Illinois Public Pension Fund Association
Information Bulletin – July 2020, Updated May 2021
PENSION OBLIGATION BONDS

Introduction. The IPPFA has been researching the issue of Pension Obligation Bonds for the last two years. The goal was to develop a whitepaper and then support dissemination of the information through seminars in cooperation with the Illinois Government Finance Officers Association (IGFOA), the Illinois City Managers Association (IlCMA) and the Illinois Municipal Treasurers Association (IMTA).

The arrival of the Covid-19 health emergency resulted in disruption in each organization's training programs and the outreach portion of this effort is on hold. However, IPPFA feels there is merit to releasing our updated research at this time in order to disseminate this information to support cities and fire district that are considering issuing Pension Obligation Bonds.

In 2021-22, we will work with our other association partners to hopefully move forward with our seminar plans.

Background. Pension funds have unfunded actuarial accrued liability (UAAL) when the present value of the plan's liabilities is in excess of financial assets. Most Illinois fire and police pension plans have an unfunded liability. The funded percentage of all Article 3 and Article 4 plans is 55% ($12 billion in unfunded liabilities). The UAAL can range from a low dollar amount in a small, well-funded plan to tens of millions of dollars in larger plans. For any municipality, the UAAL represents a debt which must be paid.

In effect, the debt is financed at the expected future rate of return on the pension plan's investments. This is because the calculation of the total accrued liability assumes that interest is being earned on the full pension obligation. When the money is *not* in the bank and invested, the UAAL principal must be paid back plus the "missing" interest at the projected future rate of return. The debt is amortized over a number of years determined by state law or the pension plan.

There is an opportunity for this debt to be paid off via the sale of bonds and the deposit of the proceeds into the investments of the pension fund. When this is done, the financing cost switches from the projected but uncertain future earnings in the pension plan to the set, fixed rate established when the bonds are sold. These bonds are known as Pension Obligation Bonds or POBs. Municipalities and districts issue them on the reasonable prediction that the lower bond interest rate will result in an overall lower financing cost.

Pension bond issuance entails risk and reward. The IPPFA Information Bulletin examines this technique and addresses the probable rewards as well as the risks that are present.

How Does a Pension Obligation Bond Work? A municipality or fire district recognizes that the pension plan UAAL is a debt that is owed by the taxpayers. Instead of financing that debt at the rate governed by the investment markets, a decision is made to issue bonds and pay for all or substantially most of the unfunded liability at one time. Under the Internal Revenue Code, bonds issued for this purpose are *not* exempt from federal taxes. Thus, the bonds are issued at a so-called "taxable" rate, not the tax-exempt municipal rate at which cities and districts often borrow.

If a pension obligation bond is issued, the municipality's annual costs are the debt service on the bonds, the normal cost contribution to the pension fund, and any amortization of any unfunded liability that remains or is experienced in the future.

Case Study #1. A hypothetical case study presented to the Illinois Government Finance Officers Association (IGFOA) in December, 2019 showed bonds issued to replace $20 million police pension UAAL. Estimated costs and savings were:

Debt service on $20 million bonds, 3.12% average interest rate, maturities through 2040.	$29,799,000
Taxation to amortize $20 million in unfunded liabilities to 2040, based on 7% interest assumption and 4% payroll growth assumption, "ramp" financing.	$39,868,000
Predicted Savings:	$10,069,000

This $10 million is a substantial savings, lowering the cost of paying for the unfunded liability by 25%.

Note that in addition to the savings that results from a low bond interest rate, the total savings is enhanced because the common practice of Illinois municipalities paying off the unfunded liability as a percentage of payroll is avoided. Such a financing technique leads to the undesirable "ramp" where payments in the later years are much higher. The current low interest rate on Pension Obligation Bonds allows for a more level payback of the obligation, so more debt principal is paid off in earlier years (at increased savings in total interest cost).

