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PUBLIC/MUNICIPAL PENSION PLAN ISSUES

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1. How do public/municipal plans differ from corporate plans? How should they differ?

2. Are traditional closed-group, reserve-accumulating valuation methods appropriate?

3. What would be the impact of universal Social Security coverage?

4. Is appropriate actuarial advice being given to public/municipal plan boards?

MR. PAUL C. HART: Anyone looking for background information in the public plan area should obtain a copy of Pensions for Public Employees, a pamphlet published by the National Planning Association. It is an exceptionally well done analysis of what the issues are in the public plan area. There have been several other publications within the last year subsequent to this pamphlet, the latest of which is the Comptroller General's report entitled Need for Overall Policy and Coordinated Management of Federal Retirement Systems. This report addresses some long range funding and cost questions in the public sector and is rather interesting. There is a great deal of difference among public plans themselves, so it is difficult to generalize and say "this is an average public plan." However, public plans do have some characteristics in common which allow for comparisons with corporate plans.

One of the characteristics which makes public plans different from corporate plans is the number of parties involved in the plan process. In recent years the public plan process has involved employees, labor union representatives, retirees, beneficiaries, taxpayers, and both legislative and executive elected officials. This is quite different from the typical unilateral corporate plan, where plan benefits and funding policy are designed by corporate executives and approved by the corporate board with very little board involvement. In the typical unilateral corporate plan the employees, retirees, and beneficiaries have little input regarding the structure of the plan, plan benefits, and funding policy. In public plans the voting power of those groups is a significant influence on the structure of the plan, as well as many other issues in the public sector.

The legal basis of public plans is different from that of most corporate plans. Most public plans are statutory, meaning the entire plan is written into the statutes of the state, city, county, etc. In those areas where changing the statutes requires a popular vote any attempt to change the plan would require going back to the voters and obtaining their approval. I have worked with one public retirement system which has remained virtually unchanged since 1948 when the statute was passed. There are some real design problems within this system, yet nobody is willing to put those problems in front of the voters because of concern of what may happen to the entire system. This situation is entirely different from that of the typical corporate plan.

Public plans are not subject to Internal Revenue Service (IRS) scrutiny, except in those cases where the IRS attempted to exercise jurisdiction over them in some areas several years ago. Public plans are also not subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), except where they have elected to be subject to those provisions.

In many cases the demographics of public plans are quite different from those of corporate plans. In one large public plan I worked with I found the average employee retired between the ages of 62 and 63 with 13 years of service. This translates to an average entry age of about fifty for those employees who make it to retirement. It is reasonable to assume that many of those employees were entering their second or third career at the time they entered the plan. Younger employees entering the plan showed very high turnover in the first ten to twenty years of employment, indicating that few of the younger employees would remain to age 62 or 63 and draw retirement benefits from the plan. However, police and fire plans are exactly the opposite since they usually show a relatively homogeneous entry age of between 25 and 27 and very little turnover, with most employees retiring at about the same age.

Another area which is now significantly different between public plans and corporate plans is the area of contributions. Almost all public plans mandate that employees contribute, but it is highly unusual anymore to find plans in the private sector requiring employee contributions. In most of the public plans I have looked at, employee contributions covered about one-third of the total cost.

There is far greater employee coverage in the public sector than in the private sector; something in excess of 90% of all non-federal public employees are covered by some type of pension plan. The percentage is considerably lower for employees in the private sector. There are also provisions in many state plans stipulating that the benefits of a participant cannot be reduced. This applies not only to the participant's accrued benefit but also to the promise of future benefits. Any reductions in plan benefits can only affect employees who become participants after the effective date of the change.

Some public plans have special benefits for certain groups. For example, in a number of state systems legislators have a special arrangement whereby they receive higher benefits than the other employees, when benefits are expressed as a percentage of salary. It is virtually impossible to do this in the private sector because of the anti-discrimination rules.

Benefit design in the public sector is almost always a piecemeal process. The benefit design of a given plan may have been a conscientious, thorough design at one point, but legislative changes over time would quite often be made on the basis of political clout rather than sound plan design.

Benefit levels are typically higher in the public sector than in the private sector and the retirement ages have generally been lower, although a noticeable trend in the private sector has been to at least allow earlier retirements with full benefits. Another distinction in the public sector has been the use of cost-of-living and ad-hoc increases to retirees. These mechanisms have commonly been found in public plans for some time but are just recently gaining impetus in the private sector.

