MANAGING PUBLIC PENSION PLANS

Decisions, Challenges, and Reforms

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Chapter 3

BALANCING GOALS FOR PUBLIC PENSION PLANS

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BALANCING GOALS FOR PUBLIC PENSION PLANS

Overview

When government employees' pension plans were established in the early twentieth century in the United States, they were designed to provide sufficient pension benefits to attract and retain public employees (Clark et al., 2003). Public-sector jobs are generally perceived to be more secure and with better benefits than private-sector jobs. Public school teachers, police officers, firefighters, and general government employees enjoy secure and guaranteed pension benefits at a level that many private-sector employees do not have. Most employees also consider sufficient pension benefits to be one of the advantages of public-sector jobs.

For public employees and retirees, it is obvious that providing sufficient pension benefits is the primary goal of public pension plans. However, sufficient benefits are not the only policy goal for pension policymakers and managers of public pension plans to consider as they make decisions on the management of the plan. Pension plan management is an area where many stakeholders have interests and voices. Without considering all the policymakers' and stakeholders' goals and motivations, pension-related policies cannot be successful.

Take the sponsoring governments for example. In many state-administered, multiple-employer pension systems, state and local governments join these systems with the expectation that as long as they keep paying the required contributions, their employees will get sufficient pension benefits. They make the decision to join these systems because they believe in the efficiency of pooled pension assets. The efficiency of asset

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management and the affordability of the required contribution amount become these participating employers' primary concerns. Participating employers would also prefer stable annual contributions at a lower level so it would be easier for them to budget for annual pension expenses.

Other stakeholders, such as politicians, government administrators, and taxpayers, also have preferences when it comes to public pension plan management. Many politicians are aware of the current challenges in funding public pensions and might have political motivations to either improve the funding of pension plans and/or protect pension benefits. Administrators bring their expertise or experience in decision making and may emphasize certain policy goals or best practices. Taxpayers, as the ultimate payers and the recipients of public services, are concerned about the overall costs of providing public pension benefits, which could crowd out expenditures for other public services.

When all policymakers' and stakeholders' perspectives are considered, we see that there are generally five goals public pension plans are balancing. They are: sufficiency of pension benefits, affordability of pension costs, sustainability of pension funding, efficiency of asset management, and good governance of pension plans. Stakeholders may pay attention to one or more of these goals and prioritize them in different ways. Keeping these goals in consideration when making pension plan management decisions is important for the success of pension policies and reforms. These five goals will each be discussed in detail in the following sections.

Sufficiency of pension benefits

The goal of sufficiency can be described by the notion that public pension plans should provide benefits at a competitive level to effectively attract and retain high-quality public employees committed to government service. Most people perceive that pension benefits for public-sector employees are more generous than those for private-sector employees. Research on pension plans and public-sector employment shows that keeping public pension benefits at a sufficient level is helpful for the recruitment and retention of public employees (Munnell et al., 2015; Quinby & Sanzenbacher, 2020; Quinby et al., 2018).

It is not an easy task to define "competitive" or "sufficient" pension benefits. As mentioned in Chapter 2, there are several indicators for the level of pension benefits, such as the normal cost, replacement rate, and lifetime take-home income. In this chapter, we focus on the replacement rate as a measurement of the generosity level of pension benefits because it is more straightforward. The replacement rate is the ratio of an individual's preretirement income to the same individual's retirement income.

A replacement rate of 100% means that this person's retirement income can fully "replace" their preretirement income and thus can sustain the same living standards before and after retirement. Although the sufficiency of pension benefits depends on individual circumstances such as lifestyle and living expenses, most financial advisors consider that a replacement rate of 75–80% is a desirable retirement income level (Peng, 2008; Young & Theodore, 2023).

In public defined-benefit plans, the typical benefit multiplier is around 2% (according to Urban Institute, 2014a). Assuming a public employee works for a total of 25 years in the public sector, the replacement rate for this defined benefit (DB) pension benefit would be 50%. If this employee also receives Social Security benefits, which could provide around 30% of preretirement income depending on the individual's earning level (Clingman et al., 2021), a sufficient level of pension benefits can be achieved as the total replacement rate for this employee is around 80%. Note that some state and local government employees are not covered by Social Security. Those employees will need higher pension benefits to attain a sufficient level of retirement income. In comparison, the replacement rate for private-sector pension benefits is on average around 15–20 percentage points lower than public pensions (Foster, 1997).

