

**RECORD OF SOCIETY OF ACTUARIES  
1978 VOL. 4 NO. 3**

**PENSION PLAN DESIGN**

*Moderator: PAUL C. HART. Panelists: MARTIN STEMPEL, DARYLE G. JOHNSON,  
MICHAEL J. MAHONEY*

1. What is the impact of the 1977 Amendments to the Social Security Act on pension plan design?
2. What is the impact of the Administration's proposal in regard to integration of private plan benefits with Social Security benefits?
3. What is the impact of the requirement to eliminate compulsory retirement prior to age 70?
4. What is the impact of the U.S. Supreme Court decision in City of Los Angeles Department of Water and Power, et al. v. Manhart, et al.

MR. MARTIN STEMPEL: There were two types of problems that made it appear that the Social Security law had to be changed. First, there were short run funding deficiencies related to higher than anticipated inflation, unemployment rates and expenditures for disability benefits insurance. Second, and perhaps more serious was the fact that long range deficits were also projected resulting from two additional causes. First, the so-called technical flaw of the 1972 amendments in the automatic adjustment provisions which would cause future benefit levels to grow more rapidly than wages if wages and the cost of living continue to rise as now forecast. Secondly, as a result of the World War II baby boom and the decline in birth rates, the ratio of active workers to the number of beneficiaries would decline from the current ratio of 3 to 1 to about 2 to 1, causing benefit expenditures as a percentage of taxable payroll to increase greatly.

The 1977 Social Security law substantially improved but did not completely eliminate the unfavorable financial outlook for the System. In particular, there remains a long-range financing problem which will become immediate in the next century as the children of the post-war baby boom begin to reach age 65. It is estimated that the long-term deficit in the OASDI Program, the pension and disability benefits, will average 1.4% of covered payroll over the period 1977 to 2051. As a percentage the deficit may seem small but if translated into dollars, the deficit is astronomical. Substantial deficits are also expected in the hospital insurance program over the foreseeable future because of the rapid inflation of hospital costs. By the year 2025, total system expenditures will reach 24% of covered payroll, compared with projected tax income of only 15.3%.

The most significant change in the law affecting benefit design is the new decoupled benefit formula. The purpose of the change in formula was to eliminate the double indexing of benefits by both changes in average wages and cost of living so that successive generations of workers would not receive progressively higher and higher levels of retirement benefits in relation to pre-retirement earnings. This is considered to be a technical correction of the previous automatic adjustment provision so that those provisions will work as they were intended to work.

The effect of the change is to stabilize the replacement ratio that Social Security provides as a percentage of pre-retirement earnings. The Social Security Administration has published tables of projected benefits and replacement ratios under the amendments for persons retiring at age 65 through the year 2000. Proportions of earnings, benefits and replacement ratios are provided for three levels of earnings: a low level, average covered earnings in 1976 and earnings at maximum covered wages. These tables were projected according to the assumptions that average covered wages would increase by 5 3/4% and that the consumer price index would increase by 4% per year.

On this basis, the income replacement ratios under the new formula for workers retiring below the maximum wage base stabilizes within 10 years at levels of replacement about 10% lower than the levels in 1979. For low wage earners, persons earning \$4600 in 1976, the replacement ratio would drop from about 60% in 1979 to stabilize at about 54% of final earnings for persons in that category. For the average worker, who earned \$9266 in 1976, the replacement ratio decreases from about 47% to stabilize ultimately at about 42%. For the worker who is expected to always earn the maximum coverage wage, the replacement ratio decreases from about 35% to 23% and then rises to reflect the higher maximum earnings levels until it is ultimately stabilized at about 28%. The change in benefit formula is expected to eliminate about 1/2 of the deficit which had been projected over the next 75 years.

The second major change in the Social Security law was the ad hoc increases in the contribution and benefit base. The Congressional Conference Committee reached a compromise maintaining the parity in employer and employee tax bases but provided substantial increases in the maximum covered wages for years 1979 through 1982. The 1978 maximum remained at \$17,700 as computed under prior law but there were substantial increases of \$5,200 to the 1979 maximum of 22,900; somewhat smaller but still large increases were mandated to reach levels of \$25,900 for 1981 and \$29,700 for 1982. Of course, these mandated increases were substantially greater than the increases that would have resulted automatically under prior law. Under the old law, approximately 85% of the total payroll of persons in covered employment were subject to payroll taxation, whereas, after 1980, approximately 91% of total payroll will be covered. About one-half of the increases in tax income because of higher wage bases is required to provide higher benefits. The Social Security System estimated that approximately 15% of covered persons will be affected by the increased maximum wage bases.

