

RECORD OF SOCIETY OF ACTUARIES 1982 VOL. 8 NO. 1

THE DESIGN OF PENSION PLAN BENEFITS UNDER CONDITIONS OF INFLATION

Moderator: DALE B. GRANT. Panelists: LEONARD J. BARDSLEY, NORMAN S. LOSK, GERALD RICHMOND, GUY SHANNON

1. Measuring the reduction of purchasing power and retirement income needs.
2. Cost implications of alternative means of financing pension adjustments after retirement.
3. The public policy issues involved in the design of indexed benefits.

This session will include a discussion of the paper "Indexing Pensions - Protecting Post Retirement Purchasing Power," by Gerald Richmond and Mark L. Rosen.

MS. DALE GRANT: I would like to introduce the panel. First to speak will be Gerald Richmond from New England Mutual Life Insurance Company. Following him we will hear from Guy Shannon, an actuary with The Wyatt Company, Leonard Barsley, an actuary with Dupont and Norman Losk who is the State Actuary for the State of Washington.

MR. GERALD RICHMOND: The abstract reads as follows:

Inflation has proved particularly resistant to public and private efforts to control it. Although many pension plans for government employees provide some protection against inflation (in the form of indexation), the private sector, on the whole, has been reluctant to respond to the challenges presented by inflation to preserving post-retirement income. This paper discusses the difficulty in measuring inflation and indicates the wide range of options available to corporate sponsors to lessen the impact of inflation on pensioners. It discusses the cost impact of various approaches, and indicates that costs may not be quite so formidable as supposed. The paper concludes with a discussion of related public and private issues, and offers our recommendations for corporate sponsors with differing philosophies and financial resources.

This paper was written in response to a view widely held in the pension benefit field, that open-ended indexation of pensions was a cost commitment that could not be afforded or undertaken by the private pension sector. The thrust of this paper is that such a view may be exaggerated and that even if it is wholly or partly true, there are many effective ways to provide partial or limited indexation that offer reasonable protection to employees and limit the cost potential to the plan sponsor.

We believe that an indexed final pay pension plan can be afforded in an inflationary economy if a non-indexed plan can be afforded in a non-inflationary economy. If a plan sponsor funds at 3% interest and 2% salary scale when there is no inflation and 8% interest and 7% salary scale when there is, for example, 5% inflation, the costs will be about the same. Bob Myers has also made this point in his book "Indexation of Pensions and Other Benefits." Our paper does emphasize that this is true only if the

nominal investment yield does in fact obtain the full inflation premium of 5%. Of course, the great fear of the private sector is that it will not, but studies of common stock investment yields over long periods of time indicate a nominal return of 5% to 6% plus the rate of inflation, the only exception being periods of hyperinflation. Such periods of hyperinflation have been rare, generally following a major war. Also today GIC's (Guaranteed Investment Contracts) are available guaranteeing substantial yields over 5 to 10 years. Since many papers have covered investment yields of alternative investment vehicles, our paper did not touch upon this matter. We do feel that investment media are available to permit the private sector to provide indexed pension benefits. We do, however, share the concern over hyperinflation and recommend limiting the indexing to 5% per year with further supplements on an "ad hoc" basis.

This paper also outlines many ways to provide partial or limited indexing to limit plan costs if full indexing is not feasible. We also suggest that employees can be asked to share in the cost of indexing. We urge Federal policy making mandatory employee contributions tax deductible. Considerable attention is devoted to performance indexing (benefits increment only as investment earnings exceed a "true" (non-inflationary) rate of interest) as a way of offering full indexing without the cost potential of guaranteed indexation. The Rockefeller Plan has achieved considerable success through the use of short term commercial paper that closely tracks the rate of inflation reflected in the prime, the pension supplement effective January 1, 1981 being 11.8% (compared to a 12.6 % inflation rate in 1980).

We have advised against the adoption of realistic assumptions fully incorporating the expected rate of inflation without first discussing the ramifications with the employer, especially the fact that pension costs are being reduced through the erosion of real pension benefits after retirement. However once this has been fully discussed, and the plan sponsor has chosen any of the wide range of alternatives for indexing suggested in this paper or even consciously chosen to completely ignore indexation, then we support, indeed recommend, the use of realistic assumptions to fund the defined benefit pension plan.

