BEYOND THE ARC

INNOVATIVE FUNDING STRATEGIES FROM THE PUBLIC SECTOR

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INTRODUCTION

The recession sparked by the COVID-19 pandemic has threatened many state and local government budgets with a combination of increased costs and decreased revenues. Unlike the 2008-2009 Great Recession, investment markets have been resilient. As such, public pension funds have not experienced major losses in the financial markets and have not taken corresponding decreases in their funded status.

However, there are concerns that cash-strapped governments will cut back on funding required contributions to public pension plans. A decrease in funding could be problematic for public pension plans, and particularly concerning for a handful of public pension plans that are not adequately funded due to past funding practices.

Against this backdrop, this report examines several innovative and often lesser-known pension funding strategies that have been utilized in the public sector to address legacy pension costs and to create more stable costs over time. This report also will clearly define what those efforts do and do not accomplish. The collection of funding strategies summarized in this report run the gamut – from implementing a wholesale funding strategy for a large state-wide plan to more targeted reforms that simply give participating employers more control of how costs are paid over time. These innovative strategies extend well beyond the oft-cited paying the Annual Required Contributions (ARC) or Actuarially Determined Employer Contribution (ADEC). Each of these efforts changes the nature of plan funding in different ways, and these case studies can be a useful reference guide for those who are concerned about a well-functioning public finance system and honoring benefits earned by state and local government employees.

The case studies discussed in this report are not an exhaustive list. But, the examples illustrate how a wide range of goals can be achieved with various strategies.

Table 1: Key Features and Accomplishments of Various Reforms

Funding Policies & Reforms	Increase Stability/ Predictability of Costs	Delink Legacy Costs from Contribution Rate	Utilize Partial Paygo Funding	Helps Prevent Employer Exits	Prevents Cost-Shifting Among Employers	Participating Employers Have More Control Over Costs	Contribution Rate Better Reflects Value of Benefits	Improves Contribution Discipline
Liability Partition (INPRS TRF)	●	●	●				●	●
Liability Partition (KY KRS NH)	●	●		●	●	◖	●	●
Side Accounts	●			◖		●		◖
Pension Bonds	●	●		◖			●	
Contribution Collars and Withdrawal Liability (Maine PERS)	●			●	●	●	●	
Withdrawal Liability	●			●	●			●
Dedicated Revenues	●	●					●	◖

I. DEVELOPING SEPARATE FUNDING STRATEGIES FOR LEGACY COSTS AND ON-GOING PLANS

Indiana's Recovery Strategy Following a Late Transition to Prefunding

Public pensions were largely funded on a pay-go basis before the passage of the Employee Retirement Income Security Act (ERISA) in 1974. While ERISA did not require public plans to change this practice, the awareness of the importance and benefits of prefunding became more widely understood by policy makers at the state and local levels following its passage.[1] In response, most public plans began down a path to prefunding in the late 70s and 80s.

The Teachers' Retirement Fund (TRF) that covered Indiana's teachers was created in 1921 and was not combined with the Public Employees' Retirement Fund (PERF)—creating the Indiana Public Retirement System (INPRS)—until 2011.[2] As late as 1995, Indiana schools were still hiring new teachers that were being placed into a pay-go retirement system. So, the state was late to adopt prefunding, at least for the system that covered teachers. Yet, today, the state is rarely mentioned as a serious offender of not adequately funding pension benefits. In fact, Indiana is one of only 13 states that has earned a AAA credit rating from all three major ratings agencies (S&P, Moody's, and Fitch).

The first example of an innovative funding strategy will be to explain the plan developed by the state legislature, along with INPRS and other in-state parties, to correct course and earn the state credibility with financial markets.

First, the plan started by creating a new tier (TRF 96 Fund) for teachers who were hired after June 30, 1995. The new plan utilized the same benefit formula as the old plan for teachers hired into the new TRF 96 Fund. In fact, the new tier was more about creating two separate funding strategies – one for newly hired teachers and one for those who would remain in the pay-go system – than it was for establishing a materially different benefit structure.

At this point, TRF had a tier with an opportunity for a fresh start, which would be prefunded from its inception. Of course, the legacy tier still would account for the vast majority of teacher pension liabilities for decades following this reform. This left a major challenge: How would the state meet these legacy costs?

