ISSUE BRIEF
American Academy of Actuaries
December 2000

Social Security Benefits: Changes to the Benefit Formula and Taxation

The Social Security system has enjoyed broad public support and served as a safety net for elderly Americans for decades. However, a flood of baby boomers on the verge of retirement and the relatively smaller number of younger workers to support them threaten the long-term solvency of the Social Security Trust Fund. Actuaries at the Social Security Administration estimate that unless the system is changed, it will have insufficient income to pay full benefits beginning in 2037. Changes may be needed sooner, however, due to problems beginning around 2015, when tax income to Social Security is expected to be lower than disbursements.

To protect the system's solvency, Congress is considering far-reaching options for reform. Such options include changing the benefit formulas or the taxation of benefits. This issue brief discusses these reform options and their possible implications.

***Note**: This is an update of an issue brief originally published in Fall 1997. The new version includes figures from the 2000 Social Security Trustees' Report.*

The following members of the Social Insurance Committee participated in the revision of this issue brief which was originally published in Fall, 1997: Bruce D. Schobel, FSA, FCA, MAAA, Chairperson; Edward E. Burrows, FCA, MAAA; Ronald Gebhardtsbauer, FSA, FCA, MAAA, MSPA; Eric J. Klieber, FSA, MAAA, MSPA; Adrien R. LaBombarde, ASA, MAAA; Richard G. Schreitmueller, FSA, FCA, MAAA; Ronald L. Solomon, ASA, MAAA; Eric Stallard, ASA, MAAA; Cori E. Uccello, FSA, MAAA

AMERICAN ACADEMY OF ACTUARIES
1100 Seventeenth Street NW 7th Floor Washington DC 20036
Tel 202 223 8196 Fax 202 872 1948

Richard C. Lawson., Executive Director
Noel Card, Director of Communications
Tom Wilder, Director of Public Policy

Background

When Social Security legislation was being drafted in the 1930s, the American public was divided on objectives for the new system. Many at the time wanted a system that was strictly based on *individual equity* and did not involve income redistribution. If individual equity had been established as the sole objective, benefit levels would have been fixed to directly relate to contribution levels. For example, a worker with twice the contribution amount of another worker would have received twice the benefit.

However, some argued that the program needed to focus on *social adequacy* and act more efficiently as a safety net for lower-income participants. They wanted a system that would provide higher benefits relative to past earnings for lower-paid workers. If social adequacy was to be the sole objective, benefits would have been set at the same level for all workers, regardless of earnings and contribution levels, or might have been lower for the higher earner, or for those who had saved more for retirement.

In the end, Congress decided to establish a program that was balanced between individual equity and social adequacy. Social Security retirement benefits would reflect a worker's pre-retirement salary but also would provide a proportionately greater benefit for lower-income workers to help prevent indigence among the elderly. This balance has been maintained to varying degrees over the past 60 years.

In the 1930s, Congress did not consider the treatment of Social Security benefits for income tax purposes. In 1983, as part of legislation to help fund Social Security, Congress changed the tax treatment of Social Security benefits for beneficiaries with significant additional income. For such beneficiaries, a part of their Social Security benefits became subject to income taxation. In 1993, the tax treatment of Social Security benefits was changed again to subject a greater portion of benefits to income taxation for some whose benefits were already taxed. As such, these changes could be viewed as an extension of the progressive nature of Social Security.

Some proposals for Social Security reform include changes to the current benefit formula and the creation of individual accounts. Clearly, both components must be combined before comparing to the current formula and determining the impact of the proposal on the balance between social adequacy and individual equity. See the American Academy of Actuaries issue brief, *Social Security Privatization: Individual Accounts*, for more information. The translation of society's balance between social adequacy and individual equity is done through the specific benefit formulas of the OASDI program. The next section provides a detailed explanation of these formulas and relates their importance back to these fundamental issues.

