Social Security

Policy Brief

Distributional Effects of Raising the Social Security Taxable Maximum

by Kevin Whitman

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As of 2009, Social Security's Old-Age, Survivors, and Disability Insurance program limits the amount of annual earnings subject to taxation at $106,800, and this value generally increases annually based on changes in the national average wage index. This brief uses Modeling Income in the Near Term (MINT) projections to compare the distributional effects of four options for raising the maximum taxable earnings amount beyond its scheduled levels. Two of the options would raise this value so that it covers 90 percent of all covered earnings and two would remove the maximum completely. Within each set of options, the proposals are differentiated by whether the new taxable amounts are used in computing benefits. Most workers would not be affected by these proposals, but some higher earners would experience a substantial increase in taxes. Correspondingly, benefit increases are largely isolated to higher earners, although the return in benefits for taxes paid would also decline. Because the proposals are targeted toward high earners, Social Security's progressivity would increase.

Summary

This policy brief analyzes the effects on taxpayers and Social Security beneficiaries of either eliminating the taxable maximum (tax max) for Social Security or raising it to a level so that 90 percent of all Old-Age, Survivors, and Disability Insurance (OASDI)–covered earnings would be subject to the payroll tax. Under both scenarios it is possible to either calculate benefits based on the current-law tax max (*no max* and *max 90*) or to credit the new taxable amounts toward benefits (*no max plus benefits* and *max 90 plus benefits*).[1]

The distributional results presented herein are from the Modeling Income in the Near Term (MINT) microsimulation model.[2] The four options are assumed to take effect in 2008, consistent with the latest start date used by Social Security's Office of the Chief Actuary (OCACT) in its solvency projections for these options using the *2005 Trustees Report*. The results focus on those aged 62 or older in 2070 to determine the effects of these changes on individuals spending most or all of their working careers under the policy options discussed here. The outcomes associated with each of the policy options are compared with current law. In addition, the immediate tax rate increase required to completely close the 75-year solvency gap (1.92 percentage points) is used as a reference point for comparing these options with a solvent baseline.[3] The major findings are as follows:

- According to OCACT, all of the options would improve Social Security's long-term financial outlook, but not to the same extent. The largest positive change would be under the *no max* option, which would improve the long-range actuarial balance by an estimated 2.21 percent of taxable payroll.[4]
- The majority of individuals would not be affected by any of these provisions. Seventy-seven percent of persons aged 62 or older in 2070 are projected to never earn over the scheduled tax max from 2008 forward.
- All of the options would result in higher lifetime earners paying more in taxes, on average.
- Among individuals aged 62 or older in 2070 in the highest lifetime shared-earnings quintile, the median percentage change in annual benefits would be 7.5 percent under the *no max plus benefits* option and 6.3 percent under the *max 90 plus benefits* option.
- The increase in payroll taxes would result in a substantial decline in the median benefit/tax ratio for those in the highest lifetime shared-earnings quintile under the *no max*, *no max plus benefits*, and *max 90* options. The decrease in the median benefit/tax ratio among those aged 62 or older in 2070 in this earnings quintile would be roughly equivalent under these three options.[5]
- Social Security's progressivity would increase under all of the options, with the *no max* option projected to be the most progressive.[6]

Selected Abbreviations

MINT	Modeling Income in the Near Term
OASDI	Old-Age, Survivors, and Disability Insurance
OCACT	Office of the Chief Actuary
tax max	taxable maximum

The Current Taxable Maximum Covers Roughly 84 Percent of Total Earnings

Beginning in 1975, the amount of earnings subject to Social Security taxes was indexed to the change in the national average wage index.[7] Congress passed the last major financing amendments for the system in 1983, and at that time Social Security covered 90 percent of taxable wages. However, wages above the tax max have grown at a faster rate than wages subject to the payroll tax. As a result, the ratio of taxable wages to covered wages has declined from 90 percent in 1983 to 83.6 percent in 2006 despite the automatic increase in the wage base.[8, 9] At an individual rather than economy-wide level, roughly 6 percent of covered workers had earnings above the tax max as of 2005.

