RECORD OF SOCIETY OF ACTUARIES 1990 VOL. 16 NO. 4A

RECENT SOCIAL SECURITY DEVELOPMENTS IN THE U.S.

Moderator:	BRUCE D. SCHOBEL
Panelists:	WARREN R. LUCKNER
	ROBERT J. MYERS
	JOHN C. WILKIN
Recorder:	BRUCE D. SCHOBEL

- o Recent and pending legislation
- o 1990 Trustees Reports and commentary by actuaries
- o Financing proposals (Moynihan Bill)

MR. BRUCE D. SCHOBEL: We have an interesting panel and a lot of developments to talk about, including the 1990 reports of Social Security's Board of Trustees, the commentary on those reports by the SOA Committee on Social Insurance, and financing proposals like the Moynihan Bill, which would have lowered Federal Insurance Contributions Act (FICA) tax rates to a pay-as-you-go level.

The first panelist is Bob Myers, who needs no introduction, but I'll give him one anyway. Bob has been involved with Social Security since 1934, or for 56 years. He has a wealth of information about what's happening now, and he can put events into historical context. Bob was chief actuary of the Social Security Administration for 23 years, from 1947-70, and returned to Social Security for a time in the 1980s. Probably his crowning glory was serving as Executive Director of the National Commission on Social Security Reform, which made the recommendations that led to the 1983 Social Security Amendments. I had the pleasure of working with Bob during that time.

John Wilkin worked with me at Social Security for a time. He worked there for 18 years and left in 1988, when I did. John has been involved more in the health area since leaving the government and is going to focus part of his presentation on Medicare.

Stephen C. Goss, whose name appears in the meeting program as a panelist for this session, is unfortunately not with us in body, but he is here in spirit. Steve, unlike Bob, John, and me, is still working for the U.S. government and, because of the government's current budget crisis, was prohibited from coming to this meeting. While the government is operating on temporary funding authority, nonessential travel is not allowed. Steve did send his presentation, which Warren Luckner will read for him.

MR. ROBERT J. MYERS: I'm going to talk about the present and expected financial status of the OASDI trust funds and the funding nature of the system in order to understand how it got the way it is and where it's going. I will also talk about the relationship between Social Security and the federal budget. Finally, I'll discuss the alleged advantages of building up a big fund and the actual disadvantages of building up a big fund, all of which is related to the Moynihan Bill, which did not pass this year but may next year.

As of the end of 1989, the OASDI trust funds had a balance of \$163 billion, which is a fair sum of money. What's important is how that compares with what was estimated to be on hand at the end of 1989 when the reform legislation of 1983 was enacted. The \$163 billion at the end of 1989 was almost three times as much, or put in dollar figures, was almost exactly \$100 billion higher than was estimated in 1983. Of course, that 1983 estimate was done on very pessimistic grounds, because the National Commission and the Congress wanted to be sure that there wouldn't be another financing crisis in a few years, as happened so soon after the 1977 amendments.

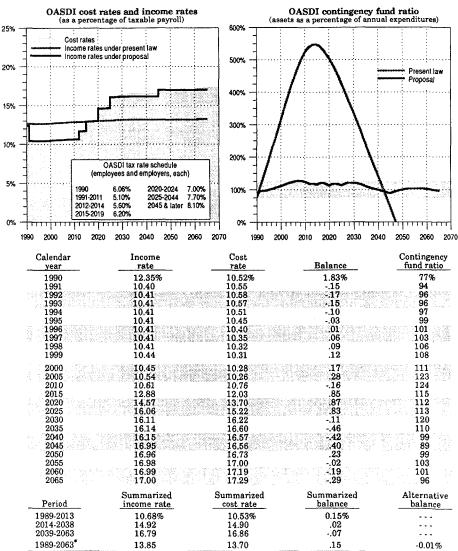
So, the actual experience to date on just a cash-flow basis has been very favorable. What do Social Security Administration's (SSA's) actuaries estimate for the future? They estimate a very large fund buildup, as you'll see in Chart 1. On the upper right graph, you'll see a line going up to a peak and falling off. That's the fund ratio, the size of the fund as compared with annual outgo. It builds up to almost 500%; that is, the fund is five times as large as the annual outgo. That's not a big figure compared to what happens to a funded pension plan, but it amounts to many dollars -- close to \$9.5 trillion at the peak. It's a very big and very rapid fund buildup, and then has a roller-coaster effect as the fund balance decreases. Shortly after the year 2040, it goes down to zero. This obviously doesn't make sense, but it is the result of the legislation.

One reason people allege publicly for this financing pattern, and one of the myths that I try to explode, is that this fund is intended to pay for the retirement benefits of the baby boomers. Then, as the baby boomers pass from the scene by the 2040s and 2050s, we won't need the fund. That is just patently not true, because the cost of the program after the baby boomers pass from the scene is just about as high or even a little higher, expressed as a percentage of payroll. The smaller number of births after the baby-boom period is counterbalanced by the lower mortality of this group. You can see the cost trend on the graph on the upper left.

Now I will deal briefly with the very complicated, smoke-and-mirrors subject of Social Security and its relationship to the federal budget. Before 1967, Social Security was completely outside of the budget. Then in 1967, Social Security was made part of the budget so that, if it ran an excess of income over outgo, that seemed to help balance the budget. Of course, when Social Security runs an excess of income over outgo, government bonds are bought that might otherwise be bought by people in the private sector.

A number of people became disturbed about this accounting for the operations of the Social Security trust fund, particularly if it built up excesses of income over outgo. (I intentionally don't use the word *surpluses* because I need hardly to tell this audience that the excess of income over outgo of any sort of pension plan is not necessarily a surplus.) As we have seen, a large fund was going to build up. The 1983 legislation eventually would have taken Social Security out of the budget, but not until fiscal year 1993. People interested in Social Security in 1983 wanted it to be out of the budget right away because it masks the true deficit operations of the government. But the budgeteers said, "Hey, you're making the job too tough for us. We've been counting on this to make it appear that the budget's balanced." So it was decided that not until 1993 would OASDI operations be taken out of the budget.

CHART 1



Projected OASDI Financial Operations Under Senator Moynihan's Bill, S. 2016, As Introduced

* Summarized income rate, balance, and alternative balance for 1989-2063 include beginning trust fund assets. Alternative balance also reflects requirement for ending fund assets equal to 100 percent of annual expenditures.