Stable and sufficient pension benefits are the primary concern for public employees and their union representatives when they consider pension-related policies. If employees have collective bargaining rights, pension benefit changes are subject to negotiation with employee unions. Pension policy changes that aim to reduce current employee benefit levels often receive resistance from employee groups and might be challenged in court.

Politicians and government administrators have diverse opinions on the sufficiency of public pension benefits. On the one hand, benefit levels help to recruit and retain a high-quality public workforce, whose support is crucial for any political agenda. Public employee morale and motivation are vital for the provision of public services. It is politically unpopular to propose policies to cut employee pension benefits. On the other hand, high pension benefits also mean higher pension expenses and fewer resources for other public service programs and projects. When pension benefits are overly generous without funding support, there will also be concerns over government officials' ability to make responsible fiscal decisions, which politicians and government administrators seek to avoid.

The Urban Institute (2014b) conducted an evaluation of U.S. state and local pension plans. One focus of this evaluation was on the retirement income security for both short- and long-term government employees. Using a simulation based on benefit rules and financial information from state and local pension plans, they conclude that "traditional pension plans

TABLE 3.1 Evaluation of Public Pension Plans' Replacement Ratios by Urban Institute

Grades	*Long-term employees*	*Short-term employees*
A (replacement rate ≥ 80%)	MT, OH, KY, OK, UT, MS, SD, WI, SC, MO, MD, OR, ID, IA, MN, AZ, AR, TX, KS, VA, WY, AL, CO, GA, PA, TN, NY, NM, VT, HI, ND, NH, NJ, LA, NC, NE, WV, CA, DE	MS, SD, WI, UT, NM, WY, ID, WV, NE, ND
B (70% ≤ replacement rate < 80%)	IL, IN, ME, CT, MI, WA, FL, RI, AK	SC, MT, MO, MD, OR, AR, IA, MN, PA, TN, AZ, CA, DE, NC
C (60% ≤ replacement rate < 70%)	DC, NV, MA	IL, KY, NY, VA, TX, FL, VT, HI
D (50% ≤ replacement rate < 60%)	None	OK, OH, CT, WA, ME, AK, CO, KS, DC, LA, NV
F (replacement rate < 50%)	None	MA, IN, AL, GA, MI, NH, NJ, RI

Source: Urban Institute (2014b).

sponsored by most state and local governments generally provide lucrative retirement incomes to long-term employees but offer little retirement security to workers who change employers several times over their career." The detailed grades for each state's replacement rate for long- and short-term employees are shown in Table 3.1. Note that in the Urban Institute's simulation, long-term employees are assumed to work for 30–40 years with the same employer, while short-term employees are assumed to also work for 30–40 years over their lifetime but change their jobs with different employers.

Affordability of pension costs

The affordability goal is focused on maintaining pension expenses at a reasonable level in comparison to the financial resources of the sponsoring governments for funding these plans. Public pension plans are funded by both contributions from the government and the employees. Keeping those annual pension expenses affordable is an important goal for many policymakers and stakeholders because higher pension expenses lead to higher taxes or less financial resources for other public service programs.

The definition of pension cost affordability can vary among governments with different financial conditions and capacities. When discussing pension affordability, we often compare the annual pension expenses with other spending or revenue benchmarks. The first approach is to compare the annual required employer contributions with the total payroll, which is the sum of salaries received by employees of a government in a given year. On average in the fiscal year 2021, employer contributions were 22.3% of the payroll in state-administered plans and 35.6% of the payroll in local-administered plans (according to the authors' calculation based on the CRR, 2022). Another approach is to compare the annual pension expenses with a government's overall budget. Pension expenses for state governments on average comprise around 2.7% of state total revenues, while for local governments on average, pension costs are 7.5% of local total revenues (according to the authors' calculation based on the Public Plans Database, 2022 and U.S. Census data on government payrolls and total revenues). NASRA (2023a) also estimates that in aggregate, state and local governments spend 5.2% of their direct general spending on public pensions.

