

Prospects for the Future of the Old-Age, Survivors, and Disability Insurance Programs in the United States of America

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Introduction—The current focus on social security reform in the U.S., Japan, and many other countries around the world, indicates that many countries are facing problems of a similar nature. There are many differences, of course, between the societies, economies, and governments of our respective countries, and these differences imply that the most appropriate ideas for social insurance in one country may not be the best for another. Therefore, before discussing the idea of a reform to an existing social insurance system, it is essential to carefully analyze the nature of the existing system and how that system is expected to evolve over time. As I shall discuss in this paper, the long-term problem facing the U.S. is fundamentally a demographic problem, but one that can be exacerbated or ameliorated depending on how the economy evolves. In this sense, the problems we face in the U.S. are very similar to those currently being experienced in Japan.

As I indicated, before trying to solve a problem, it is important to lay out clearly the nature of the problem. In the case of the U.S., the Old-Age, Survivors, and Disability Insurance programs have a long history dating, in part, back to the 1930s. The nature and scope of the programs have changed gradually since its original conception, expanding coverage under the programs and the scheduled level of benefits. The structure of the current program with respect to benefits and financing was established in two fundamental pieces of legislation in 1977 and 1983. Therefore, we have had almost 20 years to observe the emergence of problems that were understood even at the time the 1983 legislation was enacted.

In this paper, I will first define the problem by presenting the results of our 2002 actuarial valuation, and then provide an overview of some of the recent discussions in the United States concerning alternative ways in which the long-range financing problems faced by our OASDI programs can be addressed. I will begin by describing in some detail certain aspects of the current OASDI benefits and financing structure, and then follow with a quantitative assessment of the long-range OASDI financing problem. The first part of my talk will therefore attempt to summarize:

- the benefit and financing structure of OASDI under current law;
- the current forecasts of the financial situation for OASDI; and
- how current economic and emerging demographic problems in the U.S. can be quantified to assist in planning for the future of OASDI.

The second part of my talk will attempt to outline some of the ideas that have recently been put forth as possible modifications to the current OASDI system in an attempt to address its future financing difficulties. At the time I made a similar presentation here in 1998, the focus of the U.S. discussion was proposals made by a formal commission, the 1994-96 Social Security Advisory Council. None of those ideas have become political reality, so one might say that we

are in exactly the same position today, as we were four years ago. However, the ideas of that commission for the first time in the U.S. discussed seriously the possibility of converting at least part of the U.S. system from a defined benefit plan to a defined contribution plan. That first step gave rise to extensive debate on this idea, leading to another Presidential commission which reported last December on several additional ideas for introducing individual accounts into the U.S. system. While no political activity is expected on any of these ideas before next year, the possibility of some form of social security individual accounts in the U.S. seems more plausible than at any time in the 65-year history of U.S. Social Security. Therefore, in the second part of my talk, I will present a brief summary of the ideas put forth by the 2001 President's Commission to Strengthen Social Security.¹ I hope that that summary will set the stage for an interesting discussion of these and other possibilities.

OASDI Plan Structure—While the experience of one country with its social insurance system may not be directly applicable to another country with a different economy and system of government, the importance of long-range planning for social insurance programs is virtually universal. Accounting for OASDI income and outgo is accomplished through two dedicated trust fund accounts, one for the Old-Age and Survivors Insurance program and one for the Disability Insurance program. In 2002, the combined OASI and DI programs will pay \$457 billion to 46 million beneficiaries including roughly²:

- 29 million retired workers, with 3 million dependents;
- 7 million survivors of deceased workers; and
- 5.3 million disabled workers with 1.6 million dependents.

These benefits are not designed to provide all necessary income in retirement, but for a significant segment of our aged population they represent a substantial portion of their retirement income, replacing roughly between one-fourth to two-thirds of pre-retirement income. In addition, these benefits are indexed to increases in the Consumer Price Index for complete inflation protection.