Note: Estimates are based on the alternative II-B assumptions from the 1989 OASDI Trustees Report.

Source: Reprinted with permission from the Office of Actuary, SSA, February 1, 1990.

As it happened, there was some difficulty relating to the public-debt limit in and around 1984 and 1985. The Treasury took actions to pay Social Security benefits, but these actions appeared to rob the fund to balance the budget. In reaction, Congress officially removed Social Security from the budget in fiscal year 1986. However, as occasionally happens in Washington with smoke and mirrors, it was put back in indirectly, because in determining the Gramm-Rudman-Hollings budget targets, the operations of the trust funds are taken into account, which again made the targets easier to meet. So, in essence, from that standpoint, Social Security is back in the budget.

Then just last year, Senator Moynihan of New York pronounced that this procedure was thievery. Senator Heinz of Pennsylvania objected strongly. He said, "Oh, no. It's not thievery, it's embezzlement." I think that what's going to come out of the budget legislation that's now under consideration in Washington -- although nobody is quite sure what's going to happen -- is that Social Security will be removed from the Gramm-Rudman-Hollings calculations, but they'll put in a new form of calculation. And part of this famous \$500 billion deficit reduction over five years is the large excesses of income over outgo in the Social Security trust funds, amounting to \$60-70 billion a year. In fact, about half of that \$500 billion is really just the operations of the Social Security system.

Now, briefly, what in my view has been the funding basis of the OASDI system over the years? In the beginning, it was sort of a partial reserve system, and a fairly large fund was going to be built up and maintained. The interest on the fund was supposed to meet some of the costs in long-distance future years of the 1970s and 1980s. The system has gradually moved away from this, first in practice, because tax rates were frozen and, in the 1950s and 1960s, Social Security operated more or less on a pay-as-you-go basis. A small fund was built up, roughly one year's outgo, but there was always the intention of building up a fairly large fund in the long run. The long run never came. Then in 1972, the expressed congressional intent was to move directly to a current-cost or pay-as-you-go system.

In 1977, without thinking much about it, Congress moved back to this process of building up a large fund over the years. In the long range, whether that fund was maintained or exhausted depended on what your estimates were.

In 1983, there was a real financial crisis -- that is, if something wasn't done before the middle of 1983, benefit checks would not have gone out on time. Congress, on the recommendation of the National Commission, very prudently said, "Well, we've got to finance the system adequately in the 1980s, and we also should do something about the long-range imbalance." The main emphasis, however, was avoiding the iceberg in the 1980s, and at this point we can safely say that that was done. But for the long run, Congress addressed the average deficit by having the level tax rate meet a rising cost trend. The result, of course, as all of us knew at the time, would be to build up a fund and then draw it down. At the time the legislation was enacted, there were no actual figures showing the magnitude of the buildup, but the trend was known. I think the feeling was, "Hey, we're in an emergency. We've shown an intent to do something about the long range and rationalize that later." I think the time is now or even overdue to do so.

I view a large fund buildup as undesirable for several reasons. One reason is that a fund of over \$9 trillion may well absorb almost all of the national debt, some of which is needed in the banking system and for other reasons. But a more important reason that it's undesirable is that it masks the very huge budget deficits that we actually have and that we don't see. At least in the past year, the people in this country have seen it more because of what Senator Moynihan has done, as I'll describe in a moment.

Another problem is that the large fund buildup and large amounts available annually could encourage excessive governmental spending and make it that much easier to float government debt, because part of it automatically must be taken by the trust funds, and the Treasury doesn't need to sell as much debt to the general public or foreign countries as it would otherwise.

Last of all, I think that the huge build up of the Social Security trust funds will encourage unwise expansion of the program. There will be many people who will say, "Look, you've got hundreds of billions of dollars, or even by the end of this century, over a trillion dollars in the fund, surely you can increase our meager benefits." Even more important, I'm afraid that in the year 2000, when the normal retirement age first begins to start its upward movement, people will say, "Why move up the retirement age? You've got all that money in the fund; you don't need to do it." I think it's very desirable in the long run to move up the normal retirement age, recognizing increasing life expectancy, and it's something that should be done gradually, on a deferred basis, as was done in 1983. If it is not started in the year 2000, it'll be difficult to start later, especially if it has to be deferred many years, and it won't be as effective.

Why do some favor a large fund buildup? Why do I think they're wrong? Well, one group says that we need a large fund to assure the safety of the Social Security program if there's a business recession. I say that's true; that's the purpose of the fund, as a contingency reserve in bad economic times, but I don't think you need a fund buildup anywhere near what will happen under present law. Another group says that we should do this to increase national savings. I hope the national character is strong enough that somehow or other we'll increase savings without doing it in this indirect manner. Another group says that we need this level of tax from now on for generational-equity purposes. I see the merit of generational equity, but, the disadvantages of the large fund buildup, I think, outweigh the advantages of generational equity. Still other groups say that pay-as-you-go financing would violate the 1983 consensus agreement. Well, I was there in 1983, and I say that this wouldn't violate the agreement; it would be merely a rationalization and refinement of it.

At the very end of last year, Senator Moynihan put forth a proposal that really caught fire. The press picked it up and there was great discussion and has been ever since. What he said was that we should move to pay-as-you-go financing as soon as possible, as shown in Chart 1. On the upper left graph, the nearly level line is the present income rate. It goes up a little because it includes the effect of income taxes on benefits. Senator Moynihan's proposed tax schedule is the one that goes down and then goes up in steps, more or less following the cost curve.

The Moynihan tax-rate schedule was designed so that, under the intermediate assumptions, the fund would build up to about one year's outgo, which it's practically at now. That little curvy line on the upper right graph that is sort of flat in the shaded area is the fund balance under the Moynihan proposal. It avoids the roller-coaster effect of present law.

Even the people who criticized this proposal, for the reasons that I just gave, praised Senator Moynihan for bringing the issue out in the open before the American public. Virtually everybody, except perhaps the budgeteers, praised Moynihan for showing what the true budget deficit is and unmasking it this way.