We believe that this path to realistic assumptions is preferable to the cost shock that results when indexation is adopted after realistic assumptions have been adopted for the non-indexed plan, substantially lowering plan contributions.

MR. MIGUEL RAMIREZ: How do you feel about the indexing of vested pensions for people who have terminated employment?

MR. RICHMOND: If the plan sponsor can afford it, I am in favor of it. One way is to convert the accrued pension to cash and roll it over to an IRA. If good investment returns can be realized, then the pension can be protected.

MS. ANNA RAPPAPORT: If you account for the actual CPI increases in Social Security and the fact that the Social Security benefits are tax free, you then can do less than full CPI indexing in the private plan and get a total effect of indexing that is close to the CPI.

MR. GUY SHANNON: My official topic is "Measuring the Reduction of Purchasing Power and Retirement Income Needs." In dealing with this topic I have noticed a discrepancy. On the one hand there are people who claim that the single failure of the pension business is its failure to provide adequate pension indexing, while on the

other hand there is very little actually being done by any of the companies. This discrepancy makes more sense if you look, in detail, at two aspects of the problem; the measurement of reduction in purchasing power due to inflation and the measurement of retirement income needs.

The concern in the measurement of the erosion of purchasing power is not which specific index should be used, but rather what the employee feels is happening to him, both in terms of inflation and the indexing of benefits. It is not which index is used, as figures can be produced to make any conclusion needed. There is no one set of numbers that the retiree, union and employer would all find satisfactory. This leads to being able to communicate to the employees what is happening, with CPI being the obvious choice as this is what retirees see in the newspaper. Whether the CPI is the proper choice or not is not the issue, it is the fact that the number in the newspaper is the CPI and that is what the retirees will want to discuss.

The key is to index, not to the full amount, but to a percentage. What the percentage should be depends on the definition of needs and what the plan sponsor can afford.

The definition of needs has not been given enough consideration in the past. Many employees are at the peak of their standard of living when they retire and often have not been there very long. A common lifestyle for employees approaching retirement is to have the house paid for, the kids out of college and a sudden increase in time and money. Some of this extra money may go into savings. Therefore, to expect a private pension to provide 100% indexing in order to maintain the full standard of living experienced at retirement is a very high standard.

Also, many pensioners may start out too high, actually having a greater standard of living after retirement than while working. One way this happens is when a plan, designed to be adequate at 65, is sweetened to be adequate at 62, the unintentional benefit being the resulting spendable income at age 65 is more than adequate. Another reason is that Social Security integration in many plans is either omitted or done at inadequate levels. Other reasons include the omission of spouse's benefits, work related expenses not being trivial as often assumed, and the savings element sometimes being a significant portion of pre-retirement expenses. If all of these things are overlooked, the retiree may find his pensions result in an increase in his standard of living. This usually goes unnoticed, since these are not the people who complain to the Chairman of the Board. I feel that a lot of money has gone into benefits which are too high without anyone being aware of it. If money is in short supply, questions should be asked to find out if this is where the plan sponsor wants to put the money in lieu of the options, i.e., current salaries or profits.

Another contributing factor to the modest response of the private industry to what appears to be a much larger need is due to the fact that retirees do not have much power in most organizations. Retirees have a strong voice in Social Security because of the organizations established at the federal level and their voting power. This is, however, quite different from what happens to the normal employee.

The potential exists for setting too high a goal unless what is happening to the employee, in realistic terms of taxes and other financial characteristics, is taken into account. It may be reasonable, when looking at the real situation, for plan sponsors to conclude that no increase in benefits is necessary. The retirees are not starving to death, after all, because they may well have improved their standard of

living at retirement. This may be one reason why there has not been a large number of sponsors providing indexing of pensions.

Ad hocs are still a perfectly valid argument. In looking at experience, one finds that it is no accident why many sponsors do ad hoc increases. They have many advantages.