The third major change in the law was to increase the tax rates. These increases were primarily to improve the soundness of the financing of the system but of course indirectly affect plan design because of the increased burdens put upon the employer sponsors of the plans. The increases in the tax rates will increase income to the Social Security system over the 10 year period 1978 through 1987 to about 1.9 trillion dollars, an increase of 227 billion dollars over the projected income under prior law, or 14%. Of course, the increase in taxes with respect to persons earning the maximum wage base rises much more substantially: from \$965 for 1977 to over \$3,000 in 1987, instead of about \$2,000 as projected under the old law. It is estimated that the number of persons effected by the maximum increase is less than 10% of those covered by Social Security. However, it is likely that these persons are the ones who will have the most input on the Congressional reconsideration of the increases in wage bases and taxes.

With this brief review of the changes in the Social Security program, let us go on to consider the implications on pension plan design. In general, there has been a well-publicized trend for integrated pension plans to use an offset approach rather than an excess plan approach. In a recently published study by Hay-Huggins of the plans of 500 major corporations, the ratio of offset to step-rate plans was two to one. A recent issue of the Actuary presented an analysis prepared by A.S. Hansen in connection with the changes in integration which showed that the overwhelming proportion of integrated plans used an offset approach. Regardless of the changes in the Social Security law, the offset plan approach is a more reasonable and direct method of integrating pension plans with Social Security. The purpose of integration appears to be better served by the offset plan approach. The plan sponsor can set an income objective which will be achieved regardless of what happens to Social Security. The major drawbacks to offset plans have been the difficulties of estimating and explaining the Social Security "take away" - in the language often used by dissatisfied participants. However, many excess plans have been providing estimates of projected Social Security benefits as part of statements of total fringe benefits programs. An excess plan moving to the new higher wage bases may be obligated to discuss Social Security if any attempt is made to obtain employee understanding. Therefore, the previous advantage to excess plans in avoiding the appearance of a take away is lost.

The advantages of offset plans remain:

1. The clear determination of retirement income objectives,
2. The automatic hedges against the inflation of social security benefits, and
3. The avoidance of the need to continually announce increases in covered compensation levels under excess plans.

The difficulties in communicating offset plans will best be met head on by describing the purposes of integration and giving examples of projected increases in Social Security benefits and taxes.

At first thought, the 1977 Social Security Amendments would appear to have little affect on the design of existing offset plans. The anticipated stabilization of replacement ratios offers greater confidence in the ability to predict Social Security benefits and ultimately plan costs.

Decreases in the level of Social Security benefits will increase costs of offset plans - but the results may vary according to the age-salary distribution of the plan population. With the uncertainty as to changes in integration rules, it appears to be an improper time to look toward increasing offsets where possible under existing rules to reduce plan costs. To the contrary, offset percentages may need to be modified to avoid discontinuities in plan benefits over the short run. At any event, increased costs of offset plans due to the Social Security benefit changes may not be as significant to the sponsor as the changes in the direct Social Security payroll taxes. Further, there are the gloomy predictions of Haeworth Robertson as to long-term system deficits and the need for doubling taxes in the next century. These prospects make it advisable to consider using forecast methods to project the sponsor's future outlays for Social Security in order to provide estimates of his total outlays for retirement benefits.

Defined benefit plans integrated on the excess basis will face more difficult questions in terms of adjusting to the new Social Security law because of the immediately apparent increases in the covered wages. Whether an excess plan is already integrated at the maximum compensation levels or has not recently been updated it may be practically impossible to take full advantage of the substantial increases in covered compensation. This may be especially true for employers that do not supplement pension plans with other forms of deferred compensation plans. Furthermore, it would appear that the possibility of shifting to an offset plan should be considered before moving up to the new scheduled covered compensation levels to avoid extra rounds of communicating benefit reductions before a shift to an offset plan - which might be regarded by employees as the ultimate take-away.

