Pension Obligation Bonds

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Agenda

- What are Pension Obligation Bonds?

- Key Considerations (+/-'s)
  - ✓ Actuarial / Funding Ratios
  - ✓ Debt Issuance & Rating Agency Implications
  - ✓ Investments

- Summary
  - ✓ Evaluation Framework
  - ✓ Final POB Considerations

What are Pension Obligation Bonds?

How Can Boards Improve Their Funding Status?

- Revisit investment return assumption
- Achieve greater investment returns (likewise with potentially greater risk)
- Lower investment management fees (marginal impact)
- Greater contributions

Revisit Investment Return Assumption

- The investment return assumption should reflect the actual experience expected over the long-term based on fund's asset allocation
- All parties should agree on the reasonableness of the assumption before issuing a POB
- If future returns fail to meet the expectation, actuarial losses will occur and unfunded liability will arise leading to an increase in pension contributions
  - The municipality will have bond payments going forward so minimizing future unfunded liability is important
- Changing the assumption after issuing the POB will change the calculations and may be viewed negatively

Pension Obligation Bonds - Overview

- Pension Obligation Bonds (POBs) are generally taxable municipal bonds issued for the express purpose of funding retirement benefits

- Issuing debt to help fund a pension fund (or OPEB)
  - POBs reduce but <u>do NOT eliminate the annual contribution </u>to the pension plan

- POB transactions differ from a bond issuer's typical debt issuances
  - POB borrowing rates are taxable rates, and will change with changes in the fixed income market, issuer credit, and general investor sentiment regarding POBs.
  - Taxable POBs would have an expanded universe of investors compared to traditional municipal tax-exempt issuances, but will still be subject to market capacity and potential pricing penalties for size.
  - POBs are typically issued to fund the unfunded actuarial liability, not to cover the Actuarially Determined Contribution (ADC).

National POB Issuance

- First issued in 1985
- ~600 Pension Obligation Bonds
- ~104 OPEB Bonds
- Over $70.5 billion in “benefit bonds” over time

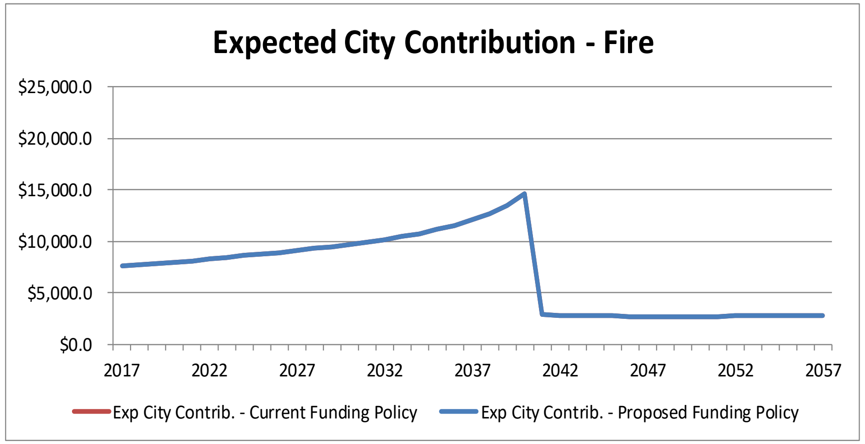
Source: POB data based on available Bloomberg data; OPEB bond data Bond Buyer, January 28, 2016: “GFOA: States, Localities Shouldn’t Issue OPEB Bonds”.

