Pensions Gone Haywire: What Can We Do?

NCPERS 2018 Public Pension Funding Forum
William Fornia, FSA - PTA
What Can We Do?

• Society of Actuaries created Retirement 20/20 in 2006
  – brought together experts interested in and impacted by retirement issues in order to design new retirement systems from the ground up that better meet the economic and demographic needs for the 21st century in North America
  – First models tended to focus on private sector solutions
  – 2017 call for models focused on public plans

• I had the privilege of reading the papers and being a judge

SOA Retirement 20/20 Public Pension Model Prizewinners

• **Funding of Public Sector Pension Plans**  
  – Chun-Ming (George) Ma, FSA, FCIA, Ph.D.

• **Multiple Employer Pension Plan Risk-Sharing Model**  
  – Sandra J. Matheson, MBA  
  – Gene Kalwarski, FSA, EA, FCA, MAAA

• **The South Dakota Retirement System Generational Benefit Structure**  
  – Douglas J. Fiddler, ASA, EA, FCA, MAAA  
  – R. Paul Schrader, ASA  
  – Robert A. Wylie

• **A Middle Ground for Public Plans**  
  – Rowland Davis, FSA
SOA Retirement 20/20 Public Pension Model Honorable Mentions

- **Full Funding of Traditional State and Local Government Pensions: The Entry-Age-Service-Cost Method**
  - Jonathan Barry Forman, J.D.
  - Michael J. Sabin

- **Tontine Pensions Could Solve the Chronic Underfunding of State and Local Pension Plans**
  - Jonathan Barry Forman, J.D.
  - Michael J. Sabin

- **Finding the Optimal Pension Plan for Public Sector Workers: A Mix of DB and DC Pension Elements**
  - Robert L. Brown, Ph.D., FSA, ACAS, FCIA
  - Stephen A. Eadie, FSA, FCIA

- **Public Pension Plan Design: A Two-Component Approach to Addressing Challenges**
  - Tammy F. Dixon, FSA, EA, MAAA
  - Maria Kirilenko, EA, MAAA
Funding of Public Sector Pension Plans
Chun-Ming (George) Ma, FSA, FCIA, Ph.D.

- Adjunct Professor, University of Hong Kong
- Canadian public plans have moved toward risk sharing with plan participants
- Well designed intergenerational risk sharing within collectively funded pension plans can be welfare-enhancing vis-à-vis individual benchmark based on optimal lifecycle savings and investments
- Ma’s research redesigned funding model to enhance equity and sustainability
Ma – Canadian Background

• Three Pillar System
  – OAS – floor government plan
  – CPP/QPP – supplemental government plans
  – Private workplace pensions and private savings

• Public Sector dominates workplace pensions, mostly DB with COLAs

• Private Sector is moving toward DC

• Funding is based on long-term and short-term perspectives
  – Going concern long term similar to US
  – Short term is on solvency basis (public plans largely exempt)
Ma – Key Concerns

- Equity vs
- Intergenerational Risk Sharing
  - What Risks
    - Investment Risk
    - Inflation (wage or price) Risk
    - Longevity Risk
    - Other Demographic Risk
    - Sponsor Default Risk (Not an Issue in Canadian Public Sector)
  - Who Shares Risks
    - Employer (paid directly or indirectly by taxpayers)
    - Active participants
    - Retired and other inactive participants
Ma – Stochastic Illustrations – Contribution Rate

Contribution is Adjusted

Benefit is Adjusted

Contribution/Benefits Adjusted 50/50
Ma – Stochastic Illustrations – Funded Ratio

Contribution is Adjusted

Benefit is Adjusted

Contribution/Benefits
Adjusted 50/50
Ma – Stochastic Illustrations – Pension Payments

Contribution is Adjusted

Benefit is Adjusted

Contribution/Benefits Adjusted 50/50
Ma – Proposed Model

• Develop parameters toward risk sharing
  – Between contributions and benefits
  – Possibly with corridor limits of adjustments