It appears that the increases in covered compensation will be so large that maintaining the plan formula at maximum covered compensation levels will be difficult unless there is substantial grandfathering of accrued benefits and/or additional plan sweeteners such as free spouse survivor coverage. Substantial analysis of the effects of the new Social Security benefits for a particular plan situation is required before informed decisions on modifying integration levels can be made.

For defined contribution plans integrated on an excess basis, the tendency will probably be to take advantage of the higher Social Security wage levels. This will be especially so in the case of small plans where the accumulation of capital for highly paid persons has been the objective.

In general, the changes in the Social Security law have not had much effect on the factors to be considered in establishing or modifying a pension plan design:

1. The retirement income objective of the sponsor must be considered. More attention should be paid to this aspect of plan design as a matter of public policy, especially in light of the increasing controversy over the income objective of the Social Security System as well as the views of the Treasury Department as put forth in their proposals on plan integration. Actuaries as a group have not presented sufficient input in determination of a national policy on retirement income as well as the design of the Social Security System itself.
2. Other plans of deferred compensation maintained or being considered by the plan sponsor.
3. The personnel situation, including relative wage - fringe benefit packages of employers competing for employees or employers in similar businesses.
4. The level of integration currently provided for by the pension plan, particularly in light of the probability of some tightening of integration rules.
5. How recently plans have been improved and/or re-integrated.
6. Projections of plan costs under realistic assumptions, perhaps also using forecast methods to predict the increased level of Social Security taxes to determine the overall employer cost of retirement benefits.

The 1977 changes in the Social Security law by themselves will not cause substantial changes in pension plan design, especially for offset plans. However, the changes in the Social Security law, together with the synergistic effect of changes in the age discrimination rules and sex discrimination issues, as well as the possible revisions in integration rules make it seem likely that the increased burdens on consultants and plan administrators brought about by ERISA will not quickly subside.

MR. DARYLE G. JOHNSON: The 1977 Amendments are going to lead to an even greater use of offset plans, because it is going to be easier for employers to justify to employees that you have an offset under the plan than it will to some day down the road have to explain that there is one benefit rate on the first \$40,000 of annual salary and another benefit rate, and a higher one, on salary in excess of \$40,000. We are also going to see more defined contribution plans because employers, just like employees, have to pay these higher Social Security taxes, and employers are going to try to find ways to save money. Instead of being willing to underwrite defined benefit plans where they have to underwrite future salary raises, cost of living and things of that sort, employers will consider defined contribution plans.

MR. MICHAEL J. MAHONEY: In January of this year, the Carter Administration submitted proposed changes in the current integration regulations which were applicable to benefits accruing after the proposed effective date of December 31, 1979. This represented the first attempt to set specific integration rules through legislation. Up to now, such details have been handled by the IRS through the issuance of regulation.

Essentially, the proposed rules would have the following effects.

Excess Plans (both defined contribution and defined benefit). These plans would not be viewed as discriminatory as long as the plan provided benefit below such level. The maximum permissible integration level would be the Social Security Taxable Wage Base.

Barring any inconsistency, no adjustments in basic benefits would be required for ancillary benefits, different annuity forms, early retirement, or employee contributions. For example, if benefits above and below the integration level had a ratio of 1.8 to 1, and corresponding employee contributions had a ratio at least as great, then no adjustment to benefits would be required. If the ratio of employee contributions were less than 1.8 to 1, then benefits would have to be adjusted accordingly. It is interesting to note, however, that the proposed rules made no provision for a credit if the ratio of employee contributions exceeded 1.8 to 1.

Offset Plans (defined benefit). These plans would not be viewed as discriminatory as long as the percentage offset of Social Security benefits did not exceed the percentage used to determine the gross plan benefit. For example, a plan providing 50% of final pay less 50% of PIA would meet the new rules. If the offset were 60%, then it would not.

As with excess plans, no adjustments were required for ancillary benefits, different annuity forms, and early retirement. However, an adjustment would be required for contributory plans. The maximum allowable offset percentage would be based on the employer-provided benefit (i.e., gross plan benefit less portion provided through employee contribution). This adjustment would put "plan integration" on an individual basis and definitely complicate plan administration.

