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A NEW LOOK AT SOCIAL SECURITY ISSUES

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In the aftermath of the Social Security Amendments of 1983, details of which have been well-publicized, this session will examine broader issues as they are now emerging.

1. Benefits vs. taxes over the worker's lifetime--the "money's worth" issue. The recent paper "A Money's-Worth Analysis of Social Security Retirement Benefits" by Robert J. Myers and Bruce D. Schobel will be discussed.
2. Implications of the Social Security changes for employee benefit plans and compensation arrangements.
3. Other impacts of the Social Security changes on the public.

MR. RICHARD G. SCHREITMUELLER: Today as our program has promised, we're going to talk about three subjects of Social Security as they were affected by the new 1983 Social Security law. We are not going to talk much at all about the financing of OASDI, nor about the details of what is in the 1983 amendments, as they have been discussed for 6 months or so. We are going to spend a good deal of time talking about the money's worth issue under which we look at benefits vs. taxes for one or more workers. Those of you who follow Social Security financing know that we examine these things in great detail every year, but the money's worth analysis is a little different. You look at benefits vs. taxes, not for the open group over the next 75 years, but rather for closed groups of real or hypothetical workers sharing similar characteristics. So for money's worth purposes, we will look at one or more workers and trace them through their lifetime looking at their benefits vs. taxes.

A second difference is that we know that you can't really compare benefits with taxes in a fair way unless you do it on an actuarial present value basis. And finally, our panelists will not cover the Medicare aspects of the money's worth issue, so it will be for OASDI purposes or perhaps OASI only.

The second topic for the panel is the effect of the 1983 Amendments on employee benefit programs and on other aspects of employee compensation. The public is perhaps more directly interested in these effects than in how we are balancing the books for the Social Security program. Congress has legislated some real innovations this year. The retirement age for the first time is scheduled to go up above 65. Also part of the benefits are going to be taxed, that's something quite new. It leads me to wonder what the state and local

governments are going to do about taxing benefits. Also we have higher payroll tax rates, and we have some new definitions of what kinds of wages are taxable for Social Security tax purposes. There were some important Medicare changes as well. With all the things that are in the law there are going to be effects on other kinds of programs coordinated with Social Security including pay and benefits, and many effects on the public--on their pocketbook, on their perceptions and maybe on their politics.

The first of our panelists, Robert Myers, is undoubtedly the world's best-known actuary. Recently he was Executive Director of the National Commission on Social Security Reform, which laid the basis for the legislation that was passed six months ago. That commission in fact has breathed new life into the concept of a government commission as something which actually could solve problems when they put their minds to it.

Our next speaker is Bruce Schobel, from the staff of the Office of the Actuary at the Social Security Administration. Bob Myers borrowed him as his staff actuary for the commission, and he worked for a few months with the House Ways and Means Committee to help them write the 1983 amendments. His most recent claim to fame is that he is coauthor of this paper on money's worth.

Next is another Social Security employee, Orlo Nichols, who works on long-range costs, and who will discuss some different aspects of money's worth.

Our final speaker is Anna Maria Rappaport, an employee benefit consultant with William M. Mercer's Chicago office. Anna is going to talk about the impact of the Social Security law on employee benefit plans and on the public.

On behalf of the few of us up here on the panel from the government, I'm just going to say that our views are not necessarily the views of the government or of any part of it.

MR. ROBERT J. MYERS: This discussion will relate primarily to one important aspect of the changes in the Social Security Amendments of 1983--namely, the extent therein of general revenue financing. I will also briefly discuss certain aspects of some other items.

The Money's-Worth Issue

Basically, I believe that, in a social benefit program like OASDI, little importance should attach to the question of whether individuals receive their money's worth--just as long as there are no great discrepancies in individual cases. Many nonactuaries believe

differently, and they often make computations in this area, usually based on the time when an individual retires at age 65--generally using erroneous methodology or inconsistent assumptions. Accordingly, it seemed to Bruce Schobel and me that, if people insist on having such computations, we as actuaries are the most qualified to make them, and therefore we wrote the paper being presented at this session.

Probably the most important element in the analysis is whether only the employee taxes should be considered, or whether instead the combined employer-employee rates should be used. Despite the argument of many economists that the employer taxes are really paid by the employee individually, I believe that only the employee taxes should be considered in money's worth analyses. Although, in the aggregate, the employer taxes are a part of the remuneration of the employees and can be so assigned to them, this is not the case on an individual-by-individual basis--just as for the average employer contribution rate in defined benefit pension plans.

Accordingly, any money's worth analysis should be focused on the present value of the benefits as compared with the value of the employee taxes. As long as this ratio is reasonably near or above unity, the situation is satisfactory.

It should be emphasized that, over the long run, any comparison of the value of benefits to the value of combined employer-employee taxes cannot exceed unity in all cases--i.e. everybody cannot always get more than their money's worth on this basis in a program that is adequately financed from payroll taxes alone. Of course, if other means of financing are injected, such as general revenues, the picture can superficially change. But in the final analysis, the same people who receive benefits will, more or less, be paying (or have paid) the taxes to meet the general revenue costs.

Implications of Changes for Private Pension Plans

One important aspect of the 1983 Amendments as they affect private pension plans is the deferred gradual increase in the normal retirement age (NRA) for OASDI benefits. If these plans do not increase their NRAs then they will have significantly higher costs. However, if they increase their NRAs, they will have lower costs, which can be used either to decrease contribution rates or to liberalize benefits, such as by financing cost-of-living adjustments for pensions in payment status.

I believe very strongly that private pension plans should increase their NRAs in line with what is done under OASDI--and for the same reasons. This will require changes in ERISA, and immediate efforts should be made to accomplish this. If the NRAs under private pension plans are not changed, and such plans fill in the gap created by the OASDI change, this will result in a great social inequity. Workers who are covered by private pension plans would then not be affected

by the OASDI change, whereas the generally less favorably situated workers who are not covered by private pension plans will be the only ones to be adversely affected.