It is also common for public plans to have a provision which I call "contingent vesting"; this means that terminating employees are vested in the benefits attributable to employer contributions only if they leave their own money in the system. Many corporate plans had provisions similar to this prior to 1974 but these were outlawed by ERISA.

Not only are the demographics different between public and corporate plans in terms of age at entry and retirement age, but I have noticed significantly lower mortality rates in the public plans that I deal with in my part of the country than in comparable corporate plans, and significantly higher disability rates. For one large system I had studied the mortality in the mid-seventies and found rates among the active and retired groups that were about one-half of those found in some large corporate plans. The reduction in mortality rates for the same public plan has been in the neighborhood of 20% over the last five years. Although the same corporate plans have shown improvements in mortality over this period, there is still a very wide gap between the rates of the two groups. I am not exactly sure what the difference is but there definitely is a difference between public plans and corporate plans in the area of mortality.

In the public plan valuation process there isn't any reason to use assumptions different from the kinds of assumptions one would use for a private sector plan. You are attempting to obtain some estimate of what the real cost of the plan is. In my own practice I do not feel compelled to use more conservative or less conservative assumptions just because a plan is a public plan. In fact, it is much more important to be as realistic as possible in the public sector because of conflicting political views and conflict among the different parties involved in the plan process. By using assumptions which in the aggregate produce a reasonable funding level, but look ridiculous when viewed seperately, it is difficult to stand up and say "trust me, I'm your actuary." It is much easier to explain and defend the results when using assumptions which are realistic, as well as appropriate.

The ability to levy taxes should not have any more bearing on the valuation of assets for a public plan than on some of the other aspects of the valuation process. However, in the public sector there is a great deal more flexibility than in the private sector. For example, one could use the method of discounting the value of a bond at the assumed interest rate to produce an actuarial value of that asset to current time; this method may not be appropriate or even possible for a private plan under ERISA.

MR. JAMES S. RUBIE, JR.: Many public retirement systems that I am familiar with not only have the actuarial method of valuing liabilities specified in the statutes but also specify the method for valuing assets. Frequently the assets have to be valued as if they were insurance company assets so flexibility is not very limited.

MR. HART: Another issue that is going to be important in the valuation of assets is the result of Financial Accounting Standards Statement No. 35. This will have a significant impact on public plans, many of whom have never reported market values.

MR. RUBIE: The topic which I am going to address is "are traditional closed-group, reserve-accumulating valuation methods appropriate?". A better way to restate this question is "are open-group, non-reserve-accumulating valuation methods appropriate?", since actuaries are more apt to question this approach than the traditional approach. In order to answer either question it is first necessary to establish some criteria by which to judge the appropriateness of a funding approach for public plans. Before examining specific criteria I might interject that the answer to both questions is yes, sometimes. In fact, I have found the range and variety of funding approaches used in the public sector to be far greater than for the private sector.

The first and most important criteria is equity. Public retirement systems are primarily funded by tax revenues and employee contributions. As used here, equity does not refer to the relationship between the employee contributions and public money being used to finance the system, but rather to the relationship between the benefits being accrued and the money being contributed. As a minimum the funding method should provide that the cost of benefits being accrued today should be funded today, because it is not equitable for the future generations of taxpayers to provide benefits for employees today and defer the costs of those benefits to the future. Today, many public systems are faced with significant liabilities for benefits earned, but not funded, in past years.

Another criteria is there should always be sufficient funds on hand to cover the benefit payments and any expenses. Those favoring the traditional closed-group, reserve-accumulating approaches may feel this criteria is superfluous, but it is not. To illustrate: several years ago I was asked to perform a valuation for a public plan which had shortly before switched from a pay-as-you-go cost method to an entry age normal method. My predecessor had apparently assumed that an advance funding method such as the entry age normal method was preferrable over pay-as-you-go funding. However, the large number of retirees relative to the number of active employees indicated the possibility of cash flow problems in the future. After performing a cash flow analysis it was found that even under optimistic assumptions disbursements could be expected to exceed income within a ten to fifteen year period. Therefore, for a long term funding program the entry age normal method proved to be inadequate. This is certainly an unusual situation, but it does illustrate that even traditional advance funding methods may prove to be inadequate and inappropriate in some circumstances.