Later, some critics said, "Well, one year's fund looked safe enough, but you ought to have 1.5 years' outgo in the fund." This figure was just drawn right out of the air. Nobody had any actuarial basis for it. I think many people said it in the hope that they could defer the incidence of the tax cut. I think that some people wanted a big fund because they wanted to see benefits grow and wanted to see public pressure build up to liberalize benefits. Of course, they don't say that, but I'm nasty enough to think that some people really feel that way. But I had made a study showing that if in 1977 we had had a fund ratio of 100%, instead of the 47% that we had then, financial difficulties would not have occurred in the early 1980s. Therefore, I think one year's fund is sufficient. Furthermore, under responsible pay-as-you-go financing, you don't just put a tax schedule in the law and forget about it. You keep monitoring it and, if necessary, adjust it upward or downward. And even if there are bad times in the 1990s, if the tax rate has to be adjusted upward, it wouldn't need to be adjusted upward to the level in present law.

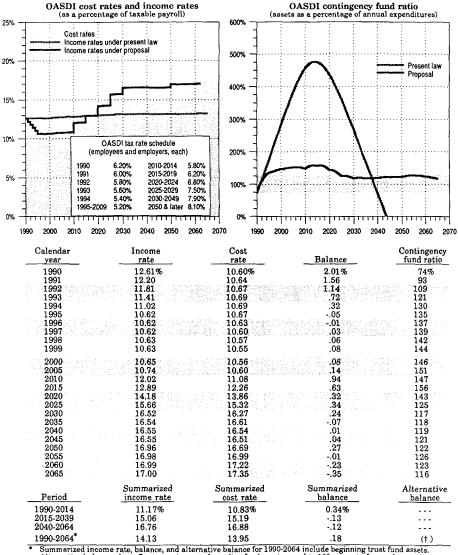
Senator Moynihan got a lot of bipartisan support. A number of Republicans said it was a great idea. A number said it was a bad idea, and the administration opposed it. Some Democrats favored and some opposed it. The debate went on throughout the year. As time came for a vote this fall, Senator Moynihan modified his proposal, as shown in Chart 2.

The modifications were intended to satisfy two groups: first, those who said that a 100% fund ratio was not enough, and second, those who said that this would have too much effect on the budget. Senator Moynihan believed, as I believe, that it should be right out in the open, but to try to satisfy the budgeteers, he phased in the decrease in the tax rate. As you can see, the lower curve on the graph on the upper left would decline gradually and then stay at a low level and then step up according to a pay-as-you-go basis.

Some people criticized Senator Moynihan's proposal and said, "You're sure of your lower tax rates now, but you're going to raise them in the distant future, over those in present law." This is true in the period beginning around 2020, but you must remember that, under present law, to maintain the same benefits after the fund goes down to zero, you'd have to raise taxes to the pay-as-you-go rate. So over the very long future, the Moynihan proposal didn't have any higher tax rates than present law would require. To people who say, "Well, we don't want to raise tax rates in the long run that high," you can avoid

CHART 2

Projected OASDI Financial Operations Under Senator Moynihan's Revised Financing Proposal of July 31, 1990



Alternative balance also reflects requirement for ending fund assets equal to 100 percent of annual expenditures. † Between -0.005 percent and 0.005 percent of taxable payroll. Note: Estimates are based on the alternative II-B assumptions from the 1990 OASDI Trustees Report.

Source:

Reprinted with permission from the Office of Actuary, SSA, February 1, 1990.

them under the Moynihan proposal just as under present law, by having benefit reductions, such as raising the normal retirement age higher than 67. But the Moynihan proposal was not an irresponsible one that meant higher tax rates forever than under present law.

In just the past couple of weeks, Senator Moynihan further modified his proposal to try to satisfy the budgeteers. The effects of the latest proposal are shown in Chart 3. He proposed, in order to keep the income level up in the next five years, raising the earnings base. So that the people at maximum taxable earnings would not get hit too hard paying on a larger amount, a lower tax rate was calculated so that they would pay just about the same as under present law. This brought in more money and could make the proposal more acceptable to the budgeteers. I didn't particularly like it, because I think the tax base should only go up with increases in wages, but as I say, this was an attempt to win support from those who were concerned about the budget impact in the next five years.

Moynihan's proposal came up for a vote last week and was successful in one way, in that 54 votes were for it and 44 were in opposition, but the vote was on a procedural question, which lost because it was a procedure to suspend the rules, which requires 60 votes. So the proposal lost this year. I am quite certain that Senator Moynihan will be back with it next year. It certainly looks as though there was a very clear majority in the Senate, and I think and I hope that it will be enacted in some form or other next year, so that we won't have this really ridiculous roller-coaster method of financing and building up huge funds that are so tempting in a very irresponsible way.

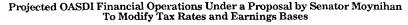
MR. SCHOBEL: In the course of his talk, Bob mentioned several groups that look at Social Security and monitor its finances. I'm going to discuss two of these quickly.

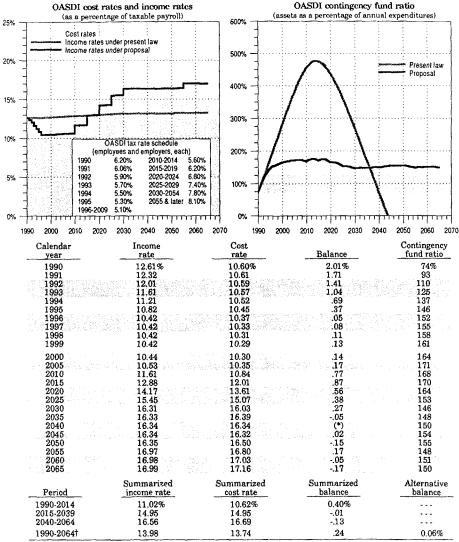
The Board of Trustees of the Social Security trust funds is required by law to report annually on the financial status of the program. Since 1984, the Board has had five members. Three are Cabinet secretaries -- of Treasury, Labor, and Health and Human Services (HHS) -- and the other two are members of the public, one Democrat and one Republican. In recent years, they've had some trouble doing their job. We've had a situation where the Social Security trust funds are building up larger and larger amounts, while the projected long-range deficit gets bigger and bigger at the same time. This has been problematical for the Trustees, who have difficulty explaining to the American people that the program is out of long-range actuarial balance, while the fund grows to these phenomenal heights.

In 1989, the Board essentially abdicated its responsibility and decided not to say anything anymore. They issued a report that has all of the trappings of a regular Trustees Report, like we've seen for the last 30-40 years, but it doesn't really have any conclusions or recommendations or say whether the program is actuarially sound or not. It has lots and lots of numbers and dumps it in your lap and says, "Well, you can make up your own mind."