Undesirability of Government Subsidies to OASDI

Before discussing the several ways in which general revenue financing has--both properly and improperly--been injected into the financing of the OASDI program by the 1983 Amendments, let me give my views as to the undesirability thereof in certain cases. General revenue financing of an "unjustified" nature is undesirable because it deceives the general public as to the real cost of the program, and therefore there is less fiscal control over changes in the benefit provision. The undesirability of general revenue financing thus rests on psychological and philosophical grounds, rather than actuarial or economic ones. As will be indicated later, certain kinds of financing of OASDI through general revenues are appropriate, but other types of a general and direct nature are definitely not.

General Revenue Payments under 1983 Amendments

Just as it is difficult to measure accurately the incidence of taxes, so too is it difficult to define in all cases whether general revenue financing is present. To some extent, it is like the story about the description of an elephant by blind men. Under previous law, it could be said that some general revenue financing was present in OASDI in connection with the employer tax for covered military and temporary civilian employees (and also, under the 1983 Amendments, in connection with the coverage of new civilian hires after 1983) and with the reimbursement for the gratuitous military service wage credits. In my opinion, this is not really general revenue financing, but rather employer contributions.

Some might argue that general revenues were injected into the program indirectly in connection with the employer tax rate being considered as a business expense for income tax purposes. Thereby, the Federal government receives less income taxes, and the trust funds are credited with the full amount of employer taxes. However, this is really stretching matters too far in attempting to measure the incidence of taxes and the existence of government subsidies to OASDI.

The same sorts of "justified" general revenue payments were introduced in several instances by the 1983 Amendments. First, the value of future general revenue payments with respect to military service wage credits was appropriated to the trust funds. This was merely an advance of moneys that should have been paid in the past as the service occurred.

Second, an appropriation has been made for OASDI checks that are charged to the trust funds when issued, but that have never been cashed--an obviously equitable procedure. This action certainly was not improper general revenue financing.

Third, general revenues will make up the difference in the future for the self-employment taxes as between the amount based on the combined employer-employee rate and the somewhat lower rate actually paid (which is intended to reflect the income tax savings that employers received with regard to their Social Security taxes). Although some may view this as general revenue financing, I do not believe that such is the case, because the same situation would result if all self-employed persons were to incorporate.

Fourth, the OASDI taxes received each month are credited, on an estimated basis, at the beginning of each month so as to be available to meet the peak benefit outgo then. Some might say that this is a government subsidy. However, it is not, because interest must be paid to the General Fund by the trust funds on these advances (which, in essence, are continuing 1-month loans).

The 1983 Amendments contain several changes that very definitely result in general revenue financing of an unjustified, undesirable nature. First, and perhaps most clearly so, is the payment from general revenues of part of the employee tax rate in 1984. The employer OASDI tax rate for 1984 is increased to what the previous law provided for 1985, but the employee rate is left at that for 1983. The difference between the employee taxes based on the 1984 employer rate and those actually collected from employees is directly appropriated from the General Fund. This is a one-time procedure. Hopefully, this direct general revenue financing will not be done again in the future.

A second, and more important, injection of general revenues--which has an effect in all future years--is the income taxation of OASDI benefits for persons with relatively high incomes. Because the definition of "high income" is not indexed, over the long run an increasing proportion of beneficiaries will be affected. The proceeds from such taxation will go to the trust funds rather than to the General Fund. I believe that such taxation is good tax policy, but I see no reason why the proceeds should go back to the Social Security program--any more than that the taxes on private pensions should go back to the fund from which they were paid. Some people may view this provision as a benefit reduction, while others may consider it to be a needs test. I believe, however, that it is really undesirable indirect general revenue financing.

Two details of the income taxation of benefits are grossly inequitable to the General Fund and thus involve additional definite general revenue financing of the OASDI program. First, the estimated income tax proceeds are appropriated on an accrual basis rather than as individuals pay the taxes (which tends to be somewhat later). Thus, there is an interest gain to the trust funds and a corresponding interest loss for the General Fund. Second, and even more inequitable, the proceeds from the estimated income taxes on benefits are appropriated at the beginning of each quarter rather than throughout the quarter as they accrue. Thus, there results a

further interest subsidy to the trust funds (unlike the case for the payroll taxes, where they pay interest on the advances, as described previously).

MR. BRUCE D. SCHOBEL: I will be discussing several aspects of our paper. Mr. Myers and I calculated the present value of the benefits that will be paid to the retired worker over his or her lifetime, assuming retirement at age 65, and compared that to the accumulated value of the OASI taxes that he or she paid. We considered only the taxes that pay for the retirement benefits and survivor benefits because that's what we looked at on the benefits side. Occasionally a person will compare the benefits that a retiree gets with the total tax rate--for OASI, DI, and HI--and of course that isn't fair and we didn't do it.

Why did we consider OASI only and not include DI? There are two reasons. Number one is that the expected value of the benefits that a person is likely to get from the DI program depend very much on the estimated disability incidence rates, which have varied so widely over the last decade that it is really difficult to arrive at appropriate reasonable rates. The rates that were experienced in the mid 70's are more than double the rates we are experiencing right now. It seemed almost impossible to arrive at a reasonable present value for the DI benefits; therefore, we left them out.

The other reason is that in a sense a person really doesn't want to get his money's worth out of the DI program. The only way to do so is to go on the disability rolls and nobody really wants to do that. Therefore, we felt that money's worth isn't really that important in the context of the DI program, at least not when considering benefits payable to hypothetical workers. The retirement program is different because everybody wants to retire and everybody wants to get his or her money's worth--although not everybody will.

We took hypothetical earnings histories for people who worked every year of their lives from age 21 through age 64 at two constant earnings levels--the average earnings history that is used in the indexing of benefit amounts, and the maximum earnings history, in other words, the earnings base. We took actual historical values of these numbers where they were known and projected them into the future on the basis of intermediate assumptions. Based on these earnings histories, we calculated the present value of benefits payable at age 65 and compared that to the total lifetime taxes accumulated at interest.

This procedure wasn't perfect, but it was chosen for some good reasons. I'll tell you why it isn't perfect first, and then I'll tell you the good reasons that we did it anyway. Those earnings histories are really not typical. I don't think you are likely to come across a person in real life who works every single year at the same relative earnings level, never changing, never getting a raise

relative to the general population, never getting less than the national average increase. In particular, for the maximum earnings case, I don't think that you know too many people 21 years old who are making \$35,700 a year, although there are some of course.