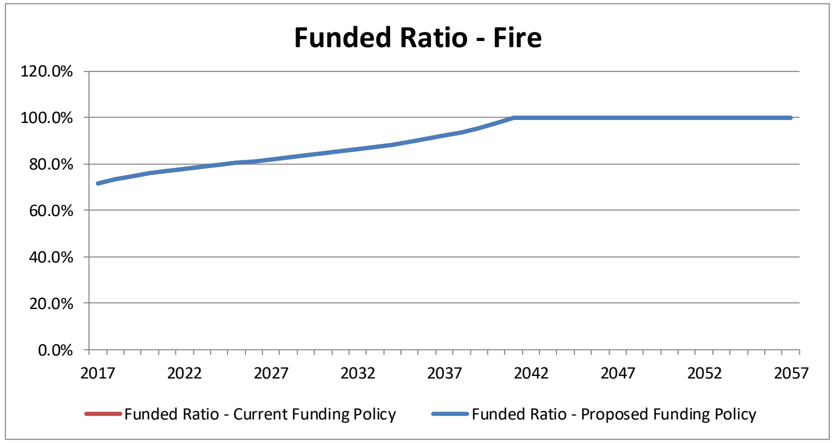
Hypothetical Example of POB and Potential Implications

- Example & Impact on Pension Fund
  - The following pages outline the effect of a POB on the pension fund
  - These projections are based on a hypothetical Fire Pension Fund with a 7.0% investment return assumption
  - After a POB is issued, the municipality will have bond payments in addition to annual pension contributions

Example of POB and Implications: Hypothetical Fire Pension Plan

- Current Plan Projection – No POB
  - Funding policy = Annual contribution to attain 100% funded ratio by 2040
  - Investment earn 7.0% per year
  - 2017 unfunded liability = $60 million
  - 2017 required City contribution of $7.6 million increases to nearly $15 million in 2040



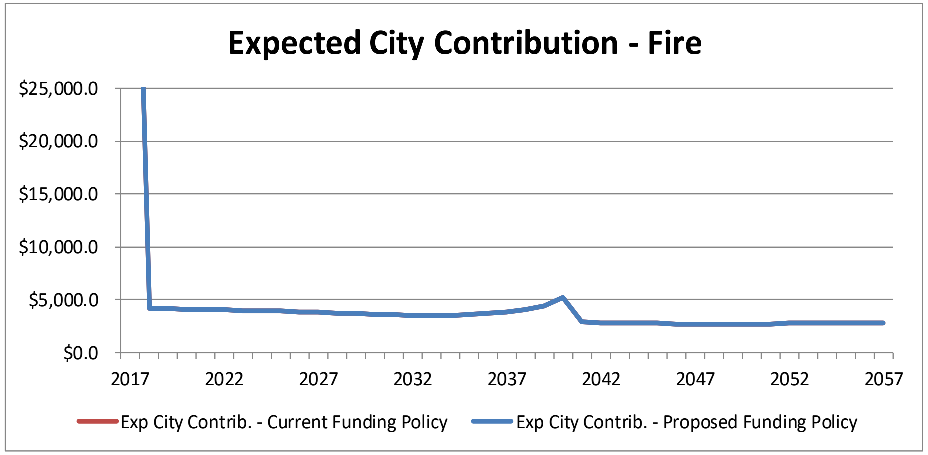


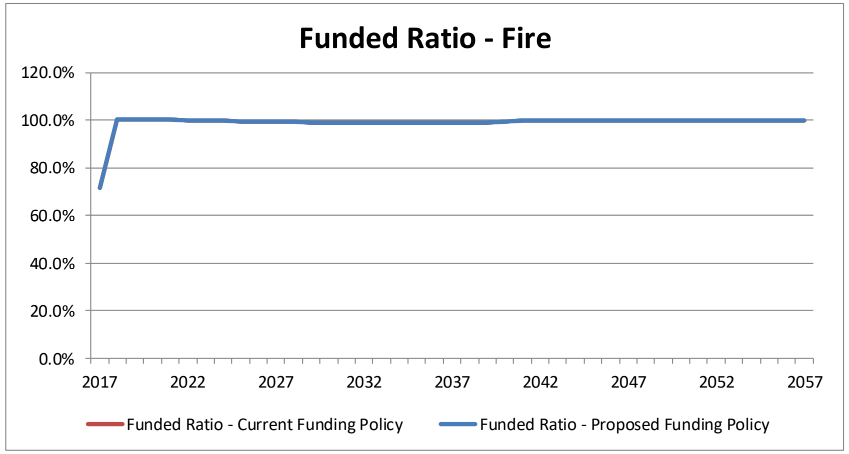
Total Employer Contrib. Paid Over Projection Period (000's)	
Current Funding Policy:	$282,818
Proposed Funding Policy:	$282,818

Hypothetical example for illustrative purposes only.

