



October
2005

ISSUE BRIEF

AMERICAN ACADEMY of ACTUARIES

Social Security Reform: Changes to the Benefit Formula and Taxation of Benefits

The Social Security system has enjoyed broad public support and served as a financial 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 Funds. According to the 2005 Social Security Trustees Report, actuaries at the Social Security Administration estimate that, unless the system is changed, benefit payments and administrative expenses will exceed payroll tax income by 2017; and the trust funds which accumulated when payroll tax income exceeded benefit payments and administrative expenses will be depleted by 2041.

To protect the system's solvency, Congress is considering various options for reform, including changing the way the system is financed, raising the age at which unreduced benefits are paid, and replacing all or a portion of the current defined benefit plan with individual accounts. This issue brief focuses on two other possible options for reform: changing the benefit formula while maintaining the defined benefit nature of the program; and changing the way Social Security benefits are treated for federal income tax purposes.

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 relate directly to contribution levels. For example, a worker with twice the contribution amount of another worker would receive twice the benefit.

The American Academy of Actuaries is the public policy organization for actuaries practicing in all specialties within the United States. A major purpose of the Academy is to act as the public information organization for the profession. The Academy is nonpartisan and assists the public policy process through the presentation of clear and objective actuarial analysis. The Academy regularly prepares testimony for Congress, provides information to federal elected officials, comments on proposed federal regulations, and works closely with state officials on issues related to insurance. The Academy also develops and upholds actuarial standards of conduct, qualification and practice, and the Code of Professional Conduct for actuaries practicing in the United States.

Members of the Social Insurance Committee who participated in drafting this issue brief include: Eric J. Klieber, EA, FSA, MAAA, MSPA, Chairperson; Kenneth G. Buffin, EA, FSA, FCA, MAAA; Edward E. Burrows, EA, MAAA, MSPA; Ron Gebhardtshauer, EA, FSA, FCA, MAAA, MSPA; Robert J. Randall, Sr., FSA, MAAA; Richard M. Rasiej, ASA, MAAA; Paul W. Robberson, FSA, FCA, MAAA; Bruce D. Schobel, FSA, FCA, MAAA; P.J. Eric Stallard, ASA, FCA, MAAA; Kenneth A. Steiner, EA, FSA, FCA, MAAA; Joan M. Weiss, EA, FSA, MAAA; James A. Wiseman, FSA, MAAA.



AMERICAN ACADEMY of ACTUARIES

1100 Seventeenth Street NW Seventh Floor Washington, DC 20036
Tel 202 223 8196 Fax 202 872 1948
www.actuary.org

Kevin Cronin, Executive Director
Noel Card, Director of Communications
Craig Hanna, Director of Public Policy
Heather Jerbi, Senior Policy Analyst, Pension

©2005 The American Academy of Actuaries. All Rights Reserved.

Others argued that the program needed to focus on social adequacy and act more as a safety net for lower-income participants. Under this argument, the adequacy of a worker's benefit is considered more important than basing the benefit on his or her contributions. If social adequacy were the sole objective, benefits might be the same for all workers, regardless of earnings and contribution levels, or might even be lower for the higher earner, or for those who had saved more for retirement.

In the end, Congress established a program that was balanced between individual equity and social adequacy. Social Security retirement benefits reflect a worker's pre-retirement earnings, but are proportionately higher for lower-income workers to help prevent indigence among the elderly. Further, the defined benefit nature of the system provides more benefits to workers and their eligible family members who live longer than to those who die shortly after beginning to receive benefits. This balance between social adequacy and individual equity has been maintained to varying degrees for over 60 years.

In the 1930s, Congress did not consider the treatment of Social Security benefits for income tax purposes. Until 1983, Social Security benefits were not taxable. In 1983, as part of legislation to help fund Social Security, Congress changed the tax treatment of Social Security benefits for beneficiaries with significant income in addition to Social Security. 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 of those whose benefits were already taxed. These changes can be viewed as an extension of the socially adequate or progressive nature of Social Security.