Another important criteria is the taxing power of the public entity sponsoring the plan. A few years ago it was not uncommon to hear arguments in favor of very minimal levels of funding for public plans on the theory that the plan sponsors possessed unlimited taxing power. One does not hear that argument much anymore, except when discussing the federal Social Security System.

A public entity's taxing power tends to be proportional to its size. In general, the smaller the entity the more limited is its ability to tax. For example, in some states municipal pension plans must be financed by means of a specific property tax. State laws may impose a maximum tax level; even if it doesn't, a municipality will usually be required to go to the voters whenever it wants to increase the tax. Today, any attempts to increase taxes are met with increasing resistance by voters. By comparison, states are generally free to fund their pension plans using any revenues they can obtain.

Related to the criteria of the plan sponsor's taxing power is the degree of permanence in the benefits. This was referred to earlier by Paul wherein some states the only measure the public plan sponsor can take to reduce benefits is to reduce them for future employees. Thus, for public plans in some areas pension benefits are more permanent than for the typical corporate plan. Therefore, the more limited the plan sponsor's taxing power and the more permanent the plan's benefits then the greater is the need for advance funding of benefits.

The final criteria which I am proposing may technically not be criteria. It is the ability of the plan sponsor to meet the funding requirements recommended by the actuary. The actuary has an obligation to the employees and taxpayers to recommend an appropriate funding level; this responsibility is independent of the plan sponsor's ability to meet that requirement. If actual income is insufficent to meet the funding requirements then the plan has a problem; this problem will not be solved by pretending it does not exist. In recent years a number of states have enacted laws requiring that an actuarial cost study be performed prior to the adoption of any change in benefits in a public plan. The laws require that the actuarial cost study report include a disclosure statement by the actuary as to the impact of the change on the actuarial solvency of the plan. Most of those laws do not require that additional funding actually be provided, but do prohibit the change in benefits from becoming effective until proper disclosure of the costs has been made. This implies that state legislatures feel a plan sponsor's ability to meet the funding requirements is not a criteria to be used in determining the funding requirements.

Let me recap the criteria described thus far. First, the funding method chosen should produce equitable results; that is, as a minimum it should provide that funding be sufficient to pay for benefits as they accrue. Second, the funding method should recognize future cash flow needs to avoid producing a pattern of contributions which would cause the fund to become insufficient to meet the benefit payout requirements at any point in the future. Third, the funding method should take into account the permanent nature of the plan and the plan sponsor's power to tax. Finally, the funding method should be independent of the plan sponsor's ability to fund the plan. Application of these criteria lead to the conclusion that an appropriate funding method for most public plans is one which provides for some degree of advance funding.

What about open-group methods versus closed-group methods? To define what is meant by an open-group method; it is one in which future new entrants are taken into account. If an open-group method is used to establish the recommended level of funding then the appropriateness of the results should be judged by the criteria just described. Too often it has appeared that open-group methods have been used to produce lower levels of contributions. This can occur since the contributions by and for new entrants can receive relatively greater weight than benefit payments to new entrants, as contributions are being discounted at a lesser rate than the benefits to be paid in the distant future. On the other hand, open-group methods can be very useful, as in the example I gave where cash flow projections were made on both a closed-group and an open-group basis. So, both open-group and closed-group reserve-accumulating valuation methods may be appropriate for determining funding levels for public plans.

Currently there is much variation in how the unfunded accrued liability (UAL) is funded. One less common approach I have seen is to pay interest on the UAL at the valuation interest rate plus 1%. This method may be preferable over a method in which amortization schedules are established with payments ultimately stopping at some point, at which time the contribution rate would theoretically drop.

Sometimes amortizing the UAL as a level percentage of payroll works well. However, if the valuation is being done on an open-group basis using a very large salary increase assumption, a situation can result in which payments toward the UAL are less than interest on the UAL. In these cases the UAL increases, sometimes for a very long period of time. Only towards the end of the amortization period is any principal paid off. This amounts to an inter-generational transfer of the UAL, which does not seem equitable.

MR. DONALD M. OVERHOLSER: The rationale usually given for amortizing the UAL as a level percentage of payroll is that, although the UAL is increasing since payments are not being made at least equal to interest on the UAL, as a percentage of payroll the UAL would be declining every year because the increase in payroll will be greater than the increase in the UAL. The approach is reasonable if the inflation factors are reflected in plan liabilities like they are in the salary increase assumption.