Example of POB and Implications: Hypothetical Fire Pension Plan

- Issue $60 million POB in 2017 to eliminate unfunded liability
  - Investments earn 7.0% per year
  - City's annual contribution is reduced to the normal cost ($4.2 million in 2018)
  - Total City contributions to the plan over the 40-year projection period are reduced by nearly $80 million
    - Increase in investment income due to more money in the trust



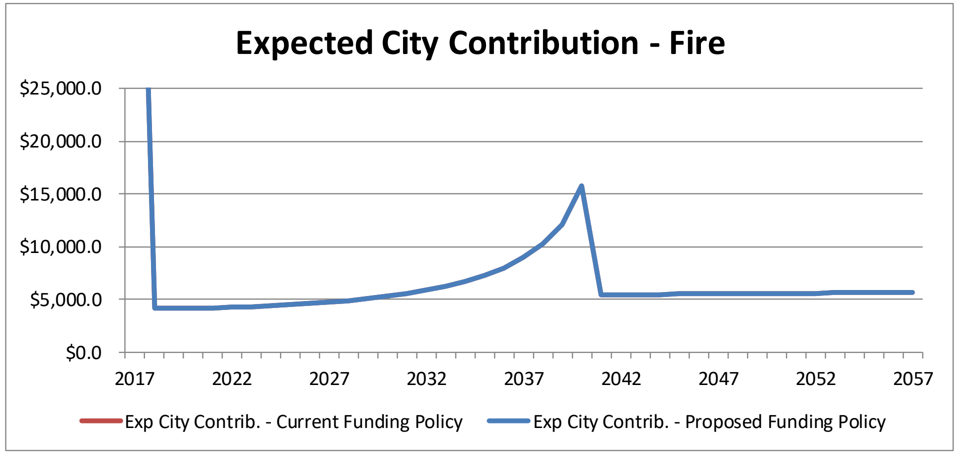


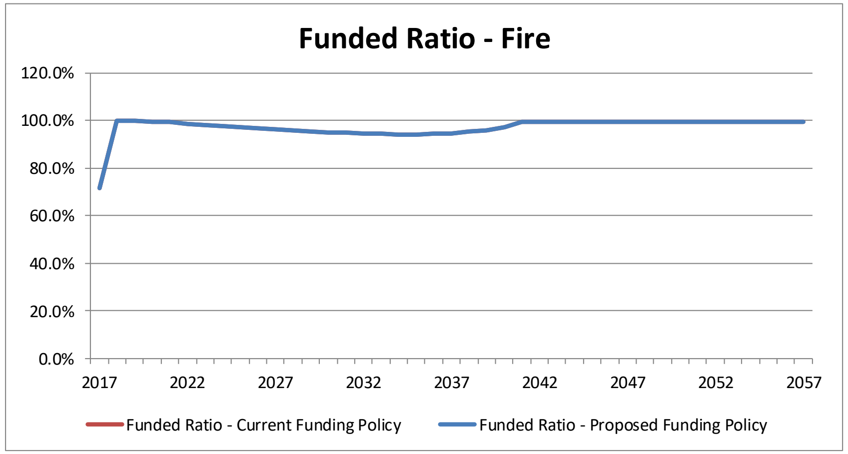
Total Employer Contrib. Paid Over Projection Period (000's)	
Current Funding Policy:	$203,475
Proposed Funding Policy:	$203,475

Hypothetical example for illustrative purposes only.