Nature of the Current System

Current Benefit Formula

Under the current system, determining a retired worker's monthly benefit level begins with calculating lifetime average (35 highest years) earnings. Before averaging, earnings from ages prior to 60 are indexed by changes in national covered wages. The result is called the Average Indexed Monthly Earnings (AIME).

The full benefit (i.e., the amount payable to a worker with no reduction for retiring before the Normal Retirement Age) is called the Primary Insurance Amount (PIA). The monthly PIA is calculated based on the worker's AIME. For beneficiaries first eligible in 2001, the monthly-benefit PIA formula provides 90 cents for each dollar of AIME up to $561. For AIME amounts between $561 and $3,381, the formula provides 32 cents for every dollar. For AIME amounts above $3,381, the formula provides 15 cents for

Benefit Formula for Newly Eligible Beneficiaries in 2001

PIA equals:
90 percent of the first $561 of AIME, plus
32 percent of AIME in excess of $561
but not in excess of $3,381, plus
15 percent of AIME in excess of $3,381

every dollar. For example, a worker retiring at age 62 in 2001, with an AIME of $4,000 would have a PIA equal to 90 percent of $561, plus 32 percent of $2,820 (3,381 - 561), plus 15 percent of $619 ($4,000 - $3,381), for a total of $1,500.

Based on this formula, Social Security benefits replace a higher portion of lifetime average earnings for lower-paid workers. For example, the replacement rate (i.e., the percentage of a worker's pre-retirement earnings that are replaced by Social Security) at Normal Retirement Age is more than twice as high (60 percent) for a low-wage earner, as for a high-wage earner (26 percent). For comparison purposes, financial advisors often tell individuals that they will need roughly 70 percent to 80 percent of their pre-retirement income to enjoy after retirement the same standard of living as before.

Social Security's progressive benefit formula is the primary method through which the program addresses adequacy of benefits for workers with low earnings. In order to address adequacy of benefits for retired, disabled, and deceased workers with families, the program also provides auxiliary, or supplementary, benefits for current and former spouses, children, and surviving spouses.

Current Taxation of Benefits

The formula to determine how much (if any) of a person's benefit is taxed is based on the annual Social Security benefit and income from other sources. If a recipient's adjusted gross income plus non-taxable interest income plus half of the Social Security benefit exceeds a specified threshold, a portion of Social Security benefits above the threshold is added to taxable income. This threshold is $25,000 for a single person and $32,000 for a married couple filing jointly. The portion of benefits taxed is 50 percent up to a point and then 85 percent beyond that point. Revenue from the 50-percent tax goes to the Old-Age, Survivors, and Disability Income (OASDI) Trust Funds, while additional revenue from the 85-percent tax goes to Medicare's Hospital Insurance (HI) Trust Fund. The thresholds of $25,000 and $32,000, unlike many other items in the law, are not indexed to either price inflation or average wage growth.

Reform Options and Possible Effects

The cost of the Social Security program may be reduced from current levels through any number of possible changes to the benefit structure. Each possible change also would have an effect on the adequacy/equity balance that currently exists in the program.

PIA Factors

One way to improve Social Security's financial condition is to reduce the PIA factors (currently 90 percent, 32 percent, and 15 percent) in the PIA benefit formula over a period of time so that they would maintain the same level relative to each other. For instance, the three PIA factors could be reduced yearly by multiplying each factor by 0.99 each year. Under this scenario, after ten years had passed, instead of factors of 90, 32, and 15, the system would use factors of about 81, 29, and 14. This approach would maintain the progressiveness of the current program but reduce the program's adequacy, especially for lower earners and their families.

Alternatively, only the 32 and 15 percent factors could be reduced, not the 90 percent factor, thus increasing the progressiveness of the formula while maintaining the level of adequacy for lower earners. The latter approach is included in the Individual Account (IA) option considered by the 1994–96 Social Security Advisory Council.