As established by the 1983 Amendments to the Social Security Act, the Social Security payroll tax rate applied to these wages is a combined 12.4 percent, with 6.2 percent paid by the employee and 6.2 percent paid by the employer.[10] In 2009, a worker earning $106,800 or more would pay $6,621.60 in payroll taxes to the Social Security (or OASDI) program, with the individual's employer also paying the same amount.[11, 12]

For benefit purposes, an employee's earnings for a year are also capped at the tax max. As many as 35 years of the highest earnings are used to calculate OASDI benefits, and only earnings up to the tax max in those years are figured into the benefit computation. Allowing higher earnings to be included in the benefit formula would increase benefits.

The No Max and Max 90 Options Would Change the Current-Law Taxable Maximum Starting in 2008

The *no max* and *no max plus benefits* options completely remove the upper limit on the wage base that is subject to the payroll tax starting in 2008. The *max 90* and *max 90 plus benefits* options gradually increase the tax max beginning in 2008 so that by 2017, 90 percent of all OASDI-covered earnings would be subject to the payroll tax. From 2018 onward, the annual tax max would equal the previous year's tax max multiplied by 1 plus the percentage growth in the average wage index. Chart 1 shows the tax max under current law and the *max 90* and *max 90 plus benefits* options (combined under the heading "Max 90 options").[13] The gap between the current-law tax max and the proposed *max 90* and *max 90 plus benefits* options reaches $155,412 by 2017.

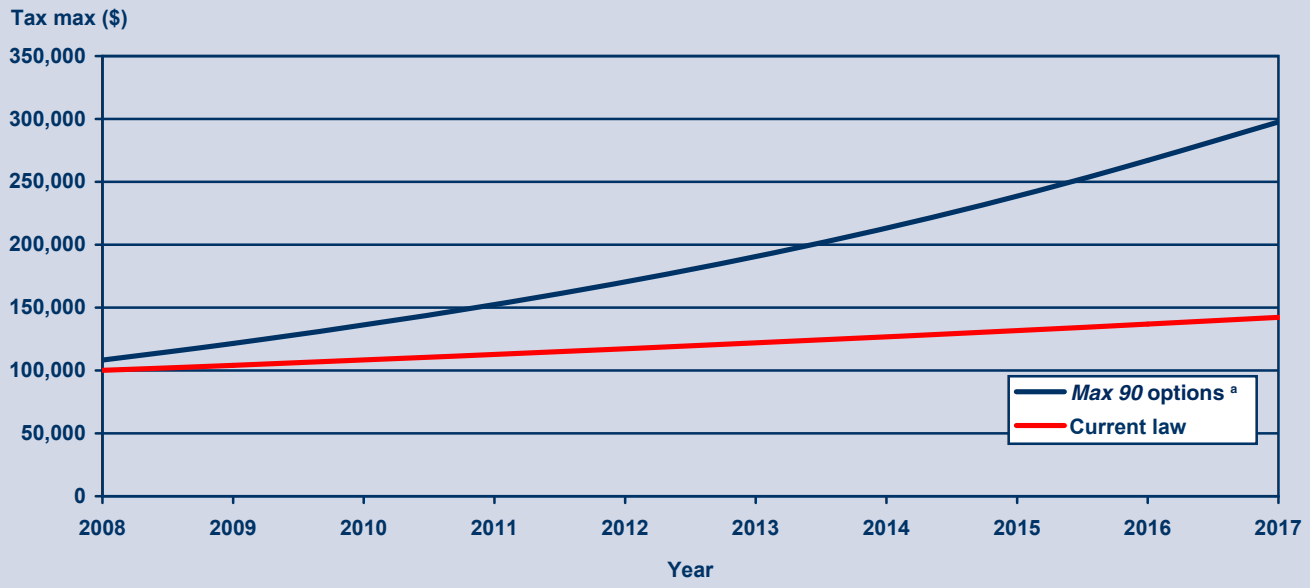
All of the Options Would Improve Solvency, but Not to the Same Degree