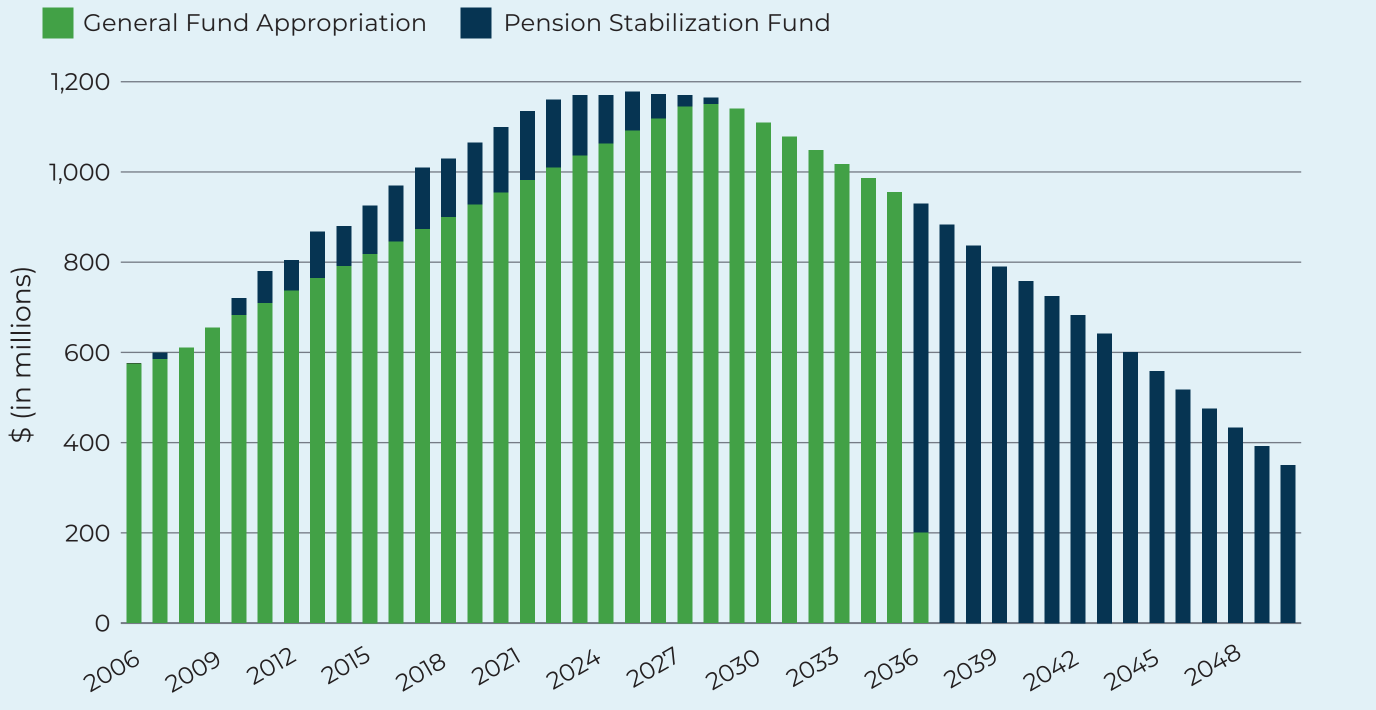
The plan essentially continued to fund the legacy costs on a pay-go basis, which is a low bar for funding purposes. In fact, INPRS continues to explain in its financial statements that the Pre-96 plan's "funding status is low by design." However, the strategy to deal with legacy costs also called for systemically exceeding this lower standard over time. In addition, it is critically important to understand that the state and its stakeholders have stuck to the plan. Below is a summary of that financing strategy for the pay-go tier:

- A Pension Stabilization Fund (PSF) was created for the legacy costs and seeded with $425 million.
- The cash flow needs were mapped out. Since the tier was pay-go, investment markets would not have a dramatic impact, leaving costs fairly predictable.
- A general fund appropriation would be made each year, which largely covers the pay-go benefit costs until 2037 (Figure 1).
- The PSF also would receive lottery proceeds, and 50 percent of state reserve balances above 10 percent of appropriations. The PSF also would retain investment earnings.
- This means, despite defining the plan as pay-go, the state was systemically pushing resources into the PSF when it was manageable to do so. And, as Figure 1 shows, the intention is to have the PSF work more like a fully funded plan to pay benefits in later years.

Today, the Pre-96 TRF tier is 25.7 percent funded[3]. But, more importantly, the tier is no longer the main driver of INPRS' broader financial picture. Benefit payments that have been made reduce the obligations in this tier, as pension obligations are by definition being met when benefits are paid, and the growing tiers are well-funded.

In short, the broader system is growing out of the consequences that stemmed from being late to move

Figure 1: Pre-96 Account DB Appropriations Forecast



toward prefunding.

Today, there are more people in the prefunded TRF tier than the pay-go tier. And only 15 percent of working teachers in the state are still in the Pre-96 TRF plan. Less than five percent of all INPRS active members remain in a pay-go tier.

The distribution of liabilities has changed, as well. However, given that many in the legacy tier are retirees (roughly one-third of retirees are in the Pre-96 TRF plan), this change occurs more slowly than does the headcount of active workers. As of June 30, 2019, less than one-third of the system's liabilities are held in a pay-go system. Those obligations are now more than 25 percent prefunded.

When the plan was closed, liabilities continued to grow, and workers continued to accrue benefits in the Pre-96 TRF plan. However, those liabilities seem to have peaked in 2015[4] at $17.0 billion. Since then, the Pre-96 TRF liabilities have drifted down to $14.3 billion. And, mathematically, one should expect that trend to continue in the future as the obligations that are being met each year far outpace benefit accruals.

In summary, the financing plan essentially partitioned off the legacy tier, retained lower expectations for the pay-go tier, exceeded those expectations in a significant and systemic way, and bought time to correct a historic mistake. Along with customary measures, such as the size of unfunded liabilities in relation to a jurisdiction's economy and the manageability of necessary appropriations, the state seems to have earned credibility with external groups by sticking with this plan over time.

Please note that NIRS does not believe this example is a good solution for a plan that is reasonably well-funded. This strategy was intended to deal with an extremely difficult funding challenge and course correct after a late transition to prefunding.

A Funding Proposal in Kentucky: Fixed Allocation of Unfunded Liabilities to Mitigate Risks

Unlike most other strategies covered in this report, the proposal for the Kentucky Employees Retirement Systems (KERS) Non-Hazardous (NH) plan funding changes has not yet become law. The proposal was passed in the Kentucky House unanimously (90-0), garnering bi-partisan support, but the measure was not taken up in the State Senate before the session closed amidst the outset of the COVID-19 crisis. However, given that the proposal is insightful about diagnosing a key problem faced by the retirement system, it seemed appropriate to include this approach for its potential utility within our community.