Example of POB and Implications: Hypothetical Fire Pension Plan

- What happens when investment income falls short of 7.0% assumption?
  - Investments only earn 6.5% per year
  - New unfunded liability is created so pension contributions increase over time
  - Total City contributions to the plan over the 40-year projection increase to nearly $307 million
    - Total City contributions during this period are $376 million if no POB is issued



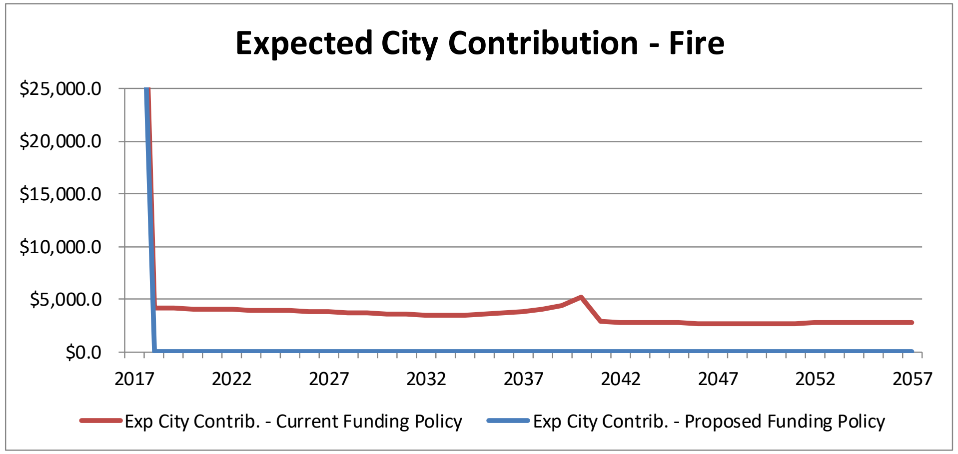


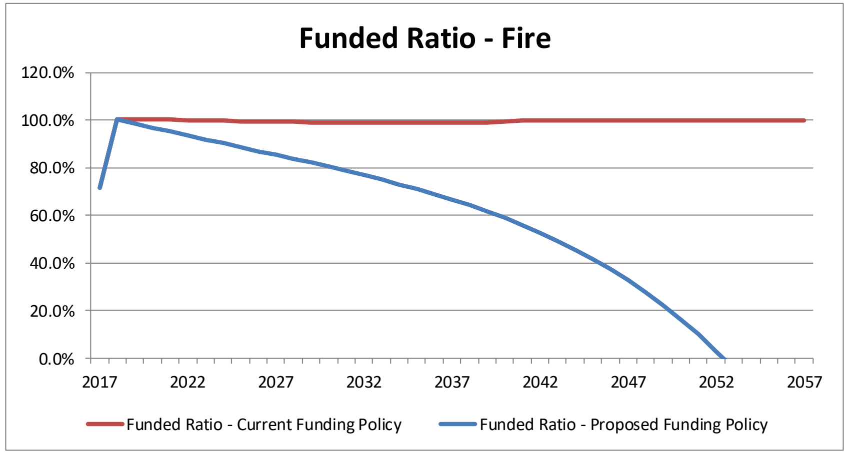
Total Employer Contrib. Paid Over Projection Period (000's)	
Current Funding Policy:	$306,664
Proposed Funding Policy:	$306,664

Hypothetical example for illustrative purposes only.

Example of POB and Implications: Hypothetical Fire Pension Plan

- Annual Contributions are still REQUIRED after a POB is issued
  - Many places (including Illinois) have fallen into the trap that the POB ends the sponsor's obligation
  - What happens if plan sponsor stops making contributions after issuing the POB?
    - The lack of ongoing contributions negates the benefit of the additional funds





Total Employer Contrib. Paid Over Projection Period (000's)	
Current Funding Policy:	$203,475
Proposed Funding Policy:	$60,000

Hypothetical example for illustrative purposes only.

