Public Pension Funding Forum

Pension Funding: It’s Not a Math Problem

April 22, 2014
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Framing the Problem

Total unfunded pension liabilities of the 50 states: $833 billion  
*(Bloomberg)*

Total with more realistic discount rate and reinvest assumptions: $1.875 trillion  
*(Moody’s)*

Starting in 2016, ten thousand baby boomers will retire or reach age 65 each day for the next 17 years  
*(Kiplinger)*

Only 53% of individuals believe they will be financially ready to retire  
*(Mercer’s 2012 Workplace Survey)*

By 2033, thirty million individuals will have reached age 65 leaving both Medicare and Social Security unable to pay their bills from current revenue, with adjustments.

Today, retiree spending equals 5.3% of our GNP and retirees hold 36% of the nation’s invested capital.
Consistent Funding Results in Greater Stability

“States that have the largest relative pension liabilities have at least one thing in common: a history of contributing less to their pension plans than the actuarially required contribution.”

- Moody’s Investors Service
Annual Funding Levels Acting as Indicators…

2012 ARC Funding %

To Overall Plan Funding

2012 State Funded Status

Credit Ratings Under Pressure

- Unfunded Pension Liabilities create downward pressure on credit ratings which makes borrowing for capital projects more expensive.
  - Moody’s Investors Service Methodology for Calculating Pension Liabilities for State and Local Governments:
    - Unfunded state and local government pension liabilities increase from $766 billion to $1.875 trillion
    - Increased weight assigned to debt and pensions for ratings determination from 10% to 20%

Sources: Changes to pension liability calculations: Moody’s Investors Service, “Adjustments to US State and Local Government Reported Pension Data”, April 17, 2013
Fitch Ratings, State Pension Update, 2013; Fitch-adjusted figures assume and 11% increase in actuarial liabilities for every 1% variance between 7% and the plan’s investment return assumption
Progress is Being Made, but is it Enough?

- Beginning in 2009, state plans have instituted benefit reforms to improve sustainability.
  - Increased employee contributions
  - Increased age or service requirements for new hires
  - Adjustments to post-retirement COLAs
  - Reduced benefit multipliers
  - Options of hybrid DB/DC plan to large groups of public employees
- While helpful, these reforms will only attain their long-term objectives if coupled with ongoing/increased employer contributions.

SOURCE: Loop Capital 2013 Annual Public Pension Funding Review; Annual Financial Reports
Funding Policy Concepts & Objectives

- A funding policy must be established with specific objectives.
  - Lay out a plan to fund pensions
  - Provide guidance in making annual budget decisions
  - Demonstrate affordable financial management practices to taxpayers
  - Reassure bond rating agencies
  - Assure employees how pensions will be funded

- Sustainability through policy implementation.
  - Have a pension funding policy that is based on an actuarially determined contribution
  - Build funding discipline into the policy to ensure that promised benefits can be paid
  - Maintain intergenerational equity so that the cost of employee benefits is paid by the generation of taxpayers who receive services
  - Make employer cost a consistent percentage of its current and projected payroll
  - Require clear reporting to show how and when pension plans will be fully funded
The Importance of Shared Sacrifice

Prevailing Solutions

- Holistic view of total compensation
- Higher employee contribution
- Required ARC funding
- Caps on benefits
- Funding underfunded systems
- Fixed retirement age
- Elimination of retroactive increases
- Development of hybrid systems
- Create contribution certainty and risk parity
- Monitor with vigilance and engage employees

Solutions that Might Fit the Context Mel Aaronson has Defined Today

- Benefits bonds
- Asset monetization
The Three Prongs of Pension Funding

To be effective and sustainable, a pension funding strategy must be considered across three primary areas.

PENSION FUNDING CONSIDERATIONS

Benefits
- Benefit Structure
- Demographics
- Labor Negotiations

Budgetary / Financial
- Budget Flexibility
- Solution Options
- Credit Impact
- GASB Changes

Investments
- Return Assumptions / Projections
- Asset Allocation
- Liquidity Needs
Pension Obligation Bond Mechanics

• Issuers of Pension Obligation Bonds ("POBs") issue debt in the taxable fixed rate markets and deposit the proceeds into their pension system.
• POBs are a risk-bearing arbitrage strategy between the cost of financing and the return on investment.
  - Investment rates that are greater than borrowing costs will achieve net savings to the pension obligation.
  - POB proceeds should be invested in asset classes that provide the best risk/return trade-off (i.e. Equities).
• POBs replace a ‘soft liability’ with a ‘hard liability’.
GFOA Best Practices for POBs

- The Government Finance Officers Association ("GFOA") advocates a thorough review and the use of caution before issuing Pension Obligation Bonds.

**POBs as part of a larger strategy**
- Pension Obligation Bonds, if used, should be utilized in conjunction with, and not in place of, sensible funding and investment policies.

**Broader budgetary impacts must be considered**
- Stakeholders should be aware that pension liabilities with debt service payments can limit budgetary flexibility, and may not eliminate unfunded liabilities in perpetuity.