The KERS NH plan had been underfunded for many years. This left the plan with a poor funding ratio and legacy costs that were a heavy burden relative to payroll. Therefore, when the legislature committed to begin funding on an actuarially sound basis in 2013, the cost increases were disruptive to employers participating in the system. In response, participating employers have made changes to reduce plan payroll, including outsourcing work. In total, plan payroll fell by 24 percent between 2010 and 2020. Making matters more difficult, the plan was assuming payroll would grow significantly over that period. In addition, the number of workers covered by the KERS NH plan fell 33 percent.

As a sign of how the underfunding is impacting the system and its employers, the contribution rate for retirement benefits (the pension component) has increased to 81 percent of payroll for 2020. However, the cost of benefits being accrued by active workers is only 12.2 percent of payroll, of which employees themselves pay five percent. This means that only 7.2 percent of pay is going towards supporting the benefits being accrued by current workers. Meanwhile, the other 73.0 percent of payroll is going solely towards service that was earned in the past.

As of June 30, 2019, the KERS NH plan was only 13 percent funded; this has improved to 14.2 percent as of June 30, 2020, but it remains dangerously close to becoming pay-go without a course correction. And, with the plan asset base dwindling, the plan could no longer maintain its long-term investment strategy, which impacts returns and required the use of a much lower discount rate (5.25%) that further inflated liabilities.

If a significant number of employers adopt strategies to effectively shift their legacy costs in an underfunded plan, the result will be that plan payroll will not match expectations, which can cause the actuarial calculations to be off-track and further defer costs. This can result in a vicious feedback cycle where raising rates leads to more of this behavior, which in turn leads to the need to raise rates further. As such, the state has good reason to fear they may end up saddled with some of these costs.

To break this cycle, the proposal was to determine each employers' share of unfunded liabilities as of June 30, 2019, as a fixed dollar amount, and require employers to pay an appropriate amount to the plan to pay off those obligations over 27 years. Essentially, unfunded liabilities are partitioned off and funded separately from the traditional percent of pay funding strategy that would still be utilized for new accruals. With this change, an employer's share of unfunded liabilities are no longer driven by their share of the plan payroll. Importantly, employers cannot "game" the funding formula with new employment practices.

In addition to the substantial flat-dollar payments, employers would contribute their share of the plan's normal costs (which is now a small portion of overall costs) based upon an actuarially determined amount. In essence, the pension costs would more accurately reflect the cost of benefit accruals, while the costs of past underfunding would become a separate cost item.

The situation of the KERS NH plan is not very different than where the Indiana TRS plan was in 1996. While the plan is closer to prefunding today (14.2 percent funded), the legacy costs in KERS NH are larger relative to payroll. In both cases solutions were developed to handle some costs separately from traditional plan funding methods, while both strategies also adopt actuarial funding strategies for benefits going forward. The key difference is that the Indiana example kept the legacy costs largely on a pay-go basis, while the effort in KERS is more aggressive in moving toward full funding.

II. EMPLOYERS GAIN CONTROL WITH EMPLOYER SIDE ACCOUNTS

One criticism, and often frustration from employers in state-run plans, is that employers do not have control over their retirement systems. Thus, experiences at the local level are driven by funding decisions made at the state level. So, local employers do not have the ability to choose their own funding strategy.

In response, some state-wide retirement systems have implemented various forms of side accounts to give participating employers more options and control. These efforts generally allow employers to pre-pay pension contributions into side accounts to reduce their future costs. Those contributions are then managed for the employer, and various methods are used to determine how future costs will be reduced by these credits.

This strategy is reminiscent of a funding practice that has long been available in the private sector: building and utilizing a credit balance. In the private sector, minimum funding is determined by Internal Revenue Service (IRS) regulations. And those minimums can be volatile due to both markets and a funding discount rate that is tied to markets (which itself can be very unstable). To manage this volatility, employers are allowed to contribute more than the minimum contribution amount into the plan and keep those excess contributions (plus interest) in the plan to use as credits for future years. This means that total contributions will always meet or exceed the accumulated minimum contributions, but the actual contribution for any given year can be less than that year's required minimum contribution (if employers have made supplemental contributions in the past). Thus, when executives think about their firm's financial future, they have the ability to recognize that higher pension contributions might be sensible when they have adequate cash on hand—knowing that such funding strategies can help their firms survive during turbulent times.

Oregon PERS Side Accounts: Early Adoption and Recent Expansion

The Oregon legislature authorized the use of side accounts in 2002[5] for the Public Employees Retirement System (PERS) system. In this version of side accounts, the excess contributions are typically used to reduce contributions by amortizing those funds over 20 years. However, legislation passed in 2018 (SB 1566) and 2019 (SB 1049) have added more flexibility, whereby the side account can now be used to reduce minimums for the next six, 10, 16 or 20 years. Of course, if amortization over 20 years is selected, the reduction is less than choosing six years because the total reduction should be actuarially neutral for both the employer and PERS.

The side accounts in Oregon PERS are invested along with the system's other assets. Thus, funds invested from 2007 through 2019 received an average investment return of 7.6 percent during those years. But returns ranged from -27.8 percent in 2008 to 19.5 percent in 2009. It is noteworthy that 2008 was the only year where a loss of principal has occurred.[6] And, the amount that contributions are reduced can increase or decrease based upon investment experience.

The Oregon legislature clearly sees benefits from this program. Not only have lawmakers increased flexibility over time, but they have also added an Employer Incentive Fund (EIF) that "*provides a 25 percent match (up to the greater of five percent of an employer's UAL or $300,000) on qualifying employer lump-sum payments made after June 2, 2018.*"[7] (This is a time limited program, as applications must be submitted by December 1, 2020.) Thus far, the state has made $64.7 million in matching contributions for PERS employers, and the EIF program has brought $541.7 million into PERS.

