RECORD OF SOCIETY OF ACTUARIES
1982 VOL. 8 NO. 2

U.S. SOCIAL SECURITY ISSUES

Moderator: JAMES R. SWENSON. Panelists: HARRY C. BALLANTYNE, BARNET N. BERIN, ROBERT J. MYERS

1. What is the financial status of the Social Security program?

2. What changes have been recently adopted and what changes have been proposed?

3. How would these changes affect the private pension system costs and plan design?

4. What is the proper role of the actuarial profession regarding the Social Security program?

The session will include discussion of the paper, "Constant Replacement Ratios in Retirement: A Theoretical Approach," by Barnet N. Berin and Anthony B. Richter.

MR. JAMES R. SWENSON: For today's session, I would like to make a personal presentation that briefly discusses the problems confronting the Social Security program, tells how those problems developed and, finally, present solutions to those problems consistent with those being generally recommended by the business community.

Most actuaries recognize that our country needs a sound, adequately financed Social Security program. 36 million people now receive Social Security benefits. Most of those people rely on those benefits. Congress must take action to assure those 36 million people that they will continue to receive their benefits. Congress must also take action to assure that future generations will receive benefits. Future benefit promises must be realistic.

Both Democrats and Republicans alike support the program. Neither party intends to destroy the program. However, at the moment neither is doing much to save it either. Despite this fact, responsible members of both parties want a sound, adequately financed program.

The problems of the program are real despite the political rhetoric. The program is not as financially sound as it should be. However, solutions are available to solve the problems. Those solutions do not have dire consequences. Current benefits need not be cut. However, strong bipartisan action is needed now before the problems grow much worse.

There are four major problems confronting the program. Each of those problems must now be addressed.

1. Public understanding of the program is modest at best. There is misunderstanding as to its purpose, nature and financing. The public was led to believe that they were participating in an

advance funded insurance program. For example, they were told that their contributions, a euphemism for taxes, were to be set aside in trust funds to pay for their own benefits. That simply is not true. The program is an intergenerational transfer program designed to meet social objectives. Taxes collected from workers are almost immediately transferred to current beneficiaries.

Social objectives of the program are met as proportionately larger benefits are paid to lower wage earners and to workers with eligible spouses and dependent children. Congress is now faced with problems exacerbated by myths. These myths were perpetuated first to gain public acceptance in the program and later to enhance its popularity. People were led to believe that they paid for their own benefits, that is, they earned them.

A question being asked of general audiences is, "Within what time period will current retirees receive benefits equal to their total contributions?" Assume someone who has paid maximum taxes during his entire working career and assume that they retire at age 65 and further assume no spouse benefits. There are four possible answers, 1 1/2 years, 3 years, 6 years or 10 years. Approximately 5% of people responding to this particular question indicate response number 1, 1 1/2 years; another 40% generally respond answer number 2, 3 years; another 40% answer number 3, 6 years; and finally answer number 4, 10 years, generally receives a 15% response. The correct answer is 1 1/2 years.

An average wage earner with a homemaker spouse would receive their contributions back in 11 months. Because of the existence of survivor benefits, that couple can expect to receive benefits for almost 25 years as long as one of them is still alive.

This sophisticated audience will recognize that the taxpayer would have received interest on their contributions. If you take that into account, you find that the payback period is lengthened from 1 1/2 years to about 2 1/2 years.

More recent myths are the result of inadequate information. One myth is that solutions to the problems will require significant benefit reductions. Another myth is that general revenues are a painless solution.

The use of general revenues is what I consider an imprudent suggestion to some of the financing problems. It is painfully apparent considering our large deficits today that there are no general revenues available. Any further increase in those deficits will create inflation and further weaken the economy. General revenues are not a free lunch. Their use would ultimately require tax increases. Future generations will already have to pay for the existing trillion dollar debt. It is not fair to add to that debt.

2. Public confidence in the program is at an all-time low. The lack of understanding contributes to this problem. Headline stories

about imminent bankruptcy shatter confidence. Younger and middle-aged workers are very skeptical. One recent poll showed that three out of every four workers between the ages of 25 and 44 had little or no confidence that they will receive benefits when they retire. Those receiving benefits are terrified. Faced with uncertainty, they visualize far greater negative impact on their monthly checks than Congress or the Administration would permit. Public confidence is critical to the support of the program. Actions are needed to substitute confidence for uncertainty.

3. The program is faced with short-term financing problems. The largest of the three trust funds, the retirement fund, will not be able to pay benefits on time by mid-1983. This problem developed despite 1977 amendments which provided the largest peace-time tax increase in U.S. history. At that time, Congress said they had solved the problems of the program until well into the 21st century. The primary reason that problems developed so soon after those 1977 amendments is that the Consumer Price Index (CPI) increased much more rapidly than wages. During the last three years, CPI-indexed benefits have increased by 40%, while wages increased by only 30%. If benefits had been increased by 30%, short-term cash flow problems would have been avoided. High levels of unemployment have also contributed to the problems.

4. The program is faced with even more serious long-term financing problems. While the short-term problems are the result of unexpected adverse economic conditions, the long-term problems are caused by demographic developments. Their solution will require more significant legislative changes. Once the "baby boom" generation retires, there will be fewer workers supporting many more beneficiaries. This is the combined result of improving longevity, the post-World War II "baby boom", and the subsequent decline in birth rates, resulting in the "baby bust". Once the "baby boom" generation retires, the percentage of persons over age 65 in the U.S. will exceed the percentage of those over age 65 living in Florida today. Unless significant changes are made, our children and grandchildren will face a tax rate officially projected to be two to three times as high as today's rate. It is neither fair nor wise to leave that legacy to them. Future benefit promises must be realistic if the program is to remain financially viable.

Actions must be taken now to solve each of the four major problems. Improved communications are needed so that the public understands the program and realizes the necessity of enacting reforms now. We must restore financial health to the program for both the short and the long term. The mood of the nation cries out for clarification, decision and then honest communication that all is well. This will restore public confidence critical to the continued support of the program.

The financial problems are the result of many factors. There has been a tremendous explosion in benefit increases since 1968. Because of a series of ad hoc increases enacted in the late 60's and early 70's, and because of subsequent CPI indexation, benefits have grown much more rapidly than

wages. From 1968 to 1981, benefits were increased by 245% whereas wages grew by only 145%.

Many benefits have been added to the program. President Roosevelt would hardly recognize the program today. Total outlays have been doubling every 5 years. Despite all of this, today's problems are modest. They are the result of unfavorable economic conditions. The future problems are much more severe because of demographics. Congress must now act responsibly to solve both problems.

The options that are available to solve the problems are either to increase taxes or to control future benefit growth. Let's study these choices.

There have already been substantial increases in payroll taxes. The first payroll tax increase occurred in 1950. Since then, there have been tremendous increases in taxes. From 1949 to 1981, average wages have increased a little less than 500%. Average Social Security taxes have increased by more than 3600% and the maximum taxes have increased almost 6500%.

There is considerable resistance to further increases in payroll taxes. As we have already seen, payroll taxes have grown enormously. The 1977 legislation provided for the largest peace-time tax increase in U.S. history. That legislation increased taxes by $227 billion over a ten year period. Congress encountered substantial public resistance to those increases. Yet those increases have already proved insufficient. Four rate increases have gone into effect since 1977 and three more increases, including the largest increase, will go into effect before the end of the decade. By 1990, the maximum tax to be paid by an employee is estimated at more than $4,600. Employers will be required to pay the same amount. Therefore, directly or indirectly, many economists would argue that most of the people in this room will be transferring more than $9,000 per year to Social Security beneficiaries.