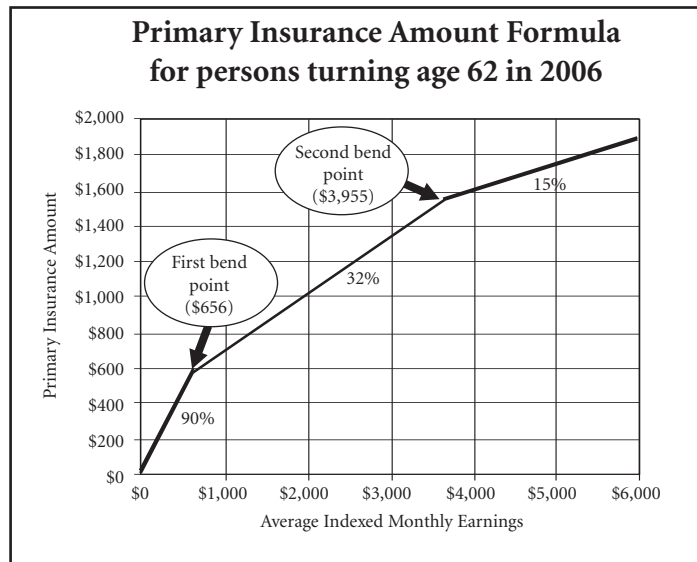
Some proposals for Social Security reform include changes to the current benefit formula and/or to the formula for including Social Security benefits in taxable income. Among these proposals are some that depart from the current benefit structure by allocating a portion or all of a worker's contributions to individual accounts. These proposals are discussed in detail in the issue brief *Social Security Individual Accounts: Design Questions*. This issue brief discusses only proposed changes to the system that remain within the current defined benefit structure. The next section describes the current benefit formula and explains how it balances individual equity and social adequacy.

The Current System

Current Benefit Formula

Under the current system, determining a retired worker's monthly benefit level begins with calculating career average earnings. Before averaging, earnings from years before the worker turns age 60 are indexed by changes in the national average wage up to the year the worker turns age 60. Earnings at ages 60 and later are included in the calculation of average wages at nominal value. The 35 highest indexed earnings are averaged and divided by 12, and the resulting amount is called the average indexed monthly earnings (AIME). The fundamental amount upon which all Social Security benefits are based is called the primary insurance amount (PIA). The PIA is calculated by multiplying 90 percent times the AIME up to the first bend point in the formula, 32 percent times the portion of the AIME that falls between the first and second bend points, and 15 percent times the AIME over the second bend point, as illustrated in the figure on the next page. The bend-points, where the factors in the formula change, are dollar amounts indexed over time by increases in average wages. The 2006 bend points, for example, are \$656 and \$3,955. Indexing earnings and the bend points to changes in the national average wage helps ensure that initial Social Security benefits remain comparable over time for workers with similar earnings histories relative to prevailing wage levels.

Finally, the PIA is indexed to changes in the consumer price index (CPI-W) beginning with the



December of the year the worker attains age 62, and this indexing continues once a worker has retired. Indexing benefits to changes in the CPI helps ensure that the buying power of Social Security benefits remains the same after a worker begins receiving benefits. For workers retiring at their normal retirement age (NRA),¹ the monthly benefit equals the PIA. Benefits are actuarially reduced for workers first retiring before their NRA and increased for workers first retiring after their NRA.

Based on this formula, Social Security benefits replace a higher portion of career average earnings for lower-paid workers. The replacement rate (i.e., the percentage of a worker's pre-retirement earnings that is replaced by Social Security) at normal retirement age can be more than twice as high (e.g., 60 percent) for a low-wage earner, than for a high-wage earner (e.g., 25 percent). For comparison, financial advisors often tell individuals that they will need to replace roughly 70 percent to 80 percent of their pre-retirement income to enjoy the same standard of living after retirement as before.

