecycle savers would tend to track below TASR benchmark

- **Data supportive of Lifecycle Hypothesis (LCH)**
  - "Most significant difference is that the *Age* coefficient is negative"
  - Older individuals tendency to "catch up"
  - Data affirming or rejecting LCH is an important contribution
  - LCH analysis: What is TASR given LCH? How are people doing?

- **ASRs have declined, how are people responding?**

Rappaport and Turner

"How Does Retirement Planning Software Handle Post-Retirement Realities?"

Summary

- **There are a lot of risks in retirement**
  - Longevity / Inflation / Health & Long-term care costs

- **Individuals may not fully understand risks**
  - Longevity: family history and current health vs. variability
  - Inflation: tendency to have short-term focus and ignore inflation
  - Long-term care: few purchased long-term care insurance

- **Current Retirement Software is inadequate**
  - Ignores or inadequately incorporates housing wealth
  - Typically silent on biggest decision for many people: when to start taking Social Security
  - Risks are ignored or masked: investment returns, longevity, inflation, medical expenses are deterministic not stochastic
  - Projections and recommendations vary wildly based on differing assumptions and data

Why is Post-Retirement Software So Poor?

- **Post-retirement situation is very complex and highly individual specific (difficult to address with software)**

- **"These programs are merely tools to help facilitate the retirement planning process and there is no accepted right answer." (emphasis added)**

Accumulation vs. Post Retirement Complexity

- **Accumulation assumptions**
  - When is retirement? (65?)
  - What is income at retirement?
  - What is target replacement ratio? (50%?)
  - How is wealth translated into income? (Single life annuity)
  - Contributions between now and retirement? (fixed % of salary?)
  - Investment returns between now and retirement? (fixed? declining?)

Accumulation vs. Post Retirement Complexity

- **Planning horizon**
  - When is retirement? (65?)

- **Wealth objective**
  - What is income at retirement?
  - What is target replacement ratio? (50%?)
  - How is wealth translated into income? (Single life annuity)

- **Inflows / outflows**
  - Contributions between now and retirement? (fixed % of salary?)

- **Investment returns**
  - Investment returns between now and retirement? (fixed? declining?)

Accumulation vs. Post Retirement Complexity

- **Planning horizon**
  - Accumulation: deterministic is plausible -- age 65
  - Post retirement: longevity must be stochastic

- **Wealth objective**
  - Accumulation: target wealth at end of horizon
  - Post retirement: spending occurs each year of retirement

- **Inflows / outflows**
  - Accumulation: inflows (contributions) assumed deterministic
  - Post retirement: outflows (spending) stochastic

- **Investment returns**
  - Accumulation / Post retirement comparable difficulty

Additional Post Retirement Complexity

- **The plan covers how many people?**

- **What spending pattern is appropriate?**
  - Flat?
  - Front loaded? (active / low longevity / entitlement optimization)
  - Back loaded? (increased medical needs)
  - Distortions from other income sources (Social Security does not start for 5 years, plan on working part time for 3 years, etc.)

- **What type of inflation protection?**
  - None: fixed mortgage / expenses mostly nominal
  - CPI: variable mortgage / expenses likely tied to CPI
  - Medical: individual consumption basket more medical focused.

- **Tax consequences**
  - Often ignored in accumulation
  - Sources of retirement income vary widely on taxation implications

Post Retirement Complexity

- **Entitlement Optimization**
  - Social Security: what age to begin?
  - Medicaid: front load consumption?

- **What about annuities? – New investment option**
  - Typically lowers cost of lifetime income
  - Can also lower cost of lifetime consumption (reverse mortgage, etc)

- **Behavioral factors in decision making?**
  - 40+ years since advantage of annuities identified. Still few takers.

- **Cognitive risks**
  - "I can make good decisions now, but I can't have a plan that requires good decision making after age 80"

Summary / Conclusion

- **Post retirement problem very complex**

- **No current consensus on "accepted right answer"**

- **Major effort needed to identify**
  - Top priority post retirement considerations
  - Accepted right answers

- **Many software solutions likely to be ad-hoc and low quality until progress is made**

- **Accumulation inherits post retirement complexity!**