SeLFIES: A New Bond to Address Retirement Security and Fund Infrastructure

Global Pensions Programme 2020

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October 29, 2020
Background: Both Sides of the Pension Coin
Pension Reform, Asset Management, and Academic

- Issued Bonds (early 1990s); Manager, Head of Research Pension & Investments Dept (late 1990s)
- MD, Head, FX Research (1999-’07)
- Co-Founder; Manage Institutional Assets; Developed Unique Strategy (2002- Today)

Books:
- Innovations in Pension Fund Management (2001)
- Rethinking Pension Reform, with Prof. F. Modigliani (2004)
- SMART Approach to Portfolio Management (2011)
Retirement Security: Challenges Are Global
Trend Has Been to Pass Responsibility to Individuals in DC Plans

DB Plans Closed/Not Offered to Individuals
Many Individuals Not Covered by Any Plan
Longevity Increasing. Families more Dispersed
Low Financial Literacy.

Yet the Goal is: Be Able to Maintain Pre-Retirement Lifestyle until Death

Need an “Out-of-the-Box” Solution
Biggest Challenge

Mismatch between Investor Goals and Industry Response

❖ Investors Understand Their Goals
  ❖ Maintain standard of living with certainty
  ❖ Have access to products they understand

❖ Industry Response is Mismatched
  ❖ Uses end of period wealth as key metric
  ❖ Does not offer a “safety-first” approach for protecting base standard of living
  ❖ Solutions that require financial literacy

Need Solutions that Individuals Can Implement With No Additional Training
DC Pension Plans Have Multiple Challenges
Could Lead to Widespread Retirement Problems

- **Risk** transferred to Individuals (one lifetime)
- **Complex Decisions** transferred to individuals
  - How much to save?
  - How best to decumulate? What annuity to buy?
- **Financial Illiteracy** confounds decision-making
- **High Cost** from involvement of multiple parties

But Goal Unchanged: Seek Guaranteed Real Retirement Income


Simple Goal: Steady Cash Flow Till Death
Guaranteed and Real = Preserve Pre-Retirement Lifestyle

- Work 40 Years: No Cash Flows Needed
- Retired for 20 Years: Need Steady Cash Flows
- Want Standard-of-Living Protection
- Longevity Risk Adds Complexity

Problem: No Asset has this Profile/Bridges Time Gap; Annuities Not Flexible
Industry Uses the Wrong “Safe” Asset

Current T-Bills, Bonds or TIPS are Not “Safe”

T-Bills/bonds protect principal (wealth), not retirement income

Highly Volatile: Annuity/income perspective

Current products (either Stock-Bond or Life-cycle Funds) are risky

Current “Safe” Assets Are Risky; Too Much Focus on Wealth vs Income
Even TIPs Are Risky in Retirement Plans

Cash Flow Mismatch/Reinvestment Risk

US TIPs maturity = 30 years maximum
(slightly longer in some countries - S.Africa)

❖ Can only hedge 10 years pre-retirement
❖ Do not need coupons when working
❖ Do not need Principal repayment
❖ Would require 61 additional small transactions to convert to desired outcome

More Pertinent Risk is Standard-of-Living Risk
Annuity = Inflexible to Purchase during Working Life
Solution: SeLFIES - A New Retirement Bond

Government Issues a New Bond

- **Key Features:**
  - Payment begins at age 65
  - Coupons-only for 20+ years (Life Expectancy)
  - $5 real/year
  - **Goal of $50K annual @ $5 real/year = 10,000 bonds**
  - Easy to track: 6,000 bonds = 60% of Goal

- **If Individual Dies Early:** Heirs Inherit Bonds (Easy to Bequeath) And Can Collect Income or Sell Bonds

- **Change Retirement Date/Target Income:** Simple

A Better “Safe” Retirement Asset

SeLFIES Deliver What is Needed
Designed to Require No Additional Financial Training

- Bond Cash Flows = Matches Retirement Goal
  - No bullet repayment, only steady Cash Flow
- Payment based on real amounts, not coupon (%)
  - $5 real/year
- Nominal Index linked to Goal – Per Capita Consumption
  - Hedges real Standard-of-Living risk for retirees
- Forward-starting: No cash flows when not needed
- Designed for financially unsophisticated population
  - Embeds Inflation, Compounding and Decumulation

Individual Just Needs to Specify Retirement Date and Target Income
Global Design – Suggested for Many Countries
Countries Can Customize to Their Unique Situation
SeLFIES – Good for Individuals

❖ Designed to Work with What People Know
  ✔ Date of Retirement and Target Income
❖ Embeds Compounding, Inflation & Decumulation
  ✔ Addresses Financial Competence
❖ Effective for Uncovered Workers Too
  ✔ Creates an “Individual DB”; Don’t Need Plan
❖ Easy to Track Progress Towards Retirement Goal
  ✔ Simple Math and Easy Calculations

→ Can Be Used “Out-of-the-Box”
SeLFIES – Good for Governments

✔ Reduces Risk of Retirement Poverty/Bailouts
✔ Cash flows from bond = Infrastructure needs
✔ VAT Regime = Government Hedged
✔ Boosts National Debt Demand
✔ Provides Near-Term Budget Relief
✔ Could be Transformational in Emerging Markets

Multiple Benefits for Governments Too
SeLFIES – Good for Financial Service Industry

✔ Goal of Individuals: Sustainable Retirement Income
Buy SeLFIES but Still Have Longevity Risk

✔ Goal of Insurance Companies: Profit/Manage Risk
Diversify Longevity Risk by signing large number of people

✔ Well-Designed SeLFIES
For right Maturity, Insurance Cos. would be willing to exchange 1 SeLFIES for Life Annuity paying $5 real/year till Death.
Price of SeLFIES vs Price of Annuity provides information about Design of Product and Longevity Diversification of Insurance Cos

Supports Product Innovation

Source: Nikkei June 2018

Merton, R.C. and A. Muralidhar. 2019. Taking a closer look at SeLFIES: Added thoughts, clarifications, Pensions and Investments, May 27, 2019
SeLFIES: A Win/Win/Win

✔ Individuals
   Retirement income product that meets actual goals and is easy to use

✔ Financial Services Industry
   Improved hedging operations and product innovation

✔ Government
   Lower financial pressures, better cash flow match and potentially fund infrastructure