We on the Society's Committee on Social Insurance didn't consider this a particularly sound way to proceed, and so we joined with the Academy Committee on Social Insurance in 1989 and devised some tests of actuarial soundness for Social Security that

CHART 3





* Between 0 and 0.005 percent of taxable payroll.

Summarized income rate, balance, and alternative balance for 1990-2064 include beginning trust fund assets. Alternative balance also reflects requirement for ending fund assets equal to 100 percent of annual expenditures. Note: Estimates are based on the alternative II-B assumptions from the 1990 OASDI Trustees Report.

Source:

Reprinted with permission from the Office of Actuary, SSA, February 1, 1990.

we felt everybody could live with -- a short-range test and a long-range test. We put these out as our substitute for what the Board of Trustees was not willing to do. In 1990, we went further and applied the tests that we had developed in 1989 to the projections issued by the Trustees in 1990. Our findings were issued in a commentary that is available from the Society.

We found, not surprisingly, that the OASDI program met the short-range test of actuarial soundness and failed the long-range test. In the course of our review, we looked very carefully at the assumptions that were used by the Trustees. One school of thought in the Social Security world for a long time has been that if half the people say you're too conservative and half say you're too liberal, then you're probably in about the right place. And that's been the situation for several years. The Trustees have changed their assumptions incrementally during the 1980s, but basically, they've stayed in a place where about half the people say they're too liberal and about half say they're too conservative.

We looked at the assumptions one by one and decided that they were reasonable in the aggregate. It's important to note here that the chief actuaries of Social Security and Medicare are required by law to state in the Trustees Reports whether the assumptions are reasonable and whether the methodology used is generally accepted within the actuarial profession. The chief actuary for Social Security did, in fact, certify both of those things, although he complained about the failure to make a statement as to whether the program was in close actuarial balance in the long range and made such a statement himself. He said that if the old test had been applied, then the program would have failed it. In our commentary, we say basically the same thing. We applied virtually an identical test and found that the program failed it. But with respect to the assumptions, we decided that if we had developed our own assumptions in a vacuum, they wouldn't be very much different from the ones used by the Trustees, and the resulting projections would be very similar. That is an important result.

Another organization looking at the Social Security programs, simultaneously, is the Advisory Council on Social Security. The law requires, among so many other things, that every four years an Advisory Council be appointed to look at Social Security and Medicare and make recommendations about how the program should be changed. In 1989, an Advisory Council was appointed. That Advisory Council has been meeting and issuing interim reports. One thing that it did in 1990 is appoint a technical panel of actuaries and economists to look at the assumptions. This technical panel also issued a report, which will be discussed later. The bottom line is that this technical panel does not come out very different from the Trustees, either.

MR. JOHN C. WILKIN: The adequacy of Social Security's financing is determined each year in reports from the Board of Trustees of the Social Security trust funds to the Congress. During the last several years, one of the most controversial topics has been how these reports test and measure actuarial soundness. Measures are scales that specify the degree of the system's financial health, while tests are binary, comparing the degree to a critical value that indicates whether the system meets the test of financial soundness. Both the OASDI program and the hospital insurance (HI) program are generally accepted as being underfinanced in the long range. While the discussion on how to

measure the deficits of these programs has heated up, discussion on possible solutions to their financial problems has been delayed.

I will quickly review the debate on the measurement and testing of actuarial balance and whether the current financing of Social Security passes the tests and present some other changes that may occur in the long run.

The enactment of the 1983 amendments put the OASDI program on a sound financial basis over the long-range period. The determination of actuarial soundness was made by comparing, over the 75-year projection period, the average cost rate and the average income rate (both of which were expressed as a percent of payroll). This calculation of the 75-year rates did not take into account the trust funds. The program was said to be in "close actuarial balance" and, thus, actuarially sound, if the 75-year income rate was in the range of 95-105% of the 75-year cost rate.

Each year after 1983, the long-range actuarial balance of the OASDI program gradually slipped closer and closer to failing the test of close actuarial balance. In the 1988 OASDI Trustees Report, only a change in the method of calculating the actuarial balance (from "average cost" to "present value" and by including the beginning trust fund balance in the program's income) prevented the program from being described as "out of balance." In the 1989 report, when the program would have been out of balance under either the new measure or the old measure, the test for close actuarial balance was dropped from the report. The test, which had been included in the Trustees Report to act as a warning signal for when action was necessary, was being removed because it might (and I quote from the Trustees Report) "inappropriately influence the decision as to whether and when changes in the program's financing or benefit provisions are needed in the future." The Social Security Administration's Chief Actuary, Harry Ballantyne, vigorously protested the Board's action. He included the determination of close actuarial balance in his signed statement of actuarial opinion, which is attached to the report.

Although the test was a good idea, weaknesses in the test and its inconsistent application contributed to its downfall. The main weakness with the test was that it did not apply to the short-range period. Whenever the OASDI program had been out of long-range actuarial balance in the past, it was taken to mean that the system was in financial trouble, requiring immediate modification. This year, under the test the OASDI system would be described as being out of balance, yet the funds are expected to increase by \$63 billion during 1990 and to be sufficient to pay benefits for the next five decades. Inconsistencies in the application of the test include: (1) sometimes using the average-cost method and sometimes using the present-value method; (2) the HI report currently includes (and the OASDI report used to include) the cost of attaining and maintaining a minimum fund balance, while the OASDI report currently does not; and (3) the OASDI report used to test for close actuarial balance, while the HI report never did so.

Of course, the test for close actuarial balance was always meant to be a long-range test, and its use in the short-range period is inappropriate. The solution would have been to keep the long-range test to identify long-range problems and to create a short-range test to identify short-range problems. Failure of the short-range test would require both

immediate action and immediate implementation of that action. Failure of the long-range test would not require that the problem be addressed immediately; the solution could be sought in a noncrisis atmosphere with an effective date many years into the future.

In August 1989, the Committees on Social Insurance of the Society of Actuaries and the American Academy of Actuaries released a joint statement on the testing of actuarial soundness. The Committees urged that the long-range test for close actuarial balance be strengthened and used in not only the OASDI report, but in the HI report as well. In addition, they developed a short-range test to be included in the reports. This statement did not end debate, but it laid the foundation for what I hope will: a report of a technical panel of experts that was released in August 1990.