PIA Bend Points

The bracket levels, or bend points, of $561 and $3,381, used in the PIA formula are indexed to changes in the national average wage level. This approach is designed to maintain the same Social Security replacement rates from one generation to the next for workers with equivalent earnings levels. One or both of these bend points could be indexed by a factor other than wage growth. If for example, the higher bend point were indexed by price increases rather than generally larger wage increases, it would generally decline in relation to workers' career earnings levels (AIME), thus providing lower benefits to higher earners or less individual equity than under current law.

AIME

As stated previously, AIME amounts, on which benefits are now based, are calculated over an averaging period of the highest 35 years of earnings. Some proposals would increase the averaging period to 38 years. This change would reduce projected future benefits, particularly for individuals with relatively short work histories. For example, if enacted in 2001, the proposal would reduce benefits an average of 3 percent, would save 0.28 percent of taxable payroll, and reduce the long range actuarial deficit by 15 percent under intermediate assumptions.

This proposal also would strengthen the relationship of lifetime contributions to benefits and increase incentives to extend working careers (especially because the Normal Retirement Age is increasing from 65 to 67), thus increasing the individual equity aspect of the program. However, increasing the averaging period would have especially adverse consequences for individuals who do not have steady earnings, particularly women who leave paid employment to care for children.

Cost-of-Living Adjustments

Many economists have suggested that the Consumer Price Index (CPI) overestimates increases in the cost-of-living. If the CPI were to be adjusted downward to reflect an overestimation in the cost-of-living, it would present a possibility for improving the financial condition of the OASDI program.

If applied to Social Security's annual cost-of-living adjustment, a 1.1 percent reduction to the CPI (as recommended by the 1996 Congressional Commission chaired by economist Michael Boskin) could reduce the OASDI program's long-range actuarial deficit by one-half to two-thirds depending on the interaction with other economic variables.

Furthermore, this proposed change could be instituted quickly without radical restructuring of the program. However, a downward cost-of-living adjustment would have a cumulative effect on existing beneficiaries. Although benefits might only be decreased by about 1 percent per year, the cumulative reductions would amount to more than 10 percent after 10 years, and about 22 percent after 20 years. To the extent that the 1.1 percent overstates the CPI error, it could hurt the standard of living of lower-income beneficiaries and others who derive most of their income from Social Security. However, if the Boskin Commission is correct, older individuals have been enjoying cumulative increases that are higher than real inflation because of distortions in the index.

Double-Deck Benefit Formula

Another option considered by the 1994–96 Advisory Council would replace the current benefit formula with a "double-deck" approach. The first deck would provide a flat dollar amount for all workers with a specified minimum number of years of earnings, regardless of the amount of earnings. The second deck would provide a specified percent of average earnings (AIME). The first deck would represent the adequacy component of the formula (each worker would receive the same floor of protection), while the second deck would provide individual equity (each worker would receive the same rate of return on payroll tax contributions).

Both proponents and opponents of this approach agree that it clearly identifies the individual equity and social adequacy components of the benefit structure. Proponents find that this is a desirable end in itself and would allow elected officials greater flexibility to make explicit decisions about the balance between social adequacy and individual equity. Opponents believe that the approach would diminish support for the Social Security program in general, particularly among the more highly paid. They also believe that the double-deck approach would increase demands for general revenue financing and means testing of the first deck or diminish the generosity of the first deck through less than full wage indexing. In their view, the consequence of a double-deck approach would erode the balance between the program's social adequacy and individual equity features and ultimately reduce the Social Security program to a plan with benefits proportional to earnings and a diminishing (in terms of then-current wage levels) welfare benefit.

Auxiliary Benefits

Another option is to modify the structure of auxiliary benefits for family members. The adequacy-driven benefits for spouses and children could be reduced a number of ways in order to move the balance more in the direction of equity. At present, a non-working spouse at Normal Retirement Age receives 50 percent of the *retired* worker's benefit (PIA). Reducing the benefit for a non-working spouse (while both are living) from 50 percent to 33 percent of the PIA would solve about 10 percent of OASDI's long-range actuarial deficit. It would also partially address the concern of two-earner couples whose second income buys little in additional benefits.