Employers issuing Pension Obligation Bonds (POBs) to fund side accounts must meet certain criteria, including conducting an independent financial assessment, making it public, and submitting it to the State Treasurer in advance of issuing bonds[6]. In addition, the program does not incentivize employers funding side accounts with POBs because they do not receive an Employer Incentive match as described above. Nor can employers choose a shorter amortization period when funding a side account with a POB. This provides some downside protection for how financially successful (or unsuccessful) POBs will be because returns over a six-year period are much more volatile than returns over a

20-year period.

Side accounts have grown to be a material portion of Oregon PERS' assets, with $7.6 billion contributed to side accounts as of December 31, 2018. As employer contributions are reduced per the pre-funding mechanism, these funds move from the side accounts into the overall system assets over time. Therefore, as of the end of 2018, there was still $5.2 billion remaining in employer side accounts, out of total system assets of $65.7 billion.

When looking at PERS' financial statements, it is important to understand that side accounts are considered pre-paid contributions and are not reflected in the system's actuarial value of assets[8]. Therefore, while side accounts are reported in the valuation itself, they are not counted as plan assets for the purposes of developing contributions or reporting the funding ratio.

Finally, there are 150 employers with side accounts held by PERS, with 99 coming from the School District pool.

CalPERS: Offering Employers Flexibility Managing Pension Costs

The California legislature passed SB 1413 in late 2018, which enabled the creation of a pre-payment option for California public employers offering defined benefit plans. In 2019, the California Public Employees Retirement System (CalPERS) announced the launch of the California Employers' Pension Prefunding Trust (CEPPT)[9].

The idea behind this program is similar to the Oregon program described above, but it also has significant differences in how it works.

Employers can submit pre-payments to CalPERS, with those funds being deposited into a Section 115 trust that is administered by CalPERS. Employers can choose between two investment options, a lower-risk or a moderate-risk portfolio that is expected to yield four or five percent annually. At CalPERS, these funds are not comingled with their larger trust fund.

The pre-paid contributions in CEPPT are not automatically amortized and used to reduce employer costs equally across future years. Instead, employers have flexibility regarding when to use these funds to reduce their pension contributions. This allows employers to utilize more of these resources toward pension costs during a recession.

Another interesting facet to this program is that CalPERS will offer this service to all jurisdictions in California, even if they do not contract with CalPERS for pension benefits. Given the size of CalPERS, and the fact that they charge a minimal service fee to cover costs, this provides economic efficiencies to employers who manage their own retirement benefits across the state.

Similar to Oregon, though CalPERS manages these funds (in conjunction with a third-party administrator), the pre-paid contributions are not counted in developing contribution rates and do not impact the funding ratio.

CalPERS had already offered a similar program for retiree health costs via the California Employers' Retiree Benefit Trust (CERBT) Fund.

New York State Employers can Establish Retirement Contribution Reserve Funds

New York jurisdictions participating in the Employees' Retirement System (ERS) and the Teachers' Retirement System (TRS) can establish reserve funds on their own to help stabilize their pension costs over time. These funds are not managed by ERS or TRS, but by employers who establish and fund accounts themselves. Therefore, these pre-paid contributions are not invested with plan assets. This allows employers more control over investment decisions, but also adds administrative processes that could be a hurdle that impacts participation.

The amount of reserve funds that can be set aside are subject to limits on annual contributions and total account size. Employers can contribute up to two percent of an employees' salary into the reserve fund in a given year. In addition, the total amount cannot exceed ten percent of payroll.

Because employers control the accounts, they also have the flexibility about when to use these funds to reduce contributions. Thus, as long the reserves are not approaching the asset cap, employers can use their judgement about their budget and revenue situation to determine when best to deploy the reserve accounts to create more stable costs or fill a deficit created by falling revenues.

Pennsylvania SERS Allows Prepayment of Unfunded Liabilities

Pennsylvania Governor Tom Wolf signed Act 2019-105 on November 27, 2019. The law allows eligible employers and the State Employees' Retirement Board to enter into an agreement whereby the employer would make a one-time lump sum payment of 75 percent to 100 percent of their respective unfunded accrued liability (UAL) in exchange for reducing their future pension costs.[12]

Interested employers must come up with the bulk of their unfunded liabilities all at once to participate. Most employers are not allowed to fund these agreements with pension bonds, but the largest such deal to date was done with Penn State University, which was able to issue a pension bond for this purpose.

SERS notes that it sees these opportunities as mutually beneficial, as the system gets an infusion of cash and employers get more flexibility. SERS also notes that this approach can be a beneficial factor for the Commonwealth's credit rating.

Unlike Oregon, once an agreement is reached with SERS, the contribution reductions will not be changed. Any investment experience gains or losses are realized by the retirement system once the pre-payment is made.

This opportunity is not on-going. Any such agreement must be finalized by December 2024, and the payment must be made by May 1, 2025.

Key Design Questions Regarding Side Accounts

The examples above largely share the same goal while utilizing different strategies. Below are a few of the key design questions that seem to distinguish these plans:

- Who establishes side accounts: Employers or the retirement system?
- How are the side accounts invested? Are side accounts pooled with plan assets immediately, or are they kept in separate accounts with different asset allocations and levels of risk exposure?
- How do side-accounts reduce future contributions? Are the reductions automatic, or can employers freely utilize these reserves at will?
- Should there be caps that limit employer contributions or account size, and if so, relative to what metric?
- Should the state take a paternalistic interest in how these funds are obtained or even disallow certain strategies that are viewed as risky? For example, can employers issue pension bonds to fund these accounts? And, if so, are they encouraged or discouraged by other policy elements, as Oregon has done by not granting a match?

Side accounts seem to enable employers to have more control over retirement costs and allow them to develop strategies to keep costs more stable over time.

