

# State and Local Employee Pension Plans: Watching for Problems //

by Bernard Jump, Jr.

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# **STATE AND LOCAL EMPLOYEE PENSION PLANS: WATCHING FOR PROBLEMS**

**BY**

**BERNARD JUMP, JR.**

**October 1976,**

3

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## SUMMARY

Why are state and local public employee pension plans often said to be financial "time bombs" in our system of public finance?

Are their benefits way out of line with those in the private sector?

Are there guidelines or tests that can alert us to pension problems before a financial crisis results?

What steps need to be taken to help ensure their integrity?

### Public Retirement Benefits vs. Private Retirement Benefits

Strict comparison between public retirement benefits and private retirement benefits is a complex task. Most public employees contribute to their retirement plans, most private employees do not. And only about half of the employees in private industry are under a pension plan, but:

- Should public retirement systems encourage retirement earlier than age 62?
- Should state and local governments be allowed to participate or not participate in Social Security as they choose? Is this fair to private organizations and employees who are compelled to participate?
- Should total retirement benefits be permitted to exceed 100 percent of preretirement income as is the case in many public systems?
- Or, would it be wise to link public employee retirement plans to a dynamic Social Security system in a way that controls the total retirement income paid to retired public employees?
- And while some adjustment for increases in the cost of living may be a desirable feature in any plan, should not the public be protected from unwarranted expansion in costs by imposition of a "cap" on the amount of such increases?
- Is it in the public interest for police and fire pension plans to be so much "richer" than those for other employees?

### Signals of Funding Trouble

The closer a fund progresses toward being fully funded, the better its condition. If a fund is making little or no progress toward being fully funded, it may be in trouble. If its progress is backward — away from being fully funded — there is good cause for

concern. Actuaries and accountants should be able to develop a means for flashing these danger signals in a way that public officials can understand.

Few public employee retirement systems are actually operated on a dangerous "pay-as-you-go" basis, but some are precariously close to such a practice because their governmental sponsors have skipped payments into the fund in order to balance their own budgets during difficult years.

While the idea of full funding is useful, and certainly distinguishes the exceptionally well-financed system, there are often good and necessary reasons for the existence of unfunded accrued liabilities. If they are founded on sound actuarial assumptions and there is steady progress toward full funding of obligations as they are incurred, there is probably little cause for concern. However, actuarial assumptions are by definition uncertain and subject to change and should be constantly evaluated.

### Conclusions

- (1) It is probably not unreasonable for the combination of a public pension and Social Security to provide a retirement income for the long-service employee that is approximately equal to preretirement incomes. But it is imperative that public pension systems be designed to take Social Security payments into account.
- (2) Full funding should not be the single guiding standard in evaluating the fiscal soundness of a pension system.
- (3) Fiscal prudence dictates that communities endeavor to err on the conservative side in their funding and thus accumulate pension assets rapidly.
- (4) Budgetary planning is facilitated by a funding method that maintains pension contributions as a constant percentage of payroll.
- (5) Whatever the funding method used, it should yield accurate estimates of the costs of proposed benefit changes.
- (6) As noted by the Advisory Commission on Intergovernmental Relations, underfunded pension systems of local governments may be a threat to their financial health. In view of the political obstacles at the local level connected with achieving adequate funding, it might be wise to bring these systems under state operation.

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# INTRODUCTION

As a broad generalization, it is fair to say that until quite recently the subject of public employee pensions was one of the lesser publicized aspects of governmental affairs.<sup>1</sup> With the obvious exceptions of pension system administrators, actuaries, and other professionals involved in the operation and management of public pension systems, few in state and local government had more than a superficial acquaintance with or interest in such matters. True, most public employees — including legislators — were aware that they could look forward to a lifetime public pension starting sometime after their public careers ended. But few observers saw public pensions as more than a “fringe” benefit. Nor did many see pensions as being responsible for more than a minuscule share of the budgets for state and local governments.

Now, however, things are much different. Hardly a week passes without the appearance in some mass circulation publication of another article describing the “disaster” that awaits some city or state and its taxpayers because of what are said to be the extravagant pensions being provided to the jurisdiction’s employees. Governors, mayors, and state and local legislators are expressing alarm about mounting pension liabilities. They bemoan the fiscal burden said to be caused by their predecessors’ alleged predilections to approve pension benefit improvements with carefree abandon and without attention to their budgetary implications. Taxpayer watchdog groups, too, are turning their attention to these matters as they become aware that public employee pensions can account for a sizable portion of government outlays. Citizens are becoming hostile and resentful as claims are made that public employee pensions, pensions paid for with their tax dollars, are far more generous than those they receive themselves. Even public employees are beginning to question whether the money will be there when they retire.

Federal officials and members of Congress also are concerned about the growing cost of state and local public pensions and the way in which public retire-

ment systems are managed. For example, both the President and the Secretary of the Treasury, during the course of their efforts to keep New York City from bankruptcy, have commented disapprovingly about the generosity and the cost of that city’s pensions. United States Senators speak to gatherings representing the financial community and warn about the “financial time bombs” created by public employee pension commitments. Indeed, some observers think the matter is serious enough to justify federal legislation to regulate state and local pension systems in much the same way as private pension systems are regulated. Clearly, any issue that might lead to federal supervision of a state or local government instrumentality is sufficiently important to deserve close examination.

## The Level of Public Employee Pension Benefits

On the benefit side, more needs to be known about the level of public pensions than can be gleaned by reviewing the anecdotal and perhaps atypical reports that garner the major publicity. A host of fundamental questions require answers. For example:

- Are public pension benefits usually higher than those awarded to private industry employees?
- And if public pensions are higher, does this necessarily mean that they are too high?
- How good is the retired public employee’s income relative to his earnings prior to retirement?
- What is the proper minimum age for retirement?
- Should police and firemen receive pensions while in their forties and fifties?
- Is public policy best served by exempting state and local governments from mandatory Social Security participation?
- Should retirees be eligible to receive cost of living adjustments?
- What are the objectives or purposes of pensions?

