Discussion: International Perspectives on Public Retirement Systems

The Future of Public Employee Retirement Systems

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*The views presented reflect the conclusions of the author and do not necessarily reflect the views of the Investment Company Institute or its members.

Discussion Inspired by the Papers

- Moving from pay-as-you-go pensions to funded pensions
  - Nonmarketable government securities
  - Investment risk premium
- Funded pensions and demographic shifts

Moving from PAYGO Pensions to Funded Pensions

Reasons to Shift to Funded Pensions

- Increase national savings
- Strengthen property rights
- Take advantage of market risk premium

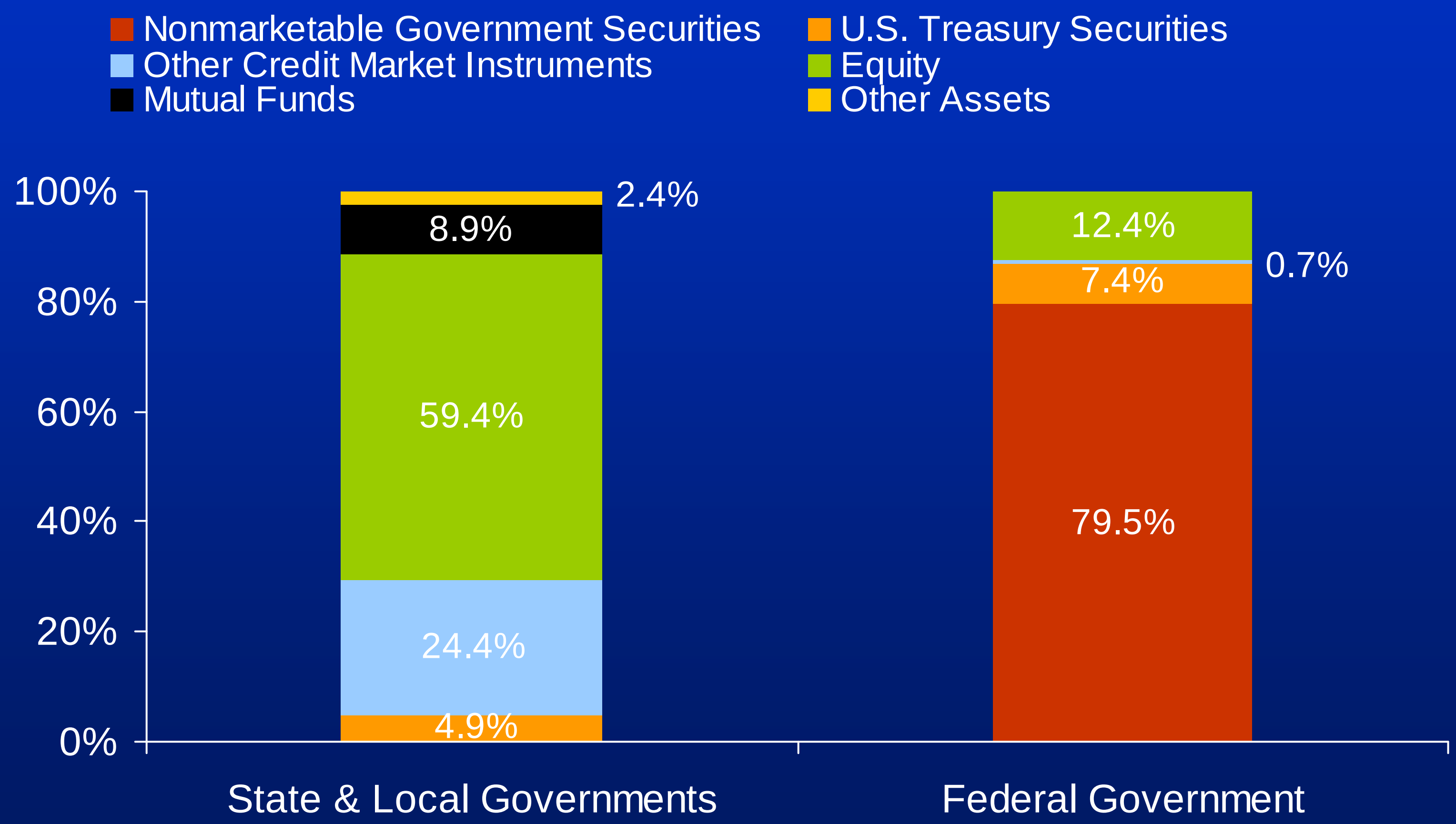
PAYGO Plans

- Advantages of PAYGO
  - If population in steady state, can fund fully indexed benefits with constant contribution rate
    - Taxes are claim on future productive activity

- Disadvantages of PAYGO
  - Demographic shifts may require benefit cuts or increased contributions
  - No new, or possible decreased, national savings
    - Capital deepening

Are U.S. Government Employee Pensions Funded or PAYGO?

Percent of assets, end of 2007



$3.3 Trillion **$1.2 Trillion**

Source: Federal Reserve Board

Is Social Security Partially Funded?

U.S. Federal Government Budget Surplus and Social Security Surplus, Billions of Dollars, 1980-2007

Source: Congressional Budget Office, *The Budget and Economic Outlook Fiscal Years 2008 to 2017*, January 2007

Moving from PAYGO to a Funded System

- Accumulated pension benefits still need to be paid
- How will contributions be invested?
  - Government bonds
    - Marketable
    - Nonmarketable
  - Private securities
- How will contributions be financed?
  - New taxes
  - New debt issuance
- Is this margin investing?
  - *Ad absurdum:* Why not finance all government activities?

Can Funding Make Taxpayers Better Off?