The best solution is to control future benefit growth. Changes should not be precipitous; changes should not be limited to only a few. That was the problem with the Administration's proposal to drastically reduce early retirement benefits. It was too much, too soon, on too few.

Gradual changes can and should be made. Changes must permit time for planning. Changes need not and must not reduce the benefits of those now receiving them. In addition, benefits should not be reduced for those planning to retire soon.

There are a variety of reasonable solutions available to restore short-term financial health to the program. Last year, some hoped that interfund borrowing by itself would be sufficient to prevent bankruptcy. This was one of the reasons that Congress failed to take action during 1981. The other two trust funds are more financially solvent than the retirement fund. However, all three funds combined are now expected to be insufficient by some time in 1984, under "best estimate" actuarial forecasts. Therefore, there is general agreement that other changes are needed as well.

Benefit recipients should be protected from the ravages of inflation. However, it is becoming increasingly apparent that full CPI indexation is

unaffordable. The CPI overstates the cost of living. In addition, indexing contributes to inflation. Some modification of the cost of living adjustment is needed. As mentioned, in the last three years, wages have increased by 30%, whereas benefits have increased by 40%. That is the cause of the short-term problem, and it was not fair to workers.

Workers were essentially required to bear the entire burden of OPEC price increases, as one example. At a minimum, benefit increases should be limited to average wage increases when wages do not increase as rapidly as prices. This would be fair to all generations. Benefits would still increase but would not increase faster than wages and, therefore, taxes. It would act as an economic "safety valve". The financial solvency of the program would be protected under adverse economic conditions.

In 1972, faulty benefit calculation procedures were inadvertantly enacted. Those procedures caused future benefits to be adjusted for inflation twice - once for wages and once for prices. Benefits grew much more rapidly than Congress intended. In 1977, those faulty procedures were largely corrected. However, benefit levels were locked in at higher levels than those existing in 1972.

During much of the 60's, the benefit replacement rate, and bear in mind that this does not include any spouse benefits and that benefits are tax-free, was approximately 1/3 of final earnings. Through a series of ad hoc increases in the late 60's and early 70's, benefits rose until 1972, when the faulty procedures were enacted. The replacement rate then skyrocketed. In 1977, Congress solved the problem partially for persons born after 1917, and the replacement rates dropped fairly precipitously. That dramatic drop in replacement rates is what is referred to sometimes as the "notch" problem. However, the ultimate level still exceeds the benefit levels that were in effect in 1972.

There have been technical proposals made, namely the Bend Point recommendation that was proposed by the Administration last year, that would gradually complete the correction. The procedure would be phased in over a period from 1985 to 1990 and would affect only future beneficiaries. Ultimately, benefits would be reduced by about 2 1/2% of indexed salary for an average wage earner. The ultimate level would still exceed the level that existed in 1972 just prior to the adoption of the faulty procedures.

There are a myriad of other short-term recommendations. For example, disproportionately large windfall benefits should be eliminated for government employees who do not fully participate in the Social Security program. Minor changes should also be made to reward continued labor force participation. However, the retirement earnings test should be retained. The test is consistent with the purpose of the program. That purpose is to replace income lost upon retirement. It is not logical to transfer tax-free money from younger workers to older workers. Additional changes to the disability program are needed. Benefit increases should be deferred for three months. That represents a small price for the elderly to pay for assuring solvency and eliminating uncertainty and anxiety. Finally, interfund borrowing should be extended beyond the end of 1982.

As mentioned, the long-term problems are the result of unfavorable demographic developments. Enactment of the recommended short-term solutions would help to restore long-term balance.

The long-term problems are even more severe. The long-term problems are caused by demographics. The solution should be a demographic solution. Most commissions have recommended a gradual future increase in retirement age to age 68. The increase should begin sometime between 1990 and 2000. It should be phased in gradually, such as over a twelve year period. This is a modest proposal. By the year 2000, persons age 74 are expected to have the same life expectancy as those age 65 in 1940 when that age became the age at which full benefits would be received. This action would significantly reduce the long-term financial imbalance.

There is wide support for this recommendation. Virtually every major study group has recommended it, and a recent New York Times poll showed that the public supports it on a gradual basis by a 5 to 4 margin. Those planning to retire soon would not be affected. However, it is important that Congress enact this proposal now so that those affected will have time to plan accordingly.

Mandatory Social Security participation should be enacted to the extent permitted by law. Everyone should be covered by the program. Mandatory coverage should be accomplished on a basis that protects accrued benefits. Existing public employee programs should not be eliminated but should be modified to be coordinated with the Social Security program. It would eliminate undesirable gaps in coverage as people move in and out of government employment and would improve both the short and the long-term financial condition of the program.

Achieving universal coverage is not a simple matter. There is considerable opposition by the employees involved. Politically realistic first steps are: 1) Cover all new federal employees, 2) eliminate windfall benefits, and 3) eliminate the option for groups to elect out.

There are two major windfall benefits. First is the proportionately larger benefit paid to lower wage earners. Many government employees are inappropriately treated as lower wage earners because their non-covered earnings are not considered. There are proposals that have been made that would eliminate this windfall.

Second, virtually all government workers qualify for Medicare, even though they do not fully pay for those benefits. That windfall can be eliminated easily by requiring everyone to participate in the Medicare program, even if they do not participate in the rest of the Social Security program.

I strongly agree with President Carter's Commission on Pension Policy - our nation is far too dependent on Social Security. We must gradually reduce that dependence through the voluntary expansion of individual savings and private pension plans. That would alleviate pressures on the overburdened Social Security program.

I strongly supported 1981 legislation that permitted everyone to establish an Individual Retirement Account (IRA). That was a step in the right direction. To improve the effectiveness of that program, annual limits

should be greatly expanded. In addition, mandatory employee contributions to private plans should be eligible for tax-deferred treatment. That would encourage the adoption of new plans and the expansion of existing plans.

Excessive government regulation of pension plans must be eliminated, and ERISA reform legislation is needed. The government must encourage rather than discourage private pension plans.

All Americans should receive an adequate and secure retirement income. A strong and productive economy is critical to achieve that objective. Private plans and savings provide an important source of capital formation. Capital is needed to create jobs and increase economic productivity. Social Security is not a source of capital formation. It probably inhibits the accumulation of needed savings essential to strengthen the U.S. economy. We must gradually reduce our dependence on Social Security and encourage the expansion of private pension plans and individual savings.

To summarize, the long-term problems are much more significant than the short-term problems. Significant changes are required. It would be unfair and unwise to wait until the "baby boom" generation reaches retirement age before making those changes. We must adopt those solutions now.

It should be noted that even if all the changes that I have recommended today were enacted, they would not completely solve the long-term financial imbalance of the program. To do so would require much more effective control of the health care cost explosion. If health care costs can be brought under more effective control, then future costs of the program would probably be tolerable, if changes such as those that I have recommended today are enacted.

Now is the time for reason and action. Reasonable solutions are available. The consequences of those solutions are not dire. Those solutions do not require current benefit cuts, and future changes are both moderate and gradual. It is critical that financial viability be restored. We must then reassure the public that the program is solvent. This will eliminate the uncertainty and anxiety affecting our elderly citizens.

You have a critical role. You must not be silent. Last year the legislative process broke down because Congress only heard from those receiving benefits. Taxpayers in the business community were generally silent. This must not happen again. Your stake in the program is too important.