## The Cost of Public Employee Pensions

Why just now is there so much concern about pension cost and financing? If public pensions are as generous and expensive as alleged, why did this not

<sup>1</sup>One of the first, if not the first, comprehensive treatments of the conceptual aspects of public employee retirement systems was Thomas P. Bleakney, *Retirement Systems for Public Employees* (Homewood: Richard D. Irwin, Inc. for the Pension Research Council, 1972). This book, along with Robert Tilove, *Public Employee Pension Funds*, A Twentieth Century Fund Report (New York: Columbia University Press, 1975) is essential reading for anyone who is seriously concerned with understanding public pension issues.

show up long ago in the form of expenditure and tax increases? After all, public pensions are not a new invention. What is it about pension benefits and their financing that leads to metaphors like "financial time bomb"? Has the problem been that pension costs and financing are largely in the domain of actuaries, and is this a domain where the layperson has no business being? Are we, in effect, captives of the occult?

Captives or not, cannot public officials and others who are concerned be equipped with guidelines or tests that would alert them to incipient pension finance problems in time to prevent fiscal crises? If, as some argue, pension commitments have usually been made with little consideration for their cost implications, what can be done now to assure that this does not happen again?

## Objectives of the Paper

This paper is concerned with some pressing issues in state and local pension benefits and their financing. Its primary objectives are to identify some matters that deserve the careful attention of policymakers; to suggest appropriate lines of inquiry for those who are evaluating a jurisdiction's pension benefit package and its method of financing the benefits; and to clear up some of the confusion that makes it so difficult to comprehend pension issues.

The first section looks at the benefit side of public pensions. Its central concern is the often-expressed allegation that public pension benefits are too high. It surveys several of the major problems that are encountered in evaluating the level of pension benefits, and it raises questions concerning the objectives that pension plans ought to serve.

In the second section, the focus moves to issues involving pension cost measurement and pension finance. Since it is frequently claimed that public pensions have been permitted to become so generous because legislators do not understand the full budgetary implications of what they are asked to approve, this section provides an introductory guide to pension cost measurement and funding. In addition, several of the major issues involved in devising a prudent plan for financing pension benefits are enumerated.

Finally, brief attention is given to some evidence that poorly funded local retirement systems are threats to the financial stability of the governments responsible for them, and that the threats are sufficiently serious to justify intervention by a higher level of government.

## ARE STATE AND LOCAL GOVERNMENT PENSION BENEFITS TOO HIGH?

It would be useful if one could speak of the "typical" pension benefit package provided to a state or local government employee. But since public employee retirement systems number in the thousands and provide such a diverse array of pension plans, any attempt to depict the typical plan runs the risk of providing a picture that is suitable to very few plans.

Acknowledging these problems and qualifying his descriptions accordingly, Robert Tilove has reviewed large state and local pension plans and developed a profile of the typical benefit package.<sup>2</sup> Among the features of Tilove's package are:

- A normal retirement benefit at age 60 after 10 years of service;
- A normal retirement benefit equal to 50 percent of final average salary (the best five salaries during the last 10 years) after 30 years of service;
- An early retirement benefit at age 55 after 10 years of service that is the actuarial equivalent of the normal retirement benefit paid at age 60;
- A disability benefit after 10 years of service (no service requirement if disability is job-related) equal to the greater of 25 percent of final salary or the normal retirement benefits;
- Death benefits if death occurs before retirement;
- Options that permit a retiring employee to reduce his own annual benefit in exchange for a benefit payable to his survivor;
- Cost of living adjustments to retirement benefits of up to 3 percent annually;
- Required employee contributions equal to 5 percent of salary; and
- Social Security coverage in addition to any pension system benefits.

Despite the value of this general profile, it is sometimes necessary or desirable to compare a particular jurisdiction's benefit package with the packages furnished in other jurisdictions that have similar characteristics (e.g., all states, a group of large cities, a group of governments whose employees are unionized, governments in a geographic region). While such comparisons are valuable, there

<sup>2</sup>Tilove, *Public Employee Pension Funds*, ch. 2.



are several reasons why they may not yield categorical conclusions on the relative "richness" of each of the several plans compared.

## Hazards in Comparing Pension Plans

For example, since pension plans contain so many separate features and elements, it is likely that comparisons will not reveal any one plan that is best (or worst) in terms of every element. Hence, the most that may be possible in some cases is to reach a qualified judgment about a plan's relative richness on the basis of arbitrary decisions about those benefits that are most important from the employee's perspective.

Of course, it does not necessarily follow that the preferred plan as seen by the employees is also the most costly. For example, suppose that one retirement system (with benefits otherwise identical to those offered by a second system) provides a superior benefit for a job-related disability. Further, suppose that only a very small percentage of employees in the system with the superior disability benefit qualify for disability benefits, while jobs of members of the second system are sufficiently hazardous that a substantial proportion of employees qualify for disability pensions. Then, assuming there is no cost difference between any of the other elements of the two pension packages, the plan with the inferior disability benefit would cost more. Which plan provides the highest benefits?

As another example of the potential ambiguities that arise in benefit comparisons, consider two plans with identical job-related disability benefits, say 75 percent of salary earned at the time of disability, and with members subject to similar degrees of risk. Assume that an employee in each system has a job-related permanent injury and that each applies to his respective system for disability retirement. Each employee must present medical evidence satisfactory to a review board to qualify for a disability pension. Suppose one plan's review board establishes a much less rigorous standard for disability. One employee may be granted his disability pension while the second may be forced either to return to work, perhaps at a physically less demanding task, or to quit without any benefits.<sup>3</sup> A comparison of plan descriptions would have led to the false conclusion that both plans provided equivalent benefits.

<sup>3</sup>The example is not farfetched. Disability review boards in New York City and Washington, D.C., are notorious for their willingness to approve disability pensions for police and firemen.

## Regular (Normal) Service Retirement Benefit Replacement Rates

Hazards and ambiguities notwithstanding, it is reasonable to want to know how plans compare in terms of what they offer to eligible employees. And with appropriate qualifications, elements of pension plans can be compared.

The central element of a pension plan is the regular service retirement benefit. Determination of when an employee first becomes eligible may be based strictly on age, on years of service, or on some combination of age and service. Given the wide diversity in eligibility requirements found among public employee pension plans, it is useful in making comparisons to consider a variety of ages and/or years of service and to determine what benefits, if any, a particular plan provides in each situation.