In the public area actuaries are moving towards the use of explicit assumptions. Where the systems are somewhat automatically indexed the interest rate, salary increase, and inflation assumptions can all be increased and still produce virtually the same normal cost rate, accrued liability, and UAL that would have resulted from using the old assumptions. However, if the UAL is amortized as a standard type mortgage payment in level dollars, the use of the higher interest rate would result in a larger UAL contribution than would have been obtained using the lower interest rate. Situations such as this may force actuaries to employ a method of amortizing the UAL as an increasing percentage of payroll.

I would now like to begin with the topic "what would be the impact of universal Social Security coverage?". I can answer that question with confidence; there would be a great deal of acrimony and bitterness, and there would be many lawsuits lasting quite a few years. When Congress defeated the attempts to mandate universal Social Security coverage in 1977, they decided instead to establish a study group whose purpose it would be to examine all phases of mandatory coverage and how it might be undertaken. Thus, the Universal Social Security Coverage Study Group was formed.

The study group's four-fold responsibility was (1) to review the extent of Social Security coverage in the governmental and non-profit sector, (2) to examine the problems created from the lack of mandatory coverage, (3) to explore methods to remedy these problems, and (4) to comment on the feasibility and desirability of various approaches that might be used to either mandate universal coverage or take partial steps to fill some of the gaps. The Actuarial Education Research Fund (AERF) assisted the study group and was primarily responsible in determining how state and local public retirement systems would be affected. I would like to very generally touch upon the results of the study group's report which was recently submitted.

The study group found three basic problems associated with lack of coverage.

The first problem is that there are many benefit gaps and protection gaps for persons who enter and leave covered employment, such as those who transfer from civil service to private industry and back.

The second problem is that of "windfall" benefits. The Social Security benefit formula provides higher benefits for persons with lower career wages, when the benefit is expressed as a percentage of wages. Therefore, persons having less than a full career is covered employment reap a substantial benefit relative to the contributions they have made.

The third problem is that it is not equitable to allow one privileged group of society not to participate in a redistributive scheme of transferring income, essentially from the highly paid to the lower paid, but also between generations as well.

The study group indicated that the coverage problems could be eliminated by providing for universal coverage, but also suggested alternatives, such as revising the Social Security benefit formula to reduce windfall benefits and establishing minimum benefit standards for public plans. With respect to mandatory coverage the study group recognized approaches involving new entrants only, new entrants and some active employees not yet eligible to retire, and new entrants and all active employees not yet eligible to retire.

Mandatory coverage is where the big problem exists. Involved in this very complicated problem are many legal issues and issues of equity in plan design. The AERF was brought in to determine what the effects would be if mandatory coverage did take place. They selected 25 systems which are presently not covered; for each system they designed a likely set of benefits intended to reproduce the present benefit structure. Using various types of benefit formulas they found they could pretty well duplicate existing benefits. The AERF then designed what they thought would be the most likely formula in the event of mandatory Social Security coverage. These formulas turned out to be almost always more generous. On the basis of these findings the study group concluded that mandatory Social Security coverage would be feasible, and in his cover letter the chairman seemed to indicate that it would also be desirable.

The AERF also calculated the cost increases associated with mandatory coverage and produce figures ranging from 5% of payroll to 10% of payroll. These increases would most likely be reflected in employer costs. This result was glossed over in about one-half of a page in the study group's report, which seemed almost exclusively concerned with benefits for employees rather than the resulting effects on employer costs.

With respect to mandatory coverage, my opinion is that it would be completely unjustifiable to cover only new entrants under Social Security. Almost everyone agrees that Social Security is a pure transfer program from the current working population to the current retired population. Under this type of mandatory coverage new active workers of present non-covered systems would commence making tax payments into Social Security, but would not draw benefits from Social Security for up to forty years, as these new active workers reach retirement age. The same principal holds true if mandatory coverage is extended to include other active workers. They would be contributing to Social Security, but would not receive retirement benefits from Social Security for some time. This situation is almost the exact opposite of what happens when entities withdraw from Social Security and leave their retired membership behind to draw Social Security benefits, but their active workers no longer pay Social Security taxes.

The concept that universal Social Security coverage should include the retired membership of present non-covered systems was touched upon briefly in the report, but was dismissed as being administratively unfeasible and unequitable. However, I believe that inclusion of the retired membership is the only approach that should be considered if there is to be any equity with respect to the non-covered groups. Inclusion of the retired membership would create some extremely complicated problems, and the Social Security System would probably realize windfalls from the other suggested methods in the area of 50 to 100 billion dollars. However, some of that money might well be spent to work out a more equitable solution to the problem.