The AIME for a worker who has fewer than 35 years of covered earnings will include some zero years. The AIME for such a worker will be comparable to that of a worker with 35 years of covered earnings at a lower level. Thus, the benefit formula treats these participants like lower-wage workers in that they get proportionately higher benefits than workers with at least 35 years of covered earnings.

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 benefits for current and former spouses, children, and surviving spouses.

Current Taxation of Benefits

The tax on a person's benefit is based on the annual Social Security benefit and income from other sources. If a recipient's adjusted gross income (excluding the Social Security benefit) plus non-taxable interest income plus half of the Social Security benefit exceeds a specified threshold, a portion of the Social Security benefit is added to taxable income. This threshold is \$25,000 for a single person and \$32,000 for a married couple filing jointly. Up to 50 percent of the Social Security benefit is included in taxable income for recipients whose applicable income exceeds this threshold but is less than \$34,000 for a single person and \$44,000 for a married couple. For recipients whose applicable income exceeds this higher threshold, up to 85 percent of the Social Security benefit is included in taxable income.

Revenue from the 50-percent taxable portion goes to the Old-Age, Survivors, and Disability Income (OASDI) Trust Funds, while additional revenue from the 85-percent taxable portion goes to Medicare's Hospital Insurance (HI) Trust Fund. All four threshold amounts, unlike many other dollar limits and thresholds in the Social Security law, are not indexed to either price inflation or average wage growth.

One of the problems with this taxation method, besides its complexity, is that it can create very high marginal tax rates for some retirees. For example, if a worker contributes an extra \$100 to a retirement plan while working and then withdraws the \$100 in retirement, not only is the withdrawal taxed at the normal income tax rate, but it can possibly push more of the Social Security benefit above the taxation thresholds, thus making up to \$50 or \$85 subject to income tax. If the retiree's nominal marginal tax rate is 25 percent, the actual marginal tax rate may be as high as 1.85 times 25 percent, or 46 percent. As with any means-testing arrangement, this may discourage saving in the years leading up to retirement (including contributions to retirement plans) among workers potentially affected by this anomaly.

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 program's adequacy/equity balance.

PIA Factors

One way to improve Social Security's financial condition is to reduce the PIA factors (the 90 percent, 32 percent, and 15 percent described above) in the PIA benefit formula gradually while keeping the ratios between the factors constant. For instance, the three PIA factors could be reduced by multiplying each factor by 0.99 each year. Under this scenario, after 10 years had passed, instead of percentages being 90, 32, and 15, the system would use percentages of about 81, 29, and 14. This approach would maintain the progressive nature of the current program but reduce the program's adequacy, especially for lower earners and their families.

The change described above would reduce newly awarded Social Security benefits by about 1 percent per year compared with the current formula. Because wage inflation has historically averaged about 1 percent higher than price inflation, under this approach initial Social Security benefits would be expected to keep pace with inflation, but fall behind in replacing pre-retirement income. For example, the 60 percent replacement rate mentioned earlier for low-income workers would decline after 10 years to 54 percent, although the buying power of the workers' Social Security benefits would be expected to remain about the same as benefits awarded today under the current formula. However, the worker's Social Security benefits would not reflect the real (adjusted for inflation) increases in wages during those 10 years.

Reducing the PIA formula by 1 percent each year without a specified end date would come close to bringing Social Security's long-run finances back into balance, but would dramatically reduce replacement rates from levels that would result from the formula in current law. For example, the benefits of our low-income worker from above would be cut in half, from 60 percent to 30 percent, in about 70 years.

Alternatively, only the 32 percent 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 very low earners. This approach was included in the individual account (IA) option considered by the 1994–96 Social Security Advisory Council.

Some recent proposals have gone even further by guaranteeing Social Security benefits to low-wage workers at least equal to the poverty level. Such a minimum benefit could apply to workers with at least

30 years in covered employment, with proportionately lower benefits for workers with 20 to 30 years. Some critics have noted that such an enhanced benefit could exceed a covered worker's wages, discouraging workers eligible to retire from continuing to work and disabled workers from returning to work. A possible solution would be to cap the minimum at the person's average indexed wage. More fundamentally, some people may view addition of a guaranteed minimum benefit as changing the nature of Social Security from an income replacement program to a poverty or welfare program. This could attach a stigma to Social Security benefits and erode public support for the system.