Eligibility for OASDI benefits is earned through work in covered employment at certain specified levels.³ The basic unit of coverage is called a *quarter of coverage (QC)* and one such quarter is earned for each \$870 of covered earnings in 2002, up to a maximum of 4 such QCs. To be eligible for a retirement benefit, one must achieve *fully-insured* status which essentially requires 40 QCs, roughly equivalent to 10 years in covered employment. Eligibility for disability income benefits requires, in addition, that 20 of the QCs have been earned in the 40-quarter period prior to the onset of disability. Benefits to spouses, widows, or children are payable based on the earned eligibility of the workers. The accompanying slides⁴ illustrate the current level of benefits, as well as the progressive nature of the benefit structure.

¹ The complete report of the commission may be found at its web site <http://www.csss.gov>.

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⁴ Slides 5-8

The basic benefit payable to retired or disabled workers is called the Primary Insurance Amount (PIA). The formula used to compute the PIA is based on career average earnings indexed to the early retirement age (or disability onset) by changes in the National Average Wage Index. The formula itself is a piecewise linear formula with three replacement rates—90 percent, 32 percent, and 15 percent, is specific to each year of birth cohort, and is automatically indexed by wage increases. The relatively higher replacement of low career indexed earnings provides a progressive structure for the determination of benefits. Benefits payable to dependents and survivors are expressed as a percentage of the PIA with a maximum limit of roughly 1¾ times the PIA payable to a single family⁵. Benefits after initial eligibility are indexed by increases in prices. There are many more technical details, but this level of description will suffice for our later discussion of proposed reforms.

These benefits are currently paid from income derived mainly from a payroll tax of 12.4 percent shared equally by employees and employers⁶. Taxable earnings for OASDI are capped at \$84,900 in 2002, and this cap is indexed by wages, in future years. Currently, over 90 percent of all wages are earned in employment covered under social security, and roughly 83 percent of covered earnings are taxable. The largest remaining group of employees not covered under OASDI is certain employees of State or local governments who have not exercised their option to elect Social Security coverage. Additional income is derived from (1) interest on invested assets held by the OASDI Trust Funds and (2) the income taxation of certain OASDI benefits.⁷ A few additional words on these last two sources of income are necessary to provide background for our later discussion.

Making a portion of OASDI benefits subject to the general income taxation was first enacted as part of the last major reform legislation in 1983.⁸ Under these provisions, up to 85 percent of an individual's OASDI benefit may be included in his annual income subject to taxation. The general revenue generated in this manner is returned to the OASDI Trust Funds although a portion of the revenue is given to the Hospital Insurance Trust Fund. The method for determining the amount of benefits subject to taxation was designed to approximate the tax treatment of private contributory defined benefit plans, but without doing individual accounting of contributions. The return of such income taxes to the social security programs is considered by some as a subsidy from general revenues. A common idea among many reform proposals has been to modify the benefit taxation to conform more closely to private pension accounting, a change that would generate an even greater general revenue transfer to the trust funds.

With respect to investment of the trust funds, the assets of the trust funds are required by law to be invested only in obligations issued or guaranteed by the U.S. government. Currently, trust fund assets are invested almost entirely in special government bonds issued only to the trust funds. These special issue bonds are always redeemable at par value and carry a coupon rate at issue determined each month to match the average yield on outstanding long-term obligations of the Federal government. As indicated in the next slide, these rates have in the past compared

⁵ For disability income benefits, the maximum is only 150% of the PIA.

⁶ Slides 9-10

⁷ Slides 11-12

⁸ Slide 13

favorably with yields earned by private insurance company general accounts⁹. In 2001, the OASDI Trust Funds invested over \$1.2 trillion dollars with an effective nominal yield of 6.6 percent. New issue rates have been declining though, and current investments are being made at a nominal annual rate of less than 6 percent, well below recent yields on equity investments. This disparity has played a significant role in reform discussions.