• Perform regular actuarial valuations including
  – Target Normal Cost Rate
  – Target Funding Level
  – Discount Rate based on Expected Return on Assets
  – Balancing Measure
  – Triggers to Address Financial Imbalance
Multiple Employer Pension Plan Risk-Sharing Model (Maine)

Presented by Sandy and Gene this morning
The South Dakota Retirement System Report Observations – Nationally

• Median funded ratio in 70%-75% range

• Based on median discount rate of 7.5%

• About 24% of plans receive less than 90% of actuarial required contribution

• This has caused concern to policymakers
  – Reductions in benefits
  – Conversions to alternate plan designs
The South Dakota Retirement System Generational Benefit Structure

- Statutory funding thresholds
- Requirements for changes when needed, ensuring system would operate within budget
- Current plan meets replacement income goals
- Funded status consistently near top in US
- Primary lever today is COLA
South Dakota Retirement System Generational Benefit Structure – Stability Through:

- Fixed statutory Rates
- Flexible DB designed to meet income targets
- Statutory funding measurement thresholds requiring corrective actions
- Outstanding internal investment management
- Responsible board focused on sustainability
- Oversight by a bi-partisan legislative committee working in partnership with the retirement board
SDRS Generational Benefit Structure – Examples of Changes for Sustainability

• Removal of all terminal pay from compensation definition
• Restructuring of return-to-work provisions
• Revision of disability and pre-retirement survivor benefits to avoid duplication with Social Security
• Charging full actuarial cost for service purchases
• Limitations on subsidized early retirement
• Raise Normal Retirement Age
SDRS Generational Benefit Structure – Adjustable Benefit Features

1. Cost of Living Adjustment

2. Variable Retirement Account

These are subject to thresholds for corrective action:

1. requirement that the fixed, statutory contributions meet a minimum actuarial requirement (20 year amortization) to support the benefits
2. Action required if funded ratio below 100%
SDRS Generational Benefit Structure – COLA Illustration

Step 1:
June 30, 2017
Baseline FVFR = 96.4%

If 100% or More

COLA = CPI-W Increase
Minimum = 0.5%
Maximum = 3.5%

If Less than 100%

Step 2: Restricted
Maximum COLA = 1.89%
Resulting in FVFR of 100%

COLA = CPI-W Increase (1.96%)
Minimum = 0.5%
Maximum = 1.89%
2018 SDRS COLA = 1.89%

2018 SDRS COLA = 1.89%
SDRS Generational Benefit Structure – Variable Retirement Account

- Notional account credited with 1.5% of compensation
- Increased by actual SDRS investment return
- Paid only if member leaves money in SDRS until retirement
- Can be converted to annuity at retirement
- Contributions cease if necessary to fund core DB plan
Davis – A Middle Ground for Public Plans

- Expansion of previous research framework to public sector

- Tracker Plan during accumulation phase
  - DC plan with variable contributions
  - Offers support for weak investment performance

- Collective risk-sharing fund post-retirement
  - Base benefits
  - Bonus if superior investment performance
  - Designed to be fully sustainable
A Middle Ground for Public Plans – Quantitative Evaluation (QE) Framework

• A set of well-defined metrics that should be determined for each proposed retirement system design

• Specific methods that should be used for the calculations

• Specific assumptions that should be used for the calculations.
A Middle Ground for Public Plans – Illustration of Benefit Metric
A Middle Ground for Public Plans – Tracker Plan Illustration
A Middle Ground for Public Plans – Tracker Plan Risk/Cost Illustration

Results with a higher allocation to risk assets (typical 90-50 TDF for DC; flat 68% for DB)
Conclusions

• Flexibility in contributions and/or benefits can help balance sustainability with benefit targets

• Stochastic analysis can help analyze likelihoods of various outcomes

• Strong governance is necessary for maintenance
Pension Reforms Gone Haywire: What Can We Do?