Whether pension expenses at this level are affordable is a debatable question depending on the government's other spending needs and revenue sources. If we compare the expense of public DB plans with defined contribution (DC) plans in the public or private sector, we can see that public DB plan expenses are much higher than DC plans. Private DC plans' employer match is at a much lower rate of 4.8% of employee salaries (Fidelity, 2023). The National Compensation Survey (Stoltzfus, 2016) also shows that employer costs for providing DC plans to private-sector employees average 4% of workers' wages and salaries in large establishments with 100 or more employees. However, private DC plans also provide much lower benefits, which are likely not acceptable to public employees. According to a survey (Giesecke & Rauh, 2022), if the public sector were to freeze DB plans and introduce DC plans, the acceptable contribution rate for public employees would be around 18.2% of payroll, which is much higher than the private DC plan employer cost but still lower than the current pension cost in many systems.

We can also compare pension costs with other spending items in a government budget. For state governments in the fiscal year 2023, National Association of State Budget Officers (NASBO) (White, 2023) estimates that the rainy-day fund balance averages 12.4% of general fund expenditures, which is roughly twice as much as the spending on public pensions. The U.S. Census Annual Survey of State and Local Government Finances also shows that interest expenses on debt take up 4% of state and local direct general expenditures (Urban Institute, n.d.), which is still less than spending on pensions.

When credit rating agencies assign ratings to government entities, the affordability of pension costs is an important factor (Aon Hewitt, 2017). Fitch's expenditure framework defines the carrying cost metric as the sum of governmental debt service, pension required contributions, and other post-employment benefit (OPEB) payments as a percentage of governmental expenditures. Fitch considers a carrying cost metric of less than 10% as an "aaa" rating and less than 20% as an "aa" rating (FitchRatings, 2021).

In addition to the affordability level of pension expenses, the fluctuations in these expenses from one year to the next also pose fiscal challenges for sponsoring governments. A sudden increase in pension costs in a year, which could be due to investment losses in a recession year or policy-related contribution increases, might cause fiscal stress to governments. Most governments have legal requirements to balance their budget on a yearly basis, and many plans also use smoothing methods to reduce the annual volatility of pension expenses. Such smoothing methods include using an asset smoothing period and the amortization of unfunded liabilities, which will be discussed in Chapter 6.

Public opinions on the costs of public pensions have also changed over time, which might reflect the fact that pension plans are getting more expensive for governments. In the 1990s, pension costs were 3.4% of state and local direct general spending, but this percentage has increased to above 5% in the 2020s (NASRA, 2023a). The negative public opinions toward high pension costs are also reflected in the media. As a response to the shifting public opinion, many politicians have incorporated plans to change state retirement systems as they campaign for public office (Degen, 2022).

Sustainability of pension funding

Sustainability of pension funding refers to whether pension plans have adequate and sustainable funding to meet the liabilities associated with the benefits promised to employees and retirees. The funding ratio of public pension plans is defined as the ratio of pension assets to pension liabilities. The decline of funding ratios for public pension plans following the Great Recession has raised serious concerns for many governments. The media have used the term "pension crisis" to describe the phenomenon when many public pension plans do not have enough funding to cover pension liabilities (e.g., see Brown, 2023). Unlike pension benefit decreases or cost increases, a drop in pension funding level does not have immediate consequences as long as the pension plan can still make benefit payments, but if the funding level keeps dropping, pension plans will have short- or long-term solvency concerns. Also, for credit rating agencies, a pension plan's

funding level indicates whether the plan has accumulated sufficient assets to cover its liabilities and, thus, is also an important indicator of the plan's fiscal health and long-term sustainability when determining credit ratings.

Analysts of public pension plans have different ideas about the definition of a healthy and sustainable funding level. Ideally, pension plans should have enough assets to fully (100%) cover their future liabilities. Many regulators or analysts still regard the 100% funded ratio as a goal that should be pursued by pension plans. For example, Standard & Poor's (S&P) states that "the funding target for public pension and OPEB plans should typically be at least 100%. We view funding targets of less than 100% as a credit weakness because these plans carry higher interest costs associated with the unfunded liability" (S&P, 2016, p. 25). However, because pension asset values fluctuate following the ups and downs of capital market returns, it is difficult for pension plans to always maintain a 100% funded ratio. Many analysts agree that if a pension plan maintains a reasonable funding level, such as around 80%, the plan is still sustainable in the long term. The Government Accountability Office (GAO, 2007) states that "A funded ratio of 80% or more is within the range that many public-sector experts, union officials, and advocates view as a healthy pension system." The 2007 GAO report has been cited by other studies, including a Pew report in 2010 as the standard to determine a healthy pension funding level. S&P rating methodology (2016) considers a three-year average pension-funded ratio of 80–90% to be "good" and above 90% to be "strong."