Case Study #2. In May, 2021 an Illinois downstate fund requested estimates from its actuary on various scenarios related to unfunded liabilities. The base information is as follows:

Unfunded Liability	$ 74,320,000
Taxation Needed to Amortize Unfunded Liability, 2021 to 2040, 6.75 % assumed earnings	$147,370,000

If the community issues a 2.75% Pension Obligation Bond for 90% of the unfunded liability, the following taxation is needed to both pay off the bonds and amortize the remaining 10% UAAL over 20 years at 6.75% assumed earnings:

Taxation for Bonds	$ 72,321,000
Taxation for Remaining 10% UAAL	$ 36,630,000
	$108,951,000
Savings from Issuance of Bonds	$ 38,419,000

This community is estimated to save over $38 million by issuing Pension Obligation Bonds for 90% of its unfunded liability.

But because of the element of risk in the pension obligation bond approach, the fund asked the actuary for additional analysis to see what would happen if the fund experienced significant investment losses. The following hypothetical scenario was created:

(a) **A portfolio loss of 20% in 2023** (the third year after the bonds are issued) and then a return to the annual 6.75% estimated return starting in 2024. In this scenario, the fund never makes up the 20% loss other than the resumption of annual 6.75% earnings, *and*

(b) **A portfolio loss of 10% in 2036**, five years before the mandated funding deadline. Similarly, this loss is never recovered other than the resumption of assumed annual earnings of 6.75% in 2037.

This scenario was picked to produce severe results. It provides for a big drop early in the investment of the bond proceeds and another drop towards the end when there is very little time to meet the funding mandate. Severity was increased by providing that the losses are never recovered by excess returns in the future.

Using this "doomsday" scenario, note the following results:

<u>No Pension Obligation Bond</u>	
Taxation Needed to Amortize Unfunded Liability, 2021 to 2040, 6.75 % assumed earnings	$247,940,000
<u>Pension Obligation Bond Issued</u>	
Taxation for Bonds	$ 72,321,000
Taxation for Unfunded Liability	<u>$169,710,000</u>
	$242,031,000
Savings from Issuance of Bonds	<u>$ 5,909,000</u>

What the above numbers illustrate is that when there is a severe portfolio loss, the loss occurs both in the pension obligation bond scenario *and when there are no bonds issued*. The investment loss is more costly in the POB issuance case because there is more money to lose in the portfolio. But the existing assets (without POB money) still take a substantial hit and the loss results in the need for significantly higher taxation.

Note also, as stated, this scenario provides that the large investment losses are not made up by excess gains in subsequent years. But excess returns virtually always follow big portfolio write-downs. For example, in the Great Recession market drop in the mid-2000's, this case study fund had a return of 4.0% in FY 2007 and a negative (-)10.5% return in FY 2008. This deficiency of earnings over the fund's 7% assumption was made up for by returns in the subsequent five years that exceed the annual 7% return assumption by 20% cumulative for the period.

How have pension obligation bonds worked out? A reputable analysis of the efficacy of pension obligation bonds is presented in a 2014 whitepaper from the Center for Retirement Research (CRR) at Boston College entitled "An Update on Pension Obligation Bonds," by Alicia H. Munnell, Jean-Pierre Aubry and Mark Cafarelli (available online at no cost). Their analysis found that immediately after the 2008-2009 financial crisis, governments appeared to have lost money on their Pension Obligation Bonds. But four years into the recovery, the effect of the bonds was positive with a net gain of 1.5%. This analysis is not definitive, as the bonds in many cases have a substantial period left until maturity. However, positive investment returns have continued in the seven years since the CRR updated analysis, even considering the recent brief market losses brought on by the Covid-19 situation.

The analysis noted also that the likelihood of success was greater when bonds were issued by financially sound governments who understand the risks and who have a broad pension reform or financing strategy. Conversely, the opposite is true if the bonds are issued by fiscally stressed governments seeking budgetary relief.