The Advisory Council on Social Security commissioned this technical panel of experts, which included actuaries and economists, to review the cost estimates, including the assumptions and methods, and the measures used to assess the OASDI program's financial soundness. The panel was chaired by Steve Kellison and included three other actuaries: Donald Grubbs, Sam Gutterman, and Warren Luckner. The panel's report, which I think is excellent, recommended that both a short-range test and a long-range test be included in future OASDI Trustees Reports. Meanwhile, another panel of experts is studying the HI program.

The panel's short-range test applies to the first 10 years of the projection period and uses the concept of fund ratio -- that is, the assets of the fund at the beginning of the year expressed as a percent of the outgo during the year. The test is met if the system (1) maintains a fund ratio of 50% throughout the period, or (2) is projected to achieve a fund ratio of 50% within five years (while always being able to pay benefits) and then to remain above 50% through the end of the period.

The panel's long-range test is an interesting generalization of the 75-year test for close actuarial balance. Instead of calculating only the 75-year actuarial balance, the actuarial balance would be calculated for each valuation period beginning with the year of the report and ending with the 11th year through the 75th year. The test for financial adequacy would be a tolerance level for an actuarial deficit of 5% of the cost rate over the full 75-year period (which is the same tolerance level as the old test) but grading uniformly to zero at the beginning of the projection period.

This new long-range test would highlight not just the average experience over the whole 75-year period, but any intermediate periods in which funding may be inadequate. The OASDI program is projected to have a fund ratio under 100% after 2040, to have a fund ratio of zero in 2043, and to fall outside of close actuarial balance in 2050 (which is a deficit in excess of about 4% of the 61-year cost rate).

The panel also specifically applies its test only on the down side, not on the up side. Their test does not call the system out of balance if the income is more than 105% of the outgo. Thus, their test requires that the system be sound on a pay-as-you-go basis, which is a minimum funding requirement, and leaves open the possibility of partial funding, on the basis of public policy and economic considerations. The panel also

recommended that the balance in the 75th year be highlighted in the report, since this is indicative of the ultimate balance of the program and a source of "creep" in the long-range balance from one year's report to the next.

With regard to the long-range test, the panel recommended that (1) the Trustees continue to use the present-value method, not the average-cost method, and (2) the cost of attaining and maintaining a trust fund level equal to one year's outgo (that is, a fund ratio of 100%) be included in the cost of the program.

The panel also recommended that three of the assumptions used in the Trustees' projections be changed. These are: (1) that the annual real-wage differential be reduced from 1.3-1.0%; (2) that the ultimate annual inflation rate be increased from 4.0-5.0%; and (3) that the real annual interest rate be increased from 2.0-2.8%.

The net effect of the panel's recommendations would be to change the 75-year actuarial balance of the OASDI program from -0.91% of payroll (or 6.5% of the 75-year cost) to -0.70% of payroll (or 5.1% of the 75-year cost). Under either result, the OASDI program is outside the tolerance of close actuarial balance.

Over the last several years, while considerable energy has been put into designing ways of measuring and testing the financial status of the system, ways in which the financing could be made adequate have received little attention. It is now time for more attention to be focused on eliminating the long-range deficit.

This summer, in its commentary on the 1990 Trustees Reports, the Committee on Social Insurance described several OASDI financing changes that we believe are likely to occur in the future. Those changes are: (1) raising the FICA tax rate by about 1.5% of payroll, on employees and employers, each; (2) raising the ultimate normal retirement age by two more years, from 67-69; and (3) increasing the portion of benefits subject to income taxation from 50-85%. These three changes would put the system in long-range actuarial balance.

The hospital insurance program (Part A of Medicare) has much bigger and more immediate problems than does OASDI. At the beginning of 1990, the HI trust fund ratio was 134%, which means that the fund held about one year and four months' outgo. The fund ratio is projected to rise through 1994 and then decline, reaching zero in 2003. The part of the FICA tax rate that goes to the HI program is high enough to fund only about one-third the cost of the program. The estimated long-range deficit of 3.62% of payroll is 56% of the cost rate, far outside the traditional measure of close actuarial balance.

Raising the eligibility age for HI is not as politically appealing as it is for OASDI, because it would likely increase the number of uninsured and underinsured, two other problems that concern Congress. The increase in the cost of HI is not just the result of demographics, in any case, but is also the result of hospital costs increasing more quickly than average earnings. The implementation of prospective payments based on diagnostic-related groups (DRGs) in fiscal year (FY) 1984, along with yearly congressional action to limit the increases in the payments, has slowed the rate of growth

in hospital payments, but not to levels as low as the rate of increase in average earnings. Thus, even stronger measures would be necessary to keep the costs of the HI program from requiring ever-increasing tax rates to support it.

The DRG method of reimbursing hospitals is likely to be the tool that the Congress uses to further reduce hospital costs under the Medicare program. This method, as opposed to fee-for-service, places an entirely different set of incentives on hospitals. Under fee-for-service, new expensive machines and treatments are viewed as sources of income. Under DRG reimbursement, they are viewed as added cost with no additional income. Of course, the ramification of limiting hospital revenues would be a reduction in the quality of care that hospitals are able to provide.

The HI fund ratio is not projected to fall below 100% for more than 10 years. The current budget reduction efforts are likely to include a substantial increase in the HI tax revenues. An increase in the taxable earnings base for the HI payroll tax to between \$73,000 and \$100,000 is part of all the proposed plans. In addition, so is extending coverage to all state and local government employees. This additional income will extend the adequacy of HI funding for a few more years. Unless there are renewed budget deficit reduction efforts, the real squeeze on DRGs will not occur for 10-15 years. After that, the cost of the HI program is likely to go through high- and low-cost cycles as a result of the schizophrenic reactions of the American public as they alternately focus their concern first on the cost of the program and then on the quality of care.

The Supplementary Medical Insurance (SMI) program (Part B of Medicare) has a completely different method of financing and testing for actuarial soundness. The SMI program is financed through enrollee and government contributions, which are promulgated in September of each year without congressional action and apply for the following calendar year. Thus, it can be said that SMI program is actuarially sound because whatever the future costs are, the enrollees and the government will pay them. Even though the enrollees and the government have agreed to pay the costs, they have no way of knowing what the costs will be past 1992, the last year projected in the report.

Furthermore, the SMI report states that, in testing the actuarial soundness of the SMI program, it is not appropriate to look beyond the period for which the enrollee premium rates have been established. Therefore, the SMI program is currently considered to be financially sound, because the financing established through December 1990 is sufficient to cover projected benefit and administrative costs incurred through then, plus a small contingency margin.

