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## Research:

### Pension Obligation Bonds Are Surging After Brief Hiatus

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Pension obligation bonds (POBs), the once-arcane debt instrument used to finance unfunded pension liabilities, have returned with a vengeance after a brief hiatus, and are again making their mark on the public finance landscape. A number of conditions have fallen into place to spark this resurgence, including:

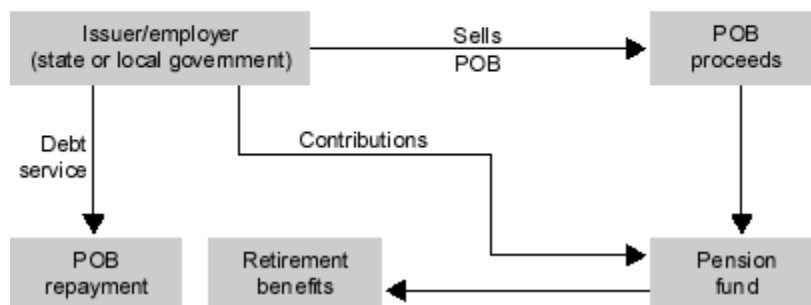
- The rapid growth in unfunded liabilities for public pension funds over the last few years, driven by investment losses, benefit enhancements, and greater longevity of pension plan beneficiaries;
- The relatively low interest-rate environment, which widens the spreads between the POB interest costs paid by the issuer/employer and the assumed investment return rate of the pension systems, which makes the economics of the transaction more attractive; and
- The potential cost savings from a POB, as many state and local employers struggle with budgetary imbalances and other savings alternatives become scarce.

Because of the confluence of these factors, POBs are back. This report details the mechanics of how POBs work, their history, the special risks unique to this debt instrument, the critical rating factors and implications, and future prospects.

#### ■ How POBs Work

While the financial implications of POBs are complex, the actual mechanics are relatively simple. Generally, the municipal employer will use the findings from the most recent actuarial valuation, or have a new valuation completed, to determine the pension system's unfunded actuarial accrued liability (UAAL). Then, it will decide what portion of the UAAL (either all or a part) will be funded with the POB. In the 1990s most employers funded the entire UAAL, but for various reasons discussed below, many now tend to finance less than the full amount. Once the POB is sized and sold, the net proceeds are placed in the pension trust fund to be commingled with the other funds, and usually invested according to the existing asset allocation guidelines (see Chart). Thus, the pension fund experiences a rapid increase in assets resulting in a higher funded ratio (actuarial value of assets divided by actuarial accrued liability). For the POB to generate savings for the employer, the investment return rate on the POB proceeds must be greater than the interest cost of the bonds (and ideally equal to, or exceed the pension system's investment return assumption), and the larger the spread between these two rates the better. The employer, as POB issuer and obligor, would then be projected to achieve lower total pension contribution and debt service costs than it would have if it had not sold the POB.

#### Pension Obligation Bond Mechanics



## ■ Brief History

While there were a few issues in the 1980s, the first big wave of POBs really came in the early 1990s. By the end of the decade about \$15 billion of POBs had been issued. The years 2000 and 2001 were slow from a POB standpoint, with 2000 correlating to the apex of U.S. public pension funding at an average funded ratios of slightly over 100%, up from only about 80% in 1990. These robust funding gains were fueled by above-average equity returns during the period and a general shift in the weighting of public pension assets to this asset class from fixed-income. The corollary to a high funding level is a lower or nonexistent UAAL. Falling funding ratios, now estimated to be heading towards the 90%, have been exacerbated by a combination of adverse circumstances, some uncontrollable and some self-inflicted. These factors include the decrease in asset values from poor equity returns and the increase in liabilities from benefit enhancements and demographic changes (for example, members living longer). The second wave of POBs, driven by burgeoning unfunded liabilities, has come on strong in 2002 and 2003. As in the first wave, California counties have been leading the pack, and there are a number of repeat borrowers, but there are also significant new players. The state of Illinois, which issued in June of this year, now holds the POB record for sheer size at \$10 billion — almost four times larger than the previous record. Oregon sold a \$2 billion issue last fall, and other states that have recently completed or plan a POB sale include Kansas, Wisconsin, and West Virginia.