III. PENSION OBLIGATION BONDS (POBs)

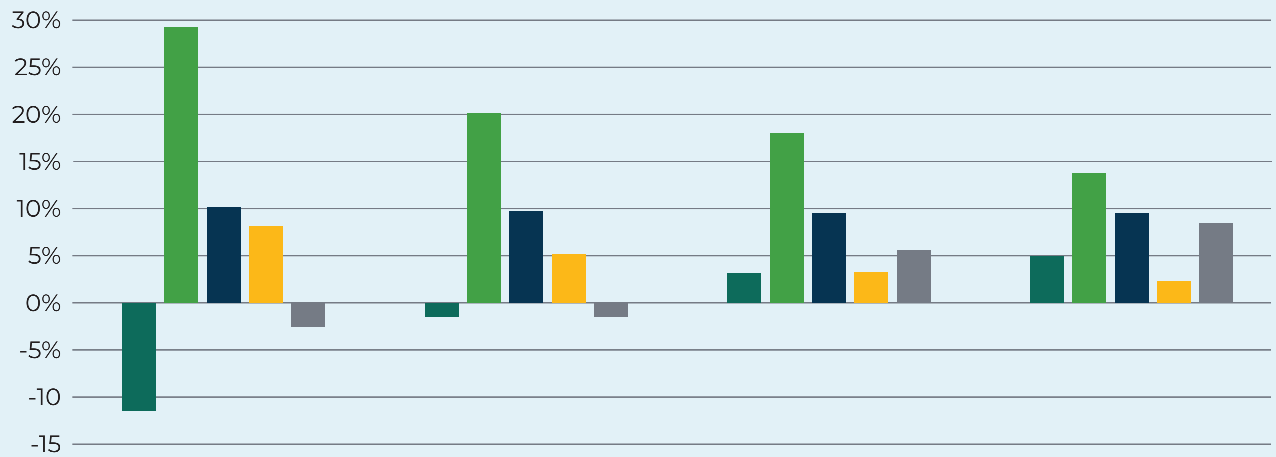
The topic of POBs has been well covered during the past decade. While this may not meet the 'innovative' criteria set out as a framework for this paper, POBs are included because they often are discussed in conversations about funding strategies, and also because there are a few observations that may be beneficial for those who are considering this strategy.

In typical conversations about pension bonds, success often is viewed as saving money over the long run. This framing can ignore other benefits, like having increased clarity regarding the timing of costs. But this research accepts the broader framework and focuses on ideas that help increase the odds that pension bonds save money over the repayment period of the bonds. In addition to that primary goal, this research also examines the importance of avoiding a major mistake.

Repayment Terms

First, the term of the pension bond plays a significant role in the likelihood that returns will exceed borrowing costs. When looking at equity returns over different periods of time, longer periods correspond with less volatility. For instance, stock market returns during a five or 10-year period have significant volatility. However, that volatility decreases significantly when looking at 20 or 30-year periods.

Figure 2: Compound Annual Growth Rate Over Different Time Periods (1900-2019)



	5-year	10-year	20-year	30-year
Min	-11.5%	-1.5%	3.1%	5.0%
Max	29.3%	20.1%	18.0%	13.8%
Average	10.11%	9.78%	9.55%	9.47%
Standard Deviation	8.1%	5.2%	3.3%	2.3%
Min Since 1950	-2.58%	-1.47%	5.59%	8.46%

Figure 2 shows the minimum compound annual growth rate (CAGR) of the S&P 500 for 30-year periods is significantly higher (5%) than it is for five and 10-year periods. In fact, when looking back to 1900, there are both five and 10-year periods where the returns are negative, which generally assures that pension bonds issued before such a stretch would end up a losing proposition. Among the 120 different 10-year periods, there were only four which had negative returns, with two occurring around the Great Depression and the other two during the Great Recession.

In contrast, when looking at 30-year periods, returns have never fallen below five percent. (The worst 30-year period occurred in the year ending in 1932.) In addition, since 1950, returns over 30-year periods have never been below 8.46 percent.

In a similar vein, maximum returns are much lower for longer periods—as a run of good years is offset by years with poorer returns.

Taken together, the outcomes over longer periods simply have less volatility. For pension bonds, that means reduced chances that timing will lead to either outstanding or very poor outcomes—increasing the likelihood that actual results will be closer to the initial expectations. This reduced volatility can be seen by comparing the standard deviations of returns over different periods of time.

The standard deviation for single year returns since 1900 is 19.5 percent. When looking at the returns over five-year periods, the standard deviation falls to 8.1 percent. The volatility of 30-year returns is a fraction of the volatility over shorter periods, with a standard deviation of only 2.3 percent.