PIA Bend Points

The bend points 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 be expected to decline gradually in relation to workers' career earnings levels based on historical relationships. Over time, the PIA formula would provide lower benefits to higher earners. This would reduce system costs and move the balance further away from individual equity toward social adequacy.

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 or 40 years. This change would reduce projected future benefits, particularly for individuals with relatively short work histories. For example, the 40-year proposal would reduce benefits an average of 3 percent and would, according to a study by the Social Security actuaries based on the 2003 Trustees Report, reduce the 75-year long-range actuarial deficit by 21 percent under the 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. One modification that proposals have used to address this concern is to allow dropout years for childcare.

Cost-of-Living Adjustments

A 1996 congressional commission chaired by economist Michael Boskin suggested that the annual increase in the CPI was overstated by 1.1 percent. In response, the Bureau of Labor Statistics has modified its methodology in recent years to account for consumers' tendency to substitute, among similar products, those whose prices have increased more slowly for those whose prices have increased more rapidly. Most economists agree this adjustment has greatly reduced, if not eliminated, the overstatement of inflation.

However, some economists think the CPI still overestimates annual increases in the cost-of-living. They suggest that using a "superlative CPI," which also takes into account the tendency for consumers to substitute products whose prices have increased more slowly for those whose prices have increased more rapidly even among unrelated categories of goods and services, would lower the annual increase in CPI by an estimated 0.22 percent. Others have suggested using, for Social Security purposes, a separate CPI that uses the typical basket of goods and services purchased by retirees, although it is unclear whether such a "retiree CPI" would be higher or lower than the regular CPI.² Adjusting the CPI down-

ward to reflect an overestimation in the cost of living would improve the financial condition of the OASDI program.

If a change in the cost-of-living adjustment (COLA) were enacted, it could be instituted quickly without radical restructuring of the program, and unlike other changes, it could be applied to people already retired. That would provide a more immediate improvement to Social Security's finances. Some policymakers suggest that everyone should participate in the solution, particularly current retirees, who will receive so much more from Social Security than they put in.

On the other hand, it is more difficult for retirees to handle changes, since their income levels are often fixed, and most of them cannot return to work. A reduction in the COLA would have a cumulative effect on existing beneficiaries. For example, if benefits increased by 1/2 percent per year less than under the current system, the cumulative reduction would be more than 5 percent after 10 years, and about 9 percent after 20 years. This change would eliminate about 40 percent of Social Security's 75-year deficit according to the 2003 study. However, such a change would have its greatest impact on the very elderly, a group that already has a high level of poverty. If a change to the CPI overstates the current 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 economists are correct that the current CPI overstates inflation, older individuals have been enjoying cumulative increases that are higher than real inflation.

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, over the long term, erode the balance between the program's social adequacy and individual equity features. Ultimately, it would reduce the Social Security program to a plan with benefits proportional to earnings plus a diminishing (in terms of then-current wage levels) welfare benefit.

Auxiliary Benefits

The current structure of Social Security auxiliary benefits was established when single-wage-earner families still predominated. At normal retirement age the lower-paid (or non-working) spouse receives 50 percent of the higher-paid spouse's benefit (PIA) unless the former can receive a higher benefit based on his or her own earnings history. When one spouse dies, the surviving spouse receives the greater of 100 percent of the deceased spouse's benefit or the surviving spouse's own benefit. Social Security also pays benefits to other family members in certain circumstances, including former spouses, dependent children, and parents.

Many critics have pointed out that this structure is unfair to two-earner families. For example, suppose the two spouses have similar earnings. When both spouses are alive, the couple together receives twice the benefit either would receive alone. If one spouse had never worked in covered employment, the couple would still receive one and a half times the benefit the working spouse would receive alone. Thus, the two-earner couple pays twice the taxes of the one-earner couple, but receives benefits only a third higher. The inequity is greater after one spouse dies. In the two-earner couple, the surviving spouse receives about half of what both received as a couple. In the single-earner couple, the surviving spouse receives two thirds of what both received as a couple, which is the same amount as the surviving spouse of the two-earner couple. Thus, after the death of one spouse, the two-earner couple gets no benefit from the additional payroll taxes they paid.