We should also note that the pension funding level is calculated in an actuarial process with various cost methods and assumptions. Future benefit payments are discounted to their present values using a discount rate that could vary by pension systems. Pension plans also use the actuarial value of assets, which could be smoothed over several years, rather than the market value, to report and calculate required contributions and unfunded liabilities. Accounting and actuarial standards have changed over the years to make these assumptions more transparent and consistent across plans (see GASB, 2012a, 2012b). When evaluating the funding level of pension plans, these assumptions, especially the discount rate, should be taken into consideration. In fact, when the reporting standards were inconsistent, Moody's developed its own adjusted pension assets and liabilities when assessing the solvency of public pension plans (Moody's, 2013).

Maintaining the sustainable funding of public pension plans is a goal that is shared by many policymakers and stakeholders. Because of the rising concerns over the public pension funding crisis, politicians have increasingly paid more attention to the underfunding problems and called for actions to improve pension funding. Administrators and participating

government employers are concerned about the funding level because a low funding ratio provides pressure to increase contributions to the plans. Low pension funding also creates unfunded liabilities in financial reports and might affect credit ratings. At the same time, governments are also concerned about the short-term goal to balance the budget, and thus, especially during a recession when there are immediate needs to pay for other public services, they might be willing to underfund the pensions in order to meet these other needs. Pension plan members are also concerned about pension funding; low funding ratios might lead to pressure to reduce benefits or increase employee contributions. Nonetheless, because most employees have benefits that are predetermined and protected by law, plan members' primary concern is still on the benefit level.

Efficiency of asset management

Besides contributions from employers and employees, investment returns are also a major income source for pension plans. In fact, looking at the data from 1992 to 2021, on average investment returns account for 64% of public pension revenue sources, while employer contributions account for 25% and employee contributions account for 11% (NASRA, 2023b). If public pension plans meet or exceed their expected investment return targets, there may be no pressure for employers and employees to raise contributions or reduce benefits. Thus, the efficiency of asset management, which indicates high investment returns and low fees, is a goal that is widely shared by pension policymakers and stakeholders.

Many pension plans have set a rate of return goal in their investment policy. The long-term expected rate of return (ERR) assumption in many plans was around 7.5% for some time. Historically, this rate (ERR) was also used as the discount rate to calculate the present value of pension liabilities with the anticipation that assets will grow at this rate to meet future benefits. A higher discount rate means lower pension liabilities and lower required contributions. When ERR was used as the discount rate, plans might have been motivated to pursue a high rate of return assumption so they could reduce pension contributions. Since 2012, new accounting standards have led to the separation of the ERR from the discount rate used for financial reporting, which has reduced this motivation (GASB, 2012a, 2012b; also see Chapter 4 for a more detailed discussion).

Looking back to the longer history of pension asset management, we see that plans have increasingly shifted from fixed-income investments to riskier asset classes such as equities and alternative investments. Pew (2014) shows that public pension funds historically invested the majority of their assets in government and corporate bonds, but the allocation of

assets to equities and alternatives increased from below 30% in the 1970s and 1980s to around 50% in the 1990s, and eventually reached around 73% in 2012.

The pursuit of high yields also creates concerns about investment risk and investment fees. While seeking high returns, controlling investment risk is also important. Some plans have set up a legal list of investments and prescribe the percentage of assets that can be invested in a certain asset class in their investment policies, although many plans have changed this practice and follow a "prudent person rule," which gives more discretion to the fund managers.

The fees that are associated with the investment and management of pension assets have received more attention, especially as pension plans increasingly invest in alternative investments, such as private equities and venture capital, which usually come with higher investment fees. Potentially, multi-employer cost-sharing systems can create a large asset pool that has more investment opportunities and lower investment fees as fees are shared among participating employers. However, the fee structure may become more complicated for employers to understand and supervise.