Moreover, since most normal retirement benefits in public plans are a function of years of service and a percentage of final average salary, it is helpful to make comparisons on the basis of the percentage of salary replaced by the benefits. By convention, this percentage is called the replacement rate or ratio.

To illustrate, replacement rates for four age/years of service combinations have been computed for general employees in eight major cities (see Table 1). These replacement rates equal gross retirement benefits divided by an assumed final year gross sal-

**TABLE 1**  
**REGULAR SERVICE RETIREMENT**  
**BENEFITS AS A PERCENTAGE**  
**OF FINAL YEAR'S SALARY**

	20 Years' Service, Age 60	25 Years' Service, Age 55	25 Years' Service, Age 60	30 Years' Service, Age 60
Atlanta	*	34.9%	38.7%	46.5%
Chicago	33.2%	30.1	43.0	52.8
Dallas	38.1	*	47.7	57.2
Detroit	32.6	*	40.6	48.5
Los Angeles	40.0	N/A	50.0	60.0
New York City†	33.3	43.0	48.2	57.5
Philadelphia	45.5	52.3	52.3	59.1
Washington, D.C.	34.5	*	44.1	53.6

NOTE: Estimates are based on \$15,000 salary in final year and past salary increases of 5 percent annually.

N/A - Information not available.

\*Not possible — does not meet age and/or service requirements.

†Estimates are for Career Pension Plan members. Benefits for sanitation and transit workers are generally higher.

ary of \$15,000. The rates show that a city's ranking varies depending on the particular age/years of service combination. No city is first for all combinations, and none is last in every instance.

## Pension Replacement Rates and Disposable Income

Replacement rates measured as the ratio of gross pension benefits to gross salary are useful indicators of the relative amount of gross salary produced by pension plans. But it is necessary to make several adjustments to both pre- and postretirement gross income in order to obtain an accurate measure of the net or disposable income available to the retiree relative to his disposable income at the time of retirement. Preretirement gross salary must be reduced to reflect deductions for employee pension contributions, income taxes, and Social Security taxes (where applicable). Postretirement gross income (i.e., pension benefits) must be reduced for income taxes and increased for Social Security benefits (where applicable).

Again using general employees of the eight cities included in Table 1, *net* replacement rates have been computed for an employee at age 62 and age 65 with 30 years' service (see Table 2). Gross replacement rates have also been computed for comparative purposes.

**TABLE 2**  
**ANNUAL SERVICE RETIREMENT BENEFIT**  
**(AFTER TAX) AND SOCIAL SECURITY BENEFIT\* †**

	<u>Age 62††</u>	<u>Age 65††</u>
Atlanta**	53% (46%)	54% (46%)
Chicago**	61 (53)	62 (53)
Dallas**	64 (57)	64 (57)
Detroit	106 (48)	116 (48)
Los Angeles**	67 (60)	68 (60)
New York City	118 (58)	127 (58)
Philadelphia	118 (59)	129 (59)
Washington, D.C.**	63 (54)	64 (54)

\*Disposable income before retirement for employees with 30 years of service based on \$15,000 gross salary less federal income taxes, pension contributions and social security contributions (where applicable). Estimates for New York City and Washington also reflect deductions for state and/or local income taxes.

Both before-and-after-retirement disposable income based on assumption of married couple with no children, joint return, standard deduction, and extra exemption at age 65.

†Social Security payments are estimates for employees who work during 1976 and begin collecting benefits in 1977. Payments are inclusive of both primary and spouse's benefit.

\*\*Employees are not covered by Social Security.

††Percentages in ( ) are gross pension benefits divided by \$15,000.

Ignoring the effects of all adjustments except Social Security payments, it is obvious that Social Security coverage is enormously important in determining the adequacy of a retiree's disposable income. Indeed, the retired public employee who also receives Social Security coverage is likely to have more purchasing power as he begins retirement than before he retired. Without Social Security coverage, a retiree's disposable income is going to fall drastically short of the amount required to maintain parity with his disposable income just prior to retirement.

## Determining the Adequacy of Retirement Income

The contrast just observed between net replacement rates for public employees with Social Security coverage and those without such coverage raises an issue about plans to provide retirement income: What objectives should a good retirement program accomplish?

It was suggested earlier that a pension plan could (should?) be viewed as more than a mere gratuity or a form of deferred compensation. A pension plan might be viewed as serving an important social objective; namely, to ensure that a long-service employee (and any employee who is physically incapable of continuing to work) will be able to live as well after retirement as before. Presumably, few would object to such a goal, at least in its general form.<sup>4</sup>

Yet it is one thing to agree on the general standard and quite another to decide exactly how close retirement income should come to replacing preretirement income. Should retirement income be expected to do the entire job? Or should retirees be expected to pay a portion of their living costs out of personal savings? One might argue that it depends on how much was earned during a person's working career, the assumption being that the higher the earnings history the greater the likelihood of accumulated resources to draw upon. But would such a test identify many who did not "deserve" a retirement income that replaced 100 percent of preretirement income? After all, the majority of public employees in most jurisdictions have not been earning and probably never will earn salaries at a level that would enable them to accumulate any substantial nest egg.

<sup>4</sup>This objective has been endorsed by New York State's Permanent Commission on Public Employee Pension and Retirement Systems. See the Commission's *Report* issued in January 1973.

Perhaps the operational standard could be that net replacement rates (inclusive of any Social Security benefits) not exceed 100 percent and that a replacement rate much below 80 percent for employees earning less than \$15,000 (in 1976) would be one indication that the retirement plan had deficiencies. Such a standard has the virtue of allowing some flexibility on the lower side of 100 percent. It also has the virtue of suggesting that taxpayers not be expected to provide a public employee with an extra reward for retiring.

Some might suggest that a better standard is the net replacement rate prevailing in private industry. Why should the public employee do better than the private sector employee? Despite its appeal to some observers, this view has its shortcomings. First, since only about 50 percent of private industry employees are covered by pension plans (in contrast to almost all full-time public employees), it is not clear what the prevailing rate in private industry means. Second, most public employees contribute toward the cost of their pension plans while most private industry employees do not. Hence, an accurate comparison of benefits would require some adjustments in the nominal replacement rates. Third, should any public plans found to be below the private industry prevailing rate be raised accordingly? This might be very costly for the state and local governments involved. Finally, if there is a valid case for at least *aiming* toward 100 percent replacement rates for long-career employees, then the emphasis should be on raising private industry replacement rates instead of trying to lower those public plan replacement rates that do not exceed 100 percent.