There are, however, places where an automatic COLA (Cost of Living Adjustment) may be needed. It depends on the specific circumstances of the sponsor, the demands from the employees and retirees, and the commitment the sponsor wishes to make. One strange item is the nature of the COLA's which have been put into effect. Many of the current plans provide for a cap of 3%-5%. My perception is that what retirees need protection against is not the 3% - 5% inflation but the catastrophic inflation of 20% which we have had recently. A better approach may be to guard for the catastrophic inflation and not be concerned with 3%-5% erosion from modest inflation. One approach would be to provide a COLA equal to 1/2 of CPI up to 10% annually. Also, an offset of the first 3%-5% may be used. The 50% mentioned above is very important. I am not going to argue that 50% is the proper number, but certainly not any higher than 75%. The reason for this is to provide the sponsor and the actuary some reassurance concerning the funding levels. If inflation becomes permanent at the 15%-20% levels, then financial requirements from your investments must only match 50% of the increase. This is a much more obtainable goal than having to match 85%-100% of inflation.

Putting all of this in context, one sees that while the 100% of CPI index is what the employee sees, it is too high as a basic objective.

MR. ALLEN ARNOLD: I agree with Mr. Shannon that benefits at retirement are frequently too high. This means that COLA's can be deferred. It was determined under certain assumed inflation conditions that benefits for career employees would be at least adequate for 10 years. The deferral of COLA's for 10 years, whether automatic or ad hoc, reduces their costs to small fractions of the costs of immediate COLA's.

MR. HUGH HARDCASTLE: I have had employers react negatively to the idea of increasing benefits to current retirees, feeling that employees receive the benefits which were promised and there was never anything promised about maintaining a standard of living.

Another point is that a lot of companies provide, in addition to pension benefits, other plans, such as thrift and savings plans, incentive or profit sharing plans, which provide lump sums at retirement. Investment of this cash will provide some protection against inflation so the need for indexing pensions is not as great as headlines would indicate.

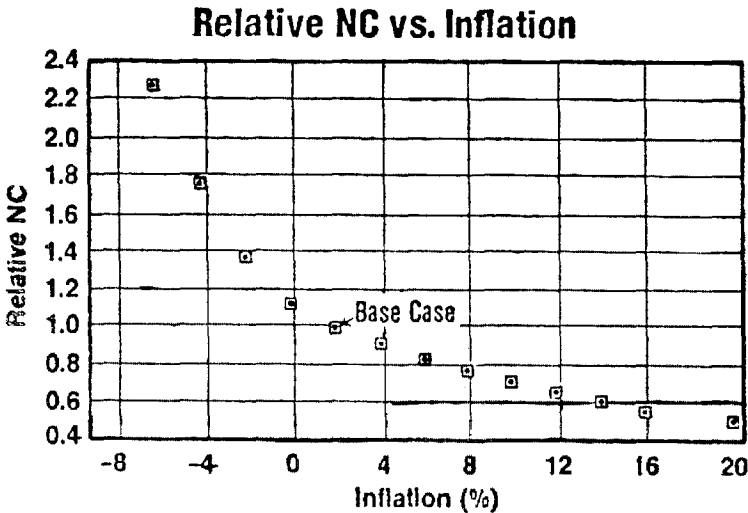
MS. GRANT: When planning indexing or any other type of automatic post retirement increases, we should consider the possible changes which may occur in Social Security, such as the possibility that benefits may not continue to be fully indexed in the future. Another area of concern might be IRA's. When we picture the retirement situation as a three legged stool, i.e., the company benefits, Social Security and personal savings, the personal savings leg has always been somewhat wobbly. Now the IRA's are going to contribute more and more to the personal savings leg and we should consider this component.

MR. LEONARD BARDSLEY: My comments this morning will be about the funding of pension adjustments. What I have to say will presuppose that the decision to do something about the erosion of purchasing power after retirement has already been reached, and I will look at this question primarily from the viewpoint of the decisions to be made by Plan Sponsor and Investment Manager, rather than by the Actuary. There is no question that this is a subject of deep concern to Plan Sponsors. The 70's were traumatic both in terms of inflation and of the difficulty of getting real returns on your pension assets, and so far the 80's have not given much cause for encouragement. A number of plan sponsors appear to feel trapped between what they perceive to be an obligation to their pensioners and the financial realities of what appear to be runaway benefit costs. It is just human nature to project the recent past into the indefinite future, and certainly, from an actuarial perspective, five or ten years is the recent past. A lot of thought and effort is now being devoted to ways of getting out of the pension adjustment business. I have some personal concern that the cure may be worse than the disease.