## ■ POB Risks

The principal risks to the issuer of a POB fall into a number of categories:

- Arbitrage (investment return/POB interest cost);
- Leverage;
- Market risk; and
- Political.

POBs are essentially an arbitrage play, the success of which is dependent on the premise that the pension fund assets (including POB proceeds) will earn on average more than the interest cost on the POBs and hopefully the assumed investment return rate (generally about 8%) or better each year for the life of the bonds. If the bonds are sold at an interest cost of 6%, for example, the spread could generate handsome savings if the investment returns goals are met over the life of the bonds. The problem is that there is no certainty that the average 8% return will be realized over time, and therein lies the principal risk of the POB to the issuer. If the pension fund earns 8% or more on the POB proceeds, then the result will be success by virtue of having to pay lower pension-related costs (contributions plus POB interest) than without the POB. However, if the investment return is less than the POB interest cost, the transaction becomes a drag on cash flows. Not only will the employer have the new POB debt service costs but also higher contribution rates attributable to new unfunded liabilities from under performing investment returns. If returns are above 6% (as in the example above) but below 8%, the employer will have increasing contribution rate costs, but it would have had them even without the POB. When investment returns are less than the POB interest costs, the POB puts additional strains on financial operations rather than helping.

While the 1990s produced some impressive investment returns, no pension fund consistently earns 8% or higher every year in perpetuity; returns vary dramatically and may (or may not) average the investment return assumption or even the POB interest rate cost. The POB paradigm has a goal to average or beat the 8% investment return assumption over the long-term. With the appropriate asset allocation strategy this goal may be attainable, but market experience over the last several years has led some to believe that an 8% return assumption may be too aggressive.

Another factor in evaluating the success of a POB is that its full effect can only fully be tallied at final maturity of the bonds. Due to market gyrations, a POB may look like a great success for several years, or even a decade, only to see investment gains erode, and at maturity are pronounced a failure. Conversely the exact opposite may be true, with poor results in the early years later overcome to achieve projected benefits in the final analysis.

In any event, we do know that even if projections are met on average over the life of the POBs, there will be years with returns that are higher, and some that are lower (maybe significantly), than the 8%

bogey. We do not have to look back very far to see evidence of such swings: in fiscal 2001 the S&P500 index of domestic equities fell 16%, in 2002 it fell another 19%, but in 2003 it fell only 1.6%. These market declines hurt issuers with POBs outstanding: most had to pay increased contribution rates to cover the new actuarial losses, plus they had the higher debt service costs due to the POB.

The risk of adding too much leverage is another factor for POB issuers to consider. Borrowing for any purpose increases leverage, and incurring debt to pay unfunded liabilities is no different. While the issuer is substituting one type of long-term liability (POB) for another (UAAL), there is a difference. In most cases, bond debt service is a "harder" obligation than the "softer" contribution payments used to amortize the UAAL. Bond debt service must be paid in full and on time or the issue falls into default, with wide ramifications. For certain employers, contribution payments, on the other hand, may be temporarily deferred or reduced without serious negative consequences. Therefore, the size of the POB relative to the total debt structure of the issuer must be measured in terms of what level of debt service can be managed if actual future investment returns do not meet the original POB plan projections.

Because POBs generate very large infusions of funds into the pension system compared with the more steady investment and reinvestment of interest, dividends, and contributions by the fund, the plan for investing POB proceeds must be considered. Should the monies be invested according to the existing asset allocation guidelines, or should POB proceeds have a special allocation strategy because of current market conditions or expectations? If the chief investment officer of the fund believes that international equities, for example, are overvalued, maybe a delay in filling that allocation would be warranted. On the other hand, in that pension funds are long-term investors, most have stuck with their traditional allocations for proceeds, eschewing market timing strategies. Whatever the strategy may be, it should be fully vetted before the POB sale.