Many proposals have been made to modify the structure of auxiliary benefits for family members. These proposals are often motivated at least as much by the desire to achieve greater equity between single-earner and two-earner families as to address Social Security's financial problems. For example, reducing the benefit for a non-working spouse (while both are living) from 50 percent to 33 percent of the PIA would eliminate about 10 percent of OASDI's 75-year long-range actuarial deficit. It would also partially address the concern of two-earner couples whose second income buys little, if any, in additional benefits. Further, if the survivor benefit remains 100 percent of the working spouse's benefit, the survivor would receive 75 percent rather than two thirds of the couple's benefit. This is in line with studies that show surviving spouses require about 75 percent of the income both spouses were receiving to maintain the same standard of living.

The 1994–96 Advisory Council developed a more complex proposal for restructuring auxiliary benefits. This proposal would also reduce spouse benefits to 33 percent of the primary worker's PIA and maintain the current survivor benefit rules under which the survivor receives the greater of the survivor's own worker benefit or the deceased spouse's worker benefit. The proposal would also provide a minimum benefit of 75 percent of the couple's combined benefit to the survivor. This would increase survivor benefits for many working spouses, particularly in situations where the spouses' career earnings are comparable. This proposal would improve equity between one-earner and two-earner couples through a combination of benefit increases and decreases, but at a net cost of increasing the estimated long-range cost of OASDI by about 0.18 percent of payroll, according to actuarial studies prepared for the Advisory Council. Placing a cap on the 75 percent survivor benefit guarantee equal to the average survivor benefit can reduce this cost. With the cap, the guarantee would primarily help low and middle-income workers that might otherwise have less adequate survivor benefits — not upper-income beneficiaries.

Taxation of Benefits

The income thresholds of \$25,000, et al, in the benefit taxation formula could be indexed for inflation. The indexation of the thresholds would decrease both the number of future recipients whose benefits are taxed as well as the proportion of benefits taxed. This would provide particular relief to certain high-income recipients. However, indexing of the income threshold would reduce tax revenue and thus increase the long-range actuarial deficits of OASDI and Medicare.

An option in the opposite direction is to replace the current method of taxation with one that taxes Social Security benefits like other pensions, i.e., all benefits in excess of the recipient's personal contributions would be taxed. The employee's contributions would be allocated over the expected lifetime and returned tax-free. Such a change would smooth out the progressivity of the current benefit taxation approach. Unlike most options, this proposal could be applied to currently retired workers. Some opponents have suggested that it would hurt low-income people the most. However, it is estimated that, under this approach, 30 percent of Social Security recipients (the retirees with the smallest incomes)

still would not pay any tax on their Social Security benefits due to deductions and exemptions. This reform can also fix the artificially high marginal tax rate problem mentioned earlier. Because this change would increase taxes for higher income retirees by a substantial amount, recent proposals in this area phase in the change over 5 years.

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. Over the 75-year projection period, this change would eliminate about 20 percent of the actuarial deficit, according to the 2003 study.

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 (which would hurt Medicare's financial position as much as it helps OASDI's). Leaving all tax proceeds in general revenue would worsen the 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, elected officials must be careful in adopting such reforms. Social Security stands as one of 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?
- Does a proposed change to the benefit formula make sense on its own, or is it purely revenue-driven?
- 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?

Endnotes

¹ NRA for workers born during 1943–54 (and becoming eligible for benefits during 2005–16) is 66.

² An experimental CPI-E based on a typical basket of goods and services for retirees was constructed by the Bureau of Labor Statistics. Over the past 15 years, it has been approximately 0.3% higher per year than the CPI-W that is currently used to index Social Security benefits.