NCPERS 2018 Public Pension Funding Forum
September 17, 2018

Mark A. Hovey
Chief Executive Officer, Retired
SDCERS
The Facts on SDCERS

✓ Plan Sponsors:
  • City of San Diego
  • San Diego Unified Port District
  • San Diego County Regional Airport Authority

✓ $8.1 Billion AUM
✓ 20,000 Members
✓ City Funding: 71.2%
San Diego City Plan Changes

✓ 1996 ⇒ 3 retirement plans
  • General, Police, Fire

✓ 2018 ⇒ 22 retirement plans
  • Complicates administration/recruiting/retention

✓ Why all the new plans?
  • Reforms apply to new hires
  • Existing employees unaffected
New Hire “Reforms”

✓ 2005 ⇒ Eliminates Benefit Programs
  • All Plans
    o Retiree health, DROP, 13\textsuperscript{th} check, Purchase Service Credits

✓ 2009 ⇒ Reduces Benefits
  • General Plan
    o Retirement Factor Dropped
      2.5\% to 1\%@50 and 2.6\% to 2\%@60
    o Average Final Salary (FAS): Highest 1 year to 3 years
  • Police Plan
    o Retirement Factor Dropped
      3\% to 2.5\%@50
New Hire “Reforms”

✓ 2011 ⇒ Reduces Benefits
  • Lifeguard Plan
    o Retirement Factor Dropped
      3% to 2.5%@50

✓ 2012 ⇒ Reduces Benefits
  • Fire Plan
    o Retirement Factor Dropped
      3% to 2.5%@50

✓ 2012 ⇒ Eliminates Program Benefits
  • Police Plan
    o FAS: Highest 1 year to 3 years
    o Supplemental Cost of Living Annuity
      (CPI COLA retained)
New Hire “Reforms”

- 2012 ⇒ Ballot Initiative Closes Most Plans
  - General Plan
    - Including Elected Officials
  - Lifeguard Plan
  - Fire Plan

- 2013 ⇒ Reduces Benefits
  - Police Plan
    - Benefit Cap Reduced from 90% to 80% of FAS
Taxpayer Promises

- Five-year Salary Freeze
  - Save $1 Billion over 30 years

- Defined Contribution Plan for New Hires
  - Cost $13 Million more than DB Plan
    - City’s DC contribution > City’s DB normal cost
  - General employee and City each contribute 9.2%
  - Safety contribution higher, at 11%, including OT
  - No Social Security (same as before)
Prop B Ballot Initiative

- Public Employee Relations Board
  - Ballot Initiative Process Violated Labor Laws

- California Appellate Court
  - Ballot Initiative Process did Not Violate Labor Laws

- California Supreme Court
  - Ballot Initiative DID Violate Labor Laws; Sent Back to Appellate Court to Determine Remedy
What Can Boards Do?

✓ California pension boards implement laws passed by City/County/State

  • Pension boards cannot undo a legislative reform

✓ Pensions boards can ensure good operational governance and implement sound actuarial practices
Board Actions

✓ Actions to Strengthen Funding

- Changed from Projected Unit Credit to Entry Age Normal to decrease back-loaded funding
- Changed from rolling to fixed layered Unfunded Actuarial Liability (UAL) amortization
- Prohibit overall negative amortization of UAL
Board Actions

✔ Actions to Strengthen Funding

• Level Dollar UAL Amortization for Closed Plan
• 15 Year Amortization for Experience Gain/Loss
• 6.5% Investment Assumption
• Review Economic Assumptions Annually
• Generational Mortality Assumption
Board Actions

✓ Plan Governance
  • IRS Determination Letter
  • Independent Audit Committee
    o Majority are not board members
  • Actuarial Audit
    o Validate funding model and contributions
    o In conjunction with experience study and plan change
Board Actions

✔ Message Control

• Develop good relationship with the media
• Regular meetings with City Council, County Commissioners, and state officials
• Speak at tax reform groups or at pension reform organizations
Questions