Improving private and public pension systems

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• The transformation from DB to DC

• Reforming DC plans

• Reforming Social Security
“The Great Transformation” in Private Pensions

Source: 1980-1999 data are from authors calculations based on Table E4 of the Department of Labor’s Abstract of 1999 Form 5500 Annual Reports [1]. 1999-2018 data are from EBRI [2].


U.S. Retirement Assets

1980: Total Assets $1.0 trillion

- Private-sector DB plans 36%
- DC plans 20%
- State and local government DB plans 20%
- Federal DB plans 8%
- Annuities 13%
- IRAs 3%

2023: Total Assets $36.7 trillion

- DC plans 10.2 28%
- Private-sector DB plans 3.2 9%
- State and local government DB plans 5.6 15%
- Federal DB plans 2.4 7%
- Annuities, 2.3 6%
- IRAs 13.0 35%

DC+IRA = 23%

- Large growth in DC assets
- Large growth in IRA assets

Data source: Investment Company Institute and author’s calculations
https://www.ici.org/research/stats/retirement
What caused the transformation?

• Cost saving by firms (Rauh, Stefanescu, Zeldes (2020))
• Lack of interest in annuitization
• Concern over counterparty risk
• Tangibility of DC assets
• ...
• The transformation from DB to DC
• Reforming DC plans
• Reforming Social Security
Ongoing challenges for the DC system

• Coverage and take-up

• Fairness / progressivity

• Imperfect consumer choices

• Fees
Access to a retirement plan at work

National Compensation Survey, March 2023, private industry workers
https://www.bls.gov/ebs/home.htm
• Tax benefits tilted toward high lifetime income and sophisticated households

• See e.g. “Who Benefits from Retirement Saving Incentives in the U.S.? Evidence on Racial Gaps in Retirement Wealth Accumulation” (Choukhmane, Colmenares, O’Dea, Rothbaum, & Schmidt, 2023)

• Much scope for improvement
# Tax treatment of retirement savings

**OECD countries, 2022**

<table>
<thead>
<tr>
<th>Account type</th>
<th>Tax status of...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Money earned and saved</td>
</tr>
<tr>
<td>Standard taxable</td>
<td>T</td>
</tr>
<tr>
<td>Back-loaded taxation</td>
<td>E</td>
</tr>
<tr>
<td>Front-loaded taxation</td>
<td>T</td>
</tr>
</tbody>
</table>

**T**: Taxable  
**E**: Exempt

### U.S. systems

- **EET (Traditional)**: backloaded taxation
- **TEE (Roth)**: front-loaded taxation

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**Sources:**

- **Figure**: OECD (2022), Financial Incentives and Retirement Savings, [https://www.oecd.org/finance/financial-incentives-retirement-savings.htm](https://www.oecd.org/finance/financial-incentives-retirement-savings.htm)
- **Table**: Landoni and Zeldes (2023)
TEE vs EET: Does it matter?

- Simple benchmark: **NO**

- When account for asset management fees: **YES**

- Intuition: EET boosts private assets (relative to TEE) but then taxes them away at withdrawal!  **Asset managers charge fees to the government** along the way

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*Should the government be paying investment fees on $3 trillion of tax-deferred retirement assets?*

Mattia Landoni† and Stephen P. Zeldes‡

This version: July 31, 2023

Case 1: no investment fees (benchmark neutrality result)

Roth

$100

30% Tax

Government $30

Individual $70

150% Return

$t = 0$

$t = 30$

$75 (FV)$

Traditional

$100

Government $100

Individual $100

150% Return

$t = 0$

$t = 30$

$75$ $250$

30% Tax

$t = 30$

$75$ $175$

Traditional (As If)

$100

Implicit Government Account $30

Individual Roth-Like Account $70

150% Return

$t = 0$

$t = 30$

$75$ $175$
Case 2: with investment fees

- Individuals pay the same fees and government pays an extra $15 of fees
How big is the implicit subsidy to asset managers?
Annual flow on current U.S. EET balances

• Annual subsidy = \( S \cdot \tau_R \cdot f \cdot (1 - \tau_C) \)

• Calibration
  • Total tax-deferred assets (DC + IRAs) \( S = $18.9 \text{ trillion} \)
  • Tax rates \( \tau_R = 20\% \)
  • Value of implicit govt. account \( S \cdot \tau_R = $3.8 \text{ trillion} \)
  - (~2/3 or $2.5 \text{ trillion in stocks})
  • Fees \( f = 77 \text{ bps} \)
  • Corporate taxes \( \tau_C = 21\% \)