## When Should Public Employees Be Eligible to Retire?

Even if there were a consensus about the appropriate replacement rate for a long-career employee's retirement income, the question would remain of when an employee should become eligible for regular (or reduced) benefits. Tilove's examination of prevailing practices in the public sector revealed, among other facts, that age 60 as a minimum age is the norm ("The most common single age . . .")<sup>5</sup> and that there was a trend toward awarding benefits at any age to employees with 30 or more years of service.

It is not clear what, if any, policy objective is served by encouraging employees to retire below age 62

when reduced Social Security benefits can be collected. Perhaps this is an aspect of the public employee pension package that amounts to no more than a sweetener in the terms of employment.

Of course, it is sometimes said that the incentive (by way of early age pensions) to retire early is good public policy because it clears out employees whose productivity is diminished. Yet it is virtually impossible to find objective support for the view that the typical employee in a nonhazardous job suffers significant impairment of abilities when he reaches the 55-to-60 age range.

## The Public Employee and Social Security

Unlike private industry, where participation in the Social Security program is mandatory, state and local governments can choose whether to participate. Moreover, having participated, they have the additional option of withdrawing from System membership. This special treatment has always been a source of controversy among specialists. Now, the matter has reached a new level of prominence with New York City's announcement of its intention to withdraw from the Social Security program as a way to reduce expenditures. There has been speculation that New York's move would trigger a multitude of withdrawals, perhaps impairing the basic financial structure of the System. Congress has already held hearings to explore the ramifications, public employee groups in New York City are vigorously opposing the city's planned withdrawal, and informed observers feel that some modification in current law is required if chaos is to be avoided.

The reason why some state and local governments decline Social Security participation is its cost. Some claim they cannot afford it. Others argue that they can provide equivalent coverage at lower cost. Obviously, the "cannot afford it" argument is not one that can be evaluated objectively. Whether the other argument has any validity is difficult if not impossible to determine, given the enormous variety of benefits included under Social Security and the uncertainty as to what future changes will be made in the program.

To allow state and local governments to participate or not as they prefer and to withdraw after a period of participation is grossly unfair to those who are compelled to participate. The unfairness comes because mammoth loopholes in the Social Security program enable employees of nonparticipating jurisdictions to gain eligibility for Social Security

<sup>5</sup>Tilove, *Public Employee Pension Funds*, p. 13.

benefits at disproportionately low cost. For example:

- By moonlighting, or by virtue of a brief period of private sector employment, present or former employees of nonparticipating governments can gain eligibility for Social Security benefits that are disproportionately large relative to the contributions they make;
- Employees who have Social Security coverage for only a comparatively short period before their government employer withdraws from the System remain eligible for benefits that are far better per dollar of contribution than those provided to persons in the System for their entire careers;
- Public employees whose employers no longer participate may have their ultimate benefits enriched even after the date of withdrawal — at no additional cost to them.

As an aside, it should be noted that the opportunity to withdraw — that is granted exclusively to state and local governments — provides them with a one-time, ace-in-the-hole budget balancing device that probably would have kept many private firms out of the bankruptcy courts had they had the same privilege.

Whether the above inequities can and will be tolerated much longer is an issue that is certain to be debated with increasing intensity. It is possible that the Congress will decide to settle the issue by mandating full coverage for all public employees. Or, Congress could decide to enact measures that will close some of the loopholes favoring employees of state and local governments who never participate or who withdraw from participation. Additionally, it has been suggested that some of the financial burden of the Social Security program be financed out of general tax revenues. Were this latter change to be made, it would mean that the federal income taxes paid by nonmembers would help finance Social Security benefits. Suffice to say that some informed observers view the optional arrangement for state and local governments as socially undesirable. Perhaps state and local governments would do well to admit to the inevitability of change in the Social Security program and then prepare to participate in the deliberations that will determine the nature of that change.

## Relating a State or Local Pension Plan to Social Security

Notwithstanding the very cogent arguments in favor of a universal Social Security System, it must be recognized that any participating employer must be concerned about the rapidly mounting costs of Social Security. In short, the employer's pension plan must be accommodated to the Social Security benefit program. Otherwise, the cost of a significant portion of the total retirement package furnished to employees will literally be out of the employer's control. Furthermore, the effect of coupling a steadily richer Social Security benefit package to the employer's pension package would be to lose control of the size of the total replacement rate.

If, as was suggested above, total retirement benefits should not exceed preretirement income, the failure of most participating governments to tie their pension plans to Social Security is already having undesirable consequences. The effects will become even more serious as the full impact of Social Security benefits enrichment is realized. Irrespective of what a jurisdiction's policymakers think the desirable replacement rate should be, they must bring it under control if they are to be able to do anything about the growth in a significant expenditure item. *It is essential to connect their pension plan's benefits with those furnished under the Social Security program.*

Linking a pension plan to a dynamic Social Security program is a complex undertaking, and a variety of approaches have been and are now being designed. One of the most recent approaches to the problem is a central feature of a major pension benefit package recommended for New York's public employees by the state's Permanent Commission on Public Employee Pension and Retirement Systems.<sup>6</sup> A review of that proposal should be instructive to others facing the problem.

The New York Pension Commission has recommended a benefit formula that explicitly coordinates the public pension element of the total retirement package with the Social Security element. The key feature is the automatic subtraction of 50 percent of any Primary Social Security benefit from the gross benefits provided by New York's own pension plan. Thus, as Primary Social Security benefits increase in the future, the share of any total retirement benefit to be provided by state and local retirement systems in New York would decline.

<sup>6</sup>See the Commission's *Recommendation for a New Pension Plan for Public Employees: The 1976 Coordinated Escalator Retirement Plan*, March 1976.

The basic benefit formula proposed by the Commission is:

(2 percent x years of service) less (50 percent of Primary Social Security attributable to New York earnings) plus (100 percent of Primary Social Security) plus (100 percent of spouse's benefit).