Financial Forecasts—Clearly, the OASDI benefits scheduled under present law represent significant promises to current and future generations that can easily imply financial obligations for the next 75 years, and more. Long-range financial planning can assist in enabling the government to ensure that it is able to fulfill these promises. The responsibility for such long-range financial planning in the United States is shared by many organizations, including Congress, the OASDI Board of Trustees¹⁰, and the OASDI Advisory Board. It is our job in the Office of the Chief Actuary at the Social Security Administration to provide the required technical assistance that enables these various groups to evaluate Social Security’s long-range financial obligations and whether scheduled income is sufficient to meet the scheduled costs. We prepare actuarial projections both for this purpose and to help evaluate any proposed modifications to the existing program. In fulfilling this role, our goal is to make realistic estimates of the short- and long-term financial obligations to help ensure the stable design and operation of the Social Security program, and to assist in long-range planning. While it would be naive to believe that we can *predict* the future with any exactness, producing a range of long-term forecasts under assumptions that vary from optimistic to pessimistic outcomes can provide useful indications of future problems long before they emerge. This provides policymakers with the opportunity to deliberate and arrive at solutions well in advance of a possible crisis.

Due to the uncertainty mentioned above, the Office of the Chief Actuary annually prepares three sets of financial projections based on different assumptions about future economic and demographic conditions. In this way, the range of possible future variation can be assessed, as well as the degree of sensitivity to changes in the underlying trends.¹¹ The greater uncertainty associated with certain factors (such as rates of inflation) can be recognized by using a broader range of assumptions. The various alternative assumptions are grouped into “low cost” (alternative I), “intermediate” (alternative II), and “high cost” (alternative III) sets of assumptions, based on their effect on program financing. Rapid increases in average wages would generally improve Social Security’s financial status and are thus classified as “low cost.” Similarly, rapid increases in life expectancy, although very desirable in general for society, add to the cost of retirement benefits and would therefore be classified as “high cost” from a financial standpoint.

Examples of economic assumptions normally required include:

- Increases in average wages
- Increases in prices (inflation)
- Labor force participation rates (and unemployment rates)

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- Interest rates

It would also be necessary to make demographic assumptions of the following type:

- Birth rates
- Mortality rates
- Numbers of immigrants and emigrants

Finally, assumptions with respect to factors relating to the provisions of the social insurance program itself would be necessary:

- Proportion of labor force in employment covered by the program
- Proportion of the population that has met eligibility conditions
- Disability rates (and rates of recovery from disability)
- Retirement rates

For the 2002 Trustees Report, the table below presents the ultimate values of certain key demographic and economic assumptions used in developing the intermediate, low cost, and high cost alternative forecasts.

Ultimate Values Of Key Demographic And Economic Assumptions			
<u>Ultimate assumptions</u>	<u>Intermediate</u>	<u>Low Cost</u>	<u>High Cost</u>
Demographic:			
Total fertility rate (children per woman)	1.95	2.2	1.7
Average annual percentage reduction in total age-sex-adjusted death rates from 2026 to 2076 ¹ ..	.73	.35	1.29
Annual net immigration (in thousands).....	900	1,210	655
Economic:			
Annual percentage change in:			
Average wage in covered employment.....	4.1	3.6	4.6
Consumer Price Index (CPI).....	3.0	2.0	4.0
Real-wage differential (percent).....	1.1	1.6	0.6
Productivity (total U.S. economy).....	1.6	1.9	1.3
Unemployment rate (percent).....	5.5	4.5	6.5
Annual trust fund interest rate (percent)	6.0	5.7	6.2
Two interesting derivative values:			
Annual labor force growth	0.2	0.6	-0.3
Life expectancy at birth in 2076 (years)	83.3	79.9	87.8
¹ Actual ultimate assumptions for reductions in death rates are specified in detail, by age group, sex, and cause of death.			

Given these assumptions, we have developed elaborate computer models that project all the factors necessary to estimate the short- and long-range financial condition of the OASDI program in the United States. The key projections needed include:

- The total population by age, sex, and marital status
- The population working in covered employment
- Future average earnings, and income from payroll taxes
- The population eligible to receive OASDI benefits
- OASDI beneficiaries
- Average benefit amounts
- Administrative expenses
- Trust Fund operations, including interest earnings on invested assets

The results of our annual projections are presented to Congress in a report from the OASDI Board of Trustees. Further details are also periodically documented in a set of Actuarial Studies, which are available from our office. Although the projection methodology is rather complex (reflecting the complexity of our Social Security program itself), the final results can be presented more simply through the use of appropriate summary statistics.