The questions before us might be called a pension funding version of the five W's of journalism — the Who, What, When, Where, and Why. In this case, we have already disposed of why. If you are going to adjust pensions, someone is going to pay—even if only on an owe-as-you-go basis. That brings us to the first question of substance—who.

In recent years there has been a lot of interest and a lot of innovation in ways of having employees pick up part of the financial burden of funding pension adjustments. Some of this is just a slick way of getting the employee to pick up part of the general retirement burden—by linking something the employer would have done anyway to a contribution requirement. This is nice work, if you can get it. In a few cases, special defined contribution plans have been installed as a vehicle for the shared funding of pension adjustments. In my view, these plans may prove to be a trap for the employer in that they provide for adjustments whether the adjustments are needed or not. If we do succeed in getting inflation under control, the employer is stuck with an additional defined contribution plan and all the headaches and expense it entails. Accordingly, I strongly suggest that if you go in for some form of shared funding, you do it in a way that does not require you to adjust pensions when there is no need to do so. A subsidized option, perhaps funded in part by rollovers from a thrift or savings plan, may be easier to phase out of existence than a special "pension adjustment" plan.

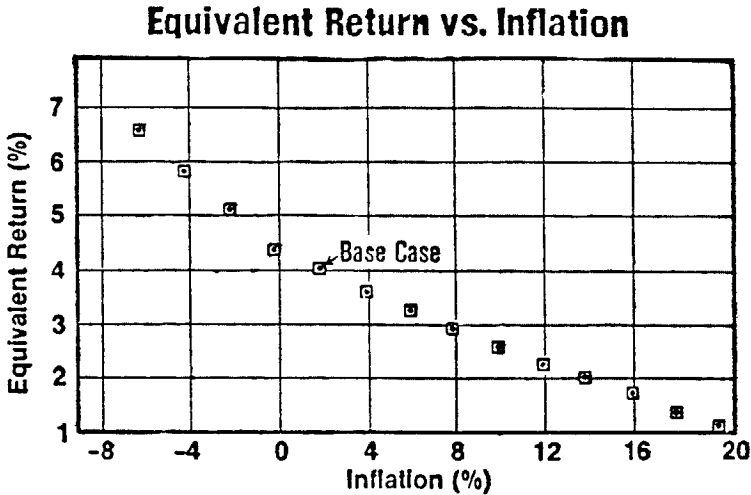
Of course, the employer funded option provides the maximum in flexibility, especially under the extremely common ad hoc approach. In my view, this approach has a lot of merit certainly more than it is given credit for. Although the ad hoc approach has obvious deficiencies from the employee's point of view, it has a lot of virtues and relatively few vices from the perspective of the employer and the stockholder. The common misconception about ad hoc increases, and I hear it everywhere, is "we can not afford to keep adjusting pensions like this." Well, a lot depends on what your pension fund manager is doing for you, but I believe that as a generality if you cannot afford to adjust pensions in times of inflation, you probably cannot afford a pension plan in non-inflationary times either.



This graph shows what happens to normal costs under a very simple model and different sets of assumptions regarding inflation or deflation. None of this is any surprise to an actuary and the recent literature is replete with papers on the subject, but most plans sponsors are really not very aware of these tradeoffs. In this illustration, the normal cost is calculated using a 4% real return and a 2% real pay increase. Pensions are adjusted at half the rate of inflation, but under deflationary scenarios are not decreased. Under these circumstances it is obvious that the more inflation, the cheaper the plan—even with pension increases of 50% of CPI, which is fairly typical of the ad hoc increases one sees in the larger companies. Under deflationary scenarios, which must be considered at least a possibility, pension cost increases very dramatically. In this simple model, I have assumed that the price deflation is completely reflected in nominal pay increases. In real life, as we all know, pay is "sticky" on the down-side and the slope under the deflationary circumstances might be even steeper than I have indicated.