I strongly urge you to contact your legislators and demand that they take action to solve the financial problems facing the program without resorting to non-existent general revenue financing. Tell Congress to face up to the problems in an honest and direct manner. Urge them to enact the types of changes recommended today, after you have had a chance to study the issues. Tell them that the program is too important to be subjected to partisan politics. Demand a bipartisan solution to the problems. If you share my concern that our country needs a sound, adequately financed Social Security program, let your elected officials hear from you now. Decisive and intelligent action is needed.

That concludes my formal comments. I would now like to introduce Harry Ballantyne, who was appointed as the Chief Actuary of this Social Security Administration in January of 1982.

MR. HARRY C. BALLANTYNE: The Social Security system consists of two basic programs. The larger of the two is the Old-Age, Survivors, and Disability Insurance (OASDI) program, which provides monthly cash benefits after a worker retires, dies, or becomes disabled. The other is the Medicare program, which provides payments for hospital care, doctor bills, and other medical expenses for persons aged 65 and over and for disabled persons.

These programs are financed through four Federal trust funds. The OASDI program is financed through the Old-Age and Survivors Insurance (OASI) and the Disability Insurance (DI) Trust Funds. The Medicare program is financed through the the Hospital Insurance (HI) Trust Fund and the Supplementary Medical Insurance (SMI) Trust Fund. The programs are essentially financed on a current-cost basis, under which total income in each year is intended to be approximately equal to total outgo in the year plus an additional amount needed to maintain the trust funds at appropriate contingency reserve levels.

My primary focus will be on the financial status of the OASI and DI Trust Funds. However, the status of the HI Trust Fund is also relevant and must be considered as well. These three trust funds, OASI, DI, and HI, are of course related in that they are financed by payroll taxes. The SMI Trust Fund is financed by contributions from the general fund of the Treasury and monthly premiums from those who participate in the program.

The financial status of the Social Security program is analyzed and reported on annually by the Boards of Trustees of the trust funds. This year's Trustee's Reports were sent to Congress on April 1, 1982, which was the statutory due date of the reports.

The reports contain estimates on the basis of four different sets of economic and demographic assumptions, varying from optimistic to pessimistic assumptions. Prior to last year, estimates were shown on the basis of three different sets of assumptions. The central set, which was labeled Alternative II, was called the intermediate assumptions. Beginning with last year's report, there are two intermediate sets - Alternative II-A and Alternative II-B. The II-A assumptions in each of the 1981 and 1982 Trustee's Reports were consistent with the economic assumptions which underlie the President's Budget for the following fiscal year. The intermediate II-B assumptions are somewhat less optimistic than the II-A assumptions and are generally considered to serve the same purpose that the intermediate assumptions before the 1981 Trustee's Report served. That is, we consider them to be the more realistic set of assumptions.

The tables and charts that I will be showing are based on the estimates in the 1982 reports. It should be noted that the estimates in the 1982 reports and in these tables and charts reflect an assumed cost-of-living benefit increase of 7.6% for June of 1982. The actual increase was recently determined to be 7.4%.

The estimated operations of the OASI Trust Fund are shown in Table 1, on the basis of II-B assumptions. The figures for 1983 and later are theore-

tical because, under present law, the trust fund will be exhausted by July of 1983.

The last column of Table 1 shows the trust fund ratio at the beginning of each year. It starts at 18% in 1981 and falls to a -24% by 1986. This ratio represents the ratio of the assets in the fund at the beginning of the year expressed as a percentage of outgo during the year. When the ratio falls below about 8% or 9%, the fund is depleted because the assets at that point are not large enough to pay all of the benefits on time. The reason this occurs is that practically all of each month's outgo from the OASI Fund, and the DI Fund, is payable at the beginning of the month - usually the benefit checks for a month go out on the third of the following month. Sometimes it is a day or two earlier than that. Income to the trust funds, on the other hand, is more or less uniformly received during the month. The assets at the beginning of the month have to be large enough to meet the outgo that is due at that time and that outgo would be about 1/12 of the year's outgo.

Legislation was enacted in 1981 which authorizes interfund borrowing among the OASI, DI and HI Trust Funds through 1982. Without interfund borrowing, the OASI Trust Fund would become unable to pay benefits on time in the latter half of 1982. The authority for interfund borrowing expires at the end of 1982. The amount that may be borrowed at any time under this authority can be no larger than the amount needed to assure timely payment of benefits during the six month period following the date of the loan. If this authority is used to its fullest extent, then it would permit the timely payment of OASI benefits through June of 1983. Table 2 shows the estimated amounts that would be borrowed by the OASI Trust Fund from each of the other two Funds on the basis of all four sets of assumptions, assuming full use of the interfund borrowing authority.

After 1982, the DI Trust Fund is expected to increase in every year in both the short and long range under all four sets of assumptions. However, if the assets of the OASI and DI Trust Funds could be combined as shown in Table 3, which is based on II-B assumptions, the funds would still become unable to make timely payment of benefits sometime later in 1983, so it would get you past July but not much later than that. The depletion of the combined Funds, which would occur under all four sets of assumptions, results because of the OASI Fund operations overwhelm the operations of the DI Fund.

Since all three Funds - OASI, DI, and HI - are supported by payroll taxes, a great deal of interest centers on the operations of the three combined Funds, which is shown in Table 4 on the basis of the II-B assumptions. This table shows that even if the three Funds could be combined, they would become unable to pay benefits on time in 1984. The short-range financial status of the OASDI and HI system as a whole is significantly worse than was estimated last year, because of the continuing adverse economic conditions. Immediately after the 1981 legislation was enacted, it was etimated that the assets of the three trust funds, if combined, could not pay benefits on time by about 1988, based on last year's II-B assumptions.

Chart 1 shows the fund ratio for all three trust funds combined, based on each of the four sets of assumptions. The shaded area of the chart represents trust fund ratios of less than 8%, which is the level required for

timely payment of benefits. The three combined trust funds fall below this level in 1984 under the II-B assumptions. Under the Alternative III assumptions, the combined funds would become unable to pay benefits on time by the beginning of 1984. Under the more optimistic II-A assumptions, the combined trust funds would barely be able to pay benefits on time, but there is no margin of safety to provide for even slightly less favorable economic assumptions. It should be noted that while the HI Trust Fund will continue to be relatively large in the next year or two, the estimates indicate that it will decline rapidly and will probably become exhausted in the latter half of the 1980's. So it is onlv a very temporary short-term relief that can be offered by the HI Trust Fund.

The short-range financing problems of the OASDI program are largely due to the poor economic performance of the last 5 to 10 years. One of the most critical economic indicators for the program is the gain in average real wages in covered employment. This can be expressed as the difference between the rate of increase in average wages in covered employment and the rate of increase in the CPI. In 4 out of the last 7 years, this real-wage differential has been negative by about 2 1/2 to 5 percentage points in each year.

In addition to the severe short-range financing problems of the Social Security program, there continues to be a significant long-range deficit. Table 5 shows that based on the II-B assumptions, the average long-range cost rate of OASDI over the next 75 years is estimated to be 12.27% of taxable payroll. This cost rate represents total expenditures of the program as a percentage of taxable payroll. The average cost rate exceeds the average tax rate by 1.82%. This is equal to the long-range deficit that was shown in the 1981 Trustee's Report based on last year's II-B assumptions. However, it is somewhat larger than the deficit that was estimated last year after the 1981 legislation was enacted. The legislation reduced the long-range deficit by an estimated .19% of taxable payroll. This reduction was completely offset by the net effect of changes in our basic estimates.