Short-range outlook—In what we consider the “short-range”—that is, the next 10 years—we make detailed estimates of all the numerous items of trust fund income and expenditures. All of these items in the short range are typically expressed in nominal dollar amounts¹². Because demographic factors typically change slowly over longer periods of time, the short-range financial situation for OASDI is heavily dependent on economic assumptions, but not very sensitive to demographic factors.

Another useful way to view the short-range financial situation is to compute the ratio of (i) trust fund assets at the beginning of a year, to (ii) annual expenditures in that year. This “trust fund ratio” provides a relative measure useful in evaluating the adequacy of OASDI financing over time.¹³ The short-range financial status is considered to be secure if this ratio remains above 100 percent, indicating that there are sufficient funds available at any time to meet all payments expected to be made in the following 12 months. This 100-percent trust fund ratio target provides a cushion of assets that might be needed to weather short-term adverse economic conditions. The projections in the 2002 Trustees Report indicated that OASDI is financially sound in the short range under even our pessimistic scenario (although separate estimates for the disability program indicated potential problems under the high cost assumptions for DI evaluated in isolation¹⁴).

Long-range outlook—The “long-range” picture for OASDI is very different however. A look at the key demographic indicators shows why there are problems. Fertility rates are near historic lows, while mortality improvements continue to extend life expectancy. Combining the demographic factors with relevant economic ones produces a forecast of the number of workers available to support OASDI beneficiaries over time.¹⁵ The decline in this ratio to below 2

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under the intermediate and high cost assumptions indicates significant long-term financial troubles for the OASDI program under those scenarios.

The summary evaluation of OASDI over the long range requires a measure somewhat different from the trust fund assets or ratios used in the short range because, over a very long period, amounts shown in nominal dollars become very difficult to interpret and are not very useful as a result. One improvement would be to express these amounts in “constant dollars,” by adjusting them for increases in inflation. This also leaves something to be desired because it does not reflect changes in “real wage” levels or the “standard of living” over time. Consequently, long-range amounts are generally expressed as a percentage of the total earnings subject to Social Security taxation. For example, if OASDI expenditures in 2002 are \$465 billion, and a total of roughly \$4.3 trillion in earnings is covered by the Social Security program, the OASDI “cost rate” would be 10.84 percent. Similarly, total tax and other income (excluding interest) of \$545 billion would result in an “income rate” of 12.73 percent. Such figures can be easily compared from one time period to another and provide a useful measure relative to the earnings base that provides the financing for the program.

A comparison of income and cost rates under all three scenarios¹⁶ confirms our initial impression that the current financing provided for OASDI will be inadequate if future economic and demographic paths in the United States match the assumptions underlying either the intermediate or high cost estimates. In addition to the year-by-year examination of cost and income rates, the long-range financial status is also evaluated through certain summary measures, produced by taking the present values of cost and income rates over all intermediate periods. The summarized cost rates are compared with the summarized income rates to produce a measure of “actuarial balance.” An actuarial balance of 0 percent means that on average over the period, income is sufficient to meet outgo and in addition leave a trust fund balance of 100 percent of the following year’s outgo.

Under the intermediate assumptions of the 2002 Trustees Report, OASDI had an actuarial deficit of 1.87 percent for the 75-year projection period.¹⁷ One way to interpret this deficit is that an increase in the current payroll tax rate from 12.4 percent to 14.27 percent would be sufficient to alleviate the projected deficit. However, even such a modest tax rate increase is probably not politically viable, nor would it permanently resolve the long-range OASDI financing problem. A similar deficit figure of 2.19 percent deficit, which was estimated in 1996, was the focus of the deliberations by the 1994-96 Advisory Council. That group correctly noticed that although a modest increase in the tax rate would resolve the OASDI financing problem for the next 75 years, the problem is more fundamental—as is clear from the ever-widening gap between projected OASDI income and outgo under all but the most optimistic scenario. Even after the current bulge of “baby boom” retirees passes through the system, mortality improvements continue to make financing OASDI a difficult proposition. As has become clear in the subsequent debate in the U.S., the range of considered solutions will probably include responses of both a demographic and programmatic nature.