When comparing all of these policy options it is important to emphasize that they do not improve solvency equally. Using the assumptions in the *2005 Trustees Report*, the *no max* option is the only option projected to fully close the long-range actuarial imbalance; the *no max plus benefits*, *max 90,* and *max 90 plus benefits* options address smaller parts of the long-range shortfall (Table 1).[14] None of these options are sustainably solvent, meaning that Social Security is paying more in benefits than it is receiving in taxes at the end of the projection period, and the OASDI Trust Fund ratio is declining.[15]

The Majority of Individuals Aged 62 or Older in 2070 Would Not be Affected by These Options

Because these policy changes only affect those persons who ever have wages exceeding the current-law tax max, the majority of individuals are not affected by the change. Roughly 77 percent of persons aged 62 or older in 2070 are projected to never have sufficient annual earnings to exceed the current-law tax max amount in the years following the implementation date of these policy options (Chart 2); this means that under all of the policy options discussed here, only 23 percent of individuals would experience an increase in payroll taxes paid during their lifetime. However, for the *no max plus benefits* and *max 90 plus benefits* options, a larger percentage of individuals would be affected in some way, not because of an increased individual tax burden, but as a result of receiving higher benefits from the earnings record for a worker who exceeded the tax max (that is, being the recipient of auxiliary benefits). Measuring the overall affected population as defined by those with a change in their net present value of benefits greater than a dollar, 38 percent of individuals would be affected by the *no max plus benefits* and the *max 90 plus benefits* options, with 40 percent of this affected group receiving increased benefits without a change in their individual taxes paid.

Chart 1.
The tax-max value under current law and the proposed *max 90* options, 2008–2017



SOURCE: Results are from SSA's MINT model.

a. *Max 90* and *max 90 plus benefits* options are combined here.

Table 1.
Effect of increasing or removing the tax max on solvency, by policy option

Effect	*No max*	*No max plus benefits*	*Max 90*	*Max 90 plus benefits*
Change in actuarial balance as percentage of taxable payroll	2.21	1.82	1.00	0.83
Percentage of long-range actuarial imbalance fixed	114.58	94.79	51.56	43.23
Percentage of annual shortfall fixed in the 75th year	50.70	36.14	25.79	16.84

SOURCE: Based on calculations by OCACT, SSA, http://www.socialsecurity.gov/OACT/solvency/provisions_tr2005/wagebase.html.