Some public pension plans have also included environmental, social, and governance (ESG) goals in their investment strategies. ESG investments are sensitive to the economic, social, and governance aspects of the investment. The consideration of ESG could serve the purpose of protecting pension assets. However, there is still no empirical finding supporting how ESG investing improves returns or reduces risks (Aubry et al., 2023). Other related goals are to prevent investments in certain assets that bring damage to society or to invest in certain businesses that pursue certain social or economic goals, such as businesses that are locally run or managed by underrepresented minority groups. There is still no consensus on whether these social and economic goals should be prioritized when managing pension funds.

Good governance of pension plans

Unlike the goals of benefits, costs, funding, and investment returns, which have more objective and quantitative measurements, the goal of good governance can only be assessed in a qualitative way. This goal is also very important, though, as the governance rules and structure safeguard the management of a pension plan and will eventually affect the other goals.

Good governance of pension plans can be broadly defined as designing appropriate processes and organizational structures for the operation of pension plans. Rating agencies consider pension plan management and governance when they assign ratings to governments (Aon Hewitt,

2017). The governance factors mostly relate to the plan's practices in following accounting and actuarial standards, setting up the due process to control risk, avoiding conflict of interests, and ensuring balanced representation of diverse stakeholders on the board. The guidelines and best practices for good governance have been put forward by professional associations.

The Government Finance Officers Association's (GFOA) best practices in pension and benefit administration include guidance for preparing pension plan summary documents, educating employees about retirement benefits, selecting investment professionals, reviewing actuarial valuation reports, and disclosing pension funding obligations. According to these best practices, a good pension system "completely, accurately, and clearly describes the significant components of the pension plan for participants" and should "educate employees about retirement income," "exercise appropriate due diligence in their selection of investment professionals," and "implement appropriate procedures when determining the level of information that needs to be disclosed about their pension funding obligations relative to their financial position" (GFOA, 2022).

Miller and Funston (2014) developed six principles for effective public pension fund governance, which include effective and capable fiduciaries to manage investments and operate funds; ethical leaders that comply with laws, regulations, and policies; open and accountable decision-making processes; intelligent and insightful risk management; a long-term view to ensure financial soundness and effective retirement solutions; and continuous adaptation to changing conditions. They also suggest that public pension funds conduct regular, independent fiduciary reviews to provide an objective evaluation of fund governance and operations.

The American Federation of State, County and Municipal Employees (AFSCME), which represents public-sector employees and retirees, also provides best practice guidance on selecting and educating pension board members, and setting ethical standards and fiduciary duties (AFSCME, 2020).

Finally, Aubry and Crawford (2019) from the Center for Retirement Research at Boston College suggest that the composition of board members is an important component of board effectiveness. They argue that a pension board should have the collective skills, experience, and subject-matter expertise to oversee a pension fund's various activities. Additionally, an effective pension board should have adequate stakeholder representation, including plan participants, government officials, and members of the general public. In 2018, 54% of public pension board members were plan participants, 15% were ex officio members, and 31% were from the general public (Aubry & Crawford, 2019).

Balancing the goals in pension plans

The five goals and the current consensus regarding appropriate targets for each goal are summarized in Table 3.2, which can help policymakers and stakeholders in public pension plans understand the goals and benchmarks discussed in the literature. However, it is equally important to balance these five goals, as there are always trade-offs among them. Pension policies that focus on certain goals, such as reducing pension costs or increasing pension funding, might involve measures to reduce pension benefits,

TABLE 3.2 Goals of Public Pension Management

Goals	*Current consensus on the targets*	*Notes*	*Sources*
Sufficiency of pension benefits	Replacement ratio ≥ 75–80%	If employees are not covered by Social Security, the expected replacement ratio would be higher.	Urban Institute (2014b), Peng (2008), and Young & Theodore (2023)
Affordability of pension costs	The sum of debt service, pension, and OPEB expenses < 20% of governmental expenditures for "aa" rating	Other cost measures include pension costs as a percent of total payroll.	FitchRatings (2021)
Sustainability of pension funding	Funding ratio ≥ 80%	The 80% rule is not a consensus. Some argue that 100% should be the goal.	GAO (2007) and S&P (2016)
Efficiency of asset management	Meeting the long-term expected rate of return (ERR)	ERR varies by plan. For most plans, this rate is around 7.5%.	Authors' opinion
Good governance of pension plans	Following best practices in plan governance, accounting and financial reporting standards, processes, and board composition	Best practices are recommended by professional associations.	GFOA (2022), Miller and Funston (2014), AFSCME (2020), and Aubry and Crawford (2019)

which compromise the goal of benefit sufficiency. Effective pension plan management should assess the plan's current status against these targets and carefully consider how any policy changes impact each goal.