I believe that the SMI report should drop the description of the SMI program as "actuarially sound," because it might, and I quote the 1990 report, "inappropriately influence the decision as to whether and when changes in the (program's financing or benefit) provisions are *not* needed in the future." It should be sufficient for the report to describe the funding basis and state whether the current premium level will fund the program until the end of the year. Any analysis of the financial soundness of the SMI program should include a projection of its costs further into the future than just three years, highlighting the effect of these costs on the federal budget and the level of future premiums.

Interestingly, the SMI program, which is the only Social Security program that is currently considered to be actuarially sound, is the one that is being looked at as the main source for reductions in the unified budget deficit.

The likely changes to the SMI program as a result of the budget reduction efforts involve an increase in the deductible from \$75 to somewhere between \$100 and \$150. The introduction of 20% coinsurance on laboratory tests is possible. Also Part B premiums are likely to be increased. This increase, however, is somewhat deceptive. Through FY 1975, the SMI premium for the aged was calculated to cover 50% of the total cost. From 1975 through 1984, the increase in the premium was limited to the previous percentage increase in OASDI benefits. The premium for 1984 covered only 25% of the total costs. From 1984 through 1990 (the current premium), it has remained at 25%. According to present law, the premium after 1990 was to be again limited to the rate of increase in OASDI benefits.

The budget deficit reduction proposals are to remove this limitation and to continue the recent practice of pegging the premium to a percentage of total costs. The most likely percentage is 25%, but other percentages up to 30% have been discussed. Because 25% of total costs is projected to be greater than what would result from increasing the premium according to increases in OASDI benefits, Congress gets credit for increasing premiums and reducing the deficit, even though it is just continuing the practice that has been in effect for the last seven years.

The biggest changes in the SMI program are not making headlines, because they do not directly affect beneficiaries. It is likely that the annual increase in the fee screens will be arbitrarily reduced. The fees on nonprimary care may be frozen, and those for several procedures and specialists will be targeted for reductions. But this year's budget reduction efforts are just small changes compared to what is already in the law. The Omnibus Budget Reconciliation Act of 1989 is phasing out Medicare's current system of fee screens that is based on physicians' previous charges. A Medicare Fee Schedule (MFS) will be set to reflect the costs of the resources necessary to produce the service -- that is, a "resource-based" fee schedule. The MFS will begin in 1992, but it will not be in effect for all services until 1996. In addition, for 1990, several procedures have been selected as "overvalued," and their fees have been reduced.

Objections to the current reimbursement system, which is referred to as the CPR system (so-called because it is based on customary, prevailing, and reasonable charges), in addition to its general complexity, are that it (1) induces inflation in fees, (2) induces increases in volume, and (3) does not appropriately reflect the actual costs of providing alternative services, with the result that physicians' decisions about training, location, and treatment are distorted.

The reform of the CPR system began in 1985 and 1986 when Congress ordered the Department of Health and Human Services to develop two major components of a resource-based fee schedule: a relative value scale and a geographic index. Preliminary versions of these were available in 1989 when Congress passed the Reconciliation Act, which contains a four-part reform package: (1) development of the MFS based on resource costs that do not vary with the specialty of the physician providing the service;

(2) annual "volume performance standards" or targets to limit growth in costs; (3) limits on balance billing, that is, the amount that physicians charge over the MFS; and (4) increased support for research intended to identify effective treatments and to develop guidelines for appropriate care.

The volume performance standard is a method of automatically adjusting fee schedules downward if it is judged that the volume of service performed by physicians increased by more than a reasonable amount. Since 1976, the rate of growth in physician costs per enrollee has exceeded the CPI by nearly seven percentage points per year. This has occurred even though fee-schedule updates have been eliminated or reduced in every year since 1983. Volume, not increases in real fees, has been the driving force behind the increase in SMI costs.

Unlike the DRG payment system for hospitals, the MFS is still fee-for-service. The volume performance standards and the research on treatment effectiveness are designed to reduce the rate of growth in volume, but it remains to be seen if they will be effective.

In summary, the OASDI program has a long-range problem, but the solutions should be formulated now, especially if the solution involves an increase in the retirement age, which should be done with many years of advanced warning. The HI program has a medium-range problem, for which the solution is likely to involve a decrease in the quality of care. The rapid increases in the cost of the SMI program (which may or may not be an officially recognized problem) are just beginning to be dealt with in a meaningful way.

MR. SCHOBEL: John, your talk makes me happy that I became an actuary instead of a doctor.

I'd like to expand on one thing that John said. He mentioned that in our commentary, the Committee on Social Insurance described how OASDI's long-range financing problems might be solved. The Committee did not make recommendations but, rather, outlined three changes that we believe are likely to occur as time goes by. It's a simple fact that the OASDI program will need more money, and there are only so many options for getting that money.

Some changes have already been made to the extent that they can be done -- for example, expanding coverage. Social Security now covers almost everybody in the country, and the remaining opportunities for expanding coverage would generate so little additional financing that they're not worth the political and administrative costs. If you want to solve the program's financial problems in the long run, you have to turn elsewhere.

We believe that Congress will do the sorts of things that it has already demonstrated it knows how to do, like raising the normal retirement age, which was done in the 1983 law. Raising the age further, beyond 67-69, for example, would be a simple matter. Increasing the FICA tax rate is obviously something the Congress knows how to do. And increasing the taxation of benefits is something that it apparently almost did this summer, when the budget negotiations were peeking from behind the curtain now and then, and

we'd catch a little glimpse of what was going on. Although increasing the tax on Social Security benefits was certainly discussed, it was ultimately dropped. We believe that it will probably come back at some point in time.

I said earlier that Steve Goss is not able to be with us because of the government's financial problems. Warren Luckner, who was a member of the technical panel that was appointed by the Advisory Council on Social Security and is a research actuary on the staff of the Society, has agreed to read Steve Goss's comments.

MR. WARREN R. LUCKNER: I had the pleasure of serving on the technical panel, and it was a highlight of my professional career. The panel got very strong support from the staff of both the Office of Research and Statistics and the Office of the Actuary, Social Security Administration. One of the main conclusions that should be emphasized in the panel's report is that the competence of the people working in the Social Security Administration is outstanding.

I am going to read Steve's remarks:

"I'd like to share with you some thoughts on a few issues addressed by the recent Technical Panel of Actuaries and Economists appointed by the Advisory Council on Social Security, as well as another view on pay-as-you-go financing for Social Security.