There were two other approaches that we could have used. We could have taken real earnings histories of real workers. Naturally we have a lot of those available to us, millions of them. The reason that we didn't do it is that we don't really know what a typical earnings history is--either for the past or the present or certainly the future. We know what the average earnings figure was in any particular past year, but we don't know, for example, how unemployment was distributed among the work force.

To illustrate the problems associated just with the unemployment rate, consider a year with a rate of 10 percent. There are two extreme ways to have such a rate--everyone in the population can be unemployed 10 percent of the year or 10 percent of the population can be unemployed all year. There is a continuum of possibilities between these two extremes, and we don't really know what the facts were. Thus, we cannot very well describe the typical earnings history. And we couldn't take a real worker and say he's typical. If the worker is not typical, then his or her money's worth ratios don't prove anything.

There's another approach and that's the approach taken by Mr. Nichols. You can try to take all the workers in a particular cohort--for instance, all the workers born in 1935, and add up all of their taxes and all of their benefits (on an estimated basis, of course). You then find out if that cohort is getting its money's worth. That's eminently fair and reasonable, but unfortunately no one else is able to reproduce the results, because no one else has the data or the models that we have.

What Mr. Myers and I did wasn't perfect, but it is reproducible. You can take the earnings histories and the interest rates and the tax rates and so forth and come up with all of the numbers that we did. And in our paper we talk about how these numbers might change if you had a more typical case of a person who is unemployed one or two years of his life or has a more typical earnings history which in relative terms will rise very quickly in the beginning and then possibly tend to lag around the end.

There is one other point that I'd like to make. Mr. Myers made it earlier, but I'll make it again because I feel pretty strongly about it. We have always marveled at people who insist on looking at this Social Security program only from the point of view of money's worth. I think that there are many things in life that are done for all sorts of reasons other than economic ones, and Social Security is obviously one of those. The money's worth aspects are important. They have a bearing on the public acceptance of the program and how friendly they are toward the Internal Revenue Service which collects our taxes for us. But the program really is bigger than that, and

the people who voted for it back in 1935 and all the subsequent Congresses obviously had more in mind than just whether or not people are going to get their money's worth. That's a good question, and people have asked it, and we've tried to answer it--hopefully reasonably well. But I just want to make the point over and over again that I could name a thousand things in life that people do very happily without any regard whatsoever to the money's worth aspects of them. I have a 2-year-old daughter who has cost me thousands of dollars, and I don't expect to get any return at all. But people go on having children in this country for some reason, and I don't think that anyone is getting their money's worth. In any event, I think that if people want to look at money's worth that's fine, and we'll help them look at it, actuaries and nonactuaries alike. As an actuary myself, however, any time I talk to people about this aspect I always try to broaden their horizons a little bit and say that, even if you don't get your money's worth, Social Security is not a bad program. It still serves very many useful social purposes, and the people of this country generally support it.

MR. ORLO R. NICHOLS: I would first like to reiterate what has been said here a couple of times already about doing money's worth calculations. For a number of years, people have been wanting money's worth calculations. I guess what got us into it is that we saw others out there doing them, and doing them incorrectly for whatever reason--whether to present a very favorable picture or as is more often the case to present an unfavorable picture.

There are many ways of doing money's-worth calculations and I have been involved in several of them. One of them was similar to the current Myers/Schobel paper, the work that Mr. Schreitmueller and I got involved in a number of years ago, a paper published by our office. In that paper, however, we did look at OASDI rather than only OASI as the Myers/Schobel paper does. We looked at it in basically the same way, on a present value basis from the beginning or middle of a worker's career rather than at retirement age. We did consider disability and survivor benefits using incidence and termination rates. We did use hypothetical work histories, three of them rather than two, a low earner case as well as the average and maximum cases.

We made an attempt at one point, although not in that paper, to get into an analysis of two-worker families. Many people have wanted to get into the question of whether a working wife gets her money's worth, and we didn't really address that very satisfactorily from some points of view. We concluded that a couple together would get their money's worth, but we did not attempt to compute their individual money's worth ratios. There are difficulties with this individual approach even though I think it is worthwhile, and it is probably what most people are interested in. However, the main problem with the individual approach is that you are selecting the cases that are most favorable or most unfavorable. The way to get around that is to look at a whole group of workers.

Most of the attention these days is on the younger worker, because this is the group that many believe does not get its money's worth. I think most people recognize that those who retired in the early history of the system got their money's worth. When they paid very low taxes a few years and then received benefits for many years they obviously received more than their money's worth. Even for workers retiring at the present time I think most would agree that they are receiving their money's worth. The question comes up, "What about the very young workers?" We will see in a few minutes why I think we can conclude that even the young workers do fairly well.

I first want to get into some of our methodology for money's worth calculations on a cohort basis. We selected workers who are ages 18-22 in 1983. The money's worth calculations came from the program which we use in calculating the year-by-year projections of the trust funds. From there we go to a present value basis, discounting each of the quantities in the trust fund analysis by a discount factor, but still on an open group basis which considers all the workers who are in the program. In order to do the kind of calculations we need for this money's worth analysis, we have to go to a closed group basis and that is done opposite from the way private systems do it. In private systems you start from those currently enrolled in the plan or those who are currently insured by a particular company and project them to get an open group. We have to do the reverse, because we already have the open group of population data as projected for the regular annual cost estimates; that is, covered worker data and beneficiary data as projected by year and by age group. From these we can calculate closed group figures by 5 year age groups.

We have, of course, in our cost estimates several sets of assumptions, known as alternative I or the optimistic assumptions, alternative II-B or the intermediate assumptions, II-A which is the slightly more optimistic set of intermediate assumptions, and alternative III which is the pessimistic set of assumptions. We find that money's worth ratios are extremely sensitive to the economic assumptions used. Naturally we should do them on the basis of the intermediate assumptions, alternative II-B. The main group we used was the cohort of workers who are now at ages 18-22, but we also looked at some younger groups, currently ages 13-17, 8-12, and 3-7, in other words those who are born but have not yet entered the work force. For the intermediate assumptions, after the 1983 Amendments, we have a benefit/tax ratio before taking out the amount for taxation of benefits of 103 percent. In other words this is very close to breaking even. As far as the taxation of benefits goes, there may be questions about whether or not that item under the new law should be included, and exactly how it should be included. It could be considered as an income item, so in computing a ratio of benefits to taxes you would include it in the denominator along with payroll taxes. However we chose to consider it as a benefit reduction, so we subtracted it from the numerator. The ratios are done for the whole group on the basis of combined employer-employee taxes. This counts

OASDI taxes only, and does not include Medicare. This approach does not get into the argument of whether to use employer-employee taxes, because for a cohort analysis everybody agrees that combined payroll taxes should be used.