Employers with more than one plan could elect to meet the requirements separately for each plan or for all plans combined.

The Administration said that a change was necessary because (a) it viewed integrated plans as a tax subsidy, (b) some integrated plans were not providing any benefits to lower-paid employees, and (c) the existing regulations were too complicated.

Some objections to the proposals raised by industry and knowledgeable experts were:

1. It was too soon after the upheaval of ERISA to make major plan changes.
2. There were several studies of existing integration requirements already under way or about to start, and it would be more appropriate to wait for the results and recommendations of those studies.
3. The proposed requirements would necessitate plan changes, resulting in additional costs. These would be on top of those emanating from the recent changes in Social Security benefits and wage bases.
4. Without regulations, it is hard to evaluate the supposed "simplicity" of the new rules.
5. If the problem is really one of "zero benefits," then a minimum benefit should be required, rather than a change in the integration rules.

Of course, the presentations before the Ways and Means Committee included some who praised the Administration, as well as some who thought the proposals didn't go far enough.

HR 12078. In April, Congressman Ullman introduced HR 12078 at the request of the Administration. Included in the bill were revised integration proposals.

Excess Plans. For defined contribution plans, there was no change in the 1.8 integration ratio or in the Taxable Wage Base as the maximum integration level.

For defined benefit plans, there were some significant changes. First, there was no limitation on the integration level--it could be any amount. Second, the integration ratio in a particular year was defined as "the lesser of 1.8 or the ratio of the integration level for such year and the maximum primary insurance amount for such year."

Questions as to--how the ratio was arrived at, why it was related to the maximum PIA, and what year was to be used--were left unanswered.

To give you some idea of how the integration ratio would work, let us look at some examples. For a plan which wanted to integrate on covered compensation, the alternative ratio would be about 3.8 to 1, assuming covered compensation of \$8,400 and a maximum PIA of \$6,200. However, HR 12078 would not permit an integration ratio in excess of 1.8.

If a plan wished to integrate on the Taxable Wage Base, the alternative ratio (in the foreseeable future) would be between 1.3 and 1.4. In this instance, HR 12078 would require that this be the integration ratio since it would be less than 1.8.

Offset Plans. There were no changes with respect to the benefit/offset percentages or to the adjustment for employee contributions. However, final average compensation is defined as the "employee's annual compensation averaged over a period not to exceed five consecutive years." For those plans with benefits based on a ten-year average, adjustments will have to be made.

If the proposed rules are adopted, then those final pay-offset plans, which provide for a percentage of final pay for each year of service less a flat percentage (regardless of service) of PIA, will have to be amended--as it will be almost impossible to demonstrate that they meet the rules in all instances.

Finally, the bill will have to be more specific as to the determination of projected PIA. Under present rules, this can be determined assuming projection of level earnings or of zero earnings. The latter approach will result in an excessive reduction where the offset is a percentage for each year of service.

In May Mr. Halperin, Tax Legislative Counsel for the Treasury Department, sent a letter to those who testified before the Ways and Means Committee on the Administration's integration proposals. The letter requested comments on various alternatives to the original proposal.

In essence it recommended the integration ratio outlined in HR 12078, proposed some transition rules of up to five years, and suggested a minimum benefit. In my opinion the minimum benefit is not a viable alternative.

Admittedly, the current integration rules are complex and in need of change. Also, there has been some abuse of the existing regulations. But there are many who will question the elimination of excess benefit plans per se and of the early retirement adjustment.

MR. PAUL C. HART: One of the major changes I see this year is that we now have integration proposed by legislation rather than by regulation. Do you have any comment about the relative advantages or disadvantages of the two approaches?

MR. MAHONEY: It would be better to leave it with the IRS because, although they might be tougher to deal with, they have been in the game long enough, they have more knowledge, and they seem to have better expertise. Legislation always leads to compromise, a political element comes into it, and I really don't think that would be the arena to handle something technical.

MR. JOHNSON: On April 6, 1978, President Carter signed into law an amendment to the Age Discrimination in Employment Act, raising the permissible mandatory retirement age for private sector employees from age 65 to age 70. The measure also removes the age 70 mandatory retirement age for federal employees.