Figure 3: Compound Annual Growth Rate, 10-Year Compared to 30-Year

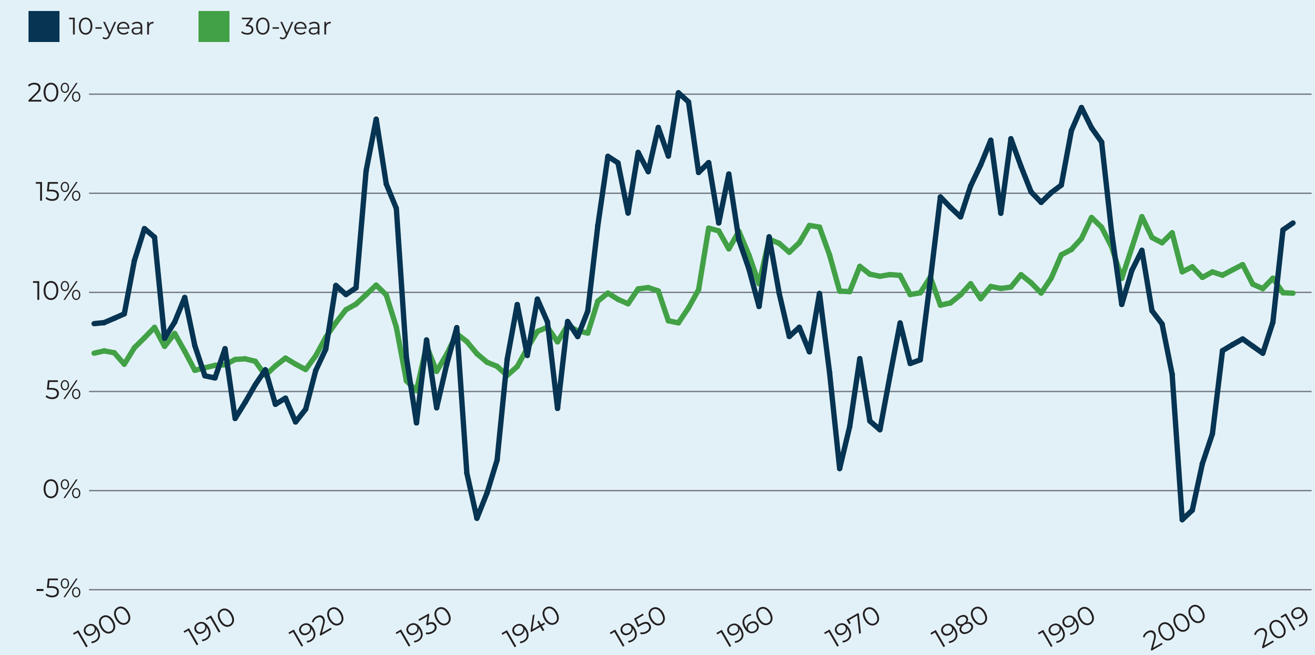


Figure 3 shows the CAGR for all years for both 10 and 30-year periods. The decreased volatility is visible when plotting the data in this way, as the peaks are much higher, and the valleys significantly lower, over 10-year periods. Over 30 year periods, the range of outcomes is greatly reduced.

Therefore, it seems clear that longer-term POBs reduce the chance that the equity risk premium (which is inherent in this arbitrage strategy) will be lost by poor timing. While there is certainly no guarantee, and there are concerns about today's historically low interest rate environment, which also impacts borrowing costs, this dynamic does seem to be backed up by our historical experiences, as well as basic statistical understanding.

And, it seems likely that this reduced volatility is worth the slightly higher borrowing costs that generally come with longer term bonds.

N.B. NIRS understands and appreciates that longer term pension bonds could lead to taking more time to reduce overall debt levels. While this is not the intention, it is simply a function of using longer periods. Any organizations considering POBs are wise to consider the repayment (or amortization) period when thinking about the terms for pension bonds. The observations above simply illustrate how the odds of poor outcomes seem to be reduced by using longer periods.

Alternative Strategies to Reduce Timing Risk

When pension bonds are issued, this typically results in a large sum of money invested in the markets at once. This moves a pension fund away from its typical practice of dollar-cost averaging money into and out of markets. The timing of this large one-time buy-in adds risk to POBs.

Pension bonds that were issued in 1999 are more likely to produce worse results than those issued in 2009, even if all the terms were similar. This is due to the combination of how overvalued markets were in 1999 and how far they had fallen in 2009. The money invested in the S&P 500 during 2009 would have bought into stocks at a much lower price than dollars invested in 1999—even though investors were largely buying into the same companies. There was a fair amount of volatility between those years, as well. This dynamic makes POBs end point sensitive (which is generally true when measuring investment returns), based upon when they are issued and how long the terms are.

On top of the investment markets, borrowing costs were also much higher in 1999. Therefore, it seems clear that timing is a driving factor for the results produced by POBs. And, if there is a bias that stems from human behavior, decisionmakers may tend to be more confident following a string of good years.

This timing risk can be reduced somewhat by strategies that utilize some form of *diversification of timing*. The following are two strategies to add timing diversification to POB deals:

1. Issue a series of smaller POBs over time (years, not months), instead of a large one-time issuance. This would offer diversification of when funds are buying into equities, as well as the interest rates that drive borrowing costs. However, it would likely incur higher administrative costs for going to market more than once, which may outweigh the benefits for smaller POB issuances.

2. Invest the proceeds into the equities markets over several years to buy in throughout the business cycle. This would reduce the expected savings of a POB, given that it would give up some risk premium in the early years by gradually moving the funds into equities. But it would allow the POB proceeds to be invested in a way that is more similar to dollar-cost averaging.

The first idea above was being considered after House Bill 1388 passed the Colorado House in 2015, but the effort eventually died in the Senate. This bill was altered throughout the legislative process to include a series of smaller POB issuances, with the intent being to diversify the timing of the issuance and when those proceeds buy into the equities markets.

N.B., NIRS does not support or oppose the use of POBs. Instead, NIRS views POBs as a tool, and this research is intended to contribute to the dialogue about best practices around POB usage.

IV. MAINE PERS ADOPTS A PACKAGE OF BROAD REFORMS, INCLUDING FUNDING CHANGES

Throughout 2016, the leadership of Maine's Public Employee Retirement System (PERS) met with the stakeholders of their local government plan, the Participating Local District (PLD) plan, to discuss its future. The plan was in a relatively strong financial condition, with a funding ratio of 86.1 percent on June 30, 2016[13], with a more conservative discount rate (6.875%) than most of its peers. There were, however, concerns that the plan was more sensitive to investment losses as compared to peers due to the fact that it is an optional plan for most local governments. This triggered concerns that large losses might cause employers to leave the system if rates escalated with nothing to stop them, opting instead to offer their own benefits to their employees.