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Given that we have quantified *on average over the next 75 years* the magnitude of the OASDI financing problem, a natural question from concerned policymakers would be “How soon will the problem require solution?” To address this question we return to looking at the trust funds in nominal dollars.¹⁸ This picture captures two important points. First, although trust fund assets are projected to be exhausted in roughly 40 years, the ongoing collection of payroll taxes beyond 2041 will meet almost three-fourths of projected outgo requirements at that time. One perspective is that it is the ongoing gap between income and outgo beyond 2041 that needs to be addressed. Other perspectives suggest that the year 2027 when outgo begins to exceed income including interest is the critical point to focus on. Yet others look at the year 2017 when outgo first exceeds current tax income alone. Regardless of perspective, the results of our current projections show that this is a gradually emerging, but persistent, problem that needs to be addressed sooner rather than later.

Second, the pattern of growth then decline in trust fund assets suggests to some observers an opportunity to manage these financial assets in a way that might defer the point at which we must deal with the inevitable demographic problems. Currently, trust fund assets are invested in fixed income government securities with interest rates set to mirror long-term yields on all outstanding government obligations. While these rates of return give the trust funds a fair deal in the context of all government debt obligations, much attention was given in the 1994-96 Advisory Council to the idea of investing trust fund assets in equity securities. Higher rates of investment earnings could help sustain the OASDI cash flow requirements.

However, a different form of investment of Social Security assets will only help resolve future financing problems if the assets are invested in such a way as to enable the overall national economy to grow faster than it would have otherwise. This is the case because, in reality, future Social Security promises are redeemed from the goods and services produced in the national economy at the time the future benefits are paid. Consequently, in dealing with Social Security financing, the focus of our attention should properly be activities that can yield improvements in overall national economic growth. If the national economy is healthy, it is then much easier to share a small fraction of that healthy economy with the aged and disabled portion of our population. If we view current OASDI outgo forecasts in this context, we see that our Social Security long-term promises represent 5-10 percent of the U.S. Gross Domestic Product.¹⁹ A continuing fundamental question that must be resolved, in the U.S. and in other countries around the world, is exactly what share of GDP is appropriate today, and what level might be considered appropriate in the future. Such decisions, of course, must be made in the context of ever increasing competition for limited resources, including for example the provision for health care and social assistance benefits.²⁰

“Recent” reform efforts—As described earlier, the currently scheduled OASDI benefits and tax rates were set in 1983, and result in a pattern of temporary trust fund build-up, followed by a depletion of assets. Although, this has been described as moving the U.S. system to a partially prefunded basis, the history of the 1983 legislation suggests otherwise. Instead, this financing

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pattern was just the consequence of the political compromise made at that time which arranged for certain benefit modifications to delay scheduled benefit increases and encourage later retirement,²¹ combined with some expedient increases in revenue.²² Consequently, one might still think of the current financing scheme in terms of pay-as-you-go financing principles.

Assuming that the costs of the current system were accounted for on a pay-as-you-go perspective, the required PAYGO tax rate can be expressed conceptually as follows:²³

$$\text{Required PAYGO tax rate} = \frac{(\textit{Average benefit})}{(\textit{Average wage})} \times \frac{(\textit{\# of beneficiaries})}{(\textit{\# of taxpayers})}$$

In this product expression, we can think of the first ratio as the generalized system replacement rate, while the second ratio captures the demographic aspects of our financing problem. Under present law, the indexed nature of the OASDI program provides relatively stable replacement rates. It is, in fact, the increasing ratio of beneficiaries to workers that is the essence of our long-term financing problem. If one assumes that the current system replacement rate is the “appropriate” level, then this simplified perspective points clearly to evolving demographic changes as the underlying source of our problem. This is illustrated by considering the ratio of beneficiaries to covered workers as is done in the accompanying slide,²⁴ which is just the reciprocal of the worker-to-beneficiary ratio described earlier. This graph clearly matches the OASDI “cost rate” trends shown earlier. It also shows that this is not just a problem of the “baby boomers,” but a problem of continuing mortality improvement beyond the end of the “baby boom” generation cohorts.