The age 70 limitation for private sector employees becomes effective January 1, 1979, but there are a number of specific exemptions from the effects of this law:

1. In the case of employees covered by collectively bargained pension plans in effect as of September 1, 1977, the prohibition against involuntary retirement provisions at ages 65 through 69 does not take effect until the termination of the agreement, or January 1, 1980, whichever occurs first.
2. College or university faculty members with unlimited tenure are exempted until July 1, 1982, after which they too will be covered by the age 70 mandatory retirement.
3. The new law does not apply to employers with less than 20 employees (neither did the 1967 Age Discrimination in Employment Act apply to such employers).
4. Bona fide executives who serve in a high policymaking capacity can still be retired at age 65 if their immediate pension is at least \$27,000 per year. The \$27,000 amount is not adjusted for cost of living increases, and does not include amounts attributable to social security, employee contributions, or contributions of prior employers. To prevent employers from circumventing the law by appointing employees to high policymaking positions shortly before retirement in order to force their compulsory retirement, this exemption applies only to employees who serve in a high policymaking capacity during the 2-year period immediately before retirement.
5. An employer may set a mandatory retirement age prior to age 70 when it can be shown that the rigors of a given job --- strenuous law enforcement or fire fighting activities, for example --- preclude older persons from performing the work safely and efficiently.

In addition to the above general features and exemptions, the new law also amends the previous bona fide employee benefit plan exception that was contained in the original Age Discrimination in Employment Act of 1967. The 1967 Act contained an exception to the effect that it shall not be unlawful for an employer to observe the terms of a bona fide seniority system or employee benefit plan, provided such system or plan is not a subterfuge to evade the purposes of the Act. It is this exception that led to the 1977 Supreme Court's decision in the case of United Airlines vs. McMann, where the high court concluded that if a pension plan is bona fide, and if it was established before the passage of the Age Discrimination in Employment Act, then the plan could not be viewed as a subterfuge to evade the Act's purposes.

The new law specifically amends this exception and is intended to overrule the McMann decision. Therefore, plan provisions in effect prior to the date of enactment of this legislation are not exempt by virtue of the fact that they happen to pre-date the Age Discrimination in Employment Act or the new amendments thereto.

What effect this legislation will have on retirement plans is not completely clear, but whatever effect it does have may be as much a reflection of personnel policy as anything else. It is important to note that the new law has been written so that it will not conflict with ERISA provisions and will still permit a retirement plan to state, for example, that the "normal" retirement age is 65. Similarly, the new law does not require that pension benefits continue to accrue beyond the normal retirement age provided in the plan. For many plans, therefore, the required change may be as simple as amending a provision now permitting employment beyond age 65 with employer consent to permit continued employment past age 65 at the participant's option.

Most defined benefit pension plans currently provide that a participant's benefit will be fully earned by normal retirement age 65, and that if the participant works beyond age 65, subject to employer consent, that the participant's benefits upon actual retirement will equal either (1) accrued benefit at that time based on salary and/or service to that time, or (2) the actuarial equivalent of what the benefit would have been at age 65.

I have a personal preference for the accrued benefit approach based on salary and/or service at actual retirement but, except for the "employer consent" provision, which will have to be changed to "participant option", the new law will still permit these benefit choices for service beyond normal retirement age 65. Which of the above choices is preferable will be for each employer to decide based upon their own situation, whether benefits are based on salary, whether the plan is contributory, whether the plan has a Social Security offset, etc., but either choice probably results in reduced cost to the plan. In practical terms then, the new law probably has more of a significant impact on employment practices than it does on defined benefit pension plans.

The effect on defined contribution plans is unclear. Currently, defined contribution plans are required to continue making contributions until actual retirement in the case of a participant who continues working, with employer consent, past a plan's normal retirement age of 65. At least some IRS offices have taken the position that even under the new law, participants will have to continue to earn contributions beyond age 65, even though the election to continue working will now be up to the participant. However, remarks made on the Senate floor by Senators Williams and Javits indicated, "...employers will not be required to continue contributions to either defined benefit or defined contribution plans for employees who continue working beyond a plan's normal retirement age." Whether such contributions are required or not, however, most employers will undoubtedly elect to continue them, and this should not have any large effect on the plan because the contribution would have to be made anyway for a younger employee who would have replaced the older employee, had the older employee retired at age 65.