What are the risks? The greatest single risk is that the pension fund will earn less than the projected rate of return and that the full savings will not be realized. Moreover, if the pension fund earns less than the interest rate on the bonds, a loss will occur. If either of these events occur, the municipality will have to pay the debt service on the bonds *and* a contribution into the pension fund to cover the increase in the UAAL that results from low investment earnings.

The savings calculation included in the IGFOA presentation hypothetical case study (#1) and the downstate fund (#2) show substantial savings. Communities that have issued pension obligation bonds predict similar or even higher savings. This type of gain usually carries substantial risk. But in the case of POBs, while there is a risk, there does not appear to be a *substantial* risk. This is because a good portion of the gain comes from (1) the fixed-rate pension bond debt (*vs*. the variable return on a diversified investment portfolio), (2) the credit worthiness of the municipality, (3) the avoidance of "ramp" funding (4) the current notably low interest rate environment and (5) the fact that the existing portfolio without supplemental funds from a bond issue is still exposed to substantial risk.

Still, there is risk**:** that the return on the invested assets could fall below the interest rate on the bonds.

The question the municipality or fire district should ask is**:** will the return on the invested assets be in excess of the currently available rate on taxable municipal bonds? If the answer to this question is a highly probable yes, then a pension bond issue should be thoroughly considered.

Who has issued POBs? There has not been a lot of activity in this area for Illinois police and fire funds. The City of Berwyn has used this financing technique and reports success. The Orland Fire District has also issued these bonds with satisfactory results. Other issuers are Round Lake Park, Bedford Park, and Winnebago County. Outside of metro-Chicago, there have been bond issues in Rantoul, Granite City and Milan. Milan undertook this approach for the added benefit of raising their asset balance above $10 million, which opened up greater investment authority under the pre-consolidation investment limits on Illinois municipal pension plans.

What do the rating agencies think? Standard & Poor's commented as follows in a May 13, 2019 *Credit FAQ*:

> As with all credit factors, we will consider pension obligation bonds (POBs) and OPEB obligation bonds (OOBs) holistically within the overall risk factors. As with any added debt, we consider ability to pay, but also as with new debt, we might not always consider POB/OOB issuance to have negative credit implications. However, we will generally view it negatively when one or more of the following conditions exists:
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> - The bonds are used as a mechanism for short-term budget relief or poor funding structure;

- Issuance is not combined with plan-specific measures to address the long-term liability; or
- The bonds substantially reduce a government's debt capacity.

Moody's position is reflected in their comments for a *Bloomberg.com* article, "Pension Obligation Bonds May Soon Have Their Moment," (October 10, 2019):

> "Our view is the issuance of POBs at the time of the transaction is really credit-neutral," says Tom Aaron, a public pension specialist at the credit-rating company. "But context matters a heck of a lot in terms of whether these things pan out."
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> In particular, "if the government continues making its full contributions, that's a different story than using the pension bonds as a temporary budget reprieve, because that turns it into an arbitrage play plus deficit financing," Aaron says. Of course, history has shown that's a big "if."

Two major rating agencies essentially say the same thing. If the bonds are issued by a government that will use the proceeds as part of a well thought out pension financing strategy, the rating agencies are neutral on the issuance. For any one city or fire district, this is a matter for exploration with the government's bond advisor.

What is the National GFOA Position? The national Government Finance Officers Association recommends that state and local governments *do not* issue POBs. In an Advisory report, they state the following objections to POBs. With each objection, IPPFA has provided a response:

#1. The invested POB proceeds might fail to earn more than the interest rate owed over the term of the bonds, leading to increased overall liabilities for the government.

> IPPFA RESPONSE: this is a correctly stated risk.

#2. POBs are complex instruments that carry considerable risk. POB structures may incorporate the use of guaranteed investment contracts, swaps, or derivatives, which must be intensively scrutinized as these embedded products can introduce counterparty risk, credit risk and interest rate risk.

> IPPFA RESPONSE: municipalities can work with their bond advisors and attorneys to avoid a risky structure.