To illustrate, consider a single employee who retires in 1977 at age 65 after 30 years of service and whose highest consecutive 3-year average salary is \$15,300. His benefit would be:

Total Benefit	\$11,507 = 75 percent of final average salary
New York Pension	6,853 = 45 percent of final average salary
Social Security	4,654 = 30 percent of final average salary

The total benefit of \$11,507 or 75 percent of final average salary is approximately equal to after-tax income immediately prior to retirement. If the employee has a spouse, the spouse's Social Security benefit of \$2,327 (50 percent of the Primary Social Security amount) would raise the total benefit to 90 percent of final average salary.

Whether the New York approach is the one for other public retirement systems remains to be determined. But it does offer a solution for jurisdictions providing dual coverage (i.e., a pension plan and Social Security).

## Postretirement Cost of Living Adjustments

The inflationary surge of the early 1970s has triggered appeals from and on behalf of retirees who maintain they, too, need insulation from rising costs. And one might reasonably question whether it makes much sense to worry about goals for pension plans, replacement rates, and the like if no provision is going to be made for offsetting increases in the cost of living subsequent to the time when an employee retires. Given the choice, there must be many current and prospective retirees who would willingly accept a lower initial benefit than that now provided in exchange for some guarantee of automatic benefit escalation when prices rise. Despite the merits of the principle that retirees deserve some protection from inflation, it does not follow that state and local governments can be expected to insulate totally their retired employees. The few state and local governments that have provided full insulation are certainly paying dearly now.

A premise that must control all aspects of pension plan design is that no government should make commitments for future expenditures that cannot be accurately estimated. Logically then, postretire-

ment benefit adjustment provisions should include a limit or cap on the maximum yearly percentage increase that might have to be made.<sup>7</sup> But once such a limitation is included, there seems to be no reason why a cost of living adjustment provision should not be an element of a pension plan.

## Special Problems in Police and Fire Pension Benefit Plans

Up to now, this discussion has omitted any reference to police and fire pension plans. However, it is important to devote some attention to these plans because of their rich benefits and high cost.

Usually police and firemen are permitted to retire at early ages and after short work careers. Some plans simply require that police and firemen serve for 20 or 25 years, after which time they are eligible for 50 percent or more of their final salary. Other plans may also attach an age minimum, though the age is usually below that required for other employees in the jurisdiction.

Although equity issues between public and private employees could be raised in connection with police and fire pensions, the more immediate issue involves the high cost of these pensions — it is not unusual for such pensions to cost a jurisdiction 40 to 50 percent of police and fire payroll expenditures. In view of the high costs, it would seem appropriate for public officials to review their jurisdiction's police and fire pension plans and to determine whether the conventional rationale for the plans' rich benefits is appropriate in the context of their community.<sup>8</sup> Among the issues to be considered:

- Are there sound reasons for encouraging police and firefighters to retire at ages when most employees have yet to reach the peak of their careers?
- Are there differences between police work and firefighting in the inner city and in the suburb and rural village that justify drastically dissimilar pension arrangements?
- If there are valid reasons for not having police and firefighters who are in their late forties and fifties on

<sup>7</sup>See Edward H. Friend, "Hidden Bombshells in Cost-of-Living Adjusted Pension Benefits and Postretirement Health and Welfare Plans," *Annual Conference Proceedings of the International Foundation of Employee Benefit Plans* (1974), pp. 92-99.

<sup>8</sup>See Tilove, *Public Employee Pension Funds*, pp. 234-237; and Edward H. Friend, "An Approach to the Rising Costs of Police and Fire Pension Systems," in *National League of Cities et al., Pensions for Policemen and Firemen*, LMRS Special Report, 1974.

standard patrol duty and manning the firehouses, is it most economical to give them a pension and send them on their way?

- Are the comparatively generous police and fire pensions in a particular community just another form of compensation for hazardous duty and physically taxing work? If this is the case, is there any reason why the compensation should not be provided up front as salary?

## FINANCING STATE AND LOCAL GOVERNMENT RETIREMENT SYSTEMS<sup>9</sup>

### Pay-As-You-Go vs. Actuarial Funding

The retirement benefit component of employee compensation costs is unique among the various elements that make up a jurisdiction's current operating expenditures. The uniqueness results from the deferred nature of the obligations or liabilities being accrued by the employer. Employees accrue claims to benefits (sometimes absolute and sometimes conditional on the event taking place) gradually throughout their working careers, but they do not begin collecting them until sometime after their careers have ended.

Thus, it is possible for an employer to avoid making any *expenditure* for an employee's accruing retirement benefits until the benefit payments begin. If this procedure, known as pay-as-you-go, is followed from the inception of a retirement plan, it would distort cost allocations over time (no costs show up in the annual operating budget until someone retires, is disabled, or otherwise becomes eligible to collect benefits) and set the stage for sudden sharp increases in operating costs when the first large wave of employees reaches retirement age.

Although deliberate and formal pay-as-you-go arrangements are thought to be rare now, at least for the major state and local government retirement systems, many systems fall victim to what are in effect modified versions of pay-as-you-go. The scenario has many variations but a general pattern can be described.

<sup>9</sup>Excellent summaries of the basics of actuarial funding are found in Bleakney, *Retirement Systems for Public Employees* and Tilove, *Public Employee Pension Funds*. A more technical discussion appears in Dan M. McGill, *Fundamentals of Private Pensions*, 3rd ed. (Homewood: Richard D. Irwin, Inc. for the Pension Research Council, 1975).

## The Genesis of Underfunding in a Nominally Full-Funded System

Assume that a jurisdiction agrees to provide a pension plan for employees whose average age is well below the earliest age for retirement. The plan is a standard defined benefit plan where annual retirement benefits are the product of some percentage of an employee's final average salary and his years of service, with service prior to plan inception to be counted. At the outset, the jurisdiction annually contributes into a fund amounts equal to the present value of the liabilities estimated to have accrued during the year. In addition, it makes an annual contribution to amortize the liabilities — the unfunded accrued liabilities — attributable to the initial members having been granted credit for service years prior to plan inception. During the plan's early years, few employees retire, contributions accumulate rapidly, and the total fund is further enhanced because the surplus contributions are invested.

However, in time the jurisdiction's fiscal situation deteriorates and its budget threatens to become unbalanced. The drain on the pension fund has grown as more employees have reached retirement age, but accumulated reserves remain well in excess of benefit payments. So it is decided to skip this year's pension contribution or at least to reduce it below the amount that reflects the present value of pension liabilities accrued this year. The community has departed from its pension funding plan, unfunded accrued liabilities rise, and the pension contribution (or, rather, its omission) has become the budget-balancing mechanism.