- Need to change real behavior
  - Shifting assets will not help in aggregate
  - Stocks, bonds, and taxes all represent claims on future productive activity
- Increased national savings could impact aggregate economy
  - Capital deepening
  - Easier to pay off future claims

Simple Model of Economy

Assumptions:

Initial Government Debt Level	1,000,000
Initial Market Value of Corporate Equity	1,000,000
Interest Rate on Government Debt	6%
Equity Rate of Return	10%
Equity Issuance	60,000
Government Pension Contribution	60,000
Private Household Savings	60,000

Model Results After 20 Years

	Invest in Government Debt	Invest in Corporate Equity
Government Pension Assets	2,207,135	3,436,500
Government Debt	2,207,135	0
Equity	0	3,436,500
Private Household Assets	11,164,000	9,934,635
Government Debt	1,000,000	3,207,135
Equity	10,164,000	6,727,500
Total Government Debt	3,207,135	3,207,135
Total Corporate Equity	10,164,000	10,164,000

Private Assets versus Government Debt

- Investment Risk Premium
- Investing in market assets or paying down debt both could lead to economy-wide capital deepening
- Other rationales for investing in market assets
  - Behavioral public finance
  - Distributional issues
    - Which groups made better off?
    - Assignable property rights

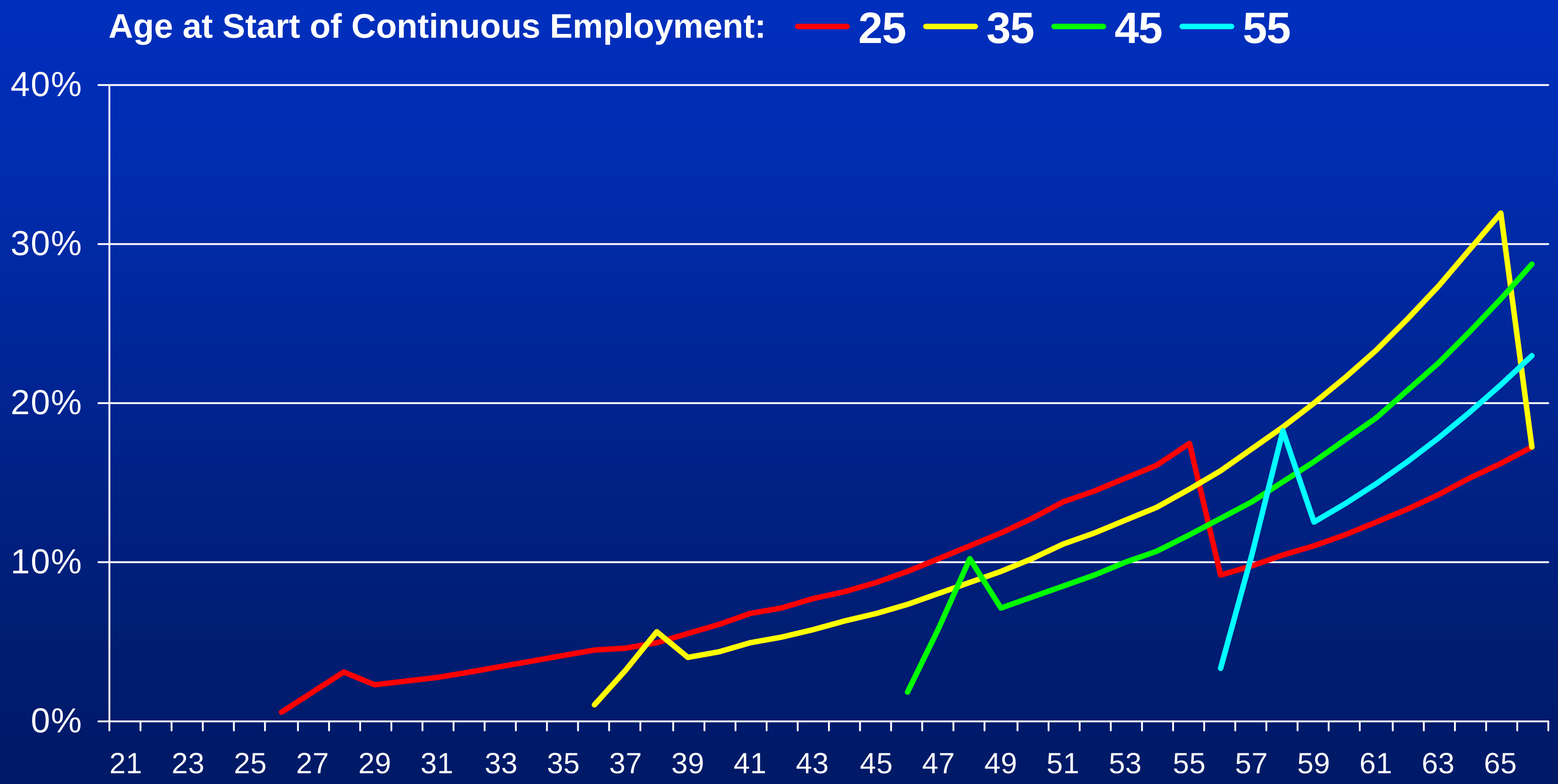
Funded Pensions and Demographic Shifts

Funded Plans Not Immune to Demographic Shocks

- Typical DB pension benefits accrue unevenly
- As long as age composition of workforce remains stable, contributions as percent of payroll remain stable
- Even in a fully funded plan, aging of the workforce increases funding costs as percent of payroll

DB Benefit Accrual for Individual Employees

PDV of DB benefit accruals with formula 1.5% per year up to 30 years



Source: Author's Calculation

Depends on Definition of “Funded”

- If changes in workforce can be forecast, can adjust funding as percent of payroll
- If decline of industry or increased productivity unexpected, may be hard to forecast aging of workforce