This demographic problem could be addressed in a variety of ways. For example, by expanding coverage under OASDI on a prospective basis, we could slow the rate of increase of that second factor. Alternatively, the system replacement rate could be reduced through a variety of modifications to the benefit formula. A more subtle point is that proposals to increase the normal retirement age under the OASDI program would appear to affect both factors. This is true because there is also an early retirement age in the U.S. system. Increases in the NRA would perhaps delay retirement for some (thus reducing the demographic factor of costs). Others however, would still choose to retire at the same time and accept greater actuarial reduction, thus resulting in an implicit benefit decrease and a lowering of the average system replacement rate. As we shall discuss below, the many of the reform plans under consideration utilize a combination of these approaches.

Under the Social Security Act prior to 1995, the executive branch of the government was required to convene an ad hoc Advisory Council every 4 years for the purpose of reviewing the

²¹ Including the gradual increase in the normal retirement age from age 65 to age 67, along with a gradual increase in the credit granted for delaying retirement beyond NRA.

²² Including expansion of coverage to Federal employees on a prospective basis, the income taxation of OASDI benefits, and an acceleration of a future payroll tax rate increase that was already scheduled in the law.

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status of OASDI, as well as the status of the Social Security health care programs. Typically, such advisory councils had representation from all segments of the political and economic spectrum. They would consider a wide range of ideas for use by the Congress and the President in their efforts to construct and maintain a viable Social Security program that met the needs of our society. After much debate and discussion, a given advisory council would reach a consensus for recommendations in their final report. Many of the ideas underlying the most recent major reforms in 1977 and 1983 had been previously considered by such advisory councils.

The 1994 Advisory Council²⁵ was charged with investigating the long-range financial status of the OASDI program. Its work extended over 3 years, and considered many new and innovative ideas. The 1994 Advisory Council did reach agreement as to the nature of the problem, and certain goals that should be achieved in any meaningful solution to the problem. Their common principles included an agreement that long-term balance should be restored in such a way that new deficits will not re-emerge strictly due to the passage of time as happens under the current financing regime. This formally recognized that the approach, used at the time of the 1983 amendments, of solving the problem “on average” over a specified 75-year period does not necessarily produce a sustainable solution to social security financing problems. In addition, they agreed that any solution should meet a test of providing a reasonable return on the contributions of younger workers and future generations, while taking into account the redistributive nature of the Social Security system.

The Advisory Council was not, however, able to reach any consensus on a set of recommendations as to how to solve the long-range OASDI financing problem. Instead, in its final report, the 1994 Council put forth 3 alternative plans ranging from minor changes to the current system, to a replacement of a major part of the current defined benefit plan with an individual account defined contribution plan. There were, however, certain themes that were common to all three approaches. These common elements included:

- Solving the problem strictly by raising payroll taxes has little political support.
- Demographic nature of the long-term deficit suggests a long-term solution should both eliminate the long-term deficit, and result in trust fund ratios that are adequate and stable near the end of the 75-year forecasting period.
- Certain elements of the current system (inflation protection, no means testing, and no general revenue funding) were important to preserve in any reformed system.
- Other elements of the current system (coverage, taxation of benefits) should be appropriately modified.

The three Advisory Council plans were:²⁶

²⁵ The Advisory Council appointed in 1994 was the last of such quadrennial advisory bodies, however, because the Social Security Act was modified in late 1994 to establish a permanent Advisory Board that was to have similar ongoing responsibilities.