Based on the more optimistic II-A assumptions, the estimated long-range deficit is .82% of taxable payroll. Among all four sets of assumptions, the actuarial balance, which is the difference between the average tax rate and the average cost rate, over the next 75 years ranges from a surplus of 1.29%, based on Alternative I, to a deficit of 6.47%, based on Alternative III. Obviously this range, as large as it is, does not cover all of the possible outcomes. But the estimates are intended to be indicators of the trend and range of future experience.

While the adverse economic experience of recent years is a contributing factor to the long-range deficit, the primary cause, of course, is demographic. The high fertility rates in the 1940's and 1950's resulted in a relatively large working population, as compared to the number of beneficiaries. The number of OASDI beneficiaries per 100 workers is shown in Chart 2. For the next 25 years the ratio is expected to remain at about 30 beneficiaries per 100 workers. However, because of the decline in fertility rates during the 1960's and 1970's, the ratio is projected to increase to about 50% in the latter half of the next 50 years, under the intermediate assumptions.

While there are severe financial problems for the OASDI program in the next 5 to 10 years and over the next 75 years, the actuarial balance over the next 25 years is estimated to be a surplus of .64%, as shown in Table 6, based on II-B assumptions. This surplus results largely because of an increase in the tax rate of 1/2% each for employees and employers beginning in 1990. However, the HI program is estimated to have a deficit of 1.95% during the period, for a net deficit of 1.32% for the three Funds combined.

In summary, the Social Security program is badly out of balance in both the short range and the long range. There is an urgent need for legislation to change the balance between income and outgo in the short range to avoid a financial catastrophe, and legislative changes are also needed to restore financial soundness in the long range.

MR. SWENSON: You mentioned that the long-term deficit for OASDI is estimated to be 1.82% based on the II-B assumptions, which most observers characterize as the legitimate intermediate assumptions. While it is generally unpublished, it should be noted that the 75-year deficit for the HI program is more than twice as large as the deficit for the OASDI program. Last year the combined OASDHI deficit was 6.1%, and I would expect that that will probably be worse this year. (Note: It was ultimately determined to be 8.0%.)

I would now like to introduce Bob Berin. Bob is Managing Director and Chief Actuary of William M. Mercer, Inc. Bob has lectured and written extensively on pensions and employee benefits. He has been an instructor for the Actuarial Club of New York where he pioneered a course in pension mathematics. Bob has also authored two books, The Fundamentals of Pension Mathematics, and Pensions: A Guide to the Technical Side, and has published numerous articles.

He is a member of seven national and international organizations. Bob has recently coauthored a paper with Anthony B. Richter entitled, "Constant Replacement Ratios in Retirement: A Theoretical Approach". Bob will not only discuss that paper but also discuss the Social Security issues and how they relate to private pensions. In addition, he will present his views on the role of the actuarial profession with respect to the Social Security program.

MR. BARNET N. BERIN: The purpose of the paper, "Constant Replacement Ratios in Retirement: A Theoretical Approach" is to identify a planning model which can be applied when improving pension benefits for retirees. The basic issue is of considerable importance to actuaries and is of general interest to a wide audience.

Recognizing the increase in the rate of inflation over recent years in the U.S.A., pension plans have been improving benefits for retired employees. A model is developed for such increases, based on periodic examination of the increase in pension necessary in order to keep a replacement ratio constant. This replacement ratio is initially related to the private pension plus Social Security benefit divided by final average salary.

The replacement ratio is calculated in retirement years and the interrelationship between the various elements that are involved in keeping the ratio constant is discussed. This includes a discussion of the relation-

ship between increases in average wage and increases in the CPI. These thoughts are central to the ideas in this paper.

The meaning and significance of the model are discussed. Both philosophical and practical issues are explored. Examples of the approach are included.

The function "Social Security Benefit divided by Private Pension" is introduced and appears useful in addressing this problem. The ideas presented are practical and can represent an interesting consulting assignment.

I. How would proposed changes in Social Security affect the private pension system plan design and costs?

We have two systems running side by side: the Social Security system and the private pension system. The Social Security pension system is about 47 years old, complex, essentially unfunded, covers about 93% of the working population on a continuous basis regardless of where employed, and recognizes compensation up to stated levels. The private pension system is about 37 years old (essentially post-World War II). It is generally not very complex, reasonably well funded, able to recognize regional and industrial differences, covers about 70% of the working population with coverage limited to employment with a plan sponsor, a vested benefit normally being available after 10 years of service, and usually recognizes service, and usually recognizes all pay. It seems clear that both systems are necessary. The weaknesses of one are complemented by the strengths of the other. The combined objective is to provide two retirement benefits from two systems, which collectively provide the basis for a decent retirement income.

Private Pension Plans

It is important to recognize that along with the company's ability to meet the costs of the pension plan, there are many significant plan design considerations in determining the level of benefits, and these must interact with recognition of service and salary to define an acceptable replacement ratio at retirement.

The focus normally is on the percentage of income to replace at retirement. We do know that income needs generally decrease after retirement:

- Social Security is free from all income tax (Federal, State and City).
- Social Security benefits are indexed, permitting increases, but not decreases.
- The CPI is but a proxy for the retiree rate of inflation. If this is in excess of a retiree index, as some believe, Social Security benefits are over-indexed to some extent.
- Job-related expenses are eliminated.
- For most people, a lower overall tax bracket is effective in retirement.
- There are double personal income tax exemptions for persons over age 65.
- There may be other forms of savings, family support and Medicare to reduce medical expenses.

On the other side, we know that there is some loss of benefits in retirement: medical benefits possibly, job-related discounts and more.

The retirement plan objective must take some account of the change in tax status in retirement and the possibility of other forms of savings. This normally takes the form of replacement ratios which are less than 100%, with such ratios decreasing with increasing salaries. For most employees, the combined retirement checks are an important part of retirement planning. With this in mind, most private pension plans are designed to produce combined retirement income of about 80% (or more) for low-paid, longer-service employees, and about 60% for high-paid, longer-service employees. Roughly speaking, this might be designed by considering a battery of test cases examining after-tax situations before and after retirement.

Social Security

The Social Security program is going through a difficult period. Changes are being proposed in the current level of replacement ratios, the indexing adjustment, the retirement age, the method of financing, and in the philosophic basis of the system itself as being inappropriate to the future covered population of this country.

Social Security will survive, surely, as the basic and fundamental national retirement program. It is inconceivable that this country would not have a national pension system to meet the needs of the elderly. If common sense prevails, the changes will not be abrupt, producing a discontinuity, but introduced gradually in an evolutionary sense.

Employers will have to review their pension plan objectives. What should the replacement ratio at retirement be, recognizing potential changes in Social Security? Whether a private pension plan is an offset plan or a breakpoint plan or a flat dollar plan, it was designed to produce a certain benefit at retirement together with a certain Social Security benefit. If the Social Security benefit decreases, should the private pension plan benefit increase, and if so, how much? Will personal savings, thrift plans, IRA's, and Salary Reduction plans be able to make up the gap?

IRS Integration

An important aspect of plan design and Social Security is the IRS position on integration of benefits. The appropriate level of Social Security benefit recognized is an important part of this concept. This is due to be reviewed and cannot be bypassed in any discussion of retirement income needs. There is no doubt that Revenue Ruling 71-446 was well conceived and that its objective can be simply stated: to prevent discrimination in favor of higher-paid employees where the primary Social Security benefit is recognized in the pension plan design. What could be tackled directly was done indirectly, and this has led to plans that are more complex than they have to be and to reducing the amount and extent of ancillary benefits. Revenue Ruling 71-446 is aimed indirectly at the problem because the essential ingredients in making any such test must be the actual relationships to final average pay.