One might wonder, now that older groups have received their money's worth in terms of benefits vs. taxes, how can we still have this young age group also receiving its money's worth? We shall see that this analysis is very sensitive to the economic assumptions. Also, we have built into our assumptions mortality projections, so that, even though the increase in retirement age to 67 is built into the analysis, the retirement age would probably have to be increased further at some later time. As I mentioned there is a 103 percent benefit/tax ratio before taking out the income taxes on benefits. After taking them out the ratio is reduced to 98 percent, which is really the break even point because administrative expenses are about 2 percent of benefits.

If we look at other assumptions, we would find some different results. One thing that can be done is to vary the interest rates--obviously these ratios are very sensitive to interest rates. In the alternative II-B assumptions we have an assumed long-range interest rate of 6.08 percent, which turns out to be a real rate, after allowing 4 percent for inflation, of 2 percent. If we vary that real interest assumption to 1 1/2 percent, the benefit/tax ratio increases to 120 percent before income tax deduction, and to 114 percent after income tax deduction. On the other hand, if you increase the real interest rate to 2 1/2 percent you have a somewhat unfavorable ratio of 88 percent before income taxes and 84 percent after deduction for income taxes. Another thing interesting to look at is a comparison of the benefit/tax ratio using the 1983 Trustees Report methodology vs. that of the 1982 Trustees Report, which was done before the '83 amendments. As you would expect the 1982 ratio was much higher, 120 percent. Of course, there is only one number to give you because there was no income tax on benefits under the 1982 law.

Contrary to what you might think, when we get to these very young groups benefit/tax ratios eventually begin to increase as the age group becomes younger. For instance we have the 103 percent ratio for people now at ages 18-22. This increases to 106 percent at ages 13-17, to 108 percent at 8-12, and to 111 percent at 3-7. As I mentioned before we use projected mortality, which would cause that to occur.

I also mentioned earlier that we had several sets of assumptions, and in this analysis I looked at three of them. For alternative I, the optimistic assumptions, the benefit/tax ratio is 81 percent. For alternative III it is 127 percent. Whether you are doing money's worth analysis on an individual basis or on a group basis, if a large group of individuals receive favorable benefit/tax ratios, this would seem to indicate that the system is under-financed, which

of course would happen under the pessimistic set of assumptions. Even under alternative II-B the analysis was done on a 100-year basis rather than the usual 75-year basis that we use for cost estimates. Toward the end of that period you have the system going out of balance. Over the entire 75-year period the balance is close to breaking even. But if you were to continue the projection to 100 years it would go to a deficit because the year-by-year cost beyond the 75-year period would show deficits.

One other thing to mention is the relationship of money's worth to normal cost. We have made normal cost calculations for several years, by using the present value of benefits in relation to the present value of taxable payroll. You can see therefore that it is very closely related to the money's worth calculations. We will be publishing something on these calculations with more details, probably by the end of the year.

MS. ANNA MARIA RAPPAPORT: My focus is not that of a Social Security expert, but rather of one who's been looking at issues relating to employee benefits and the structure of financial security systems. It is the view of an outsider to the Social Security System. Mr. Schreitmueller asked me to look at the implications of the 1983 legislation for employee benefit plans, compensation systems, and at the implications for the public generally. I'll approach this assignment by focusing on just a few provisions.

Yesterday morning in the general session we heard about long-term trends in our society. We heard that the major transforming force in our society is shifting from energy to information. We heard about demographic changes. We also heard that, as we're moving to being more of a service economy, we can expect lower growth rates, because the kind of productivity gains that can be achieved in manufacturing can't really be achieved in services. We also heard that we can expect more changes in Social Security as time goes on. What I want to do now is look at issues related to provisions that were included in the Social Security legislation, along with some of the things that are going on in employee benefit plans generally. I'll try to tie external issues, benefit issues and Social Security issues together and hope to give us some things to think about.

So far people who work with employee benefit plans haven't paid very much attention to the 1983 Social Security amendments. We've all been too busy worrying about TEFRA, the Norris case, and the FASB. Nevertheless, the Social Security issues track some of the external trends that are important to us. We have already experienced significant changes in mortality at higher ages and we can expect to see further increases in the lifespan. We see changes in family economic structure with more than half of the husband and wife families being two-earner families. In many cases, the second earner, usually the female, is dropping in and out of the labor force more than the primary earner. You see more females than males with a variety of activity over their life cycles. We built our financial

security systems around a three part life cycle model that says first, we grow up and get educated, then we work and finally we retire. Yet many people have started to live their lives with much more variation than the model provides for. We also need to focus on birth rates. The model of the traditional family in a linear life cycle has been the foundation for the employee benefit planning of the past 30 or 40 years. Today there's an evolution taking place. The evolution that's taking place is that we're looking more logically at diverse life patterns, diverse family patterns and employee needs.

My discussion, unlike that of the other panelists, is going to focus both on retirement issues and on medical care and health-related issues, because both are important to the private sector. The health-related issues may have the greatest impact in the short term. The first change I want to mention is that Social Security taxes are now payable on deferred compensation of various types, including contributions to tax sheltered (403(b)) annuities, and to cash or deferred profit sharing plans (401(k)) plans. Taxes are payable on the contributions to these plans, and the amount of income that has been deferred is included as part of the employee's income for calculation of Social Security benefits. It also can be included in the compensation base for a defined benefit pension plan.

As Mr. Myers mentioned earlier, Social Security benefits will now be taxed for higher income taxpayers--beginning in '84 up to half of the benefit will be taxed. This means that the after-tax retirement income of these higher income taxpayers will be lower. If we are planning to achieve benefit adequacy, that means we need to take a new look at plan design.

