The Design and Sustainability of Public Pensions: Discussion

Laura D. Quinby
Research Economist
Center for Retirement Research at Boston College

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The papers present different visions for the future of public pensions.

- Boyd, Chen, and Yin assume that governments will reduce pension costs by adopting alternate plan designs.

- Lenney, Lutz, and Sheiner argue that most plans are fiscally sustainable with minor adjustments.
    - Drawing on lessons from public economics, they show that full funding is not necessary for fiscal sustainability.

Boyd, Chen, and Yin show how "shared-risk" plans affect contributions and benefits.

- They consider two design options linked to financial status:
  - Variable COLAs.
  - Variable employee contribution rates.

- Outcomes include plan cost and volatility:
  - Cost = PDV of contributions over 40 years.
  - Volatility = probability that contributions or benefits reach undesirable targets.

- They find that seemingly small differences in designs have large effects on outcomes.

But the party with a high contribution rate may not bear pension costs in practice.

- Boyd, Chen, and Yin define costs in an accounting sense.
- The economic incidence of pension contributions depends on the relative bargaining power of employers and employees.

Increase in employer contribution → Wage freeze

Increase in employee contribution → Harder to recruit and retain public workers → Wage increase, reduced service quality

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And the paper could discuss how shared-risk plans transfer wealth across generations.

Currently, the paper:

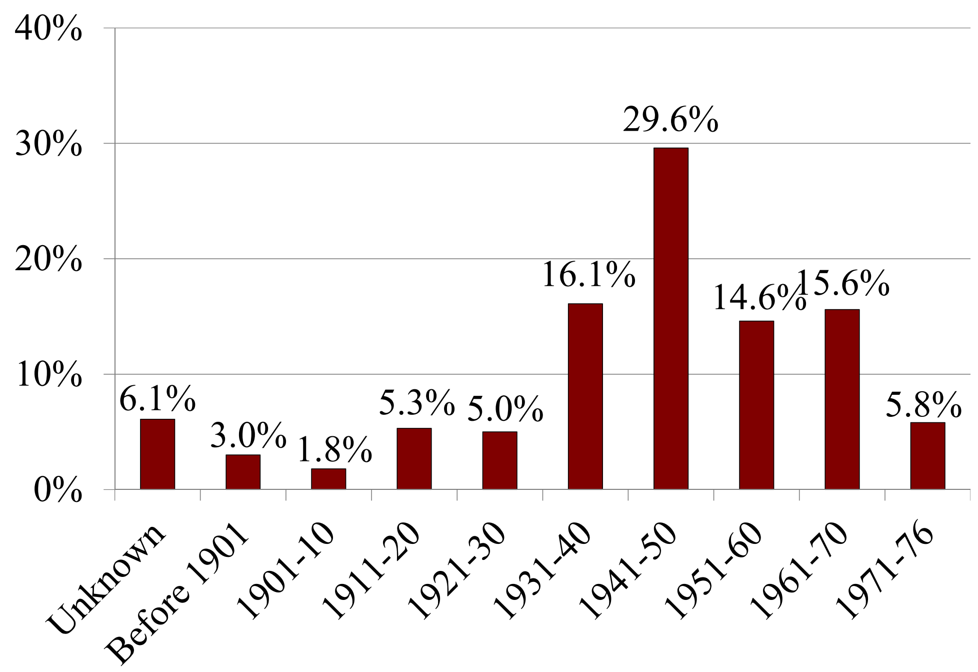
1. Shows how benefits vary over time for a single cohort of retirees.
2. Models contributions over a 40-year period.

Measures of intergenerational risk include:

1. Variance in the deferred compensation received by different cohorts of public employees.
2. Variance in the employer contributions made by different cohorts of taxpayers.

Linking benefits to funding burdens transition cohorts when plans move from PAYGO.

Percentage of State and Local Plans Established or Significantly Restructured, by Date



Sources: Center for Retirement Research at Boston College calculations based on PENDAT (1900-2000); and *Public Plans Database* (2001-2014).

