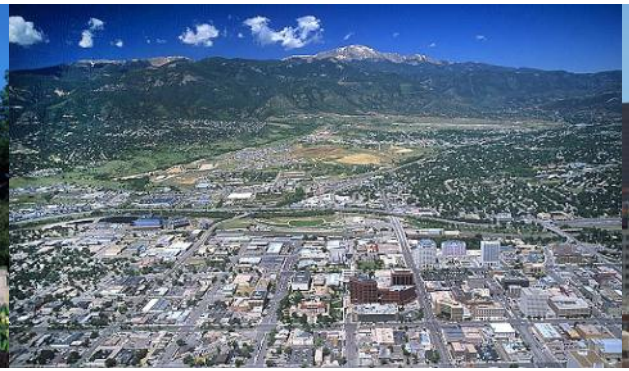
Pension Review Subcommittee

Considerations in the Use of Pension Bonds

September 3, 2019


What are Pension Bonds?

- Bonds issued for the purpose of funding pension liabilities.
  - IRS rules require that pension bonds be issued as taxable obligations.
  - Proceeds are generally invested in accordance with investment policies of affected pension system.
  - Issuer of the pension bonds and repayment structures governed by state law.
- Fundamental premise is to borrow money in the bond market to invest in whole or in part in the stock market, a practice known as “leveraged” investing.
  - Leverage increases risk because the bonds must be paid even if earnings are below the bond rate.
- Challenges worth noting include:
  - Basic financial theory suggest that portfolio returns cannot be changed over time by changing the degree of financial leverage. As a practical matter, theory suggests that stocks have a higher return over time because they entail greater risk and volatility, and increasing leverage would result in magnifying that risk. Pension bonds are essentially a form of leveraged investing, and thus the presumed arbitrage should be offset by increased volatility and increased risk.
  - Political incentives suggest that one “fix” to a complex problem may have unintended consequences that can exacerbate a situation over time.

Goals of Issuing Pension Bonds

- There are two fundamental rationales for the use of POBs to allay increases in annual pension funding costs.
  - *Market Arbitrage.* The presumption that bonds can be issued at an all in interest cost that will prove to be lower than actual pension fund earnings.
  - *Actuarial Arbitrage*. Pension bonds allow the funding of a system UAL at an all-in interest cost below the UAL actuarial funding rate, reducing the annual ARC.
  - The first rationale reflects a real financial impact on the system, while the second is an actuarial calculation that does not necessarily create a real benefit over time.
- Overarching goal is to use the existing PERA payment streams to improve funded status and reduce funding horizon to pay down unfunded pension liabilities.
  - Reduce the unfunded liability by depositing the proceeds of the bond into the pension fund.
  - Use the arbitrage earnings to improve the funded ratio of the pension fund and years required to fully fund the unfunded liability.
- The assessment of pension bonds becomes increasingly complicated if the goals of a pension bond strategy includes the reduction of annual pension funding burden from participant operating budgets.

Arguments in Favor of Pension Bonds

- Reduces the unfunded liability immediately by depositing the proceeds of the bond into the pension fund.

- Positive arbitrage earnings can be used to shorten the time period required to fund 100% of the unfunded liability; and/or reduce required employer contributions, freeing up money in budgets for other needs.

- As long as bond yields are below the PERA actuarial discount rate of 7.25%, the balance sheet liability of the remaining PERA unfunded liability + Bond liability would be less than the PERA unfunded liability without the issuance of pension bonds.