"First, the technical panel. This panel, headed by our own Steve Kellison, looked extensively into the assumptions and methods used to project OASDI costs and income into the long-range future. For the intermediate projection, the panel recommended: (1) a significant increase in the expected rate of inflation from 4-5% per year; (2) a drop in the expected rate of real wage growth from 1.3-1.0% per year; and (3) an increase in the expected real rate of interest on long-term U.S. Treasury obligations from 2.0-2.8% annually. The Trustees, who report annually to Congress on the actuarial status of the trust funds, will be reassessing their own assumptions soon and will consider the panel's recommendations.

"The inflation and real wage recommendations may seem to be improvements to most of you, as they do to me. The higher real interest assumption, however, is more at odds with all but the very most recent experience. The driving argument that led to the higher interest recommendation was the belief of some that the current real return on long-term securities -- over 3% when the panel met -- indicates what the market makers think the real rate of interest will be for the next 30 years."

I will make an editorial comment here on the work of the panel. First, it's understandable that there can be professional differences of opinion on setting an assumption. Second, the panel included actuaries and economists. The actuaries focused more on the analysis; the economists focused more on the assumptions, although we all participated in discussions of both aspects. Regarding the real interest rate assumption, we looked at weighted averages over various periods of time -- the last 10, 20, 30 years. The conclusion was a consensus of the panel.

My particular perspective on the issue had to do with the relationship between the inflation rate and the rate on long-term securities. The net difference is the real interest rate. In the 1990 Trustees Report, the sum of the inflation assumption and the real interest assumption differs appreciably from the rate on long-term securities.

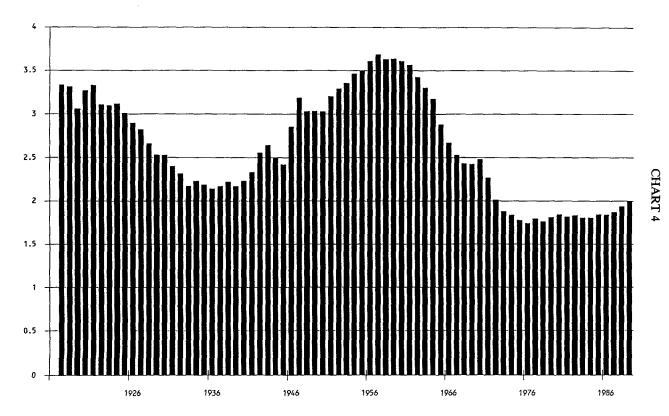
To go on with Steve's statement:

"I believe that interest rates, even long-term rates, are responsive to the current supply and demand relationships of funds and, thus, are not necessarily good predictors of future rates. Ultimately, real interest rates on long-term Treasury securities will likely be closer to 2% than to 3% because the U.S. will not be able to continue running foreign trade and federal budget deficits indefinitely, even if we want to.

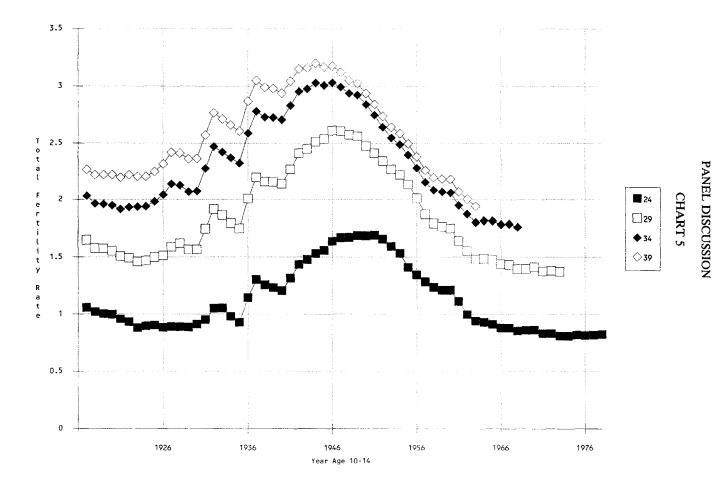
"The panel recommended no changes in the intermediate demographic assumptions of the Trustees Reports. However, in an appendix to the panel's report, Finis Welch, a highly capable and respected economist, expressed his belief that future total fertility rates will be more like 1.6 or 1.7 children per woman per lifetime, rather than the 1.9 used in recent Trustees Reports. In fact, the total fertility rate, which hit its all-time low of 1.74 in 1976, has been rising steadily ever since and is currently over 2.0. Finis suggested that much of the drop in the 1970s and rise in the 1980s resulted from a substantial age shift in births among women from their early 20s to their early and mid-30s. A brief theoretical analysis of the age-shift phenomenon (see Charts 4 and 5) indicates that the recent rise in the total fertility rate will decline from current levels only if younger cohorts of women desire fewer children during their lifetimes. Evidence of the past 15 years, both in surveys of birth expectations and actual birth rates, show no such decline. In fact, birth rates for every 5-year age group of women have been steady or rising since 1976. If this experience continues, we'll be more likely to return to the total fertility rate assumption of 2.1, steadfastly adhered to by Bob Myers for the past decade, than to project any further decline.

"As the final point related to the panel, it recommended adoption of both short-range and long-range tests of close actuarial balance. You will recall that the Social Insurance Committees of the Society and the Academy jointly made a similar recommendation last year in the wake of the Trustees' decision to eliminate the traditional long-range test of close actuarial balance. The panel's recommendation distinguishes itself in that it includes a generalization of the traditional long-range test. In effect, it would require that the traditional test be met not just for the total 75-year valuation period, but for each of the 65 valuation periods beginning with the current year and ending with the 11th through the 75th years. This approach answers the criticism that the simpler, traditional test aims for solvency only at the end of the 75-year period, with no consideration of the financial status at earlier points in time. A more thorough analysis of this new test can be found in the appendix of the technical panel's report, which is available from the Advisory Council staff."

A comment on the test: In my opinion, that particular aspect of the report is probably the most significant from an actuarial standpoint. Although the test is complicated, I think that it is an improvement, and I hope that those of you who have an interest will get a copy of the panel's report and review the test.