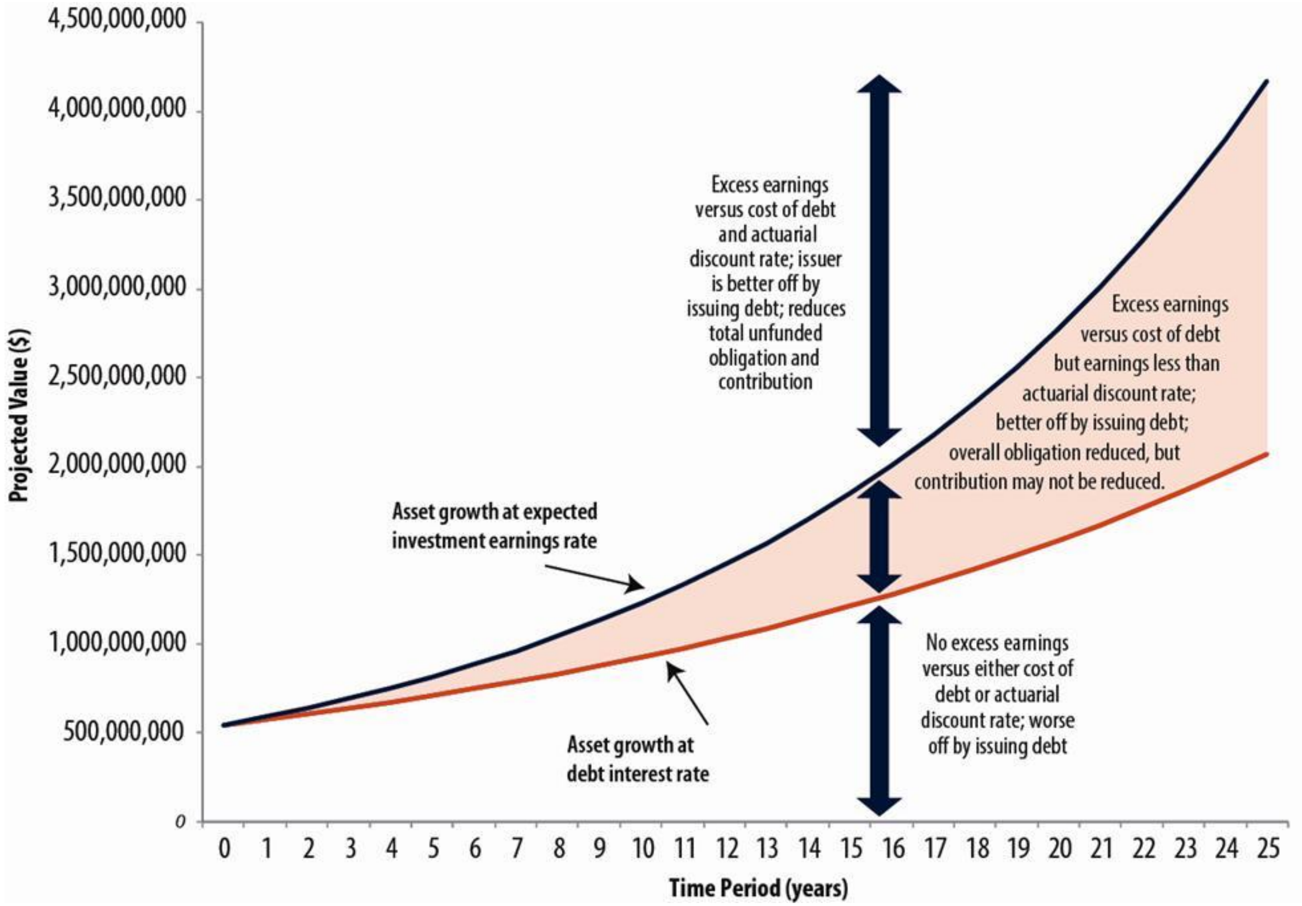
Key Considerations

POB Considerations

- There are numerous factors that must be evaluated and weighed when considering a POB that will have a direct impact on the outcome of the funding strategy
  - Understanding of interest rates
  - Issuance timing
  - Investment of POB proceeds
  - Rating levels and overall impact
  - Covenant risk mitigation strategies