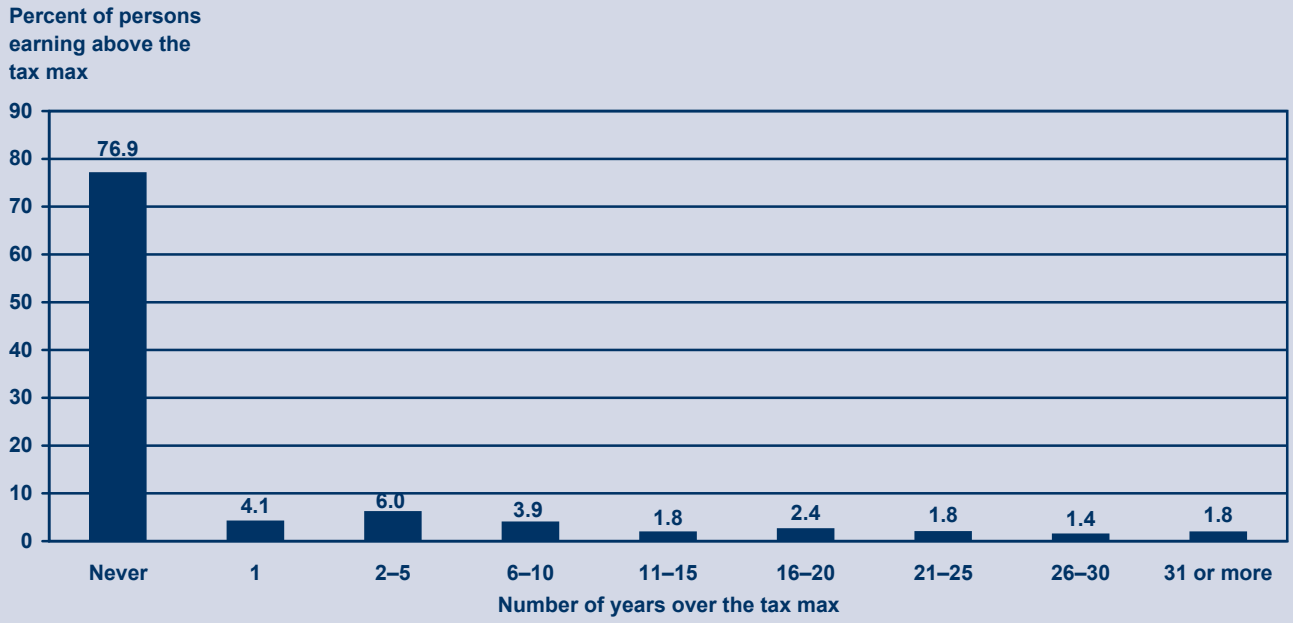
Individuals in Higher-Earning Households Would Pay More in Taxes Compared with Current Law

Although most individuals would not experience a change in their tax burden, the highest lifetime earners would, on average, see their taxes increase under each of the options compared with current law. Among individuals aged 62 or older in 2070 in the top 25th percentile for shared lifetime earnings, the median equivalent tax increase on lifetime earnings would be 0.15 percentage points for all of the options (Chart 3).[16] The higher the shared-earnings percentile, the higher the equivalent tax increase. For those in the highest 10th percentile for shared lifetime earnings, the median equivalent tax increase would be 1.92 percentage points for the *no max* and *no max plus benefits* options and 1.91 percentage points for the *max 90* and *max 90 plus benefits* options.

The equivalent tax increase is calculated by taking the difference between the present value of payroll tax paid under the option and current law and dividing this amount by the present value of taxable covered earnings under current law. This value represents the immediate tax increase that would be equal to the overall change in an individual's tax burden occurring under the policy option (that is, a 2.0 percentage-point increase is the equivalent of the combined employer and employee OASDI payroll tax rate increasing from 12.4 percent under current law, to 14.4 percent under the option).