It may be possible to continue pension underfunding for several years without any adverse effects being detected. Retirement system reserves may remain adequate to cover all benefit payments due; indeed, reserves may actually continue to grow because some contributions are still flowing in (perhaps from active employee members) and investment returns are being realized. Someone may even suggest that further accumulation of retirement system reserves is inappropriate in a period of budgetary stress and rising taxes, and it may be decided to further reduce the government's contribution for the still growing employee pension liabilities. (Or, in a variant of this scenario, the growing reserves of the pension fund may be taken as *prima facie* evidence that the community can afford to grant additional benefit improvements without affecting the current operating budget.)

Usually, the more enlightened officials will sense that something is not quite right, but the subtleties

of the situation may be more than they can convey to others. Alternatively, there may be no dispute about the undesirability of the practice, and all may agree that the community will return to its original funding plan when the community's financial situation returns to "normal." Unfortunately, normality in fiscal affairs usually means more demands on the fisc than it can accommodate. Thus, those items that are most easily deferred continue to be deferred. If pension costs become a regular deferrable, the jurisdiction may discover one day that it has worked itself into a pay-as-you-go arrangement.

## Fundamentals of Actuarial Funding

The case against pay-as-you-go, whether *de jure* or *de facto*, is compelling. (If one remains unpersuaded, it would be well to review the situation in Massachusetts or Washington, D.C. — to name two places that are currently facing major crises because of their long use of pay-as-you-go.) Or, to state the matter positively, the canons of sound fiscal management make actuarial funding essential.

*Actuarial funding* refers to a procedure where the estimated cost — *the actuarial present value* — of pension benefits accruing to active employees is systematically paid by the employer into a fund (perhaps with a share paid in by the employee as well). In turn, the retirement fund makes payments to retirees and invests surplus funds.

The *actuarial* in actuarial funding reflects the fact that the exact cost of an employee's retirement benefits cannot be known with certainty until he dies, quits, or otherwise loses eligibility for benefits. Hence, costs of pension benefits that are to be allocated or attributed to each year of an employee's work career must be estimated on the basis of *actuarial assumptions* that reflect the actuary's (and others') best guesses about the probabilities that a variety of contingencies will occur. Among the required actuarial assumptions are: whether and when the employee will quit; whether and when he will retire; whether and when he will become disabled; the age when he will die; his career salary progression; and the rate of interest earned on invested funds.

At the inception of a pension plan or at a time when a benefit improvement is being contemplated, an actuary — equipped with a set of actuarial assumptions and an actuarial cost method — can estimate the cost of the benefits and allocate that cost among the years during which each plan member will be accruing benefit claims. But, based as they are on assumptions about future events, actuarial cost es-

timates are never precisely correct and must be revised from time to time as experience unfolds.

## The Inexact Nature of Actuarial Assumptions

Although there are better and worse actuarial assumptions in terms of the quality of the analysis and data used to derive them, even the best actuaries cannot predict future events with certainty. Thus, actuarial assumptions have to be monitored against unfolding experience and modified when they are found to depart substantially and consistently. When a new assumption about a relevant event replaces an old assumption, the cost estimate for a particular pension plan and set of participants is likely to change. As such, these changes are the inevitable product of uncertainty about the future and not a weakness of the general procedure.

Barring major and frequent improvements in the pension plan, these inevitable cost adjustments that result from changed actuarial assumptions should not be large enough to have a major impact on a jurisdiction's annual budget — if the unfolding experience is monitored closely. But if there are major benefit improvements or if actuarial assumptions are too liberal (i.e., financially more favorable than actual experience), the actuary's *plan valuation* or *valuation of liabilities* will reveal an increase in accrued liabilities for which the funding plan has made no provision. When this occurs, contributions will have to be increased if the jurisdiction is to continue funding (making provision for) liabilities at the rate contemplated when the funding plan is adopted.

## The Measurement of Pension Plan Liabilities

The nuances of pension plan liability measurement are widely misunderstood and often unrecognized by nonspecialists. They lead to a great deal of confusion about a retirement system's condition and about the fiscal implications for the governmental unit responsible for meeting the liabilities. However, a mastery of the basics of liability measurement is worth the effort to anyone concerned with understanding the fiscal condition of a retirement system.

The first essential point is that liability growth is what an expanding retirement system is all about. An employee is added to the jurisdiction's work force and immediately begins accruing retirement benefits which are conceptually, if not always legally, his assets. The concomitant of this asset creation process is a liability creation process affecting the

employer. An employee's pension assets are his employer's pension liabilities. Assuming the governmental unit recognized the full cost implications when it agreed to the pension plan and determined that it could afford to meet the cost, the growth of pension liabilities should not be a cause for alarm. If an appropriate funding plan has been adopted, the employer's annual contributions to the retirement system will assure the availability of sufficient funds to meet the full pension liability owed to the employee. In effect then (and with some oversimplification), a fund is built up during an employee's working years and the value of the fund at any moment is equal to the present value of the liabilities accrued by the employer on behalf of the employee.

As a practical matter, almost every plan will have some *unfunded accrued liabilities* (i.e., liabilities for which there are as yet no assets) at various points in its history. For example, when a pension plan is launched, it is customary to make the benefits retroactive for service prior to plan inception. Hence, there will immediately be an unfunded accrued liability that must eventually be provided for. But since not all of the employees on the payroll at the plan's inception will retire immediately, full funding of the initial unfunded accrued liability does not have to occur at once. (Indeed, to ensure equity between generations of taxpayers might require that some portion of the initial liability be borne by future taxpayers.) Rather, a sound funding plan will include provision for amortizing the unfunded accrued liability over several years in much the same way that a person pays off a mortgage on a home. If all unfunded accrued liabilities are ever totally amortized, the pension plan is described as *fully funded*.

## Measures of Funding Progress

While the notion of full funding is valuable as an attribute to distinguish the exceptionally well-financed pension system, its operational utility is limited because there are good, or at least acceptable, reasons for the existence of unfunded accrued liabilities. All of which suggests the need for some other measures or techniques to distinguish systems in trouble from those following sound funding plans.