The new law permits employment practices and retirement plans to provide for a mandatory retirement age of 70, but there has already been discussion about eliminating any specified age altogether, as the new law does for Federal employees as of September 30, 1978. Therefore, employers will want to consider whether any mandatory retirement age at all should be established.

As noted earlier, the new law does not affect employers with less than 20 employees. Nevertheless, some such employers may want to amend their plans to permit participants the option of working past age 65, so as to bring them into conformity with what is about to become an accepted practice and standard in the field.

MR. HART: The Supreme Court has finally made a decision on an issue which was very clear to me when I was four years old; there are "both real and fictional differences between men and women." The Manhart case arose out of a public plan in the Los Angeles area which provided that the female employees contributed slightly less than fifteen percent more than the male employees prior to retirement but received the same benefits at retirement. The suit was filed by female employees who claimed that under the Civil Rights Act the plan discriminated against them as a class of females. The Supreme Court took on the case and spent a great deal of time in the ultimate decision differentiating between this case and the G.E. vs Gilbert case involving pregnancy in which the conclusion of the Supreme Court was exactly the opposite as in the Manhart case.

There are four points in the opinion of the Court. The major point is that the Court clearly stated that they were accepting the fact that as a class women live longer than men. This is a point which some of the lower courts did not agree on and they took great pains to establish this and accept this as a fact. The Court did decide that women were being discriminated against and although, as a class, women live longer than men, the Civil Rights Act makes it unlawful to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of his employment because of the individual's race, color, religion, sex, or national origin. Since any individual female who happened to die before an individual male could be discriminated against because she had made higher contributions during her working career, it was unlawful for the plan to discriminate against the individual females. That is a very important distinction. You can discriminate against a class as long as that class is not one of the five classes that are enumerated in the Civil Rights Act. The distinction that the Court made between the Manhart and G.E. cases is that in the G.E. case there were two classes. One class was pregnant women and the other class was non-pregnant persons. The non-pregnant persons class included both men and women and therefore the classes were not totally sex distinct. In the Manhart case the two classes were males and females. Even though there were definite differences between those classes, they were not necessarily the same differences between individuals in those two classes. Even a true generalization about the class is an insufficient reason for disqualifying an individual to whom the generalization does not apply.

One of the points the Court made concerning insurance and insurance practices was that treating different classes of risk as though they were the same for purposes of group insurance is common and has never been considered inherently unfair. The Court said it was not setting out to disrupt the insurance and pension industries as long as the classes are not sex distinct.

The Equal Pay Act was referred to in the Court's decision and was used as an argument by one of the defendants in the case. There is an amendment to the Civil Rights Act which essentially says the compensation differential based on sex would not be unlawful if it was authorized by the Equal Pay Act. There were four exceptions in the Equal Pay Act and one of them was a differential

based on any other factor than sex. The employer argued that the differential between the two classes was longevity and therefore would be justified by the Equal Pay Act. The Supreme Court said the difference was not longevity, but **rather, sex.**

The Supreme Court, in the third portion of the opinion, said they were not suggesting that Title VII of the Civil Rights Act was intended to revolutionize the insurance and pension industries. It said nothing in their holding implies that it would be unlawful for an employer to set aside equal retirement contributions for each employee and let each retiree purchase the largest benefit which his or her accumulated contribution could command in the open market. Nor does their decision call into question the insurance industry practice of considering the composition of an employer's work force in determining the probable cost of a retirement or death benefit plan. I was glad to see these **specific comments because I don't believe any of us, as actuaries, would have been comfortable with a decision which had any question at all about your ability to determine the contribution to a plan and to make a distinction between male and female in the actuarial calculation.**

The fourth point was retroactive relief. The Supreme Court overturned the lower court decision which did award retroactive payments to the female employees to make up for the differential in contributions. The Supreme Court said that the rules that apply to pension and insurance funds should not be applied retroactively unless the legislation has plainly commended that result. This is a very important point in terms of future legislation. If we have any influence at all, we should make sure legislation is very specific in terms of its application or its non-application to retroactive changes in pension plans.