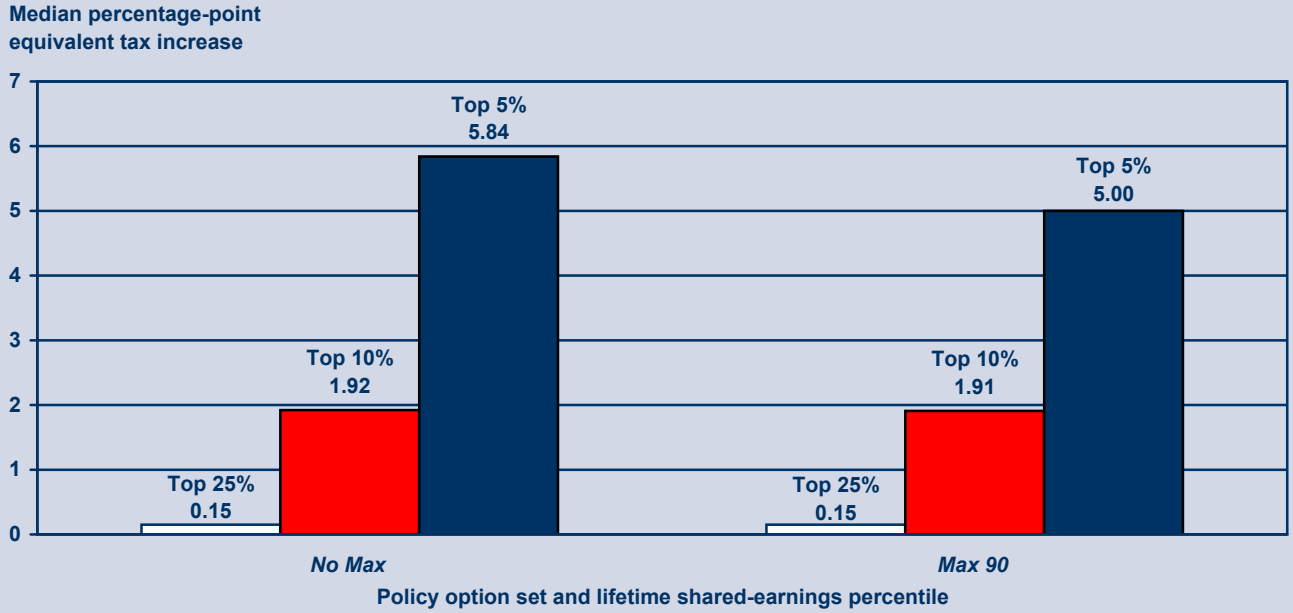
As a comparison, using the *2005 Trustees Report*, which corresponds with the solvency estimates included in this brief, OCACT estimates that

Chart 2.
Persons aged 62 or older in 2070 exceeding the scheduled tax max, by number of years (starting in 2008) their earnings exceed the tax max (in percent)



SOURCE: Results are for persons aged 62 or older in 2070, using SSA's MINT model.

Chart 3.
Taxes on higher lifetime earners increase, on average, under all policy options compared with current law



SOURCE: Results are for persons aged 62 or older in 2070, using SSA's MINT model.

NOTE: *No max* and *no max plus benefits* options are combined here. *Max 90* and *max 90 plus benefits* options are combined here.

completely fixing the program's shortfall over the 75-year projection period would require an immediate across-the-board tax increase of 1.92 percentage points. Note that although the median percentage-point equivalent tax increases for even the top 10 percent of lifetime earners under all four of the options are roughly equivalent to the 1.92 percentage-point tax rate increase needed to close the 75-year solvency gap, some individuals would experience a significantly higher equivalent tax increase. For example, under the *no max* and *no max plus benefits* options, the median equivalent tax increase among those in the top 5 percent of lifetime shared-earners is 5.84 percentage points. For the *max 90* and *max 90 plus benefits* options, the comparable figure is 5.00 percentage points. These findings underscore the distributional trade-offs between a general tax increase and changes to the tax max that are specifically targeted toward higher earners.

Table 2.
Benefit increases are concentrated among persons in higher-earning households, by selected policy option

Lifetime shared-earnings quintile	Median percentage change in annual benefits	
	No max plus benefits	*Max 90 plus benefits*
Lowest quintile	0.0	0.0
Second lowest quintile	0.0	0.0
Middle quintile	0.0	0.0
Second highest quintile	0.0	0.0
Highest quintile	7.5	6.3

SOURCE: Results are for persons aged 62 or older in 2070, using SSA's MINT model.

NOTE: Annual benefits under the immediate 1.92 percent tax increase needed to close the 75-year solvency shortfall would be the same as under current law.

Among Individuals in Higher-Earning Households, Benefit Levels Would Increase on Average under the No Max Plus Benefits and Max 90 Plus Benefits Options

The *no max plus benefits* and the *max 90 plus benefits* options would both increase benefits because the new taxable amounts also would be credited for benefit calculations (Table 2). Under the *no max plus benefits* option, the median percentage change in annual benefits for individuals aged 62 or older in 2070 in the highest shared-earnings quintile is projected to be 7.5 percent. For the *max 90 plus benefits* option, the comparable benefit increase for the same group is projected to be 6.3 percent. Benefit increases would be concentrated among households representing the highest fifth of earners because individuals in this group would have a higher number of years with wages above the current-law tax max.