Also, retirement ages have been increased, with the age for full benefits increased 2 months per year for persons reaching 62 in the years 2000-2005. It will stay at 66 for those reaching 62 in 2005-2016 and then will increase 2 months a year again for those reaching age 62 in 2017-2022 and then stay at 67. The delayed retirement credit will be increased, for workers who retire after the full benefit age, currently 65. Between that age and 70, the credit is 3 percent per year now. Beginning in 1987 it will increase 1/2 percent every other year to a maximum of 8 percent for people reaching 62 after 2004.

The changes in retirement ages and the late retirement credit work together. In 1986 someone who retires at age 62 is going to get 80 percent of the Primary Insurance Amount (PIA). The PIA is the amount that will be payable in that case at 65, and someone who retires at 70 is going to get 115 percent. By 1999 a person who retires at age 62 is still going to get 80 percent of the PIA. The age 65 benefit amount is still the PIA, but someone who retires at 70 is going to get 132 1/2 percent, quite a bit more. However, in 2022, the person who retires at 62 will get only 70 percent of the PIA; that's because the PIA is now the age 67 amount. A retiree at 65 will get 86 2/3

percent, and a retiree at 70 gets 124 percent as the eight percent increase per year applies. The eight percent increase is used for only 3 years, and not 5 years. This illustrates the interaction of increasing both the delayed retirement credit and the retirement age.

The next change I'd like to mention is the earnings test. The earnings test is liberalized again and beginning in 1990 the benefit reduction will be \$1 for every \$3 earned in excess of the earnings test limit.

One thing the law didn't deal with was the issue of whether benefits were being treated properly when husbands and wives both are working. While it didn't deal with that issue and didn't make any change, it did recognize the issue. The law includes a provision for an earnings sharing implementation report.

Earnings sharing is a proposal calling for splitting the earnings of a married couple. The earnings would be split 50%-50% rather than the earner getting a wages credit in his record and the spouse a spouse's benefit. In a two-earner family, the earnings would be added together, with half credited to each. This is a different way of handling benefits within the family. The law provides for a study by the Secretary of Health and Human Services in consultation with the Senate Finance Committee and the House Ways and Means Committee of the implementation of an earnings sharing plan. There is a report to be made by July 1, 1984. So nothing has happened yet, but this is a future issue that ties into some of the key demographic changes.

The last provision of the law that I will mention relates to Medicare. The new law includes a major change in the method of payment under Medicare for inpatient hospital services. Effective with hospital cost reporting periods beginning after October 1, 1983, for inpatient operating costs, Medicare will pay a fixed amount determined in advance for each case, according to one of 467 diagnosis related groups into which the case is classified. The prospective payment will be considered payment in full, and the hospitals will be prohibited from charging beneficiaries more than the statutory deductible and coinsurance. So instead of the hospital being reimbursed for its charges, or for a share of its costs, if the patient is a Medicare beneficiary, depending on the classification of his condition and his disease, the hospital is going to get a fixed amount of money. This amount will be based on a schedule of payments regardless of whether the patient stays there for two days, three days, or four days and regardless of whether they do one diagnostic test or twenty tests. That's a very important change in the way hospitals will be paid for Medicare patients.

Now I will talk about retirement issues and then we'll return to the medical issues. The taxation of benefits immediately reduces after-tax income for higher income retirees. As the full benefit retirement ages go up, benefits are reduced for retirement at a given

age. Later retirement is made more attractive. In a minor way, the law recognizes changes in the family structure. Let's relate these changes to some of the trends that we've seen in retirement ages.

Retirement ages have decreased steadily in the U.S. in recent years. We can confirm this by reviewing labor force participation rates. This is particularly true for men. The common range for retirement ages today is 62-65 and even earlier. Federal legislation in 1978, the Age Discrimination in Employment Act, banned any mandatory retirement age prior to 70. Employers can not force anybody to retire before age 70 with a few minor exceptions. No particular change in retirement experience has been observed, however. There are reasons for that, and an examination of these reasons shows why we shouldn't look for the fact that no change has been taken yet as being a good indication about the future. First of all, since 1978, many employers have used special temporary early retirement incentives and have made it very attractive for people to retire. Many companies have reduced their work forces, and early retirement programs, as well as other kinds of work force reductions, have supported business response to adverse economic conditions. The large number of such programs may have been unusual. Another factor is that older persons often have difficulty in securing work. We've also experienced major technological change, and unequal access to training, which creates disadvantages for older persons. Retirement expectations by both employees and employers are built up over a long time. For these reasons, the fact that we haven't seen a lot of change in 5 years does not mean that there might not be more change in the future. There are currently substantial financial incentives to retire.

In considering this issue, we need to remember there is probably a very large underground economy in the United States. I don't know how to measure it or whether anyone has tried, but I believe that some estimates indicate that it is extremely large. The underground economy means that there may be a lot of people whom we are counting as retired when in fact they are really working. However, they are working under conditions where they are not included in any of the statistics. There may be other problems understanding the issues because of the statistics. Many persons retire and collect retirement income, but the same persons become gainfully employed elsewhere or for part of the year, in a special retiree pool, or in the underground economy. I understand that if such persons are gainfully employed (but not in the underground economy) they will appear in government labor force statistics even if they are also collecting retirement income. Depending on whose statistics we look at we may get different impressions of what is happening.

There is a real question about the future of retirement ages. The law is supporting the idea of people working longer. This encourages private plans to increase their retirement ages. There is a technical problem with ERISA, which has prevented those plans wishing to change their normal retirement age from doing so, but hopefully that will be changed.

The law also affects retirement income adequacy. The traditional defined benefit plan is designed around the goal that a retirement program should replace on an after-tax basis either all or some percentage of pre-retirement earnings for a full career employee. The 1983 legislation changes after-tax income replacement for higher paid employees, so we need to take a new look at the benefit adequacy. This relates to another issue. Some plans are integrated with Social Security so that the replacement ratios for people at different income levels adjust over time. Other plans are integrated in a way such that, unless there is a specific amendment or change, the real level of integration decreases over time and the plan becomes less well integrated. I have personally seen several situations where, because the Social Security benefits changed so quickly in past years, the plans are less integrated than was intended but the plan sponsors have not yet amended the plan. The taxation of Social Security benefits will aggravate the disparity in benefit levels for some of these employers. In response to these forces, it is time to take another look at the income replacement and whether the plan is doing the job the employer intended it to do. It also may be time to take another look at the employer's objectives. Well designed defined benefit plans do a good job with respect to income adequacy for people who work for a single employer over a long period of time. For an employer focusing on income replacement, they are usually the best solution. However, they don't do a good job for people with multiple jobs over their entire working lifetime, or for people who drop in and out of the paid labor force. Individual assets accumulated in defined contribution plans do a much better job for people with mixed life cycles.