A plan sponsor who is contemplating alternative means of taking care of this problem, which may involve a permanent commitment, ought to consider these trade-offs very carefully. The outlook for our economic future isn't necessarily normally distributed around 8%-10% inflation. I doubt that it's normally distributed at all, and I sometimes think it is bimodal—like a Bactrian camel rather than a Dromedary. If we wind up on the lower hump of the camel, some rethinking of priorities is going to be necessary. It can be argued that as we get up into double digit inflation, real returns are no longer available or are available to a lesser extent. This is probably true while the economy is accommodating itself to

inflation. Even so, because of the effect shown on this chart, some give up of real return is tolerable.



This chart shows one of a family of equal cost curves using the same simple normal cost model as in the preceding chart. Once again, the real return that is required to "breakeven" under deflationary scenarios increases very rapidly—while under conditions of inflation, the required real return decreases from 4% under my base case of 2% inflation to under 2-1/2% using an assumption of 12% inflation. To drop from 2% inflation down to zero increases the required return by 37 basis points. Those of you involved in the asset management side of this business, know that to pick up a consistent 37 basis points on a fund of any size is not simple. Of course, this rapidly becomes irrelevant if your fund is not earning real returns. In that case, however, pension adjustments are the least of your problems.

Assuming you are going to do it, and therefore you are going to fund it, when should you do so becomes the next question. Being against advance funding is like being against motherhood. There are, however, a number of significant problems. One is that the IRS will not let you use explicit assumptions unless you guarantee the adjustments, something with which most of us are loathe to do. The IRS is currently considering modifying their position on this, and that would certainly be helpful. There are other problems; one is that an explicit assumption, even if not meant as a commitment, could be taken as one by employees and unions. Another problem is that ERISA appears to require that a contractual adjustment scheme be extended to vested terminees, a class of individuals for whom many employers feel little responsibility.

Of course, the traditional way of handling this is through implicit assumptions. The actuary simply shaves enough off the investment return assumption to provide for an ongoing source of gains with which to finance the pension adjustments. In the last decade this has not worked very well because investment gains have been hard to come by. Further, ERISA has put a crimp in this with the requirement that assumptions represent the actuary's most likely estimate. However, some margin of conservatism is still possible, desirable and defensible.

Finally, you can advance fund your adjustments through a special defined contribution arrangement, perhaps with employee participation. The Sun Company, Xerox, and some others have recently begun to do this. The form of arrangement varies, but generally both the employer and employee contribute to a qualified defined contribution plan. I think we will very quickly begin to see deductible employee contributions and 401(K) plans used for this purpose. At retirement, the proceeds of the defined contribution plan, sometimes with an employer guarantee as to some level of adequacy, are applied to the purchase of an additional retirement income benefit. The most sensible form seems to be an escalator on the base pension, frequently on a simple interest basis. In other words, if the base pension was \$10,000 per year and the escalator was at 3%, the pensioner would receive \$10,000 the first year, \$10,300 the second, \$10,600 the third, and so on. The declining actual rate of growth is felt to fit in well with the general reduction in need for discretionary income as the pensioner's lifestyle becomes increasingly sedentary.

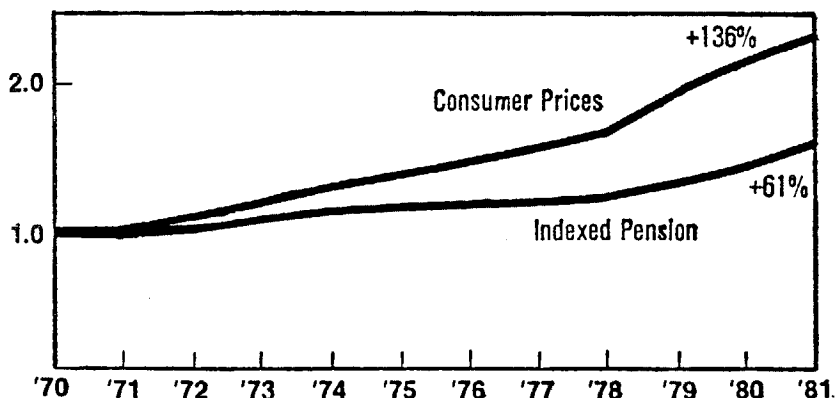
Pension increases could also be terminally funded to some extent. This seems mainly useful when it takes the form of "rolling over" a defined benefit plan accumulation, sometimes matched by additional employer contributions at the time of retirement. Finally, and most commonly, pension increases are funded on a pay-as-you-go basis. I would include in pay-as-you-go amortization over relatively short periods, such as 15 years, which has the added advantage of tying into the period over which you may be amortizing the investment gains which we hope accompany the pension adjustments. It does not seem to me to be a sound practice to amortize the cost of pension increases over a period in excess of the average life expectancy of the pension rolls.