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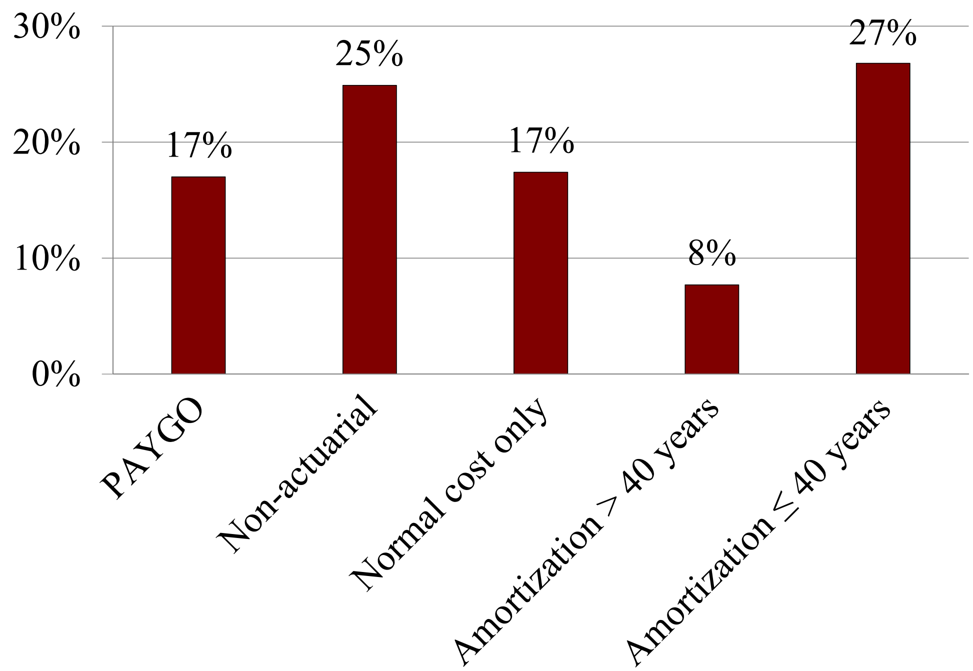
Nearly two-thirds of public plans were not targeting full funding before the 1980s.

Percentage of State/Local Pensions by Funding Arrangement, 1978



Note: The categories do not sum to 100 percent because plans whose funding regime was unknown are omitted from the figure.
Source: Congressional Committee on Education and Labor (1978).

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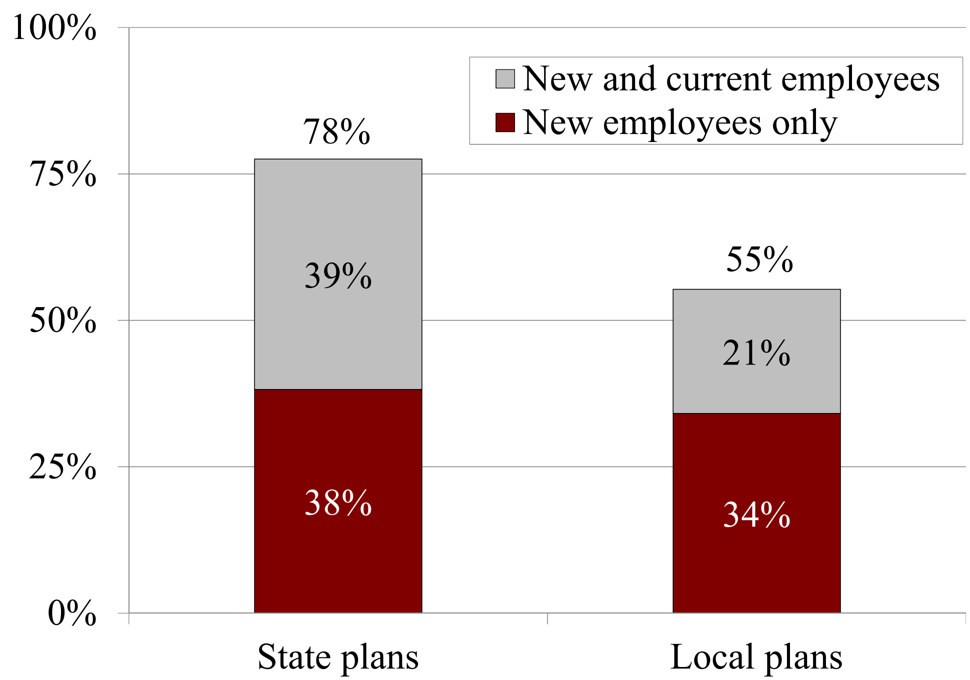
Lenney, Lutz, and Sheiner show that plans can be sustainable without full funding.