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- *Maintenance of Benefits plan*—Would provide for some marginal changes to fix funding of current system. This is accomplished through a combination of expanding coverage, reducing benefits slightly, and increasing the payroll tax slightly in the distant future. In addition it would consider investing some portion of trust fund assets in equities.
- *Individual Accounts plan*—Would preserve social adequacy protections of current system, while attempting to increase overall national retirement saving through the establishment of publicly managed mandatory individual savings accounts funded through an additional payroll tax. While the individual accounts were to be publicly managed, the IA idea would allow for some individual investment choices.
- *Personal Security Accounts plan*—Would establish a two-tier social security system with a flat rate benefit based on years of employment under the system, along with fully funded defined contribution plan. The defined contribution plan would be funded using 5 percentage points of the current 12.4 percent payroll tax rate.

While it is not important to repeat here the details of these plans, the discussion provided by that earlier panel suggested a way of thinking about these problems that is shared by many today.²⁷

- *Why not just raise payroll taxes slightly?*—If we are only concerned about solving the problem on average over the next 75 years, then our current actuarial projections suggest that it would require only a 1.87 percentage point increase in the current 12.40 tax rate to be shared by employees and employers. However, the year-by-year projections show this solution is not sustainable in perpetuity. If we wait until 2041, and then provide for payroll tax rate increases to cover the annual shortfalls, by 2076 we would need an increase of 6.42 percentage points, and the required increases would continue to grow into the foreseeable future. Expressed in this way, the political difficulty of maintaining PAYGO funding of currently scheduled benefit levels becomes clearer.
- *What about reducing scheduled benefit levels?*—Over the period 2002-76, projected revenues would be sufficient to pay only 87 percent of projected costs. Thus *long-range actuarial balance* could be achieved by an across-the-board benefit cut of about 13 percent over the period 2002-76. However, only certain kinds of reductions in future scheduled benefits would provide changes of the type that could produce a sustainable solution to the developing demographic problem.
- *Can we capture the power of the marketplace?*—While there is not support for tax rate increases, major benefit cuts are not appealing either. Current thinking often combines more modest reductions in the current defined benefit structure with a movement in the direction of individually managed defined contribution accounts which hold the promise of potentially higher gains from equity investments.

In this context, the debate over the future of OASDI became part of the debate during the 2000 Presidential election campaign. During that debate, President Bush indicated his strong desire to pursue the idea of individual accounts as part of a broader solution to the Social Security long-range financing problem. In an effort to build on this idea, in May 2001 the President

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appointed a special Commission to Strengthen Social Security, and directed the Commission to propose Social Security Reform plans to modernize and restore fiscal soundness to Social Security, using six guiding principles:²⁸

- Modernization must not change Social Security benefits for retirees or near-retirees.
- The entire Social Security surplus must be dedicated only to Social Security.
- Social Security payroll taxes must not be increased.
- The government must not invest Social Security funds in the stock market.
- Modernization must preserve Social Security's disability and survivors insurance programs.
- Modernization must include individually controlled, voluntary personal retirement accounts, which will augment Social Security.

The Commission published its report on December 21, 2001. In that report, the Commission provided the outline of three reform models, each of which included a component of some type of individual account plan.²⁹ In addition, two of the three models proposed additional changes to currently scheduled benefits in order to move closer to achieving long-term solvency. While the three models were not intended as specific legislative proposals, they did provide a framework for the anticipated political debate that would shape the actual details of a reform plan. As will be described below, in addition to each of the plans having some sort of individual account, each plan relies either explicitly or implicitly on some form of temporary or permanent general revenue subsidy to achieve complete solvency for OASDI.

As directed in the charge to the Commission, each of the three models contains some form of voluntary individual account system. The three models differ however in the level of individual contributions permitted, the potential source of the contribution, and the effect the individual account level has on potential benefits under the traditional defined benefit plan. Furthermore, the models differ as to possible other changes in the traditional defined benefit structure, and possible general revenue subsidies. A brief description of each model follows.

Model #1: This model establishes a voluntary personal account option but does not specify other changes in Social Security's benefit and revenue structure to achieve full long-term sustainability.³⁰

- Voluntary personal account based on 2 percent of taxable earnings. Source of contributions in this model were not specified, but could be a redirection of existing OASI taxes, entirely general revenues, or a combination of the two. Impact on the traditional system would of course depend on the source of the contributions.