#3. Issuing taxable debt to fund the pension liability increases the jurisdiction's bonded debt burden and potentially uses up debt capacity that could be used for other purposes. In addition, taxable debt is typically issued without call options or with "make-whole" calls, which can make it more difficult and costly to refund or restructure than traditional tax-exempt debt.

IPPFA RESPONSE: (1) municipalities can work with their bond advisors to be sure that their overall debt capacity is properly used, (2) if call options have to be forgone, this will not necessarily alter the potential overall financial benefit of a pension bond.

#4. POBs are frequently structured in a manner that defers the principal payments or extends repayment over a period longer than the actuarial amortization period, thereby increasing the sponsor's overall costs.

IPPFA RESPONSE: the issuing government should generally limit the bond maturity to the amortization period allowable under law; however, the very low interest rates now available do not make a slightly longer maturity ill-advised, especially if it can reduce or maintain the current taxation, which may be at the low end of the undesirable "ramp."

#5. Rating agencies may not view the proposed issuance of POBs as credit positive, particularly if the issuance is not part of a more comprehensive plan to address pension funding shortfalls.

IPPFA RESPONSE: as discussed, issuing government should seek to comply with the practices that the rating agencies will find acceptable.

Is this a good time for POB issuance? IPPFA cannot identify if the current environment is good or bad for issuance of Pension Obligation Bonds. The volatility in the investment markets experienced in 2020 certainly makes one cautious. But at the same time, borrowing rates are at an extremely low level. Is your pension fund (especially with investments managed by the new Consolidated Fund) going to earn more than 3% to 3-1/2% on its investments over the next several decades? If the answer to this question is a highly probably yes, then it is reasonable for a pension bond issuance to be explored with professional advisors.

What is the Impact of Consolidation on this Financing Technique? The new consolidation plan aggregates funds for investment but measures the valuation of each pension plan separately. Consolidation does not impact the funded status of any one fire or police plan. A local government that wishes to use pension obligation bonds to reduce taxation for unfunded liabilities may do so under the consolidated structure.

If bonds are issued during the Transition Period and deposited in the local pension fund, then more assets will be transferred to the Consolidated Fund. After the asset transition takes place, a government could still issue bonds and turn the proceeds over to the Consolidated Fund for credit to the specific police or fire fund. An example is the Winnebago County issuance of Pension Obligation Bonds and subsequent payment of the proceeds to the county's account at the Illinois Municipal Retirement Fund (IMRF).

An argument can be made that consolidation improves the likelihood that a Pension Obligation Bond will be successful. This is because the opportunities for investment performance are expanded and investment costs reduced.

Other Information. See "Pension Obligation Bonds May Soon Have Their Moment," by Brian Chappatta, *Bloomberg.com*, October 10, 2019. This article highlights the opportunity for well-run governments to take advantage of the current interest rate market to finance their unfunded liabilities via pension obligation bonds.

Should Your Government Issue Pension Obligation Bonds? IPPFA does not recommend or not recommend this financing technique. But we do recommend that pension trustees, finance officers, treasurers, municipal managers and key elected officials discuss this option with their bond and legal advisors now, especially given the opportunities made available by the current interest rate environment. An important piece of information in this review is the projected taxation needed to amortize the UAAL through 2040 under the communities current funding methods and projections. Every pension board and city administration should be aware of the estimated future annual tax levies needed to amortize the pension plan's unfunded liabilities.

We do feel comfortable opining on what a pension obligation bond issue is NOT:

> A POB is not a government "kicking the can down the road." Unless the proceeds are used in place of the appropriate normal cost contribution, POBs are the exact opposite of "kicking the can down the road." These bonds create a permanent financing of unfunded liabilities, today.
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> A POB is not like "paying off one credit card with another," although it is a financing of a debt at a lower interest rate.
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> A POB is not a "risky arbitrage bet." It is a well thought out financing technique in which the responsible parties examine the risk and the probability of substantially lower taxes being needed to meet pension obligations.

Good luck with your review of this opportunity and feel free to contact us for additional information.

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