While the ruling could be attacked head-on as a mathematical approximation applied consecutively to a number of approximations, which, therefore, become dubious in nature and complex in practice, there is a more constructive approach to take and a considerable social need for change in this country.

Revenue Ruling 71-446 has influenced the design of survivor benefits and subsidized early retirement benefits in integrated pension plans. The recognized credit for Social Security benefits is reduced if such benefits are included. Reducing the allowable Social Security offset, of course, increases the plan cost, so that the sponsoring organizations must weigh the offering of an additional benefit, however sensible, against increased costs and further complications in plan design. At the same time, the need for such benefits provides a reasonable and compelling basis for change. Change, due to the development of different social needs evolving over a period of years, requires a regulatory modification to protect pension plan participants.

Revenue Ruling 71-446 is outdated. We need to develop a viable alternative, a reasonable arithmetic procedure applicable to the design of a pension plan where benefits are to be coordinated with the primary Social Security Benefit. A quantitative test, and not a qualitative test, is essential. In this respect, Revenue Ruling 71-446 is correct.

The "Cap"

Any sensible definition of the "Cap", worked out with the IRS, the actuarial profession and the companies affected, strikes me as a reasonable approach that overcomes the problems mentioned.

The term "Cap" refers to a maximum benefit applicable at retirement. In simplest terms, the pension plan benefit is reduced if the pension plan benefit plus the primary Social Security benefit is too high in relation to final annual salary. Typically, the test compares the pension plan benefit plus primary Social Security benefit against 85% of final average salary or a graded percentage which is higher for lower-paid employees and reduces with increasing salary. If the combination is higher than the stated percentage, the pension plan benefit is reduced.

As a practical matter, it would be necessary to grandfather in present plans and simplify the present rules to prevent illogical plan design such as total benefits that do not decrease with increasing salary.

With the "Cap" in both salaried and hourly pension plans, the salaried and hourly plans would be drawn closer together. This could be useful since it may become less feasible, in future years, to have one pension formula for salaried employees and a different pension formula for hourly employees.

II. What is the proper role of the actuarial profession regarding the Social Security program?

This discussion is about the political process and not about the actuarial process. I hold the Social Security actuaries in the very highest of esteem.

A reader of the Sunday New York Times of November 26, 1972 would have encountered an interesting article entitled, "Social Security Now Seen Stable". The reasons for stability were identified as: retirement payments had risen to a very respectable level; future automatic CPI adjustments will keep them there; payroll taxes were at a point where there would be stiff public resistance to further increases; new financing assumptions introduced future wage increases enabling a reduction in contingency funds from 100% to 75% of one year's payment.

Since that date, the system was amended in 1977 to correct an error in plan design (euphemistically termed, "the need to decouple"), experienced the longest string of continuous deficits in its history (from 1974 to date, outlays have exceeded revenues), and the reserve fund has decreased to about two months of payment. Now, 10 years later in 1982, the Social Security system is being examined clinically in a sense that could not be imagined as possible prior to 1972.

1972

To my mind, 1972 was a turning point, and there is likely a lesson to be learned by actuaries, and others, in the circumstances surrounding the 1972 changes so that this system, so well regarded from 1935 to 1972, could become damaged and regarded as impaired from 1972 to 1982. As a consequence, some form of additional corrective action is likely to occur.

Actuaries were lulled by the excellence of the professional actuarial work, 1935 to 1972. Yet no one could regard this period as calm or uneventful. A contributory national pension plan was introduced in the middle of a severe economic depression and then improved considerably and continously over the next 37 years.

Joint-Actuarial Committee

During the following 10 years, 1972 to 1982, the system went into a financial tailspin. There was not then, and there is not now, a systematic and independent review of Social Security proposals by any committee of any professional actuarial organization. These committees should be encouraged to form one joint-actuarial committee to respond to Social Security issues by publishing papers, widely distributed, which show not only the majority point of view, but the varying points of view if there is not general agreement.

Actuaries are uniquely able to respond to Social Security issues. For example, the appropriateness of actuarial assumptions can best be reviewed by actuaries. Politicians are not actuaries. They rely on actuarial reports, and their recommendations commit billions of dollars of public monies.

The range of Social Security low-high assumptions should be reviewed independently. These are projections ranging from seemingly optimistic to pessimistic. But are they optimistic and pessimistic assumptions, as commonly perceived, or are they rather a tight range around a somewhat optimistic set of assumptions? A critical review of actuarial assumptions is needed by private sector actuaries who should report their findings widely.

It has been suggested that it requires people outside of the Social Security process to get at the real facts about the whole system. If there is any merit to this statement, I believe this joint-actuarial committee can make an important contribution to our nation's welfare.

What Went Wrong?

Returning to 1972, evidently something did go wrong, and the effects on the Social Security system were considered so severe that action had to be taken in 1977 to amend the program. Of particular interest are the following decisions made in that period.

First, the low-cost and high-cost estimates, used effectively by the prior actuary and reinstated by the subsequent actuaries, were replaced in 1972 by a "best estimate". Would the decoupling problem have been revealed by the low-cost and high-cost technique? Did the "sensitivity" testing that supported the 1972 amendments disclose the decoupling problem?

Second, the economic forecast supporting the 1972 amendments assumed that salaries would move faster than the cost-of-living, so that, among other things, it would be feasible to grant the full cost-of-living to retired participants. But why was it necessary to give the full cost-of-living increase subject to the 3% triggering rule, rather than some controlled increase within defined limits? Were a variety of other economic forecasts considered that might have disclosed the potential problem?

Actuaries are trained to take careful action based on an analysis of a wide range of possible assumptions. I would guess that the Social Security actuaries knew of "decoupling" before the 1972 Act was passed and also had concerns about full indexing based on the supporting set of assumptions. I would guess they were blocked by the political process. Without an independent, outside professional actuarial review, there was no mechanism in place to challenge the 1972 proposal or even to investigate these questions. Taken together with an excellent history of substantial and successful change, 1935 to 1972, it was unlikely that the 1972 Act would be criticized at that time.

I believe that we should know more about how this happened in order to establish procedures so that it could not happen again. The Social Security system is simply too important. We still do not know the answers to these questions about the 1972 changes. They deserve to be answered in a constructive sense. A system that directly affects 150 million Americans, as taxpayers or beneficiaries, should not be allowed to fall so far, 1972 - 1982 compared with 1935 - 1972, without a fair but intense review principally so that whatever went wrong would never happen again.

I would like to see the professional actuarial organizations organize a joint committee to review the Social Security program on a continuing basis. I would like to see the concept of regular review papers adopted. And lastly, I would recommend that one paper focus on the 1972 changes.

A Final Word On The Use Of Words

The first time I came across the word, "decouple", probably like you, I was driven to a dictionary to find out how this related to Social Security.

Now the word, "decouple", does not appear in most dictionaries. When it does appear, it usually is defined in terms of atomic physics. The use of the word here relates to railroad terminology: couple/decouple adjacent cars. The major 1977 change was "decoupling" of the indexing method introduced in 1972 which produced unintended increases in projected benefits, considerably beyond the increase in average wages. The 1977 amendments attempted to stabilize future Social Security benefit levels in terms of future wage levels. I am rather hard-pressed to understand why the need for a single word to describe an error in benefit plan design. While I think the tactic is diversionary, it seems to have worked, and therefore, there should be no surprise that the technique reappeared. Concurrent Resolution 222, of the 97th Congress, first session, November 17, 1981, directs the Commissioner of Social Security and the Secretary of Health and Human Services to immediately conduct a study and report to Congress on steps which can be taken to correct the benefit disparity known as the "notch problem", in order to ensure equitable and fair treatment for those who have based their retirement plans on benefit levels which have existed for the past decade.