MR. JOHN H. MILLER: Another problem is being able to redesign public systems already covered by Social Security to coordinate not only benefits but employee contributions as well. I see many systems where the benefits are redundant when Social Security benefits are taken into consideration, and the contributions that the employee is putting into the retirement system and Social Security are burdensome. In effect, he is mortgaging his present to pay for a large future benefit. The only system I have seen that attempts to coordinate benefits and contributions is in the state of Maryland, where they have a moving wage base every year with no contributions required up to this base.

MR. HART: Perhaps the best solution for those desiring universal coverage is to have some percentage of Social Security costs paid out of general revenues. Effectively all workers in the United States would therefore be paying towards the cost of Social Security and there would be more of an incentive for public employees presently not covered to get in voluntarily.

MR. OVERHOLSER: This was proposed in the report, as were other methods. I oppose using general revenues to support Social Security because if conceals costs.

MR. HART: The willingness of public employees to make contributions to the Social Security System in addition to their public plan is amazing. I have been involved in a few situations where I have actually proposed that a contributory system be changed to a non-contributory system, and the employees have been as admanately opposed to the change as the employers have. The employees felt that by making contributions to the system, they had more of a voice in the decisions concerning the system. I do not know how much longer that philosophy can last.

MR. OVERHOLSER: I would like to comment further on member contributions and the redesigning of benefit programs. The removal of employee contributions would seem to be a good device for those people who are trying to reform in the direction of smaller benefits. This was done in Maryland, where the tradeoff for lower benefits was the elimination of member contributions.

It is much more difficult to establish reasonable benefit structures for systems presently under Social Security than it would be for the new systems coming in. The systems that came in back in the fifties and sixties did so under very favorable circumstances. Systems were able to buy "back-service" in order to make members eligible for Social Security benefits, and the "restart" provisions in 1951 were a great inducement for public systems to come under the Social Security System, which many did. The problem is that prior to the time Social Security benefits were liberalized, public plans started using more generous benefit formulas. Substantial Social Security increases in the last several years has acted to further increase benefits. The result is that the benefit structure of some systems are now too generous, if Social Security benefits are taken into account.

Presently the benefits of the covered systems are, with few exceptions, considerably better than those of the non-covered systems. The non-covered systems are presently providing a total benefit that seems to be reasonable; if the Social Security benefit could somehow be carved out they could still achieve a total benefit that is not nearly as out of line as can be found in the covered systems.

MR. RUBIE: The final topic on the program is "is appropriate actuarial advise being given to public/municipal plan boards?". This topic was not assigned to anyone because we all agreed that we give appropriate advice to our clients and there are some people who do not give appropriate advice. However, one of the problems occasionally encountered by actuaries for public retirement systems is that they do not have control over the methods or assumptions. In these cases the method is usually specified in the law and the assumptions are adopted by some board. I have not yet been put in a situation where I have had to use a method or assumptions I felt were inappropriate, but I envision that situation arising. Don mentioned earlier that he was faced with that problem in one case and he issued a report on both basis' and was fired. That is the only alternative available sometimes.

MR. JAMES LAWS: My firm's policy is to do exactly what Don did. If it is our opinion that the assumptions are unrealistic we will offer two sets of costs, with one being based on what we consider to be realistic assumptions. Of course, as a practical matter we try to keep the realistic assumptions as close as possible to those picked by the trustees or directors.

MR. THOMAS F. CROCKER*: The California state legislature is about 80% through the process of amending the state laws to require that actuarial reports be based on the actuary's own best judgement regarding assumptions. If the current legislation continues, the actuary will also have to state in his report the differences that result from using his assumptions versus those specified by the governing body.

MR. RUBIE: Missouri law requires the actuary to offer an explanation should he use interest and salary increase assumptions which differ by more than 1%.

MS. KRYSTYNA H. UPSTILL: In one county in California the employee groups were trying to bargain for actuarial assumptions. They knew that increasing the interest assumption would lower plan costs, and felt that it was a bargaining possibility. However, the legal counsel put a stop to it. Has anyone else heard of something like this happening before?

MR. RUBIE: In the area where I operate, a public plan encountered a situation where a union group wanted to negotiate the assumptions because they felt they could get plan costs down and then increase benefits.

* Mr. Crocker, not a member of the Society, is associated with the California Public Employees Retirement System.