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- Traditional Social Security benefits would be offset by the nominal amount in the worker's personal account determined by accumulating his contributions at a specified rate equal to the rate of price inflation + 3.5 percentage points (using a monthly amount based on CPI-indexed life annuity using current population mortality assumptions).
- Since no other changes are specified, this model would require further benefit reductions or increases in revenue to achieve long-range solvency for OASDI.

Model #2: This model establishes a voluntary personal account option based on a redirection of existing payroll taxes, accompanied by other changes in the traditional Social Security benefit, and temporary general revenue subsidies to help finance transition costs, thereby achieving long-term sustainability.³¹

- Voluntary personal account based on 4 percent of taxable earnings, up to a maximum contribution of \$1,000.³² Source of contributions would be entirely a redirection of existing OASI taxes.
- Traditional Social Security benefits would be offset by the nominal amount in the worker's personal account determined by accumulating his contributions at a specified rate equal to the rate of price inflation + 2 percentage points.
- Changes to the traditional defined benefit would include (1) indexing initial benefit by prices, rather than wages, (2) an enhanced benefit level for low earners, and (3) increased benefits for widows.
- General Fund transfers would be needed for the period 2025-54, with an average annual transfer of 2.1% of taxable payroll for the 30-year period.

Model #3: This model establishes a voluntary personal account option using a contribution on a redirection of existing payroll taxes, accompanied by other changes in the traditional Social Security benefit, and temporary general revenue subsidies to help finance transition costs, thereby achieving long-term sustainability.³³

- Voluntary personal account based on 2.5 percent of taxable earnings, up to a maximum contribution of \$1,000, for those who contribute additional 1 percent out-of-pocket.
- Additional required 1 percent would be subsidized on a progressive basis. Source of 2.5 percent match would be a redirection of existing OASI taxes.
- Traditional Social Security benefits would be offset by the nominal amount in the worker's personal account determined by accumulating his contributions at a specified rate equal to the rate of price inflation + 2.5 percentage points.
- Changes to the traditional defined benefit would include (1) slow the growth in benefits across generations by about 0.5 percent per year (roughly offsets the assumed increases in life expectancy), (2) a gradual reduction in replacement rates for high earners, (3) an

³¹ Slide 36

³² Value for 2002. Amount would be indexed by increases in average wage thereafter.

³³ Slide 37

enhanced benefit level for low earners, (4) increased benefits for widows, and (5) modifications to the actuarial factors used to adjust for early or delayed retirement.

- Provide for transfers from General Fund of the Treasury amounting to an average annual transfer of less than 1 percent of taxable payroll the beginning in 2005, plus additional unspecified transfers to assist in funding transition costs over the period 2034-63.

Clearly, this Commission framework provides another fresh perspective from which to continue the ongoing debate concerning the future of U.S. Social Security. As suggested earlier in this paper, a very important unresolved question is the issue of what impact these envisioned changes might have on the economy in general. That, of course, is a much more difficult question ranging beyond my modest expertise.

What does the future hold?—Where do we go from here? It is clear that there is a problem in our social insurance system that must be addressed. As indicated by the 1994-96 Advisory Council, and reiterated in many subsequent debates, such problems in planning for retirement are better dealt with sooner rather than later. What will emerge from the political process is not very clear however. Despite the emphasis on a partially defined contribution approach, the current debate still has supporters for the full range of ideas encompassed by the earlier Advisory Council report. One end of the spectrum in the debate places great faith in the current system, relying on minor modifications to shore up the existing OASDI program. At the other end of the spectrum, advocates of personal accounts look to individual investment to provide the solution. As proponents of individual account plans point out, trying to fulfill the promises of the current program will become increasingly difficult, not just because of the OASDI imbalance, but because of the increasing competition for the nation's limited resources to provide other services such as health care. As with most things decided in the political arena, the end result will represent some sort of compromise. However, for now, the prospects for major political action in this arena have likely been deferred until next year, but the debate continues. For those interested in learning more about the ideas touched on in this paper, details of our actuarial valuation may be found at our web site <http://www.ssa.gov/OACT>. Details of the Commission's work and our estimates for the Commission may be found at <http://www.csss.gov>.