Mini case: overview of NYCTRS

The New York City Teachers' Retirement System (NYCTRS) is one of New York City's five major pension systems. NYCTRS provides pension benefits to New York City public school teachers, certain other school employees, and college teachers in the City University of New York (CUNY) system. The system contains two major pension plans: a cost-sharing, multiple-employer defined-benefit plan called the Qualified Pension Plan (QPP), and a voluntary defined-contribution plan called the tax-deferred annuity (TDA). As of 2022, the system has approximately 124,000 in-service members and 92,000 retired members and beneficiaries. This section discusses how the five goals for public pension plan management were achieved in NYCTRS.

Sufficiency: the replacement rate

As discussed above, one of the measurements for the sufficiency of pension benefits is the replacement rate. It is not straightforward, however, to calculate the average replacement rate for NYCTRS members. Members receive benefits mainly from the defined-benefit plan QPP, but some of them also participate in the voluntary DC plan TDA, which provides guaranteed investment returns. In QPP, there are five benefit tiers with different formulas, contribution requirements, and retirement eligibility rules. The different tiers are due to benefit changes (mostly reductions) in 1973, 1976, 1983, and 2012. Members receive different benefit levels depending on the date they joined the system.

Here we provide a simple estimation of the replacement rate based on the benefit formula in the defined-benefit QPP plan. The benefits are calculated based on total service credit and the final average salary (FAS). FAS is generally the highest average of wages earned during any continuous five-year period of employment. The benefit factors are calculated following the rules summarized in NYCTRS 2022 Annual Comprehensive Financial Report.

> Benefits: (1) For a member with fewer than 20 years of service, the benefit is 1.67% times FAS multiplied by years of service. (2) For a member with at least 20 (Tier VI) but fewer than 30 years of service (Tier III/IV), the benefit is 2% times FAS multiplied by years of service (Tier III/IV) or

> 35% plus 2% times FAS multiplied by each additional year exceeding 20 years of service (Tier VI). (3) For a member with 30 or more years of service, the benefit is 2% times FAS for each of the first 30 years of service plus 1.5% times FAS for each additional year (Tier III/IV). (p. 11)

For an employee who started working for a public school in New York City at the age of 25 and retired at the normal retirement age of 63 (i.e., 38 years of service), the replacement rate is around 72% (30 * 2% + 8 * 1.5% = 72%). With fewer years of service such as 25 years, the replacement rate will decrease to 45% (35% + 5 * 2% = 45%). Members are also required to contribute 3–6% of their payroll depending on their salary level. With higher members' contributions, the lifetime take-home income for a member is reduced. Increasing members' contributions is a way of reducing benefit levels.

NYCTRS also provides automatic cost-of-living adjustments (COLAs), which are one-half of the increase in the Consumer Price Index for All Urban Consumers (CPI-U) with a floor of 1% and a cap of 3% of the first $18,000 of the sum of the maximum retirement allowance and prior COLAs (NYCTRS, 2022). This automatic COLA helps preserve the purchasing power of pension benefits after retirement.

Affordability: the employers' contribution rates

The system's actuary calculates the actuarially determined contributions (ADC) in the actuarial process. In the fiscal year 2022, the NYCTRS required employers' contribution was $3.3 billion, which is around 29.6% of payroll. Employers are legally required to fully pay the annual contribution amount.

The Department of Education (DOE) is the largest contributing employer in the system, which pays $3.2 billion to the system. Considering that NYC's general revenues were approximately $69.7 billion in the fiscal year 2022 (NYC, 2022), the pension contributions are around 4.58% of the city's general revenues. For NYCTRS, the high contribution rate has been a concern for many years. Looking at the contribution rates in the past ten years (2013–2022), the average rate is above 37.7% of payroll with a high of 44.8% of payroll in 2016.

Sustainability: the funded ratio

NYCTRS also reports the funded ratios of the QPP-DB plan as part of their actuarial valuation process. In the fiscal year 2020, the reported funded ratio for the QPP plan was 80.4%. This funded ratio has gradually increased over the last decade from 58.2% in the fiscal year 2011, and

finally reaching above 80% for the first time in the decade from 2011 to 2020 (NYCTRS 2022). Comparing the funded ratios with the goals listed in Table 3.2, we see that NYCTRS has made substantial improvements toward reaching the funding goal. Its funded ratio has improved by more than 20% in the last decade.