Another aspect that few envisioned when this instrument was first initiated is the political risk hidden, almost like a Trojan horse, within the POB structure. As was mentioned in a feature on this subject, ("Pension Obligation Bonds: Unique Rating Documentation", RatingsDirect, March, 4, 1999), POBs can become victims of their own success. For example, if a POB is issued for the full UAAL, resulting in a 100% funded ratio, and subsequent higher-than-average returns push the ratio to 110% or 120%, there will arise tremendous political pressure to distribute the so-called "excess" funding by increasing benefits, thus incurring new liabilities. The excess funding touted in the late 1990s turned out to be illusory. Even systems bolstered by POBs that did not increase benefits found themselves in under funded positions following the market declines from 2000 to 2003. Those that fell victim to the siren's song and increased benefits have even lower funding levels. Some pension funding ratios declined to the extent that the employers' opted to go back to the market to issue POBs for a second time.

## ■ Analysis

The rating process for POBs basically parallels that of long-term debt with similar security plus with certain additional analytical factors pertinent to the POB and pension system. Most POBs issued to date have a GO or general fund pledge. Also, a high percentage of those sold have been additionally secured by bond insurance. In Standard & Poor's analysis specific to POBs we focus on the effect of the bonds on the issuer's debt structure and its ability to meet its obligations. The financial review includes the impact on both the balance sheet and the operating statement or cash flows. The status of the issuer's pension fund on a pro forma basis is also part of the review as with any similar analysis.

From the balance sheet perspective, we look at how the POB fits into the issuer's total debt plan. Does the POB dramatically alter the issuer's debt profile? We look at total debt with and without the POB so as not to penalize a POB issuer in comparison to another issuer that might have relatively low debt (and no POBs) but sizable unfunded pension liabilities. Also, we evaluate the leverage added by the POB. Does it markedly increase hard, fixed costs (bond debt service) in place of a softer, more discretionary obligation (pension contributions)? If sub par investment returns put upward pressure on contribution rates will they, coupled with the new higher debt service costs due to the POB, put the issuer's budget under greater strain? The issuer must also be cognizant of the effect the POB issuance may have on statutory debt limits. Will the POB use up debt capacity that might be needed for other, more pressing needs?

From a cash flow standpoint, Standard & Poor's reviews projected debt service and contribution costs, with and without the POB, including the validity of the assumptions including those for POB interest

costs and pension fund investment returns. How do the projections compare in total and on an annual basis? The spread between interest costs and investment return generates the savings expected from the transaction. What is the magnitude of annual savings and total present value savings? Where (in what years) are the savings taken? Are the savings front-loaded in an attempt to mask budgetary stress? Will any front-loading lead to higher, unsustainable contribution rates in later years? Do the potential savings from the POB outweigh the risks involved? The analysis of the cash flows is a critical component to understanding the full impact of the transaction.

As part of the POB analysis we also review the current status of the recipient of bond proceeds — the pension system itself. What is the statutory relationship between the issuer/employer and fund? How have the laws and precedents for making contributions affected funding progress and how do they play into the POB strategy? Have funding levels generally been increasing over time? What are the funding goals and how will the POB impact these objectives?

The pension fund's general actuarial methods and assumptions also will be reviewed for comparative purposes. The fund's asset allocation strategy will be studied for consistency with the POB assumptions and for the general risk profile. An aggressive investment strategy may make the POB objectives more difficult to achieve on a consistent basis.

### ■ **Rating Implications**

Employers looking to help manage their unfunded liabilities through the issuance of a POB should weigh the pros and cons very carefully. Any applicable risks from the above list should be evaluated. There should be a clear POB plan with attainable actuarial and investment assumptions and a conservative structure. Prudent allocation for projected savings over time limits the chances for problems

It is possible for POBs to have a negative effect on credit quality, especially in the investment environment over the last several years or if they were structured poorly at the outset. Standard & Poor's will continue to evaluate POB risks in light of each employer's individual profile at the time of sale as well as their projected effects over time. POBs may work as planned over the long-term, but short-term fiscal dislocations resulting from these structures are part of their baggage.

### ■ **Special Rating Documentation Requirements for POBs**

The unique nature of POBs requires certain additional documentation not normally requested for other types of ratings:

- POB financing plan, including its effect on the overall debt plan;
- Projections of UAAL contributions and debt service with and without the POB;
- Latest pension fund annual report;
- Most recent actuarial valuation and experience studies of the fund; and
- Pension fund's current asset allocation strategy and plan for investing POB proceeds.