And that brings me to how. The best approach I know of is similar to that used by the Rockefeller Foundation for its employee pension plan. I start from the premise that the villain in this situation is the Federal government. It is the Federal government which, by irresponsible fiscal and monetary policies, is taking money out of the pensioner's pocket. At the same time, however, the government is putting money in the pension fund's pocket—generally not dollar for dollar, but to some extent in the form of the very high nominal returns available at times like the present. My personal belief is that the employer has some obligation to return these high nominal returns to the pensioner, but to do so in a way which preserves the actuarial and financial soundness of the fund and does not commit the employer to more than he can deliver.

It is an historical fact that short-term, risk-free investments such as T-bills typically are about a breakeven opposite inflation, although year by year the correlation is not high. To the extent that your investment manager takes risks by investing in something else, he is attempting to provide a significant real return. I think a manager who produces 3%-5% real returns over market cycles at reasonable levels of risk is doing quite well. What I suggest, as an alternative, is that you guarantee

pension adjustments equal to the lesser of the increase in cost of living (whatever that means and clearly the CPI has its deficiencies) and the 90-day T-Bill rate minus some reserved real return. I would suggest about 3%. This will produce a pretty high probability that your fund can earn at a rate at least 3% in excess of the rate at which you are adjusting pensions. If your investment manager can produce 2% per annum over and above the T-bill rate, the fund will earn at a rate of 5% over the rate at which you are adjusting pensions. Financially, this works out about the same as if the fund had earned 5% and there had been no adjustments, not an unreasonable position in a low inflation environment. If you use 3% as the reserved real return, the T-bill rate less 3% will control the vast majority of the time.

Cumulative Increase Consumer Prices vs. Indexed Pension (T-Bills Minus 3%)



The effect of this kind of arrangement on a pensioner who retired on January 1, 1970 is shown on this chart. Throughout the period, the T-bill rate less 3% is well below the consumer price index on a cumulative basis, but still produces a 61% increase in pensions, and subjects the employer to relatively little in the way of risk. A final benefit is that it should enable you to build some explicit assumptions into your valuations and advance fund for this on some kind of rational basis. Of course, should an arrangement like this produce less by way of adjustments than what you feel is desirable, you can always grant additional amounts on an ad hoc basis.

MR. NORMAN LOSK: I am going to discuss the question of "Design of Public Pensions in the Era of Inflation." We are going to see that public sector pension plans are more liberal than private sector plans and what the results of this fact may be. The title of the panel uses the word "design," while in my experience with the public sector I have found that, for the most part, public sector plans are not designed. Public sector pension systems, and some private sector systems, evolve; they may have started with a design concept but over the years they change in many unusual ways through the legislative process.

In spite of the evolution process, there are a lot of common elements in public sector systems, much more than in the private sector. First, the vast majority of public sector retirement programs are defined benefit programs, however many of these programs have defined contribution elements. There is a large number of programs for higher education faculty that are essentially defined contribution plans, but the bulk of public sector retirement systems are defined benefit programs.

Second, public sector systems are usually contributory, commonly requiring employee contributions in the area of 4% to 6% of salary. Third, benefits are available at relatively early ages. Many plans provide benefits at age 60 without any actuarial reduction, or as early as 55 or below with significant service requirements. In plans covering the public safety sector, police and fire retirement programs frequently have 20 years and out provisions. The State of Washington has a normal retirement age of 50 in its police and fire programs.