In addition, employers increasingly want the individual to assume more responsibility for retirement planning. For a long time, employers were expected to do more and more of the job, but today I see the individual's responsibility increasing again. This is a reversal of direction. The legislation supports more diversity of choice by the individual. The legislation supports the shift by recognizing salary reduction (401(k)) contribution as wages for Social Security. This should be considered together with the authorization to set up a 401(k) plan and the Economic Recovery Tax Act, which allowed everybody to have an IRA. Individuals can be covered by an Individual Retirement Account whether they are covered by an employer's plan or not. Larger employers often have both a defined benefit and a defined contribution plan. In such cases, it's quite likely that the importance of the defined contribution plan will grow as will the incentives to the employee to save and to participate. Most larger employers will continue to offer both types of plans. But the mix--in terms of how much of the retirement income is going to come from one or the other--is likely to shift. The defined contribution plans will typically have more employee than employer money in them. 401(k) and the availability of salary reduction has become a significant factor in encouraging such plans. It is important to point out that 401(k) money is before-tax money that the employee is saving for retirement. In contrast, employee contributions in a defined benefit plan are after-tax money. So there's a real push to 401(k) plans and that's a really hot area.

The last retirement related issue deals with earnings sharing. We see an enormous change in family economic structure and labor force participation. This is shown by female labor force participation, the growth of two-earner families, and the increases in divorce. As yet these issues are largely unrecognized in financial security systems, but this may change. At the same time that the government is looking into these issues with respect to Social Security, employers are also recognizing work force diversity and are introducing more choices in employee benefit programs. Section 125, the cafeteria benefit section of the Internal Revenue Code, makes it more feasible to offer opportunities for choice. I expect more choices whether through formal cafeteria plans or not. Many choices are not part of cafeteria plans. If earnings sharing is implemented it's going to require substantial restructuring of integrated plans with direct Social Security offsets. It's probably also going to require rethinking of some other issues. It may cause people to want to change the way survivor benefits are handled, and some companion legislation may be needed there. The law didn't do anything about integration, but the defined benefit integration rules have been in effect since 1971, and are badly in need of an update. I think a lot of people are expecting new integration rules; some people are waiting before they really look at the retirement income adequacy issue to see what is going to happen with integration.

I will comment on one other retirement-related issue. I think that many employers recognize there must be more substantial changes in Social Security in the future. Some of them feel a little uncertain and a little uneasy about their plans, which are a second layer on top of Social Security, because they're not too sure what's going to happen with the layer underneath. They have confidence that the system will continue to operate, but they don't know what the benefit will be and how it will work. There is uncertainty about Social Security, and depending on the plans and how they are designed this could have a very material effect on them.

The other area I want to touch on is Medicare reimbursement. This area may have a tremendous impact on the public, on employers and on benefit plans. For our clients, health care costs have become a major employer concern, as well as a major national concern. Health care costs over 10 percent of gross national product today. A few years ago, if there was a big cost increase, the employer negotiated with the insurance carrier to get the cost down. In addition, maybe the claims procedures were tightened up and the funding method changed. Basically, after the employer did whatever he could to keep costs down, he paid the cost increase and continued the plan. That's really changed. People are looking at what kind of benefits they're providing, and they're changing their plans. They're reducing the benefits and making other changes in order to cut down the employer's share of total health care dollars, in order to get the employee interested in what health care is costing and to create an incentive for changing utilization. The thing is that the benefit systems, both Medicare and also employer plans, as third party payment systems

just reimbursed health care providers for the services that were rendered, providing no incentives to control utilization to the providers of the services or the users of the services. The combination of the third party payment system, technology, prosperity, and entitlement, led to a very high utilization of highly sophisticated technological services. The reimbursement system, particularly in the private health insurance plans, frequently promoted in-hospital care because the plans would pay for something if it was done in the hospital rather than out of the hospital. And the tax laws made first dollar plans very attractive. These forces have gotten us to the place we are in today.

Many employers are very concerned about their health care plans. Medicare in changing to the Diagnosis Related Group (DRG) system reverses the financial incentives present in traditional third-party payment. Before, the financial incentive was for the provider to provide the most care, but now with the fixed reimbursement for a given diagnosis the incentive is to keep costs down. It also creates the need for new and very sophisticated financial analysis and management. The hospital is concerned about what it costs for a DRG--whether different doctors have the same cost for the same DRG, whether there are some doctors that will cause it to lose money in terms of reimbursement. The move to DRG reimbursement will probably be a real factor in encouraging changes in the health care market place. Employers may also respond to these issues. Employers might use the DRG as a base for claim payment. Employers also are considering buying services from health care providers in various forms of Preferred Provider Organizations (PPO) arrangements. The PPO is an arrangement whereby there is some kind of contract between a health care provider or group of providers and an employer on an attractive cost basis. It may be justified by the use of extensive utilization review, or may include a discount. These arrangements are not like a Health Maintenance Organization (HMO) arrangement where the employee has no choice other than to use that specific medical group. In contrast, the employee gets one level of reimbursement if they use the PPO, and another level of reimbursement if they don't. There is a financial incentive but no requirement. We expect to see plans designed with higher deductibles, more coinsurance, and incentives to get care outside of the hospital. Some employers are putting in utilization review. Employers are also much more active in dealing with health care providers. There is going to be a big cost shifting game. For example, assume a hospital has 30 percent of its income from Medicare patients. When Medicare moves to DRG based reimbursement, if that 30 percent is decreased and if the hospital doesn't reduce total costs, then somebody else is going to pay more. This will probably be the employer. The same hospital may be setting up PPO's, marketing its services aggressively, and giving attractive prices to its bigger customers. There's going to be a lot of different pricing and competition to get a lower price. The employers who aren't big enough or aren't in a preferential price arrangement are going to be

potential losers in the cost shifting game, as will that part of the public that's not in one of those arrangements. This evolution could lead to chaos. Another impact of DRG based reimbursement on the public may be accelerations of hospital closings, particularly for hospitals that are marginal now and don't have high enough occupancy rates. People not insured in major plans may be big losers and they may be unable to pay for quality health care. There is a lot of uncertainty about the medical system, with substantial effects on the public and employers.