In addition to the option for employers to leave the plan, there was no means to obtain payment from exiting employers for their share of unfunded liabilities. Most stakeholders agreed that this could be problematic for the plan's sustainability in the future.

Also, the legal protections for workers covered by Maine PERS are significantly weaker than those in other states. COLAs could be reduced or eliminated, and the plan had the ability to impose higher contribution rates for workers covered by the plan; in a legal sense, the plan already had risk sharing.

In response, a lengthy dialogue produced a set of reforms that was broadly accepted by most of the key stakeholders interested in the success of the plan, including employers, retirees, retiree groups, and representatives of various classes of workers, as well as receiving bi-partisan legislative support.

These reforms were adopted by the Board of Trustees overseeing this plan on May 10th and September 13th of 2018.[14] These changes included how employer and employee contributions would be set, imposed minimum and maximum contribution rates for both employees and employers, established a process for how cost-of-living increases would be determined, reduced early retirement subsidies and various other non-core benefits, and added a withdraw liability that would protect the plan from financial harm if an employer ceased participation in the system.

Most readers of this paper are likely familiar with the range of benefit changes that have been made to public plans, like Maine PERS, since the fallout from the Great Recession impacted the economy in so many ways. A fuller accounting of changes to state-level plans can be found on the website of the National Association of State Retirement Administrators (NASRA)[15].

Because this research is focused on funding strategies, the following examines a few aspects of two reforms: the addition of a withdrawal liability policy and how contributions are set in the future.

The state legislature, in PL 2017, c.293, §12, required *"withdrawal liability payments by the local district of amounts calculated in an actuarially sound manner and appropriate to protect the funding of the plan and treat members, the withdrawing local district and nonwithdrawing local districts in a fair manner."* With this action, one of the key goals was achieved: Employers could no longer pull out at opportune times that would allow them to abandon their legacy costs, leaving them to be paid by employers who remain in the system.

Employers could still choose to leave, but they would be responsible for paying their share of prior costs.

In implementing this new law, Maine PERS will calculate the unfunded liability using the same assumptions that they use for the on-going funding of the plan, which means that the plan will not recognize any gain or loss by the employers' decision. This is similar to the practice utilized by multiemployer plans, although other public plans—such as CalPERS—have chosen a more defensive liability measure for departing employers that allows them to immunize those costs.

At the same time, the package of changes also included contribution floors and limits for both employees and employers who participate in the various benefit plans that are offered (with employees paying roughly 42 percent of the total, and employers paying the remainder). The important part of this structure is that both employer and employee rates are capped at a stated amount, and neither group can pay less than their share of the required normal cost even after the plan reaches full funding. The aggregate cap is 9 percent for employees and 12.5 percent for employers. COLA variability assures the plan remains actuarially sound regardless of the contribution limits.

As the combination of policies gives some assurance to everyone participating, it was widely seen as making it much less likely that employers will have an incentive to leave an efficient plan that has managed to support 59 percent of benefit costs with investment returns, while only 28 percent of costs have been supported from employer contributions.

V. IMPLEMENTING A WITHDRAWAL LIABILITY TO PROTECT PLAN SUSTAINABILITY

Indiana began on a road to implementing a withdrawal liability for employers who exclude future employees from INPRS when HB 1466 was signed into law in May 2015. The bill was broadly supported in a bi-partisan vote in the House (97-0) and in the Senate (50-0).[16]

Concern began when a few large employers, including some participating universities, started excluding their future employees from participating in the plan. This action would mean future plan payroll of departing employers would become relatively smaller (as a percentage of total plan payroll) than their legacy costs that would be compared to overall liabilities. Thus, by excluding future employees, these withdrawing employers would end up shifting a portion of their legacy costs to other employers in the system.

HB 1466 provided "that an employer that is eligible but not required to participate in the public employees' retirement fund (PERF) must pay the employer's share of the unfunded liability attributable to the employer's current and former employees if the employer withdraws from PERF or otherwise phases out its participation in PERF."[17] INPRS is responsible for the calculations about what might be owed when an employer leaves.

As a result of the bill and its retroactive nature, four employers who had recently decided to exclude future employees from INPRS participation ended up owing the retirement system a total of $73 million.[17]

This withdrawal liability established in HB 1466 is similar to how private sector multiemployer funds protect themselves from demographic risks. However, the private sector multiemployer laws only allow for the plans to recoup these costs if an employer implements a *hard freeze* (where current workers cease accruing benefits in the plan). But, in Indiana, this idea was extended to partial withdrawals, or what is often referred to as a *soft freeze*, where those who are currently in the plan continue to accrue benefits in the plan. And, as INPRS' calculations indicate, there clearly is a cost shift within the plan when employers implement a soft freeze.

CalPERS Takes a Different Approach to Withdrawing Employers

CalPERS offers another illustration of the range of withdrawal liability policies that are possible. CalPERS runs a separate Terminated Agency Pool (TAP) to pay the benefits accrued at employers who end their contract with the retirement system. The TAP is used to immunize the liabilities of exiting employers, so they will not adversely impact other employers in the system.

Employers who terminate their relationship with CalPERS for retirement benefits employ a hard freeze (no future accruals for current workers), but they allow the employer the option to enable final pay to grow for its employees who end up working for another CalPERS (or reciprocating system) employer.

Because the TAP uses a conservative investment policy, the discount rate used to calculate the termination liability is generally lower than what is used for funding the plan in an on-going manner (although that may not always be the case, as market rates can fluctuate more than long-term expectations). In essence, the only revenues available to the terminated pool are those of employers who exit. So, that fact is being reflected in how benefits are priced.