- Economists have long debated optimal funding levels, often in the context of Social Security.
  - Baker, DeLong, and Krugman (2005); Bohn (1995 and 2011); Cutler, Poterba, Sheiner, and Summers (1990).

- Pensions are "fiscally sustainable" if benefits can be paid without raising taxes or reducing other expenditures.
  - The tax base grows as fast as the pension liability; and
  - The trust fund never exhausts its assets.

A key finding is that benefit flows are at a peak due to cuts made post-2008.

Percentage of Plans Making Benefit Changes, by Type of Employee, 2009-2014



Source: Author's calculations from various AVs and CAFRs (2009-2014).

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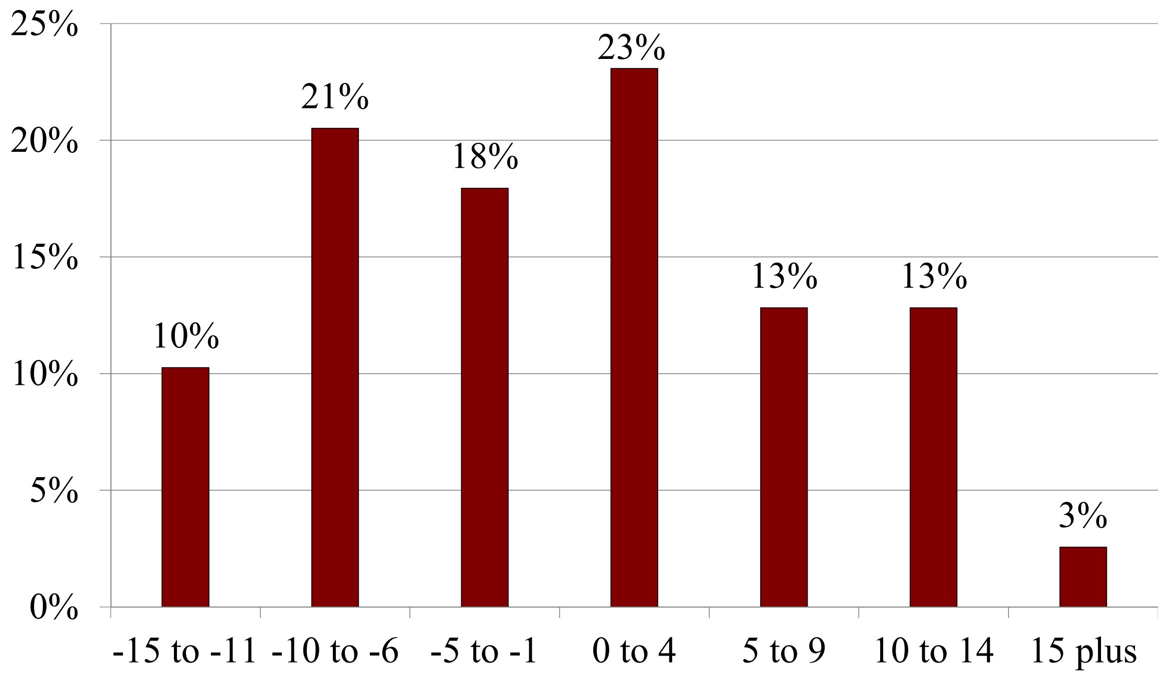
Raising contributions by about 4 percentage points would stabilize the plans nationally.

Distribution of Additional Contributions Necessary to Stabilize UAAL/state-GDP



Note: the results assume a 3.5-percent real return on assets.
Source: Lenney, Lutz, and Sheiner (2019 preliminary).