• Annual subsidy = $23.4 billion

• Future subsidy depends on future growth in AUM (contributions + returns relative to withdrawals)
## Subsidy for selected other countries
(U.S. dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>Data Year</th>
<th>Retirement Assets</th>
<th>Gov. Acct.</th>
<th>Subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$b</td>
<td>$b</td>
<td>Fees</td>
</tr>
<tr>
<td>United States</td>
<td>2018</td>
<td>16,464</td>
<td>20% 3,084</td>
<td>0.80% 21%</td>
</tr>
<tr>
<td>Canada</td>
<td>2015</td>
<td>1,003</td>
<td>15% 129</td>
<td>2.06% 15%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2015</td>
<td>950</td>
<td>20% 41</td>
<td>1.45% 20%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2015</td>
<td>108</td>
<td>39% 41</td>
<td>1.41% 25%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2015</td>
<td>945</td>
<td>4.0% 38</td>
<td>1.29% 18%</td>
</tr>
<tr>
<td>Australia</td>
<td>2015</td>
<td>1,797</td>
<td>3.4% 34</td>
<td>1.10% 30%</td>
</tr>
<tr>
<td>Japan</td>
<td>2015</td>
<td>112</td>
<td>2.6% 3</td>
<td>1.47% 30%</td>
</tr>
</tbody>
</table>

Notes: “Assets” includes only fully-funded tax-deferred private pension savings, excluding DB plans. Fees are the asset-weighted average of money market, equity and fixed-income mutual fund fees based on overall (not retirement-only) asset allocation in that country. Sources of non-U.S. values: OECD (retirement assets), Morningstar and others (fees), national statistical offices (total assets in each type of account and income distribution), country tax authorities (tax schedules).
Do asset managers charge lower percent fees under EET? (partial equilibrium)

• NO

• We prove a supply side fee equivalence result:
  • No existing firm has the incentive to alter percent fees

• If average asset management costs are decreasing with scale, then under EET (relative to TEE):
  • Percent fees are the same
  • Percent markups over average cost are higher
  • Total profits of asset managers are higher
  • Total cost to the government is higher
What happens in general equilibrium? (Salop circular city model)

• Under EET ...
  • AUM of asset managers higher
  • Profits of asset managers higher and/or
  • Resources devoted to asset management higher
  • Social welfare lower

• If instead use TEE, government could afford to create a 6% government match with saved resources
Proposal: TEE with a progressive government match

- All contributions TEE
- Government matches a fraction of contributions
- Percent match declines with
  - current income
  - cumulative lifetime contributions
- Reduces dependence of subsidy on tax rate
- Enhances progressivity
- Precedent: U.S “Saver’s Match” in Secure 2.0 (2022)
- Other components
  - Restrict accounts to hold only publicly traded assets
  - Limit total size of tax-advantaged accounts
President Joe Biden has now signed into law the year-end legislation that will fund the government into 2023. That legislation also contained the Secure Act 2.0 law that will increase retirement plan catch-up contribution limits from $7,500 in 2023 to $10,000 for taxpayers aged 60, 61, 62 or 63 for tax years beginning after 2024 (the catch-up contribution limit will be increased to $5,000 for SIMPLE retirement plans).

For IRAs, the $1,000 catch-up contribution limit will also be indexed for inflation beginning in tax years after 2023. Starting in tax years beginning after 2023, however, all catch-up contributions will be treated as Roth contributions.

Now, though, we’re seeing a shift in momentum, toward what some are calling “Rothification.” In a nutshell, it’s the idea of using legislation (in this case several provisions inside the SECURE 2.0 Act signed into law in 2022) to encourage or require retirement savers to use an after-tax Roth account along with or instead of a pre-tax account.
Asset allocation and the rise of Target Date Funds (TDFs)

How does this rise of TDFs impact life-cycle asset allocation? (Ameriks, Xiao, Zeldes, in progress)

Source: ICI Fact Book 2023
• The Great Transformation from DB to DC

• Reforming DC plans

• Reforming Social Security
US Social Security: a largely PAYGO system (costs and income as % of GDP)

https://www.ssa.gov/OACT/presentations/index.html
OASDI Trust Fund
(2023 dollars)

Data source: 2023 Social Security Trustees Report
• Contribution formula: fixed by law

• Benefit formula: fixed by law

• Budget constraint: $TF_t = TF_{t-1} (1+r_t) + \text{contributions} - \text{benefits} + \text{taxation of benefits}$

• Borrowing constraint: $TF_{t+s} \geq 0$ for all $s$
• Look at system on a generational / cohort basis

• Early generations: PAYGO \( \rightarrow \) NPV > 0 \( \rightarrow \) “Legacy costs”

• Intertemporal budget constraint: infinite horizon NPV moving forward must = 0

---> Subsequent generations must get NPV <0

• How much of projected shortfall is due to legacy costs and how much due to NPV>0 promises to current and future generations?
Proposal: Fund legacy costs with dedicated tax on general revenue

• Why should costs of promises to past workers be borne only by future workers, especially those earning less than the earnings cap?

• A dedicated tax on general revenue, to cover legacy cost, with proceeds sent directly to Social Security Trust Fund

• This will only cover about half of the projected infinite horizon shortfall of $65 trillion

• How to cover the rest?
  • To be worked out...

• Add self-correcting mechanisms – reducing need to adjust rules in the future

• Political challenges
  • How to modify the fiscal rule, then protect it from change in the future?
  • Contrast with Italy...