There are five main points to this resolution:

1) Unforeseeable economic conditions have adversely affected the changes made by Congress in 1977 in the Social Security benefit formula.

2) Those born in 1917 (and thereafter) whose work records are otherwise identical to those born in 1916 would be sharply and unfairly penalized by the present formula changes combined with economic conditions.

3) A simple repeal of the 1977 benefit formula would not only cost the Social Security Old Age and Survivors Insurance Trust Fund approximately $7 billion, but would impose a further penalty on those who chose to retire in the 1979 through 1981 period at ages 62 through 64 where most people do retire under Social Security.

4) Some compensatory alteration in benefit formulas is desirable to mitigate the benefit differentials being experienced by those retiring at age 65 in 1982.

5) The National Commission on Social Security, after extensive investigation, agreed that this disparity in benefit amounts was unjust and that steps should be taken to resolve it.

To those not familiar with the system, this certainly sounds serious. But is this really a "notch problem" or is it an error in plan design, a consequence of the 1977 amendments? On April 3, 1981, in an article appearing in an eastern newspaper, an official of the Social Security Administration said, in reference to the "notch problem", "Beneficiaries will probably not notice it, unless they compare notes with their neighbor." In the same article, Bob Myers was quoted, "This gap has been present all along (1981 retirees compared to 1982 retirees)... and that ... he attempted four years ago to warn Congress that this benefit gap would occur".

"Decoupling" and "notch" are now words in the history of Social Security and likely their moments have passed.

I recommend the establishment of a joint-professional actuarial committee to review and comment on Social Security on a continuing basis. It is essential that the work of this committee be published, distributed widely, and where there is not general agreement, the various points of view be expressed in writing.

MR. SWENSON: It is my understanding that back in 1972, when Congress was enacting legislation that resulted in the adoption of the faulty indexing procedures, the Actuaries within the Office of the Actuary recognized the fact that under situations of high inflation, the program would be confronted with problems. I understand that for political reasons, that information never was permitted to reach the general public.

The final speaker, Bob Myers, is a former President of the Society of Actuaries and has published more than 560 papers. He has authored the authoritative text on Social Security which I am sure everyone in this room is intimately familiar with. He was the Chief Actuary of the Social Security Administration from 1947 to 1970, and last year Bob served as the Deputy Commissioner of Social Security. He is now the Executive Director of the National Commission on Social Security Reform. That bipartisan commission is significantly different from other Social Security commissions and study groups in the sense that seven of its fifteen members are current members of Congress. Their recommendations will recognize political realities, and very likely their recommendations will be enacted. The actuarial profession, indeed the entire country, is well served by having someone such as Bob Myers as the Executive Director of that Commission.

MR. ROBERT J. MYERS: Well thank you very much Jim for those very nice words. I hope you will be able to repeat them at the end of December when our work is done.

In addition to the usual disclaimer that all Federal employees give when they talk before groups like this, the views that I am expressing are my own and not necessarily those of my agency. But in addition to that, I have to point out that, because of the bipartisan nature of this organization that I am working for now, as Jim said, I am not supposed to be expressing any views at all. So if you see any views between the lines, you do so at your own risk.

Just a few more words about this new national commission beyond what Jim told you. We have a very simple assignment of getting bipartisan agreement on the solution to the financing problems confronting the Social Security program at the moment such that these solutions will be able to be legislatively adopted. The National Commission was formed as a result of a suggestion that President Reagan made in a speech last September, after there had gotten to be a legislative deadlock in the attempts to solve the Social Security problem in Congress. This Commission then was set up, and it is now at work. It has had two meetings, mostly of an exploratory nature, to see if there was a problem and, if so, how much of a problem. The solutions will be discussed subsequently. No decisions have been made as yet. The Commission is meeting for four hour sessions roughly once a

month. Perhaps there will be more sessions later on towards the end of the year.

Turning back to what problems confront the system, the previous speakers have pointed these out quite well. In essence and in brief, the problem in the short run in the past has been essentially with the OASI Trust Fund, which has steadily decreased for the last five or six years. If present trends continue with no further action, as they most certainly will, the system will reach the stage where it will not pay benefits in a timely manner.

The DI Trust Fund, as it so happens, is in quite good shape, largely because the disability experience turned around from being very unfavorable in the mid-1970's until, in the last few years, the experience is now as favorable as it has ever been. The DI Trust Fund has, therefore, been building up steadily.

What has been done about the problem in the past is that there have been two bandaids put on it. In 1980, legislation was enacted to transfer money for 1980 and 1981 from the DI Trust Fund to the OASI Fund; otherwise the OASI trust fund would already have run out of money by now. The other legislative bandaid was the one that Harry described, that was enacted late last year, where limited interfund borrowing was permitted. Congress here intentionally put its feet to the fire and said we will only permit enough borrowing to enable benefits to be paid out of the OASI Trust Fund for the first six months of 1983.

This is one case where the actuarial cost estimates will inevitably prove to be correct because, under any foreseeable circumstances, if present law is not changed, the OASI benefit checks to somewhat over 30 million people could not go out in a timely manner in the beginning of July. Although this is certainty, I think it is an equal certainty that Congress will do something about this matter before July of 1983, so that the benefit checks will go out in a timely manner.

The question of what is the future financing problem of the Social Security system is one on which there are differing views. Harry has pointed out the various alternative possibilities very well, and Jim has pointed out what he believes quite likely will happen.

There are others who have quite pessimistic views about what will occur. Geoff Calvert, a member of the Society, recently published a pamphlet in which he believed that the official actuarial cost estimates were too optimistic. This booklet was published by Alexander & Alexander.

On the other hand, there are some people who say that there really is not much of a problem, that the actuarial cost estimates are far too conservative, too pessimistic. According to this view, the whole problem can be solved without making any of the benefit changes that, for example, Jim has recommended as being necessary.

The position taken is that, in the 1980's, there may be some problem because, as the chart indicated, according to the more optimistic of the intermediate estimates, the system could just barely get by until 1990 with interfund borrowing being changed so that it is on a permanent basis and

with the loans later being repaid with interesc. Then in 1990, the OASDI system is in great shape, according to this view, because the tax rate goes up then, and for at least the next 20 or 30 years, there are considerable excesses of income over outgo. Even after that, some of the excess funds that have been built up can be used.

So the view expressed is that all that is really needed is to not only have interfund borrowing but also to permit borrowing from the General Fund of the Treasury, repayable with interest. According to this view, this would be done in the 1990's when the high tax rate comes in, plus the low cost situation in that at that time, the retirement age population is relatively low because of the survivors of the births of the depression years of the 1930's.

Of course, there are others who say this is not the proper way to look at it. In the first place, how are you going to borrow from the General Fund of the Treasury when, as Senator Russell Long says, "There is no money in the General Treasury; there are just deficits. How can you borrow from deficits?" Still others say that if you borrow from the HI Trust Fund, the HI system is going to have its own financial problems, even perhaps in the late 1980's and certainly in the 1990's, and borrowing is just making it weaker.

Furthermore, people who argue against this viewpoint say that in the 1990's, maybe there will not be these big surpluses of cash income over outgo in the OASI system because so much depends on the economic assumptions. The intermediate estimate assumes that wages will rise by 1 1/2% more than prices each year. Well, in the past ten years, there has been a negative differential in the other direction of 1/2%, so that even if things turn around, as everybody hopes they will and most people believe that they will, wages will once again rise more rapidly than prices. If that differential is relatively small, the apparent large excesses of income over outgo in the 1990's just will not materialize.