The Return in Benefits for Taxes Paid Would Also Decline for Individuals in Higher-Earning Households

The effect of increased taxes and benefits would also be seen in the benefit/tax ratio, which measures the amount that workers receive from the program for every dollar of taxes paid. In 2070, among individuals aged 62 or older in the highest shared-earnings quintile, the benefit/tax ratio would markedly decrease under all of the options, except for the *max 90 plus benefits* option (Table 3).[17] The average decline would be roughly the same under the *no max*, *no max plus benefits*, and *max 90* options, with the median benefit/tax ratio for the highest shared-earnings quintile falling from 0.9 under current law to 0.8.[18] In addition, under the *no max* option, the median benefit/tax ratio for individuals aged 62 or older in the second highest shared-earnings quintile would also decline. In many instances, the benefit/tax ratio value would still be higher than the median benefit/tax ratio for the same earnings group under the proposal to immediately increase the tax rate by 1.92 percentage points. However, because all four of the options are so narrowly targeted, there are individuals who would experience a far larger decrease in their benefit/tax ratio than under the immediate tax increase option.

Increasing or Eliminating the Taxable Maximum Would Make Social Security More Progressive

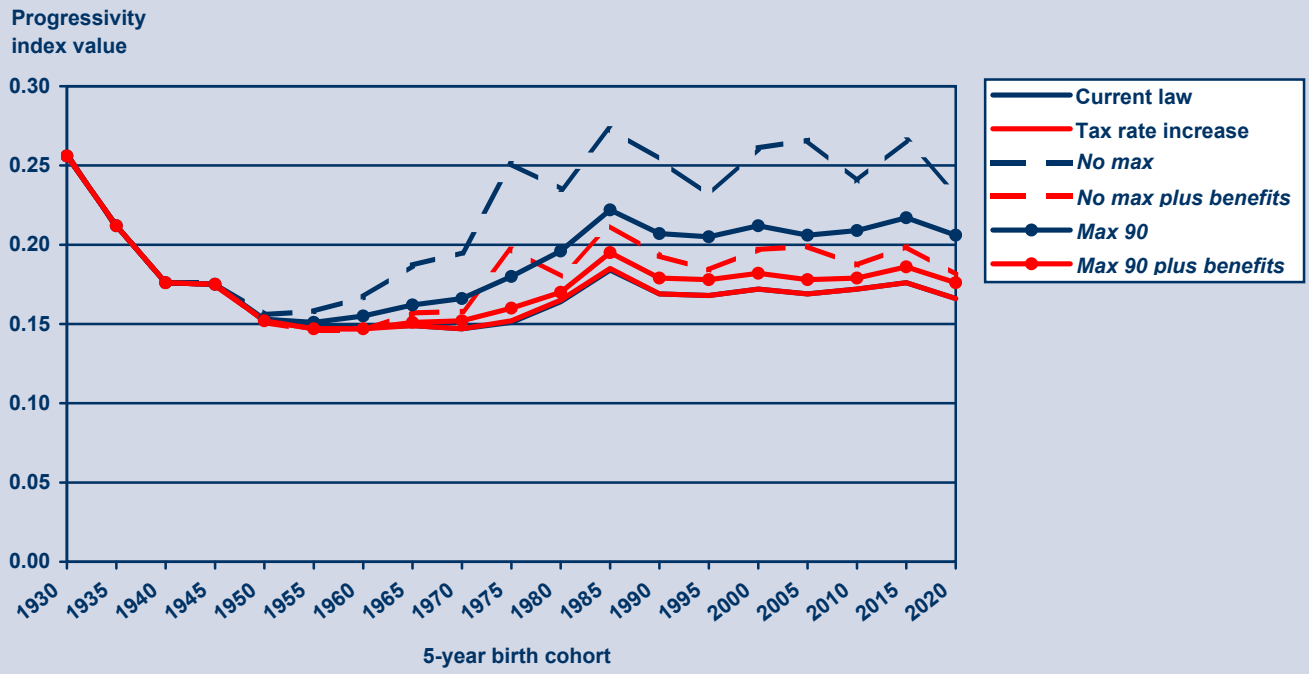
By increasing taxes on individuals with Social Security–covered wages in excess of the current-law tax max, the Social Security system's progressivity would increase. Progressivity can be measured by an index that ranges from 0 (benefits are exactly proportional to lifetime taxes paid) to 1 (highest earners bear the entire tax burden, and lower earners receive all of the benefits).[19, 20] Chart 4 shows that the progressivity value for the affected birth cohorts is generally between 0.15 and 0.17 under current law, but would increase under all of the options.[21] The *no max* and *max 90* options have the highest progressivity values because they increase payroll taxes on high earners without crediting this amount toward benefits.