Fourth, the benefit available at retirement is generally based on a final average pay base. Final two or three year average is standard, but there exist programs which are based on final pay or even final rate of pay. And finally, public sector plans are much more likely to provide for post retirement adjustments. Surveys from the National Association of State Retirement Administrators and the National Council of Teacher Retirement show that roughly 50% of the state wide general employee and teacher programs provide some form of automatic post retirement indexing of benefits. This contrasts with the conference board survey which indicates that roughly 4% of the defined benefit programs in the private sector provide automatic post retirement increases. For these reasons, public sector programs are more liberal than private sector plans, particularly concerning inflation related provisions.

Public sector programs are established and amended through the legislative process. Because of this, interest groups and successful lobbying efforts have had a significant impact on the current design of public sector programs. Currently, public employee labor groups and the teacher organizations are strong forces in state capitals. A recent phenomenon is the emergence of a senior citizen lobby. There has been a significant trend for earlier and earlier retirements with these people being generally healthier, both physically and mentally, and living longer. As a result there is a large pool of manpower which is only now being organized into senior citizen lobbies. These senior citizen lobbies are going to be a significant force in the future.

In the area of implementing post retirement adjustments, I am going to discuss four methods. Probably the second most popular method is the "automatic adjustment." These are adjustments in which no decision needs to be made for the implementation of the adjustments. The range of this type of adjustment is anywhere from 1% per annum to full CPI adjustment. Generally, the method used for automatic indexes is to provide a CPI adjustment subject to a limit, 3%-5% is common. There are programs which require the CPI to increase by a given amount before an adjustment

is triggered, the adjustment then being only a percentage of the CPI or a percentage of the excess over the trigger point. Most any type of automatic adjustment can be found in the public sector.

The second type of adjustment mechanism is the "discretionary adjustment." If the cost of living goes up, based on whatever index is used, and if there is sufficient assets in the pension fund, which are surplus to the other needs of the fund, to support an adjustment, then a board or other governing body may grant a post retirement adjustment. This method is very popular to legislators. Their view is that as excess investment returns are created, some of it can be given to retirees. As we know, there are problems with using actuarial gains to fund benefits because actuarial gains must, inevitably, be used to offset actuarial losses in other areas. An example is the parallel changes in investment return and salary increase. If actuarial gains are used to fund benefit adjustments, then there is nothing to offset the actuarial losses from excess salary increases.

A third method, which is used more than commonly thought, is the equity annuity. As mentioned earlier, a significant percentage of higher education faculty members are covered under programs which are essentially defined contribution programs and these are generally funded through equity annuities.

The last method is the popular "ad hoc" adjustment. Flexibility and the limited nature of any commitment give ad hoc adjustments appeal with legislators. Ad hoc adjustments can be added on top of any current cost of living provisions. From the standpoint of a legislator, the fact that an ad hoc requires a limited financial commitment is very attractive. The cost of a single adjustment is very small in relation to the cost of committing to a long term series of post retirement adjustments. However, if you move out into the future and look back, it may be found that ad hoc adjustments are the most expensive mechanism for providing post retirement adjustments. This is because an ad hoc adjustment is relatively inexpensive per adjustment and easy to give. These features let legislators provide ad hoc adjustments regularly, developing patterns of adjustments and possibly providing larger increases than they might have committed to on an automatic basis.

Finally, I think it is clear that the public sector reaction to inflation has been more liberal than the private sector reaction. Have the programs for post-retirement adjustments succeeded? In the area of employee acceptance and retiree satisfaction it has. Legislators are concerned with the expense of providing on-going, automatic, or even regular ad hoc adjustments. The public sector, as well as the private sector, is looking for solutions to inflation problems. The conclusion that many have come up with is that the only real solution in dealing with the impact of inflation on retirees is to generate a solution to inflation.

MS. GRANT: I was one of the people involved with designing Xerox's automatic post retirement adjustment program. This was one of the first programs to use defined contributions. I am going to discuss the background of this program because many of the questions we have heard today, such as why and/or should you adjust pensions, by which method and how much were considered by Xerox.