Pension Obligation Bond Math

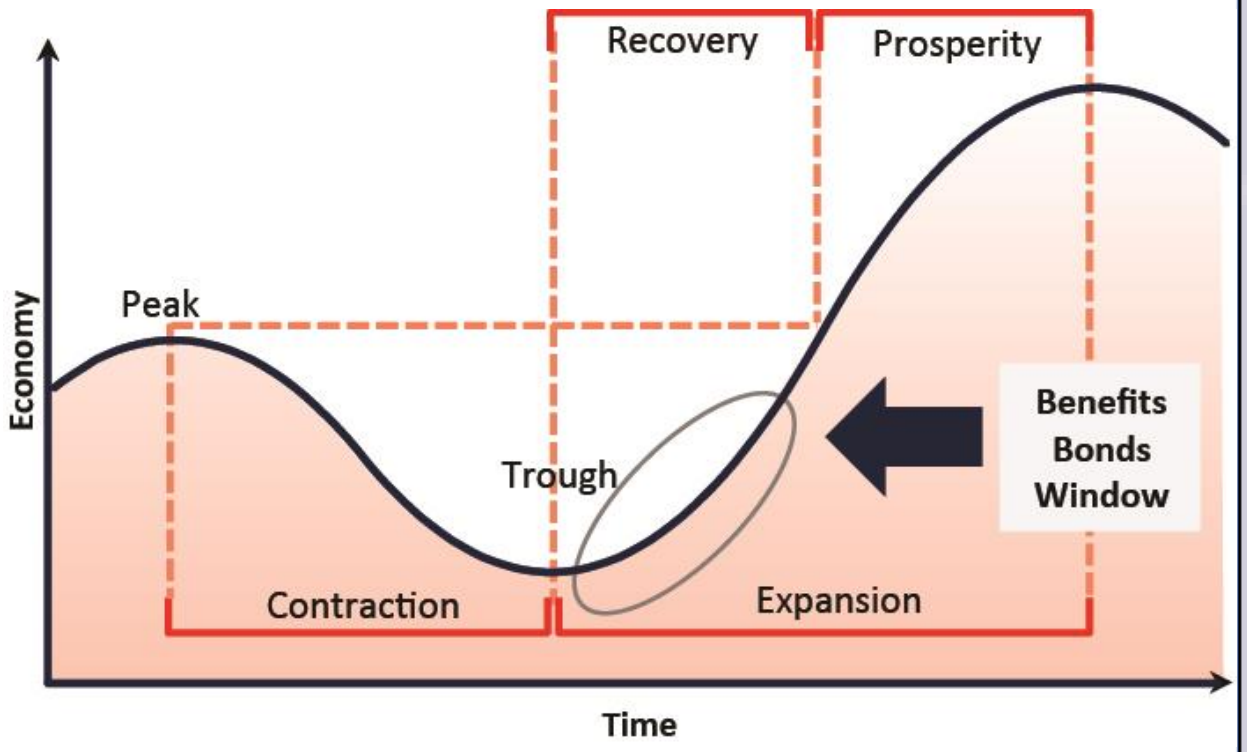
- POBs are a risk-bearing arbitrage between the cost of financing and the return on investment.
- Investment rates that are greater than borrowing costs will achieve net benefit to the system, but if the rate of return is lower than the discount rate, the originally projected funding target may not be reached.
- While current low borrowing rates make POBs attractive, issuers must also consider the investment of the POB proceeds and investment market cycles.
- Plan of investment of the lump sum - both timing and asset classes.
- Consideration should include pension fund liquidity and ability to pay benefits.