One such measure is the *funded ratio* — the ratio of a pension plan's assets to its accrued liabilities. Obviously, a fully funded plan would have a ratio of 1. But what can be concluded about a plan whose ratio is  $3/4$ ?  $1/2$ ?  $0$ ? One generalization is that a funded ratio within striking distance of 1 indicates that the plan has been soundly financed so far. Predictably

then, warning bells should go off if any but a brand new plan has a ratio close to 0. This is not to say that calamity is imminent. Nevertheless, a ratio indicating little or no funding progress is a signal that the situation should be reviewed carefully, because a system without assets and no immediate prospect for having any is equivalent to a "pay-as-you-go" operation.

Few other generalizations about a plan's condition can be made on the basis of no more than the funded ratio for a single year. The careful analyst will want to look at the ratio's trend. If examination of the trend reveals a history of increasing ratios and few instances of declines, the system is probably being soundly financed. Conversely, there would be grounds for concern if the ratio has deteriorated steadily during recent years. Obviously then, it must be recognized that retirement systems with identical funded ratios may not have equally favorable (or unfavorable) financial prospects.

A variation on the funded ratio technique involves comparing a system's assets with the several components that comprise accrued liabilities. In effect, this approach distributes assets among claimants: current retirees and other beneficiaries, active and former members with vested rights to benefits, and active employees with accrued but not yet vested rights. Since the sum of the total claims of these groups equals the accrued liability, a system that is fully funded would have assets in an amount sufficient to cover all of the claims. Consequently, the conclusions that can be reached by this approach are not unlike those that can be inferred when funded ratios are studied. The special value of this approach is that it provides more refined information, and it may be helpful to think of funding in terms of accumulating assets for identifiable groups of claimants. Here again, however, the technique only relates one kind of information to another; the job of drawing conclusions remains for the analyst.

The typical retirement system and its actuaries and accountants could do a great deal more in providing information about funding progress in a form that is meaningful to the nonprofessional. Many systems' annual financial reports are devoid of the data required to perform analyses like those just described. Some systems officials and staff actuaries — but probably not consulting actuaries — will argue that computation of accrued liability data involves a needless expense because their actuarial funding technique does not require such information in order to develop contribution rates. Such reasoning is feeble and should be treated accordingly. Indeed, the actuarial and accounting professions would per-



form a valuable public service if they promulgated a model set of financial and actuarial reports that contained the variety of data described here.

A few systems produce (at least for internal purposes) long-term projections of pension costs, system cash flows, accrued liabilities, and the like. Some systems even perform sensitivity analyses on these important variables by introducing alternative values for volatile actuarial assumptions (e.g., salaries, rate of interest) and measuring the effects on system costs, cash flow, assets, and liabilities. When properly used, the projections are enormously valuable to system administrators and jurisdiction finance officials in developing and modifying their financial planning models. Such projections show in tangible form the *future* fiscal consequences of a great many contingencies—some of which are controllable. Unfortunately, there is little evidence that these techniques are used by many systems.

## Actuarial Funding Methods

Reference has been made to the desirability of allocating, over the period of each employee's service, the total cost of providing his pension benefits. This process produces a cost estimate for each year's accruing benefit liability that should be charged against the jurisdiction's general budget. By appropriating for these costs as they accrue, assets can be accumulated by the time an employee retires that are equal to the then-present value of all benefits he will collect. If this is done and if the accumulated assets are managed safely,<sup>10</sup> the employee can be confident that the benefits will be paid.

Despite its conceptual clarity, the allocation process presents some difficulties that make it confusing to the nonspecialist. One difficulty is that there is no universally recognized "best" or "correct" actuarial funding or cost method, although certain methods are inappropriate for a given type of pension plan. By substituting one appropriate funding method for another, the actuary can produce dramatically different costs for any given year or series of years. Equally dramatic changes in the rate of asset accumulation can also result. Similarly, the discretion permitted in adopting an actuarial cost method can mean that the reported annual costs of two pension

plans will not be identical, even though they are identical in every material way.

As a further complication, the same funding method can produce different costs, depending on the duration over which accrued liabilities are being funded or amortized—that is if the liabilities are being amortized at all. The details behind these complications are sufficiently involved that their exegesis is best left to an actuarial treatise. However, their flavor can be sensed by looking briefly at two funding methods in wide use by state and local government systems.

*Entry-age normal* funding involves an annual contribution (cost) consisting of a *normal cost* and a *supplemental cost*. Normal cost is the level amount or percentage of an employee's salary that would be required yearly during an employee's entire work career. If normal cost were actually contributed each year beginning with the year of entry, and if no unfunded accrued liabilities (supplemental liabilities) were created along the way, the present value of accumulated contributions at the time of retirement would equal the actuarial present value of all benefits owed to the retiree. In other words, the employee's pension would be fully funded when he retired. A corollary of entry-age normal's leveling of costs is that contributions in the early years of an employee's career are higher than the accruing value of his benefits and lower than accruing values in the years near the age of retirement.

Since unfunded supplemental or accrued liabilities will almost certainly be created at various points during a plan's operation, a supplemental cost contribution may be made to amortize them. Unfortunately, actuaries don't always agree on the proper period for amortizing liabilities. Some argue that the period should not be longer than the average remaining work life of current employees. Others argue that the period can be 40 to 50 years or longer. Some even see no reason to amortize at all. In any event, the fact that the amortization period can vary according to who makes the choice explains, in large part, why different actuaries using the same actuarial cost method can arrive at widely different cost estimates for the same plan.

Although a close relative of entry-age normal funding, *aggregate funding* requires an annual contribution, measured as a percentage of payroll, that is the ratio of the actuarial present value of all unfunded future benefits to be collected by current employees and retirees to the actuarial present value of all future salaries of the same group. Initial contributions required with aggregate funding will be higher than those required with the usual approach to entry-age

<sup>10</sup>The risk that assets won't be managed prudently is a matter that deserves the close attention of policymakers. Such attention is especially important now that governments (e.g., New York State and City) have rediscovered the "virtues" of borrowing from their own retirement systems. See Louis M. Kohlmeier, *Conflicts of Interest: State and Local Pension Fund Asset Management*, Report to the Twentieth Century Fund, 1976.

normal funding or with practically every other method of funding. This is because aggregate funding effectively allocates the costs connected with a group's pension benefits over its average remaining work life. If no subsequent accrued liabilities are created, contributions as a percentage of payroll will decline over time, a result of the rapidity with which this approach builds up assets.