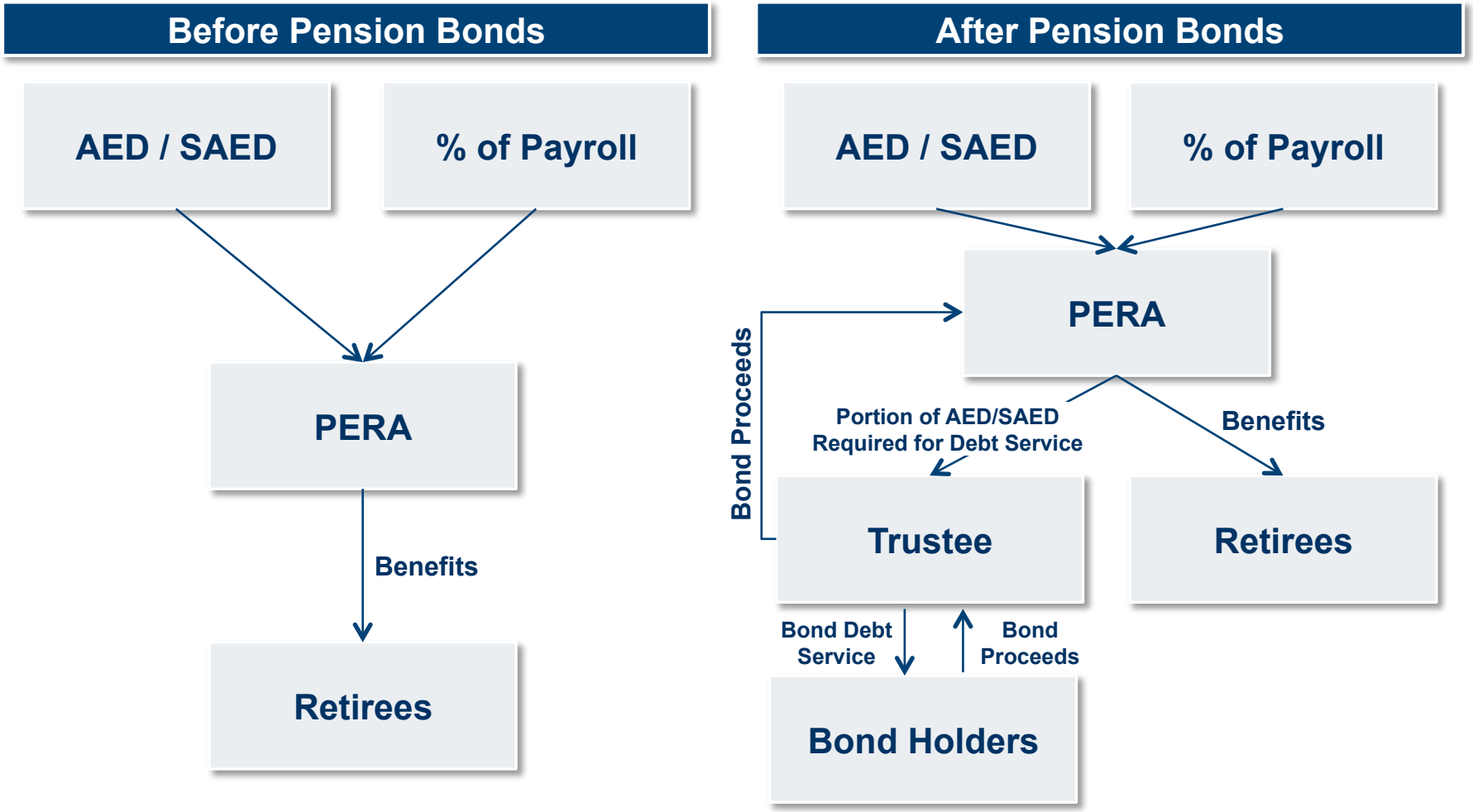
- Removes the risk to the pension fund that the employers will reduce payments on the unfunded liability in the future, to the extent that provision is included as a bond covenant.

- Interest rates are near the lowest levels in history, making it an attractive time to issue bonds in the hope of realizing arbitrage benefits.

Arguments Against Pension Bonds

- No one knows how equity markets will perform in the future.
- Pension bonds replace “flexible” liabilities with inflexible liabilities: deferring bond payments is not a public policy or budgeting option.
- If PERA’s investment returns are lower than the interest rate on the bonds, the impact of issuing pension bonds will be to increase rather than decrease the PERA unfunded liability.
- Hiring bankers and lawyers to craft a “financial engineering” solution will attract negative publicity and public attention to risks.
- Pension bonds can provide an excuse for participating governments to underfund pension liabilities going forward.
- Pursuing “arbitrage” strategies is not a prudent risk to be undertaken by governments, and that the proper path is to fund the unfunded liabilities through increasing employer and employee contributions, or renegotiation pension benefits due to retirees.

Structure of the 2015 Pension Bonds



Before POBs: State can reduce AED/SAED and/or % of Payroll and underfund PERA through legislative action

After POBS: Proposed legislation prohibited reducing AED/SAED or other action to reduce pension funding

What Happened Last Time Around?

- In 2015, legislation was drafted that authorized revenue bonds to fund a portion of the unfunded liability of the state and school district divisions.
- To secure and pay the bonds, PERA would pay AED and SAED directly to the bond trustee, with a covenant that limited estimated debt service to an amount not exceeding two-thirds of of annual AED and SAED payments.
- Bonds were to be fixed rate bonds to avoid any use of financial derivatives.
  - Denver Public Schools transaction, and difficulties experienced during 2008 market turmoil, served as backdrop for questions raised in 2015.
- Bonds were to be issued by CHFA at the direction of the Governor and the Treasurer.
- Bonds could not be issued until a Colorado court has issued an opinion that the transaction does not violate TABOR or the other applicable debt provision of the Colorado constitution.
- Legislation was passed by the House; killed in first Senate committee.

How Have Pension Bonds Worked Out for Others?

- The simple answer is that for some communities, issuing pension bonds has worked out well, for others it has not.
- Market timing is a critical issue to long-term success.
- Boston College Center for Retirement Research assesses pension bond performance:
  - 2009 study showed that more issuers lost money on the intended arbitrage.
  - 2014 study, five years after financial collapse, showed that more issuers made money, realizing a 1.5% positive return.
  - They recognize that as a 30-year strategy, the true results will not be known for decades.
- Complicating factor in assessing success and failure is how pension bonds might exacerbate underfunding on an annual basis, a factor that the 2015 legislation sought to address.

Final Thoughts

- Success of a pension bond strategy is difficult to gauge
  - Issuing POBs is a long-term strategy and you won't know how successful it was until years down the road.
  - Singling out one year or five years of investment returns will not provide an accurate picture of the success of this transaction as it will need to be evaluated over the longer term.
  - That said, with 30-year Treasuries hovering around 2.00%, this is a more opportune time to consider pension bonds than in 2015. Pension bond rates at 3% would compare favorably to long-term PERA returns in the 5-6% range.
- Understanding and articulating the financial, political and public policy goals and objectives are important as one moves forward.
- Consideration should also be given to articulating in advance the risks, consequences and commitments of the parties in the event the desired outcomes are not realized.
- Any pension bond strategy should consider including restrictions on the state's ability to reduce employee and employer contribution rates in the future until there is no unfunded liability, with limited exceptions.