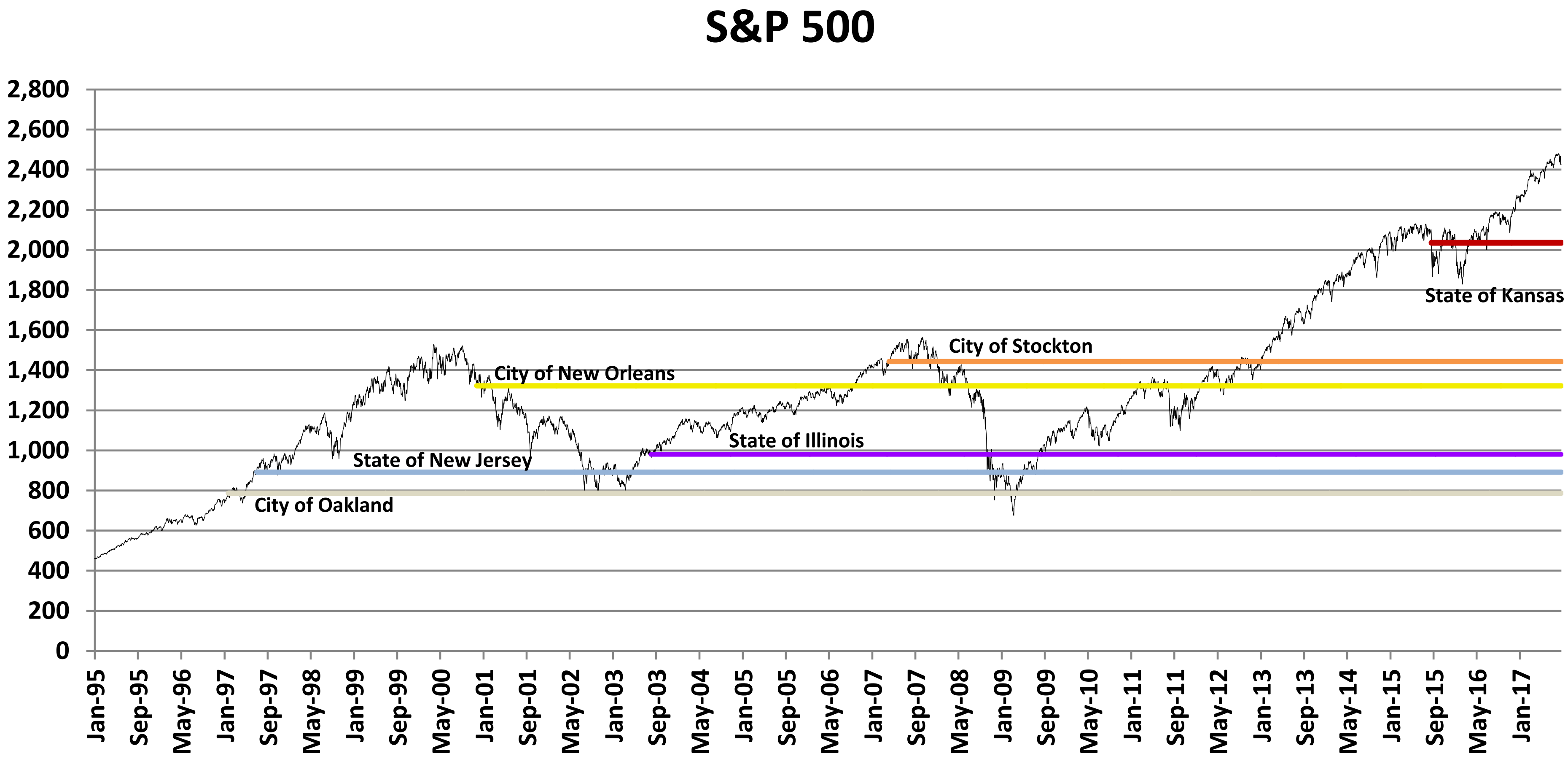
Issuance Timing – The Benefit Bonds Window

<u>What is the POB Window?</u>

- 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.



Past Pension Obligation Bond Timing & Perspective



Issuance Considerations

- Dependent on the size of a POB, there could be pricing penalties associated with large issuances.
  - Tranching could help to lessen the impact of a size penalty, but carry potential political and broader risks.
  - Structure of authorizing language could help to guard against this type of penalty, however, market sentiment regarding POBs will ultimately drive pricing levels.
- Ultimately, the buyers of the bonds will dictate the borrowing cost of the POB.
  - Often times, marketing of POBs will require a focus on sophisticated investors.
  - Based on market reactions to recent municipal bankruptcies (in California, Detroit), references to the bonds as “pension bonds” could cause investor concern regarding the safety of the security relative to other obligations of the issuer, including pension payment liabilities.
- Marketing of POBs will benefit from the distribution of a broad, but on-target POB message similar to what will be articulated to the rating agencies.