Unlike other systems, CalPERS also routinely provides its participating employers with their withdrawal liability as a part of the plan's annual communications with participating employers.

Key Design Questions on Withdrawal Liability Policies

Private sector multiemployer plans' withdrawal liabilities are largely a matter of law—not plan design. While there may be some flexibility, many of the core policies are set by law. In contrast, public pension plans have the autonomy to think beyond ERISA. With that in mind, the following key questions should be considered by public pension plan staff and legislators if there is a need or interest in adding or modifying withdrawal liability rules.

- Can employers choose to cease participating in the plan? If so, can a hard freeze and/or a soft freeze be implemented?
- Should actuarial assumptions be based upon long-term expectations, or should a plan take a more defensive approach to avoid a cost-shift that arises after employers depart?
- If a more defensive approach is adopted, should the funds be invested separately with a customized asset allocation for immunizing liabilities?
- Should a withdrawal liability only be targeted toward hard freezes, or should there be a process to also recoup funding for legacy costs when employers implement a soft freeze?

VI. DEDICATED REVENUES

Due to the economic devastation wrought by the Great Recession in 2008 and 2009, several state and local governments reduced contributions to public pension plans for a period of time. Most of these governments eventually contributed the full amount owed for the years when contributions were reduced. But, state and local governments across the nation have continued to face budgetary pressures, which have returned due to the twin crises of the COVID-19 pandemic and ensuing recession.

In response to these budgetary pressures, dedicated revenues in some states have been suggested as a secure and reliable source of funds to strengthen public pension plans. The feasibility of these dedicated revenues will vary from state to state, but are worth exploring for jurisdictions facing severe funding challenges. Maintaining a disciplined funding policy is one of the most important actions that plan sponsors can implement to keep a pension plan at healthy funding levels.

Several cities and states have sought revenue for pension funds from various types of legalized betting and gambling. In the wake of the U.S. Supreme Court decision *Murphy v. National Collegiate Athletic Association* in 2018, states have explored using revenue from legalized sports gambling to help fund their pension contributions. House Bill 137 introduced in the Kentucky legislature in 2020 would permit legal sports betting in the commonwealth and would dedicate 95 percent of revenues to paying down the state's unfunded pension liabilities. While the legislation was not passed during the 2020 session, it seems likely to be introduced again since a number of politicians, including the governor, have indicated support for using sports betting revenue to fund pension contributions.

Senate Bill 1049, which passed the Oregon legislature in 2019, dedicated revenue from sports betting to fund contributions to the Oregon Public Employees Retirement System. Also, in 2019, Illinois passed legislation that would allow more casinos in the state and permit sports gambling. The city of Chicago would receive its first casino and the revenue generated from the casino in Chicago would go toward funding pensions for police officers and firefighters in the city.

Other states also have used revenue from casinos or lotteries to fund pension obligations. The Kansas legislature authorized the use of a portion of casino revenue to pay down the unfunded liability in the Kansas Public Employees Retirement System. Similarly, Oklahoma uses proceeds from the state lottery, in part, to fund contributions to the Teacher Retirement System. In 2017, the New Jersey state legislature went so far as to transfer ownership of the state lottery to the state pension fund.

A few states have created various types of stabilization funds to support pension contributions. Louisiana, North Carolina and Oklahoma all have some version of a stabilization fund into which surplus revenues and excess funds are contributed and the money in the stabilization fund can be used to fund pension contributions. This is akin to the use of rainy-day funds to collect excess revenues in preparation for years when revenues decline.

Montana uses a portion of revenue from its coal severance tax to pay down the state's unfunded pension liabilities. House Bill 454, passed in 2013, dedicated millions of dollars per year to the Montana Public Employees Retirement System from the coal severance tax, as well as amortizing the system's unfunded liabilities. This legislation states that on July 1st each year, a certain portion of the coal severance tax is to be appropriated to the PERS defined benefit plan trust fund.

If dedicated revenues are under consideration, it is important to understand the trends of the revenues that will be dedicated. Certain tax streams, like cigarette excise taxes, seem to be declining because the number of smokers has declined. Thus, it is important to understand the future revenue stream when determining the future impact on the pension fund.

Finally, the State of West Virginia used dedicated revenues in an unconventional manner when its pension plan was reopened for teachers. The state used dedicated revenue from the tobacco settlement and securitized that cash flow as a large lump sum payment to the pension plan. This action enabled the state to increase the funded status of the plan from about 25 percent to 50 percent funded during a two-year period. This strategy allowed the state to dedicate a revenue source to correct historic funding problems and secure a large one-time lump sum to jumpstart the plan funding. However, this strategy also moves a large portion of contributions away from dollar-cost averaging. The importance of this dynamic was previously discussed above in the pension obligation bond section of the report.

CONCLUSION

Defined benefit pension plans have been an important part of the compensation package offered to a wide range of public employees for many decades. A wide body of retirement research shows that pensions are uniquely positioned to help older Americans maintain their standard of living throughout retirement.

While most public pension plans are well-funded and sustainable over the long-term, there are some public plans that face difficult funding challenges. The broader economic environment has not been helpful to the efforts of public plan administrators and lawmakers working to improve funding levels.

While the investment markets and funding levels have been resilient in the wake of the current recession, policymakers and stakeholders across the country are concerned about funding difficulties in 2021 because state and local governments are facing unprecedented budgets challenges stemming from the economic fallout from COVID-19.

Given the potential for renewed funding debates, these case studies can serve as a tool for policymakers and stakeholders interested in exploring funding strategies that have been utilized to address funding challenges. These case studies illustrate how different goals were achieved and can help frame funding policy discussions. And, these funding strategies could serve as a model to craft customized funding goals and strategies for pension plans facing similar obstacles.

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