MR. SCHREITMUELLER: A couple of the speakers did refer to workers as "he". We want the record to show that the male will embrace the female for purposes of this session and similarly the female will embrace the male. Also, a more serious thought was expressed by one or two of the speakers in which I share. I don't think that money's worth computations are absolutely essential to having a sound Social Security program, but they do help move public opinion. In the best of possible worlds I would hope that there would be a kind of reverse Gresham's law in which good numbers would drive out the bad ones.

MR. MYERS: The only thing I will add is in connection with what Ms. Rappaport brought up about the legislated study of earnings sharing proposals. It should be noted that this is only a study. This does not mean that it will be legislated. I think that earnings sharing is, in principle and philosophically, a great idea. Practically, I think that there is no way of doing it without greatly increasing the cost of the program. Otherwise, there will be some winners, and there will be some losers. And the losers will not be just men. There will be many women who will lose under all of the various earnings sharing proposals that I have seen. Perhaps it is wishful thinking, but I believe that this is going to be one of those typical Washington studies, where there will be a report, but no action from it.

MR. SCHOBEL: I'd just like to make one point in regard to Mr. Nichol's numbers. He was indicating how the ratios increase above 100 for the younger cohorts and in fact they get up around 111, I think Mr. Nichols said, for those people who are now ages 3-7. I've thought about this over some time, its not the first time I've heard of these numbers. I think one reason that happens is that the system after about 80 years, even under intermediate assumptions, is supposed to be bankrupt. Therefore, these ratios over 100 percent are a comparison of benefits that cannot be paid to taxes that perhaps will have to be raised. This is part of the reason the numbers get so very high. As Mr. Myers said early on, this is not a machine that is able to generate money. If one group is getting more than its money's worth eventually a group has to come along that gets less. And any time you see money's worth ratios over 100 percent you ought to really question whether those benefits are going to be payable or not.

MR. NICHOLS: I would agree with Mr. Schobel's comment--taxes would have to be raised in the future, out there where the young group of that day would not get its money's worth. Another thing which I neglected to bring up is that one difficulty in doing individual money's worth calculations under the '83 amendments is this taxation of benefits. I think hypothetical earnings cases are quite good for most purposes in doing individual money's worth calculations, but when you get to the taxation of benefits you have, I think, probably too many variables.

MR. DONALD S. GRUBBS: A question for any of the panel who would care to address it. Many of the publicly displayed money's worth projections indicate that one of the choices that a young worker might have is to change the system so that he didn't have to pay any more taxes and all of his money in the future could then be used to provide his own benefits. We realize, of course, that if we didn't have any more money coming in from new participants, we would have to substantially raise taxes in some other form to pay for the people who already retired. Certainly no one would propose we would discontinue benefits for the people already retired. What portion of the new worker's contributions would be needed to pay the benefits for the people already retired.

MR. SCHOBEL: Well obviously in the first couple of years it would be almost 100 percent. Are you talking about only the new workers and leaving the present system intact for older workers?

MR. GRUBBS: We would have to during the course of the future have contributions or taxes in one form or another to pay the benefits for the people already retired. Over a period of a career for a new worker, one might ask how much of his contributions would be going to pay the benefits for people already retired.

MR. SCHOBEL: I'm not sure that I'm really going to be able to answer the question, but our office estimates that of the 75-year average cost, something like 10 percent is the cost of those people presently on the rolls. I'm not sure that really answers the question but it's the best I can do.

MR. A. HAEWORTH ROBERTSON: My comments will be limited primarily to the money's worth paper written by Robert J. Myers and Bruce D. Schobel and presented at this session. The authors have stated a number of limitations to be considered in evaluating their paper. My view is that if these limitations, as well as others, are given proper emphasis it will severely limit the value of the paper. I believe that actuaries who study this paper very carefully may find the paper to be of some value. But I believe that actuaries who read the paper less carefully and all other readers will probably get a false idea of the answer to the money's worth question. This is particularly important if the paper was intended for the general public, not just for actuaries. Even today, we have representatives of the press in the room, and there is a danger they will take the

paper at its face value because of the prominence of one of the authors. I would suggest that some of the more important limitations of the paper's analysis are as follows.

As the authors stated, Hospital Insurance and Disability Insurance were not included in the analysis, although HI and DI accounted for twenty-six percent of the FICA taxes in 1980, according to the paper. In the future, I believe that HI and DI taxes are projected to amount to about forty percent of the total Social Security taxes, a large amount of money to be excluding when you are considering money's worth. I maintain that the taxpayer pays one big tax for "Social Security benefits" and that it is inappropriate, if not grossly misleading, to make pronouncements about money's worth that are based on only a fraction of the total taxes. I was disappointed in Mr. Schobel's rationalization for excluding DI from the analysis (in his oral commentary on the paper) to the effect that people don't want their money's worth out of the DI program because they cannot get their money's worth without becoming disabled. That is not quite what I would have expected an actuary to say. It is like saying you don't get your money's worth out of the fire insurance premiums on your house unless your house burns down.

An important methodological limitation of the paper is that it is based on the accumulated OASI taxes only at interest and not with the benefit of survivorship. It seems clear that one ought to accumulate OASI taxes with the benefit of survivorship and then subtract the value of the survivorship benefits. Those two factors that were omitted may or may not be completely offsetting, but we cannot arbitrarily assume that they are.

It has been almost six months since the Social Security Amendments of 1983 were enacted (April 20, 1983), yet the paper fails to take into account several important changes having a significant effect on the money's worth question. The 1983 Amendments increased the full-benefit retirement age for people aged 45 and under in 1983, and it effectively decreased benefits by virtue of taxation of a portion of Social Security benefits, heretofore untaxed. While these changes will have the greatest effect on today's younger workers, it is precisely this group that is asking the most compelling questions about money's worth.