Table 3.
Money's worth declines most for persons in higher-earning households, by policy option

Lifetime shared-earnings quintile	Median benefit/tax ratio					
	Current law	1.92 percentage-point tax rate increase	*No max*	*No max plus benefits*	*Max 90*	*Max 90 plus benefits*
Lowest quintile	1.9	1.7	1.9	1.9	1.9	1.9
Second lowest quintile	1.4	1.2	1.4	1.4	1.4	1.4
Middle quintile	1.1	1.0	1.1	1.1	1.1	1.1
Second highest quintile	1.1	0.9	1.0	1.1	1.1	1.1
Highest quintile	0.9	0.8	0.8	0.8	0.8	0.9

SOURCE: Results are for persons aged 62 or older in 2070, using SSA's MINT model.

Chart 4.
Most progressive policy option: *No max*



SOURCE: Results are from SSA's MINT model.

NOTE: The label for 1930 includes persons born from 1926 to 1930.

The line in this chart representing current-law progressivity is largely obscured by the line showing progressivity under the tax rate increase option because the underlying values are nearly identical.

Notes

Acknowledgments: The author thanks Laura Haltzel, Kathleen Romig, Joyce Manchester, Mark Sarney, David Weaver, Jason Fichtner, and Dave Shoffner for their helpful comments and suggestions.

[1] To make it easier to identify these policy options when they are cited in the text of this brief, their titles will continue to be noted in italics.

[2] Readers interested in detail on MINT should see "Modeling Income in the Near Term 4" by Smith, Cashin, and Favreault (2005), available at http://www.urban.org/UploadedPDF/411191_MINT4.pdf.

[3] A solvent baseline is used because according to the most recent estimates from the *2008 Trustees Report*, OCACT projects that Social Security will lack the funds necessary to pay current-law benefits starting in 2041.

[4] This solvency estimate corresponds with projections from OCACT based on the *2005 Trustees Report*. The figures based on the *2005 Report* are used because they are the solvency estimates closest to the 2004 assumptions used in MINT. OCACT has produced new estimates using the *2008 Trustees Report*, but the changes in the program's projected actuarial balance are minor. OCACT periodically updates their solvency scores and readers interested in the most recent estimates should see http://www.socialsecurity.gov/OACT/solvency/provisions/wagebase.html.

[5] The median benefit/tax ratio for those in the highest lifetime shared-earnings quintile would also decrease under the *max 90 plus benefits* option, but the decline would not be large enough to change the rounded values.

[6] Although the two analyses use several different measures, as well as a different analysis year, these results are qualitatively similar to those produced by the Congressional Research Service using the Dynasim model. Available at http://www.aging.senate.gov/crs/ss7.pdf.

[7] Prior to the implementation of changes mandated by the 1972 Amendments to the Social Security Act, Congress raised the tax max intermittently on an ad hoc basis.