The actuarial funded ratio is influenced by the actuarial methods used to calculate liabilities and assets. The various cost methods and discount rates, along with their impact on liabilities and funded ratios, will be discussed further in Chapter 6.

Efficiency: expected rate of return

As of 2022, the system's ERR on investments is 7.0%, which represents the long-term investment return goal set by NYCTRS for its pension funds. NYCTRS invests its pension assets in several funds. As of June 30, 2022, QPP assets were invested 26% in U.S. equities, 17% in non-U.S. equities, 20% in alternative investments, and 37% in fixed-income and short-term investments. The gross investment returns in the years 2020, 2021, and 2022 were 5.1, 25.1, and −9.39%. In the fiscal year 2022, the annualized three-, five-, and ten-year returns were 6.02, 6.82, and 8.06%, respectively (NYCTRS, 2022). Because the ERR is based on a long-term horizon, we should use the long-term perspective to examine whether the pension fund has met its return goals. In the past ten years (2013–2022), the investment returns fell below the 7% expected rate in four years (2015, 2016, 2020, and 2022), but the overall annualized rate is still at 8.06%, one percentage point above the expected rate.

Governance and policies

New York City's credit rating was Aa2 (Moody's) and AA (S&P) in the fiscal year 2022. NYCTRS is governed by the Teachers' Retirement Board, which consists of seven trustees that represent members and employers. Among the seven trustees, three are elected by members, two are appointed by the Mayor of New York City, and the other two are ex officio trustees (the City Comptroller and the Chair of the Panel for Education Policy). The Board holds monthly meetings, which are open to the public, and the meeting minutes are published on the system's website. NYCTRS sends semiannual newsletters to members, which report their investment returns and new policies.

NYCTRS follows generally accepted accounting principles to prepare their annual financial reports. They have received GFOA's Certificate of Achievement for Excellence in Financial Reporting, which recognizes that

the financial reports have followed GASB standards to report necessary information and are readable.

In sum, by comparing NYCTRS's performance with the goals and targets summarized in Table 3.2, we can conclude that the system has provided sufficient retirement benefits for long-term employees, employer contribution rates are relatively high, the funded ratio has improved and reached sustainable funding in 2022, investment goals have been met, and the system has maintained a good credit rating while following financial reporting standards.

Summary

In this chapter, we describe and explain the five goals for public pension plan governance. Pension plan policymakers and stakeholders consider these goals as they make pension policies, but they might place different emphasis on these goals depending on their interests or preferences at a point in time. Debates over which goals to prioritize often occur when pension policy changes are discussed.

For example, when the sponsoring governments face high pension liabilities and costs, pension plans often face pressure to reduce pension costs. Policy options for cutting pension costs often entail cutting pension benefits by creating a new tier with lower benefits or asking active employees to increase their contributions. The creation of new tiers with lower benefit levels and higher employee contribution rates will help to lower pension costs in the long run. However, employees under the new tier have less benefit sufficiency and retirement security. Policymakers need to work with employee groups to negotiate over these multiple goals of benefit sufficiency, cost affordability, and fiscal sustainability.

Another typical example of a compromise over the goals occurs over contribution changes during a recession. When economic recessions occur, pension assets often receive lower-than-expected returns, which will lower funding levels and increase required contributions. During recessions, governments also often have lower tax revenues and often face pressure to increase spending in other public service areas either to create jobs or to provide assistance to citizens. This can lead to pressure to reduce pension contributions in a recession year for other more immediate needs, if their contribution policies allow them to do so. However, lower pension contributions will impact the fiscal sustainability of the pension plan. Facing this decision, policymakers in different governments make different choices depending on the information they have or their policy agenda. Lawmakers in some states have set up policies to mandate governments to fully pay their required contributions to public pension plans. In fact, we

observe different contribution practices across governments and pension plans, which will be discussed further in Chapter 7.

As a summary, we suggest that these five goals are important for public pension plan management and for discussions over pension policy changes. Current issues in pension management, such as low pension funding ratios and high pension costs, are usually due to previous decisions that emphasized certain goals but sacrificed other goals. Successful policy changes or reforms in pension plans are usually the result of balancing these goals.

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