Another concern of two-earner couples is that the benefit payable to the *survivor* may not be enough to maintain their accustomed lifestyle as when both were alive because studies show that one person needs about three-fourths of the income of two people. For example, if spouses have similar earnings, they will be eligible for similar retirement benefits. That is because the survivor would receive the larger of the two benefits, or only about half of what they received as a couple. The survivor of a one-earner couple, however, receives about two-thirds of the couple's benefit (if both are the same age) under current law.

If spouse benefits are reduced to 33 percent of the worker's PIA, the survivor would receive 75 percent of the couple's benefit.

A proposal to produce this same 75-percent result for one-earner couples also was considered by the Advisory Council. The proposal would reduce spouse benefits to 33 percent of the primary worker's PIA and provide a minimum benefit of 75 percent of the couple's combined benefit to the survivor. This proposal was estimated to increase the long-range cost of OASDI by about 0.18 percent of payroll. The current minimum survivor benefit rules would also be maintained, which means that the survivor would receive at least the survivor's own worker benefit or the deceased spouse's worker benefit. This proposal would improve the individual equity between one-earner and two-earner couples. Note, however, that because this approach would increase the cost to the program, other reductions would be needed to bring the program into long-range actuarial balance.

Taxation of Benefits

The income thresholds of $25,000 and $32,000 in the benefit taxation formula could be indexed for inflation. The indexation of the thresholds would decrease both the number of future recipients who have a portion of their benefits taxed as well as the proportion of benefits taxed. This would provide particular relief to recipients at lower income levels. However, indexing of the income threshold would reduce tax revenue and thus increase the long-range actuarial deficits of OASDI and Medicare.

An additional option is to replace the current method of taxation with one that taxes Social Security benefits like other pensions (i.e., benefits in excess of the recipient's personal contributions would be taxed). The return of the post-tax contributions would be tax-free on either a first-in-first-out basis or a pro-rata-over-life-expectancy basis. Such a change would reduce the progressivity of the current benefit taxation approach. It also may subliminally reinforce the misperception that an individual's contributions are accumulated and invested over their working life and then repaid during retirement. Unlike other options, this proposal would affect currently retired Americans. However, it is estimated that under this approach, 30 percent of Social Security recipients still would not pay any tax on their Social Security benefits due to deductions and exemptions.

Adopting this alternative method of taxation (assuming the proceeds are still allocated to the trust funds) would increase the trust fund balance, especially in the early years when current thresholds are still large in relation to average wage levels.

Other alternatives include leaving all tax proceeds in general revenue and returning the programs to the principle of payroll-tax financing, or transferring all tax proceeds to Social Security only. Leaving all tax proceeds in general revenue would worsen the short-run and the long-run financial health of the trust funds, which currently receive those proceeds.

Underlying Questions

Although changes in the benefit and tax formulas might enhance program solvency and provide relief to retired Americans, elected officials must be careful in adopting such reforms. Social Security stands as one our government's most popular programs. Benefit outlays have sharply reduced poverty among the elderly. Any change to the system might upset the delicate balance between social adequacy and individual equity, and public support for the Social Security program might be jeopardized.

Congress should consider the following policy questions before changing the benefit calculation formulas or the structure of the tax on benefits.

- To what extent is Social Security responsible for ensuring that the country is not faced with an elderly population with high poverty rates?

- How much can Congress reduce the individual-equity component of the system and still retain support among higher-income Americans?

- Should the tax on benefits continue to flow to both Social Security and Medicare, to Social Security only, or to the general fund of the U.S. Treasury? What is the true cost of this tax to today's seniors?

- How would a change in the cost-of-living adjustment affect existing beneficiaries, particularly the very elderly who currently have the highest poverty rates in the United States?