Rating Agency Considerations

- The security for a POB could be unique, and not fit into any of the rating agencies standardized methodologies.
- Issuance will often necessitate a well developed strategy for approaching and working with the rating agencies.
- The rating process could be iterative in order to achieve a ratings target consistent with the anticipated borrowing rates the structure of the POB would require.
- Additional security features may be explored and supplemented to the issuance in order to increase likelihood of a strong rating and increased investor demand.
- While the annual funding of pension contributions are viewed by many government entities as a ‘soft liability’, the debt service associated with POBs are a ‘hard liability’ for issuers and must be paid when due.

Rating Agencies' Heightened Focus on Pension Funding

- Numerous rating agency metrics explicitly factor in pension liabilities, and incorporate current and potential future burden of benefits into their process.

- Although annual pension payments can be temporarily underfunded, policies that risk unsustainable future payments or lack a responsible long-term approach to an appropriate funding level will be viewed as credit negatives.

Rating Agencies' Heightened Focus on Pension Funding

- National pension fund performance, budgetary limitations, and current funding levels have caused rating agencies to take a closer look at how these metrics impact an issuer's credit worthiness.
  - Moody's adopted a methodology for calculating unfunded pension liabilities.
  - Their Adjusted Net Pension Liability ("ANPL") eliminates actuarial asset smoothing in favor of market value, and uses a discount rate based on the Citibank Pension Liability Index, a high grade corporate bond rate.
    - The changes to the calculation methodology result in a significant increase to Moody's calculated ANPL, versus the traditional UAAL.
  - The metric has been formally adopted into rating criterias.
- The heightened focus of rating agencies on pension funding and funding levels have created downward pressure on ratings for entities with stressed pension systems.
- Rating agency reports have drawn attention to the current pension funding levels

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 out-performed fixed income classes, on a relative basis

POBs within IL Pension Code Guidelines

- Investment restrictions for Article 3 and Article 4 Pension Plans limit the potential effectiveness of a POB
- Plan sponsors should avoid issuing bonds to buy bonds
- Example of how the investment restrictions can limit effectiveness:
  - A Pension Plan has $6.5 million in assets and $10 million in liabilities → 65% funded ratio
  - Current asset allocation has 60% invested in equities and 40% invested in fixed income
  - Plan sponsor wants to issue $3.5 million in POBs to reach 100% funding
  - State statute limits the equity investment to 65%
  - Even after increasing its equity exposure from 60% to the maximum of 65%, $900,000 of the $3.5 million bond issue will have to be invested in fixed income investments
  - Achieving your investment return assumption may be more difficult with fixed income investments

Summary

Evaluation Framework

Partner with Pension Board

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Evaluate Financial Sustainability of Municipality's Benefit Structure

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Review and Update Debt and Credit Policies

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Proposed Structure of the Bonds

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Current and Historical Market Conditions

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Local Legal and Labor Relations Environment

Final POB Considerations

- <u>In order to be most effective, POBs must be part of a long-term, comprehensive strategy</u>.
- POBs, though an attractive option on the surface, carry many issues that should be properly addressed.
- Issuers must be willing to consider a POB issuance as part of a long-term strategy that will ultimately be measured based on long-term results - this can be difficult from a shorter-term political perspective.
  - To provide the best chance for success, the issuer should evaluate the economic drivers of POBs at the time of a contemplated issuance.
- Future underfunding of ADC payments by the issuer will diminish impact of a POB.
- Higher pension funding levels may trigger employee demand for increased benefits.
- Even if executed with a thoughtful and well managed issuance and investment strategy, among some audiences POBs have a negative connotation.
  - The GFOA has firmly recommended against the use of POBs.
- ***The use of POBs should be considered on a individualized basis with the issuer's specific pension system characteristics, risk profile, and overall debt and financial position driving the development of a broad-based pension funding strategy.***

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