**Avoid extension of UAAL**
- Pension Obligation Bond debt should not extend the unfunded actuarial accrued liability.

**Creation of ‘hard liability’; impact on debt capacity**
- Issuers should be mindful of the impacts on debt capacity, and the reporting implications of the hard debt liability.

**Impact on multiple-employer systems**
- Employers participating in multiple-employer systems should pay additional attention to the actuarial and cost implications of those plans.
POB Considerations

- There are numerous factors that must be evaluated and weighed when considering a POB that directly impacts the funding strategy.
  - Conversion of a soft liability to a hard liability
  - Issuance timing
  - Issuer debt load and capacity
  - Ratings impact
  - Covenant risk mitigation strategies while debt is outstanding (to the extent legally enforceable)
    - Create separate trust structure within retirement system to facilitate a POB investment strategy that is different than system-wide asset allocation
    - Limit ability to provide benefit enhancements while POB debt is outstanding
    - Consider a rate stabilization fund from POB excess returns once funded ratio exceeds 90%
The timing of when an issuer enters the market can significantly affect the performance of POBs.

Stock prices fluctuate, and the risk of loss in the first recession after a POB sale must be evaluated carefully.

A ‘Pension Obligation Bond Window’ is the period of time an issuer can invest these bond proceeds in the stock market with a reduced probability of experiencing lower stock prices in the subsequent economic recession.
What is the Pension Obligation Bond Window?

- The period of time an issuer of benefits bonds can most reasonably expect to invest bond proceeds in the stock market without witnessing lower stock prices in the subsequent economic recession.
  - Measured from the bottom of the stock market (which typically corresponds to the trough of an economic business cycle) until the stock market ‘breakeven’ level with the subsequent stock market bottom.
  - Theoretically, the period in which the risk of subsequent cycle loss is < 50%.
  - Quantifiable only in hindsight.
  - No one can ever predict in real-time when there is a bottom.
Evaluating POB Strategy Outcomes

- It is important that POB issuers commit to taking a long-term view on the results of the strategy.
  - History shows that over a long-term period (30-year), equities predominantly outperform POB funding costs; whereas shorter term views (5-year) provide more erratic performance results and greater risks.

*Excess Returns is defined as S&P Forward Return minus AA Corporate bond yield.

Data source: Ibbotson Associates, Inc.
Investment of POB Proceeds

- Proceeds of a POB issuance should be invested differently than the balance of the retirement system assets.
  - Typical pension plan investment strategies have asset allocation targets that include equities, fixed income, and other asset classes.
  - Plan sponsors should not issue bonds to buy bonds.
  - POB proceeds should primarily be invested in equity asset classes.
- Over a 20-year history, equity asset classes have regularly outperformed fixed income classes, on a relative basis.
### Asset Class Annual Returns

#### Annual Returns by Asset Class (1994 – 2013)

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**Source:** Callan Associates
The New Paradigm View of Benefit Bond Decisions

| Issuance Sizing | • Based on stage in business cycle  
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<th>• Optimal recessionary sizing (80 to 85% for POBs; 65% for OPEB-OBs, preferably split in two issues)</th>
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| Financial Analysis | • Primary driver of issuance – equity market risk/reward characteristics based on stage in business cycle  
|                  | • Dynamic reinvestment scenario analysis |
| Investment Management | • Equity-only initially, no arbitrage in selling bonds to buy bonds  
|                        | • Time-based migration to normal asset allocation |
| Overfunding Risk Mitigation | • Restrictive covenants to preclude benefits “give-aways”  
|                                | • Excess returns available to pay down debt  
|                                | • Protective POB trusts |
Asset Monetization as a Funding Strategy

- Many governments own significant assets that provide a stable and long-term source of cash-flows.
  - Governments may sell or lease these assets to match long-term cash-flows with the long-term liabilities associated with retirement systems.

**Pittsburgh, PA** rejected a bid of $453 million for a 50-year lease on parking revenues to fund its pension deficit. Instead, it sought to accomplish the same purpose by transferring the yearly parking revenue directly to the pension system. While the economics of this were similar, no changes were made to the pension system’s benefits, and the funded ratio is falling.

**Allentown, PA** leased its water utility for 50 years to a public authority in return for $211.3 million, of which $160 million was used to reduce the unfunded pension liability. Future rate increases were limited and there was no initial cost to taxpayers. As a result, Standard & Poor’s revised Allentown’s ratings outlook from stable to positive.

**Chicago, IL** monetized its on-street parking enterprise for $1 billion, but used the proceeds to fund a current operating deficit. Critics contend the City was undercompensated in the transaction and neglected to provide protection against steep increases in future parking rates.
• Any strategies implemented with the goal of strengthening a public retirement system must be part of a long-term plan that spreads the impact of changes across employers, employees, and taxpayers.
• These stakeholders’ interests must be balanced to create…

Sufficiency,

Affordability,

and Sustainability.
Additional Information

PFM Center for Retirement Finance

Available at:
https://pfm.com/financial-advisory/retirement/