Xerox had no question about the welfare of their retirees, they knew that they were living adequately, whether they had retired five or ten years ago. Xerox knew that, in addition to Social Security benefits, each of the retirees had good retirement

benefits from the defined benefit plan as well as their benefits from the profit sharing plan. The question that Xerox asked was whether or not retirees should have their standard of living at retirement protected by the company. They answered this question yes. The second question was whether Xerox was to pay for all of the increases or should the costs be shared with the employees. Xerox decided that they wanted the employees to share part of the costs.

Xerox had, and still does have, a profit sharing plan in existence. One part of the profit sharing contribution was called an "optional contribution." Optional, in this case, meaning that the money could have been taken in cash or deferred. This contribution, which is 100% vested, can be as much as 6-3/4% of pay. What Xerox did was designate the first 1-1/2% of this "optional contribution" as part of the inflation adjustment program. It is still 100% vested to the employee. This is all pre-tax employee money set aside in an inflation adjustment account. The pension plan then matches the 1-1/2% the employee contributed. Anyone who terminates before retirement is eligible for the entire 3% account, the employee's 1-1/2% designated from the "optional contribution" and the matching 1-1/2% from the pension plan. The program is, for employees who terminate, a capital accumulation where 3% of pay accumulates. For employees who do retire, the account is used to provide as much post retirement adjustment as is possible, subject to a minimum of 3-1/4% simple interest annually.

MR. HOWARD HENNINGTON: We have all been trying to think of ways to help employers include cost of living features in their retirement plan. I have thought of what may be called a "subsidized index option." What I have in mind is an option, at retirement, which would allow an employee to choose a reduced indexed pension instead of his fixed pension. The word "subsidized" would reflect the fact that the indexed pension is not reduced by the full actuarial reduction, which would otherwise be applicable, but by some lesser amount. The purpose of the employer subsidy is to encourage election of this option by making it attractive to the employee.

MR. BARDSLEY: A few years ago, at Dupont, we tried some market research on this option you are referring to. We assembled confidential panels of employees, and discussed what the future might hold and solicited their opinions. In this case, the option was not well received, and therefore we did not pursue it.

MR. LOSK: I have made a similar proposal to the legislative in my state. It was felt, in my state, that this option would probably not work because retirees expect to get ad hoc adjustments anyway, and additionally would not want to take the initial reduction.

MR. VINCENT TOBIN: One of my clients recently put such an option into effect. This particular option was subsidized by 50% of the actuarial reduction. Initially, response was very good; about 30% of the people retiring elected the option. The election rate, however, dropped to near zero after the face to face communication was set aside. There seems to be a great shyness on the part of the pensioner in electing this type of option.

MS. GRANT: I believe that one of the problems is that, even when subsidized, these automatic adjustments are so expensive. The retirees feel that they are losing some of their benefits, even when the reduction is subsidized.

MR. SHANNON: I agree; we all recognize that a 15% reduction is half price, but to employees it is a large reduction. I went through this question with a client who did not want to provide any subsidy at all. This client wanted to provide indexing for benefits, but without any employer money. This firm had a substantial thrift plan in addition to their pension plan. To provide a reasonable benefit adjustment after retirement for a long service employee requires about one years pay at retirement. This is the 30% reduction the retiree would suffer on an actuarial basis. The concept which evolved was to permit the employee to use additional money, whether from the profit sharing plan or another source such as the gain from the sale of a house or simply private savings, for the purchase of indexing provisions. This method avoided the handicap of a reduction in benefits.

MR. JIM COWEN: In the federal sector, I do not believe that ad hoc adjustments will ever be accepted. The conflict between the federal budgetary requirements and the needs of the pensioner requires federal retirement systems to use automatic increases. The times when the pensioner need the increases the most are the times the legislature also needs the money for other items.

MR. RAMIREZ: Concerning Mr. Hennington's suggestion of a subsidized indexed option, I feel there may be problems. When there is an option which is worth something additional to the employee, (i.e. not actuarially equivalent to the other options offered) and the employee does not elect the option, then the employee is damaging himself. From experience, we have seen that, unless an indexing option is forcefully explained, employees see only the reduction and not the fact that they are losing money by not electing the subsidized index option.