To reiterate, alternative ways exist by which the costs of a pension plan can be estimated and distributed over time. This means that there can be a faster or slower rate of asset accumulation, depending on the actuarial funding method selected. And since asset accumulation is what funding is about, it is important that the actuarial funding method be selected with some predetermined funding objectives in mind.

## Criteria for Choosing a Funding Plan

Some may find it hard to accept the idea that funding objectives are judgmental matters, arguing instead that the proper objective is axiomatic — a retirement system should be fully funded. However, as this paper has demonstrated, even the notion of full funding is not without ambiguities. Widely used and quite respectable funding methods can yield very different estimates of pension liabilities and costs. Similarly, a single-funding method can yield differing estimates, depending on the amortization period selected and the actuarial assumptions used, and not even the expert may be able to say which estimate is the correct one. Under these circumstances, one is well-advised not to make full funding the single guiding standard.

A related source of difficulty in setting funding objectives is the troublesome matter of paying off supplemental liabilities such as those incurred when a pension plan is launched or when benefits are enriched. To require immediate funding might mean that a community could never afford a respectable pension plan. Additionally, there is reason to question whether the pension plan's entire "start-up" costs should be borne by only one set of taxpayers. Perhaps it is fairer to spread the cost between present and future taxpayers.

Within limits, which are also open to dispute, communities (or states only?) should decide how rapidly to provide for their pension liabilities. Some may prefer to err on the conservative side and to accumulate assets rapidly, perhaps because present conditions are good and it seems prudent to bear the cost burden while it can be handled with comparative ease. Alternatively, the choice to fund rapidly may be

deemed proper because the jurisdiction has a record of intermittent pension difficulties, difficulties that were attributable to inadequate attention to the burden of pension benefits. In this latter case, rapid funding serves as a form of fiscal discipline and a barrier to excessive pension improvements.

Another advantage of a method that accumulates assets rapidly is that it provides a cushion and therefore the flexibility necessary to defer a contribution safely if the community is hit by a severe but temporary economic downturn. But this advantage may disappear if every year's budget crisis is deemed a qualifying emergency.

Having agreed in principle on the desirability of funding in a fiscally responsible fashion, a choice must be made among several funding methods that fit the general criterion. Hence, other criteria must be established. One that might meet with the approval of legislators and finance officials who do not welcome surprises when they are trying to manage the annual budget-balancing hurdle is that the method should produce pension costs that remain a constant percentage of payroll.

Some actuaries and other specialists argue that it is not necessary for all jurisdictions to set funding objectives as if they are going out of business. If a community has reasonable prospects for long-term economic growth, it might decide to pay only normal costs and interest on unfunded accrued liabilities. Unfunded liabilities themselves would remain unfunded into perpetuity, just as the jurisdiction itself is expected to have perpetual life. However, even if the jurisdiction does not become a ghost town, it is almost certainly going to stop growing someday, its workforce will mature, and it could face the need to make sharp increases in contributions to forestall a negative cash flow (i.e., benefit payments in excess of retirement system income). Thus, despite its superficial soundness, *interest-only funding* carries its share of risks.

Recognizing the potential drawbacks of interest-only funding while still feeling that some governmental units ought not to build up assets as if every year might be their last, some suggest any one of a number of methods that provide for partial amortization of unfunded accrued liabilities. In short, they consider full funding an unnecessarily demanding goal.

A final criterion, that allows for no exceptions, requires a funding method that yields accurate cost estimates for proposed benefit changes. (This criterion is equally apt as a standard for selecting actuarial assumptions.) Some funding methods that have

their attractions for other reasons (e.g., interest-only funding) do not always lend themselves well to this criterion.

## A CONCLUDING NOTE ON THE NEED FOR REGULATION OF STATE AND LOCAL RETIREMENT SYSTEMS

Several years ago, in the course of examining the financial conditions of major cities, the Advisory Commission on Intergovernmental Relations (ACIR) determined "that underfunded, locally administered retirement systems pose an emerging threat to the financial health of local governments."<sup>11</sup> The ACIR also found the costs of most cities' retirement systems to be rising rapidly and sharply for three reasons: large increases in salaries, large improvements in pension benefits, and a trend toward retirements at earlier ages.

Especially notable among the ACIR's other conclusions were the "serious lack of information about the solvency of locally administered retirement systems . . ." and "the inherent local political problems in providing adequate funding from either employee or city contributions. . . ."<sup>12</sup> After considering the full implications of its findings, the ACIR made two very strong recommendations. First, it suggested that states "require an accurate and current valuation of all local systems" and, second, that states then "require realistic funding based on such valuation."<sup>13</sup> Moreover, the ACIR recommended that the best solution to the problem might be absorbing local systems into state-operated systems—though it did not make a formal recommendation to this effect.

There is little evidence that many states have heeded the ACIR despite mounting evidence that its warnings were well-founded. This inaction is all the more surprising since there is the very real threat that Congress is prepared to make regulation and supervision of state and local pension plans a federal responsibility.<sup>14</sup>

And though subnational governments speak with one voice in opposing federal intervention and in arguing that public employee pension problems are better handled by themselves, they have failed to take on even the fundamental task of finding out how bad the problems are. So, now, the federal government is conducting its own investigation.<sup>15</sup>

With the record to date as best evidence, one wonders whether we dare leave the job of dealing with "the public employee pension problem" to state and local governments.

<sup>11</sup>Advisory Commission on Intergovernmental Relations, *City Financial Emergencies: The Intergovernmental Dimension* (Washington: Government Printing Office, 1973), p. 6.

<sup>12</sup>*Ibid.*

<sup>13</sup>*Ibid.*, p. 7.

<sup>14</sup>H.R. 13685 (May 11, 1976) would "provide for pension reform for state and local public service employees."

<sup>15</sup>The initial findings are contained in U.S., Congress, House, Committee on Education and Labor, *Interim Report of Activities of the Pension Task Force of the Subcommittee on Labor Standards*, 94th Cong., 2d sess., March 1976.