U.S. TOTAL FERTILITY RATE



U.S. TOTAL FERTILITY RATES UP TO SELECTED AGES, FOR COHORTS AGE 10-14 IN 1917-1978

2412

Now going on to Steve's next major point:

"Should the Social Security program be financed on a strictly pay-as-you-go basis? There are not many things that I disagree with Bob Myers on, but this is one. I understand there are several reasons why many actuaries, and at least one notable Senator, believe that the Social Security program should levy payroll tax rates each year equal to the amount necessary to pay the year's benefits. Primary among these is a justifiable lack of confidence that the Congress will keep its hand out of the cookie jar, if substantial trust fund balances accrue. It is argued that the Congress will simply use accumulations in years that FICA rates are higher than necessary to increase spending or cut taxes elsewhere in the unified budget, or worse, Social Security benefits themselves will be liberalized, creating long-term commitments that will be hard or impossible to meet.

"While I share these concerns, especially the latter, there is a further concern that is important in the context of a program that, like all pension plans, is inevitably based on intergenerational transfers. In order for the program to continue to maintain the broad-based support that it enjoys across all age groups, a reasonable degree of intergenerational equity must be maintained. That is, each generation must be perceived to at least roughly pay its own way. In other words, the FICA rate for all cohorts should roughly average out to their entry-age-normal cost rate, which is currently about 14% of payroll for new entrants and will increase in the future as life expectancy increases. This principle suggests that (1) current FICA rates of 12.4% should not be lowered, and (2) any necessary increases in the future should be made on a very gradual basis. Pay-as-you-go financing would reduce current rates by about one-fifth and then raise rates by about one-half during a 20-year period, after the turn of the century. On the other hand, maintaining the current FICA rate will permit a far more gradual rise after the turn of the century.

"Reserves built up now can be drawn down later to ease the impact on payroll tax rates of the dramatic entry into retirement age of the baby-boom generation. Detractors proclaim that these reserves are fiction and that they represent nothing more than another kind of claim on future income, just as with payroll taxes. If there is anyone for whom the fact that the Social Security trust funds are not held in a pile of dollar bills is a revelation, I suggest they review their investments in stocks, bonds, and CDs. Of course, the U.S. government securities held by the trust funds will be redeemed from revenues raised in the year of redemption, just as with the sale or maturity of any other financial instrument. But while the revenue required to redeem securities in the future must be collected in the future, it need not be collected in the form of a payroll tax. In fact, revenues to redeem securities held by the trust funds would likely be raised either through borrowing, income taxes, or a more broadly based consumption tax.

"In any case, the incidence of tax for the revenue to redeem securities will be quite different from the incidence of payroll taxes. Thus, the effect of advanced funding is not just to smooth out payroll tax rates in order to give the illusion of intergenerational equity. It can also change the incidence of the cost of paying the benefits. Payroll tax rates should not be lowered for the baby-boom generation just because their parents were prolific. And the relatively few children of the not-so-prolific baby-boom generation should not have to shoulder the whole burden of a bulge in the Social Security

program cost in their payroll taxes. Advance funding permits some sharing of this burden by all taxpayers, including the retired baby-boom generation, and is desirable for this reason also."

MR PHILIP F. FINNEGAN: Bob, you mentioned something that puzzled me. You said that the above half of the \$500 billion deficit reduction would be from Social Security income. How is that a change from the status quo?

MR. MYERS: You're quite right. It is no change, but that's the way they do the arithmetic.

MR. GENE ECKSTUT: I've been a student of Social Security for a long time, primarily because of the great book that Bob Myers wrote and keeps updating. I have a hobby of economics, also.

I have a real problem with the Social Security assumptions for the 21st century. The history of the 19th and 20th centuries suggests that the real annual growth rate of the economy is very close to 3%. In other countries it's more, but for some reason historically, 3% has been the growth rate in the U.S. All the scenarios in Social Security except the most optimistic assume that in the 21st century, the annual growth rate of the economy will be 2% or lower. To me, the growth rate of the economy is more important than the real-wage increase, because if the growth rate of the economy is 3%, you can always raise the percentage of income that's taxed -- in other words, the wage base -- in order to track the growth rate of the economy.

Also, the way that the assumptions in Social Security are, by assuming a high growth rate for the next 10 or 20 years, and then going down to 1.6-1.9% for the next 50 years, you get higher benefits having to be paid to the people who are retiring in the 21st century, on the basis of them having high wage rates, but then the people who have to support them are getting low growth rates and there's not much money to tax.

I'm trying to figure out where this crazy assumption came from. Is it based on the fact that you don't think there will be many workers? That the birth rate is real low? That there won't be much immigration? I don't understand it.

MR. SCHOBEL: John Wilkin is best prepared to answer that. John was in charge of recommending the assumptions for quite a few years at Social Security.

MR. WILKIN: To me, the question is, are you a supply-side economist or a demand economist? For making projections of the economy for the Trustees Reports, the economy is disaggregated into labor supply times the average productivity of that labor. In the past, the population has been growing very rapidly and increasing the labor supply. But with the low fertility rates that are assumed in the future, the growth in the labor force is almost zero through most of the 21st century. All the growth is in productivity. If you're a demand economist, you believe that the economy is going to grow at 3% per year and will demand all that extra work out of the fewer workers. I think in the long run the supply side is the better way to look at it.

MR. MYERS: Just a reply to Steve, who unfortunately can't counterreply. I agree with him about the intergenerational aspects of pay-as-you-go financing -- that it would be more fair to have a level tax rate, but I think that the cure is much worse than the disease. The great political dangers of having a large fund are not an actuarial matter, but I don't think we can stay in the actuarial ivory tower and ignore the real political world and what will happen if a mammoth trust fund is built up in the name of intergenerational equity.

MR. WILKIN: I can plug a pet idea of mine, again, that has to do with the SMI program. I agree with Bob Myers that the best way to fund OASDI is pay-as-you-go and that a tax-rate cut for OASDI is appropriate now. But, while many see the OASDI surpluses helping to fund the general budget, the general budget is putting billions of dollars every year into the SMI program. So this money is going both ways. I say cut the OASDI tax and use that money to fund the SMI program on a payroll-tax basis, and then look at tests for actuarial soundness of SMI similar to those for OASDI and HI.

MR. LUCKNER: I have some quick comments on intergenerational equity. There are aspects to it that I don't want to get into right now, in terms of things like taxation of benefits and deferred taxes on contributions that could, in effect, enhance intergenerational equity in the future. However, I would like to point out that the growth in the economy in the future has some bearing on intergenerational equity, in the sense that, with a bigger pot to pay from, there may be less concern about intergenerational equity in terms of the tax rates that are charged.