Furthermore, all of the tables in the report are based upon taxes scheduled in present law and not those that would be necessary to support the existing program. More or less as an afterthought, the authors say that if we collected sufficient taxes (which I presume we must), the money's worth ratios would be somewhat less favorable. The paper then gives a broad range within which these more realistic money's worth ratios would fall but does not present complete tables. Unfortunately, because of this method of presentation, there may be a tendency for people to focus on the tables themselves, which are based upon inadequate taxes.

If we would take all of the above-mentioned factors into account, I believe we would get a much less favorable answer to the question of whether taxpayers get their money's worth than is stated in the paper.

On the other hand, offsetting what I consider to be an incomplete analysis that paints an inappropriate rosy picture of the money's worth question, Table 5 on page 41 of the paper paints what I think is an inappropriately gloomy picture about how much less valuable Social Security becomes as time goes by. That table says, for example, if we consider a single person who is a maximum wage earner and who reaches age 65 in 1960, it will take 24 months for him to receive benefits equal to his and his employer's accumulated taxes. (By ignoring postretirement mortality, the question of different payout periods for different sexes is sidestepped.) For such a person reaching 65 in 1990, it will take 120 months and for such a person reaching age 65 in 2025, it will take 222 months. I doubt that this is really a fair representation of how the equity is shifting over time. I believe it overstates the case and that there will be a tendency for people to seize upon that table and misuse it. Unfortunately, a table like this appears to cater to the public desire for easy to understand statistics that are based on misleading and incomplete analyses--something the authors berate nonactuaries for doing.

In the third from last paragraph of the paper, the authors discuss the possibility of a more theoretically perfect analysis of the money's worth question. The Social Security Administration has done some important work in that area, some of which has been published (Actuarial Note No. 95, April 1978, by Mr. Schreitmueller and Mr. Nichols. If the money's worth question is really important, then I would urge the authors and the Social Security Administration and the Health Care Financing Administration actuaries to expand their work in this area. Perhaps the money's worth question is not important; most of the panelists seem to think it is not very important, and I tend to agree with them. To discuss this question of money's worth (from the view point of individuals) requires an underlying presumption that we have a national pension and social insurance program that provides--or should provide--benefits commensurate with an individual's contributions or a generations's contributions. This is, I believe, a false premise. We do not ask the question of individual's money's worth about public education; we don't ask it about the national defense system; we don't ask it about Aid to Families with Dependent Children or the farm subsidy programs or a myriad of welfare programs. And I'm not sure that it's any more appropriate to ask the individual's money's worth question about Social Security than it is about any of these other national programs.

The authors state in their abstract that nonactuaries frequently make analyses of the relationship between Social Security taxes and benefits in an inadequate manner because they make inconsistent

assumptions, ignore certain important benefit features, or use incorrect methodology. The authors state further that it is possible, however, to analyze the situation adequately and imply that they have done so in their paper. I would submit that the authors have, in this paper, committed many of the transgressions they attribute to nonactuaries and that they have not in fact analyzed the money's worth question adequately. Accordingly, in my view this paper is not well suited to inform the general public about the money's worth question.

MR. SCHREITMUELLER: At this point we can give the authors a minute or two to respond to that.

MR. MYERS: I can certainly agree with Mr. Robertson on many of the facts, but I come forth with different conclusions. I believe as we said in our paper, that these money's worth comparisons are not meaningful for a social benefit program such as OASDI. But we are faced with the fact that if actuaries do not make studies thereon, then others will. So, when Mr. Schobel and I undertook this study, we said let us do it as correctly as possible, under the basis of looking at the situation for a person who has attained age 65. We were not trying to prove that Social Security is wonderful, or that it is bad; we just want to do the analysis under these precepts in what we considered to be the best professional manner.

The reason we considered the situation, in essence, at age 65 and did not accumulate with benefit of survivorship was that most of the people who have made inadequate analyses say, "Let's look at the situation at this point, when the person retires at age 65." So we did the same thing. Such a person looks back and says, "What are the taxes that I have paid, what have they accumulated to, and what is the value of the future stream of benefit payments?"

We knew that there were more elegant methods of making the analysis, but if we had done it that way, we believed that the public would not have understood it. Rather, they would wish to look at simplified examples. Therefore, we constructed what we thought to be the best possible simplified examples.

As to the point that the analysis is based on the law that had previously been in existence (and was inadequately financed), we wrote the paper in December 1982, when it seemed very unlikely that a legislative solution to the financing problems would be forthcoming. We recognized that, on this basis, the ratios would be higher, but the system might become bankrupt. We have developed tables comparable to those in our paper. We will put them into our reply to our discussion to show what the situation is under the 1983 Amendments with respect to the higher retirement age and the other changes made. We will not take into account the effect of the income taxation of benefits because that is, I think an impossible thing to deal with. It is not difficult, it is just impossible, because one cannot make reasonable assumptions as to the presence of other income than OASDI benefits.

MR. SCHOBEL: As far as leaving out the DI and HI benefits is concerned, we had two somewhat different problems there. In the HI program, the taxes are so terribly inadequate, that to include the benefits and compare them with the terribly inadequate taxes would have been very misleading, and we decided to just leave the HI program out altogether. Another related reason is that we know perfectly well that the HI program is going to change very much in the next few years. There's an Advisory Council looking at it right now. There were some changes made in the 1983 amendments, and there will obviously be a lot more changes. If there are not, the HI program will go broke and the Congress is not about to let that happen.

As far as the DI program goes, Mr. Robertson is right. Like with fire insurance the person paying taxes for the DI program wants to get some value, and the protection of the insurance has value. But when taking hypothetical workers it is very hard to measure that value unless you assume that person actually goes on the rolls. I was not trying to suggest, and I'm sure that Mr. Myers wouldn't either, that the DI taxes have no value or that a worker is not concerned with getting value for the DI taxes. All we were saying was in an analysis of this type which takes hypothetical workers and compares their taxes with their benefits, that type of analysis does not lend itself very well to considering the DI benefits. So we left them out. But I was not trying to say they had no value or people are not interested in the value.

MR. SCHREITMUELLER: It has been a bit like an old time actuarial meeting, when the audiences were smaller and the discussions were more spontaneous. We want to thank our hard working panel, our recorder, and all of you for participating today.