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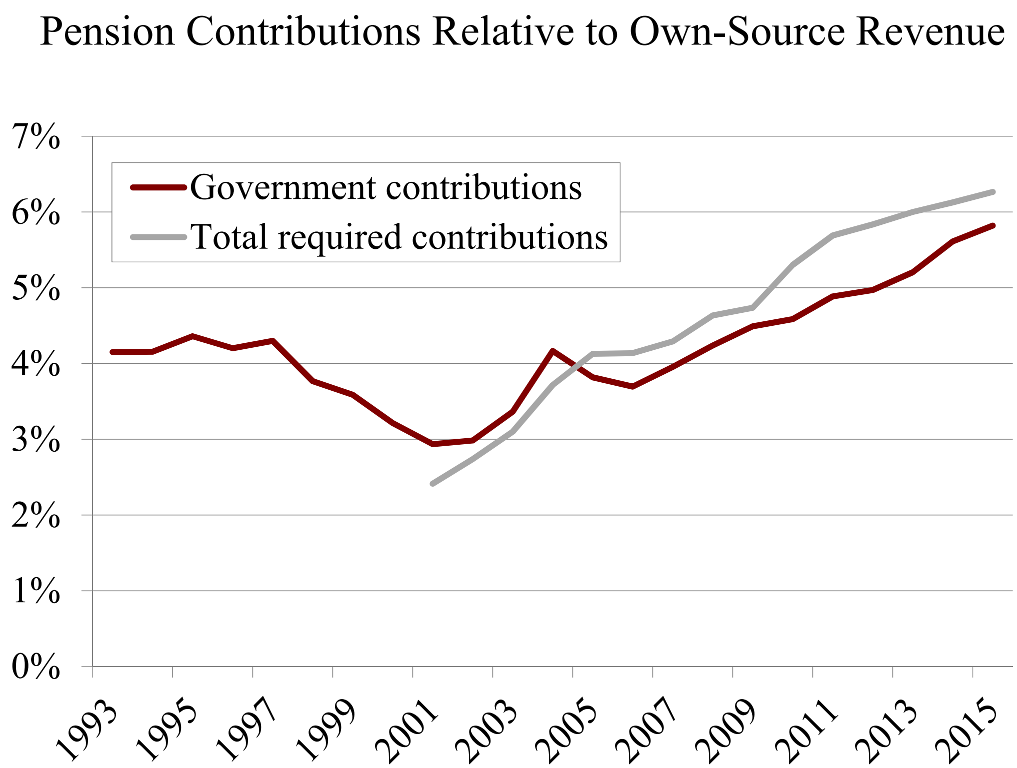
How much of a funding buffer is needed to weather economic shocks?

- The authors could test the sensitivity of their state-specific results to different payroll trajectories.
  - Barro and Sala-i-Martin (1992); Blanchard and Katz (1992); Ganong and Shoag (2017).

- What happens if state economies respond to pension funding requirements?
  - Pension costs could affect future benefits (through wages) and tax revenues (through migration).

It is also unclear how analysts should define a budgetary crisis.



Sources: Author's calculations from U.S. Census Bureau, *Employee Retirement Systems Database* (1993-2016); and the *Public Plans Database* (2001-2016).

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These two papers highlight how funding targets for public plans have evolved.

- **1978**: Many plans do not practice actuarial prefunding.
- **1996**: GASB 25 amortizes the UAAL over 40 years.
- **2006**: GASB 25 shortens the amortization period to 30 years.
- **2008**: Most analysts consider 80% to be a sound funding target (U.S. GAO 2008).
- **2018**: Many analysts advocate for full funding over a short time horizon.

Setting a funding target for public plans should take into account several factors.

Intergenerational equity

- Which generations should pay legacy costs?

Fiscal sustainability and benefit design

- Benefit design affects the quality of public services (Quinby 2019; Quinby and Wettstein 2018).

Opportunity cost

- Do pension contributions yield a higher economic return than other spending?

So how do we move forward?

- Fund legacy costs with dedicated revenue over a long period.
- Fund the normal cost using conservative actuarial assumptions.
  - Taxpayers are responsible for the services they receive.
  - Retirees receive the benefits they were promised.
- Consider risk-sharing designs for the normal cost.
- Reassess total compensation for new hires.
  - Set competitive wages to attract highly skilled workers.
  - Align the normal retirement age with the private sector.