Now as to the long-range situation, people who take this optimistic view that I have been describing say, "Well, the situation out in the long-term years just will not eventuate. The actuarial assumptions are all too pessimistic. Mortality will not improve as much as is said; there will be bigger gains in productivity than the intermediate estimate shows, instead of wages rising by 1 1/2% a year more than prices, maybe it will be 2% or more, so that under those assumptions, there would not be a long term problem."

This then brings us to the point of saying how should the financing basis of the Social Security system be determined? What should be the input as to what assumptions should be made? There are some who believe that the actuaries are being far too pessimistic about this and that they should be required to use what some would say are more realistic assumptions. In other words, use lower cost assumptions and that way, the problem would go away.

Now as Bob Berin has said, the actuarial profession faces a real challenge here - I think it would certainly be a desirable thing if there were some sort of a review group set up, even though it might be on an informal basis so that there would be some support for the actuaries in the Social Security Administration (SSA).

I think it is fair to say that over the years the actuaries in SSA have tried to make the best possible cost estimates that they could. They have never tried to be too conservative or too liberal as to the assumptions. I believe that it is also fair to say that they never let their own personal feelings about whether proposals are good or bad influence the cost estimates.

Therefore, it would seem to me that the best thing for the political people involved to do is to take the estimates that the Office of the Actuary puts out and to base their political decisions thereon. When I had the political position of Deputy Commissioner of Social Security, I did not or at least I do not believe I did; I certainly tried hard not to influence any of the actuarial cost estimates or methodology. If I had been making up some of the assumptions, I might have done differently. In some ways, I might have had lower cost assumptions and in some cases, higher cost assumptions, but I did or tried to do what I think a political figure should do - let the actuaries do their best professional work and go on from there with political decisions.

MR. JOHN A. LESSL: There was quite a bit of talk today about raising the retirement age to 68, and I think we are all getting the feeling that something like that is pretty likely. I was just wondering if any consideration is being given at the same time to tying the retirement age to life expectancy, in other words, indexing it. For instance, suppose in the year 2000, the expectancy is 15 years for a 68 year old. We could then have a retirement age which produces an expectancy of 15 years. Is any consideration being given to that?

MR. MYERS: Proposals of this type have been made in the past. For instance, the President's Commission on Pension Policy did consider doing that, but in the end, they did not come out with that particular recommendation. I think the belief is that this was a concept that would be too hard for people to understand, and rather, any changes should be made on an ad hoc basis. It is a very appealing idea, I think.

MR. KEN E. JAMES: A rather specific question that maybe Mr. Ballantyne or Mr. Myers could respond to. Last year, there was legislation in committee referred to as the Pickle Bill relative to not allowing future opting out of Social Security of 501(c)(3) organizations. That did not pass. I understand that there is a new bill in committee basically to accomplish the same thing. Could you comment on what your personal reactions are as to the likelihood of that to come to a political fruition in the next 12 to 24 months, let's say?

MR. BALLANTYNE: Well, I am not sure how likely it is. I think it would become a bigger problem. There certainly is more discussion of that and more intention apparently on the part of voluntary groups to opt out. I would hope that for the non-profit organizations and state and local groups, that legislation would be passed so they could not drop out, because when they voluntarily come in, they will gain eligibility for benefits and pay some taxes. But when they drop out, the taxes will stop, the eligibility will continue, and they will be paid higher benefits relative to their contributions, and it has a very adverse affect on the system.

MR. MYERS: If I might supplement that, just as a factual matter. That bill is still alive, because it is still the same Congress and Mr. Pickle could take it up at any moment. I have heard Mr. Pickle say that although there will not be any major Social Security legislation this year, this is one item that he may take up and just draw that out of the bill. Conceivably he still could keep the same date in it because as, I recall, the date was something like any elections to withdraw made after March 25, 1981 would not be valid. Legally, they could still maintain that effective date, so the people that have been opting out in the past year may have found that they have just spun their wheels. Of course, it is not a certainty that they would keep that date, but it is still a conceivable thing.

MR. SWENSON: I would like to make one further comment. It is my prognosis that Congress is very likely, perhaps not in this session but in future sessions, to eliminate the windfall benefits that accrue to groups that do not fully participate in the Social Security program. That would have a very major effect on those groups that are now considering opting out.

MR. JAMES: Regulations under Section 401(k) of the Internal Revenue Code back in November of 1981 basically allow for salary reduction arrangements in which FICA tax is on net pay rather than gross pay. Could you comment as to whether there is any discussion as to modification of that to provide for FICA on gross rather than on net?

MR. MYERS: I am aware of this situation of the 401(k) matters. I have not heard any discussion about making that taxable for Social Security purposes, but the actuarial cost estimates do allow for some movement in the way of more remuneration being non-taxable. Whether 401(k) will result in much of that, I do not know.

MR. MICHAEL FALLON: I have read that currently we have more two-wage-earner families than we had when the program was designed. Is there any need to look at the structure of the program benefit-wise to accommodate that situation relative to when it was initially designed?

MR. MYERS: This is a very hot issue. There are a number of women's groups who believe that the system is being discriminatory against two-worker families. On the other hand, there are some other women's groups who say the system is just fine and leave it alone. I think it is an issue that people are aware of. Some of the various groups have looked into it. I am not sure whether the new National Commission will do so or not, but it is a matter that if there is a solution so that there are not winners and losers, it is going to cost much money. On the other hand, if you eliminate what appeared to some as an anomaly and do not have any increase in cost, it means that you are going to take benefits away from others. So it is a very difficult issue, and I am not certain that this new National Commission will go into it that deeply, but again we may, because there are some members of the Commission who feel rather strongly about this.

TABLE 1

ESTIMATED OPERATIONS OF OASI TRUST FUND UNDER ALTERNATIVE II-B IN 1982 TRUSTEES REPORT, 1981-86

(AMOUNTS IN BILLIONS)

CALENDAR YEAR	INCOME	OUTGO	CHANGE	FUND AT END OF YEAR	TRUST FUND RATIO
1981	$125.4	$126.7	-$1.3	$21.5	18%
1982	137.1	141.8	-4.7	16.8	15
1983	137.0	156.4	-19.4	-2.6	11
1984	149.1	173.2	-24.0	-26.6	-1
1985	167.1	191.1	-23.9	-50.5	-14
1986	180.7	208.5	-27.9	-78.4	-24

NOTE: ESTIMATES FOR 1983 AND LATER ARE THEORETICAL BECAUSE THE OASI TRUST FUND IS DEPLETED IN JULY, 1983.

TABLE 2

ESTIMATED AMOUNTS TO BE BORROWED BY OASI TRUST FUND IN 1982 UNDER ALTERNATIVES I, II-A, II-B, AND III IN 1982 TRUSTEES REPORT

(IN BILLIONS)

	ALTERNATIVE			
BORROWED FROM--	I	II-A	II-B	III
DI AND HI FUNDS	$7.1	$7.0	$11.1	$12.3
DI FUND	6.2	6.3	5.7	5.6
HI FUND	.9	.8	5.3	6.7

TABLE 3

ESTIMATED OPERATIONS OF OASI AND DI TRUST FUNDS, COMBINED, UNDER ALTERNATIVE II-B IN 1982 TRUSTEES REPORT, 1981-86

(AMOUNTS IN BILLIONS)

CALENDAR YEAR	INCOME	OUTGO	CHANGE	FUND AT END OF YEAR	TRUST FUND RATIO
1981	$142.4	$144.4	-$1.9	$24.5	18%
1982	154.1	160.3	-6.2	18.4	15
1983	163.1	175.5	-12.3	6.0	10
1984	178.6	193.3	-14.6	-8.6	3
1985	204.5	212.5	-8.0	-16.7	-4
1986	222.5	231.4	-8.9	-25.6	-7

NOTE: ESTIMATES FOR 1983 AND LATER ARE THEORETICAL BECAUSE THE OASI TRUST FUND IS DEPLETED IN JULY, 1983.