[8] The ratio of taxable wages to covered wages in 2006 is preliminary and reported in the *Annual Statistical Supplement to the Social Security Bulletin, 2007* (Table 4.B1). See http://www.socialsecurity.gov/policy/docs/statcomps/supplement/2007/4b.pdf.

[9] Prior to 1994, self-employment earnings above the annual tax max were not reported to Social Security, resulting in the ratio of taxable wages to covered wages being overstated. Adjusting for this change in the calculation methodology would mean that the dollar targets for the tax max under the *max 90* and *max 90 plus benefits* options would need to be lowered to match the ratio as of the 1983 Amendments. This adjustment is not included in this analysis, as the phase-in figures for the *tax max 90* options used in the projections and Chart 1 are from OCACT. Available at http://www.ssab.gov/documents/Taxable-Ratio-Computations-092905.pdf for more information.

[10] The 1983 Amendments refer to Public Law 98-21 (H.R. 1900). For a summary of the law's provisions, see http://www.socialsecurity.gov/history/1983amend.html.

[11] See http:/www.socialsecurity.gov/policy/docs/chartbooks/fast_facts/2008/fast_facts08.html#generalinfo.

[12] However, it is generally argued that the employee effectively bears the burden for the entire 12.4 percent Social Security payroll tax because the employer passes on the cost of their portion of the tax to the employee through lower wages. (See "A Guide to Social Security Money's Worth Issues," by Leimer (1995), available at http://www.socialsecurity.gov/policy/docs/workingpapers/wp67.pdf.) Thus, the total tax burden for a worker earning at or above the tax max in 2009 would be $13,243.20.

[13] The *no max* and *no max plus benefits* options are not included in Chart 1 because starting in 2008, there is no tax max under these options.

[14] OCACT's more recent modeling of these proposals projects that the *no max plus benefits* option will also solve the long-range solvency imbalance. Available at http://www.socialsecurity.gov/OACT/solvency/provisions/charts/chart_run214.pdf.

[15] The 1.92 percentage-point tax increase used for comparison in this brief is also not sustainably solvent. The most commonly used sustainably solvent baseline is payable benefits, which represents what Social Security is projected to be able to pay without any reform. Payable benefits is not included as a baseline in this analysis because it achieves solvency solely through benefit reductions, starting in 2041 (according to the *2008 Trustees Report*). The options included here focus on immediate tax changes. Consequently, it is difficult to construct a meaningful comparison.

[16] To address earnings on a household level, the shared-earnings measures attributes half of a married couple's earnings to each individual during the time of their marriage.

[17] There are a variety of ways to calculate the benefit/tax ratio based on how one attributes taxes and benefits. This analysis divides the lifetime benefits an individual receives, regardless of the source (that is, the benefits could be based on another person's work record, such as a spouse), by the lifetime taxes the individual paid.

[18] The projected values are not exactly equal, but round to the same number.

[19] Under a regressive system, the index would have a negative value.

[20] For a more complete description of the progressivity index, see "A Progressivity Index for Social Security" by Biggs, Sarney, and Tamborini (2009), available at http://www.socialsecurity.gov/policy/docs/issuepapers/ip2009-01.pdf.

[21] Readers may notice the zigzag pattern in the *no max* and *max 90* progressivity lines. This variation primarily results from fluctuations in earnings patterns for the different cohorts among the small percentage of workers who earn above the current-law tax max. These changes are amplified in the progressivity values because these options do not count the increased taxable earnings for benefits.

Kevin Whitman is with the Social Security Administration's (SSA's) Office of Retirement and Disability Policy.

Questions about this analysis should be directed to the author at (202) 358-6317. For additional copies of this brief, e-mail op.publications@ssa.gov.

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Social Security Administration
Office of Retirement and Disability Policy
Office of Research, Evaluation, and Statistics
500 E Street, SW, 8th Floor
Washington, DC 20254

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