TABLE 4

ESTIMATED OPERATIONS OF OASI, DI, AND HI TRUST FUNDS, COMBINED, UNDER ALTERNATIVE II-B IN 1982 TRUSTEES REPORTS 1981-86

(AMOUNTS IN BILLIONS)

CALENDAR YEAR	INCOME	OUTGO	CHANGE	FUND AT END OF YEAR	TRUST FUND RATIO
1981	$178.2	$175.1	$3.1	$43.3	23%
1982	186.9	195.9	-9.1	34.2	22
1983	205.4	217.1	-11.7	22.5	16
1984	224.8	241.6	-16.8	5.7	9
1985	256.0	268.1	-12.1	-6.4	2
1986	281.8	294.8	-13.1	-19.4	-2

NOTE: ESTIMATES FOR 1983 AND LATER ARE THEORETICAL BECAUSE THE OASI TRUST FUND IS DEPLETED IN JULY, 1983.

CHART 1

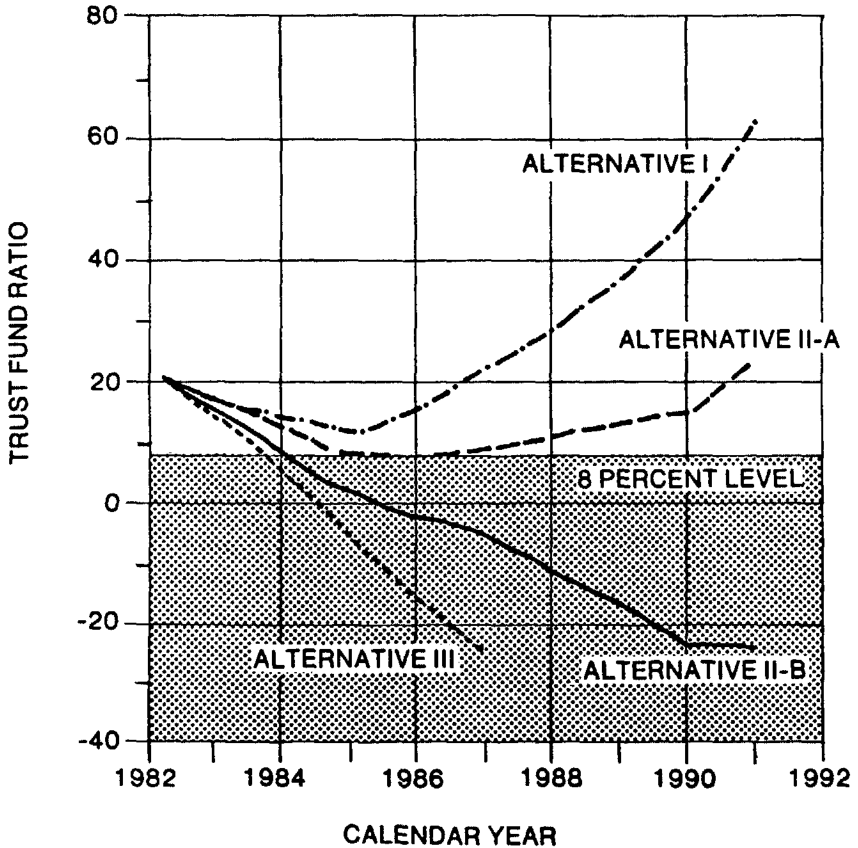

TABLE 5

OASDI AVERAGE SCHEDULED TAX RATES AND ESTIMATED AVERAGE COST RATES UNDER ALTERNATIVE II-B IN 1982 TRUSTEES REPORT

[IN PERCENT OF TAXABLE PAYROLL]

CALENDAR YEARS	AVERAGE COST RATE			AVERAGE TAX RATE	DIFFERENCE
	OASI	DI	TOTAL		
1982-2006	10.14	1.23	11.37	12.01	+0.64
2007-2031	12.43	1.65	14.08	12.40	-1.68
2032-2056	15.20	1.61	16.81	12.40	-4.41
1982-2056	12.59	1.50	14.09	12.27	-1.82

CHART 2

NUMBER OF OASDI BENEFICIARIES PER 100 WORKERS UNDER ALTERNATIVES I, II-A, II-B, AND III IN 1982 TRUSTEES REPORT, 1940-2060

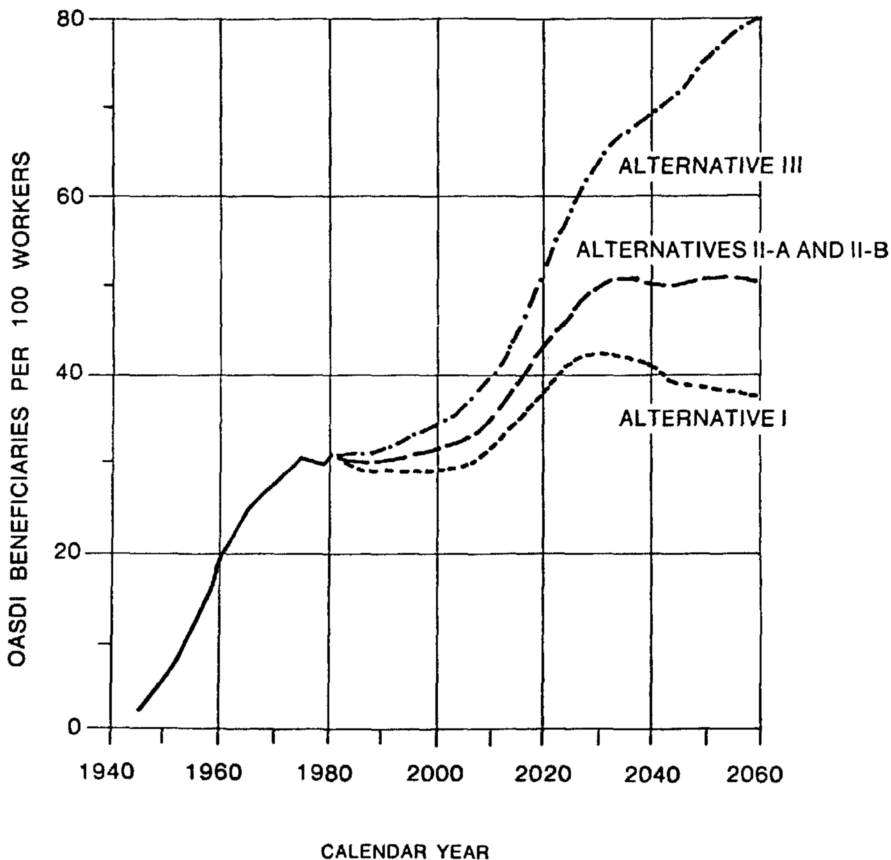

TABLE 6

ESTIMATED ACTUARIAL BALANCE FOR 1982-2006 UNDER ALTERNATIVE II-B IN 1982 TRUSTEES REPORTS

	PERCENT OF TAXABLE PAYROLL	
	OASDI	HI
• AVERAGE SCHEDULED TAX RATE.......	12.01%	2.86%
• AVERAGE COST RATE..................	11.37	4.81
• ACTUARIAL BALANCE..................	0.64	-1.95