CONGRESSIONAL BUDGET OFFICE
U.S. Congress
Washington, DC 20515

Phillip L. Swagel, Director

October 10, 2019

Honorable John Larson
Chairman
Subcommittee on Social Security
Committee on Ways and Means
U.S. House of Representatives
Washington, DC 20515

Re: Additional Information About the Effects on Social Security of H.R. 860, the Social Security 2100 Act

Dear Mr. Chairman:

In response to your request, the Congressional Budget Office and the staff of the Joint Committee on Taxation (JCT) have analyzed the budgetary, financial, and long-term distributional effects of enacting H.R. 860, the Social Security 2100 Act, as it would be modified to include a revised provision.[1] Specifically, with the modification, a portion of the income taxes collected on Social Security benefits would be transferred to the Medicare Hospital Insurance (HI) Trust Fund in the same manner and amount as under current law. Any residual amount of those income taxes would be credited to a new Social Security Trust Fund that would be established by the bill. This analysis does not consider any other modifications to the bill.

As shown in Table 1, CBO and JCT estimate that over the current baseline projection period (2020 to 2029), enactment of H.R. 860, as modified, would:

- Increase Social Security benefit outlays by $386 billion;
- Increase federal revenues by $911 billion, the net effect of a decrease in on-budget revenues of $747 billion and an increase in off-budget revenues of $1.658 trillion; and

1. In September 2019, CBO transmitted an analysis of the bill as introduced in January 2019. See Congressional Budget Office, letter to the Honorable Kevin Brady providing an analysis of effects on Social Security of H.R. 860, the Social Security 2100 Act (September 13, 2019), www.cbo.gov/publication/55627.

- Reduce the federal deficit by $525 billion (excluding any effects on direct spending for programs other than Social Security).

To help the House and Senate Budget Committees determine whether certain budgetary points of order apply to legislation, CBO typically provides information in cost estimates about whether a bill would increase on-budget deficits by more than $5 billion in any of the four decades after the baseline projection period.[2] Although H.R. 860, as modified, would reduce the overall federal deficit over that period, CBO estimates that enacting the bill would increase on-budget deficits by hundreds of billions of dollars in each decade. Those increased deficits would occur because the increase in payroll taxes would result in a change in the composition of compensation that would lead to reductions in income tax revenues. (Income tax revenues are classified as on-budget.)

Over the next 75 years, H.R. 860, as modified, would increase Social Security revenues more than it would increase benefits, substantially reducing the funding shortfall that is currently projected. Under the bill, CBO estimates, the 75-year summarized value of revenues would increase by 1.5 percent of gross domestic product (GDP), and the 75-year summarized value of outlays would increase by 0.3 percent of GDP.[3] In CBO's estimation, the net effect of those changes would be to reduce the Social Security system's 75-year actuarial deficit from the 1.5 percent of GDP shown in CBO's extended baseline projections to 0.4 percent under the bill. You asked for a comparison with the estimate from Social Security's Office of the Chief Actuary (OCACT); it estimates that the changes would eliminate a smaller 75-year actuarial deficit of 1.0 percent of GDP and result in a positive actuarial balance of 0.1 percent of GDP.[4]

CBO projects that under H.R. 860, as modified, spending in 2093 (at the end of the 75-year period) would increase by 0.4 percent of GDP and Social Security revenues would increase by 1.9 percent of GDP, compared with the projections in CBO's extended baseline. The annual gap between revenues and outlays would be widening by the end of

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2. The revenues and outlays of the Social Security trust funds and the net cash flow of the Postal Service are classified as off-budget.

3. The 75-year summarized value of revenues is the present value of tax revenues for the period, plus the trust fund's initial balance, divided by the present value of GDP over the same period. The 75-year summarized value of outlays is the present value of outlays for the period, plus the present value of a year's worth of benefits at the end of the period, divided by the present value of GDP over the same period. A present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) at a specific time. The actuarial balance is the summarized value of revenues minus the summarized value of outlays. The actuarial deficit is the negative of the actuarial balance.

4. See Social Security Administration, Office of the Chief Actuary, letter to the Honorable John Larson, the Honorable Richard Blumenthal, and the Honorable Chris Van Hollen concerning estimates of the financial effects on Social Security of the Social Security 2100 Act, updated to reflect the 2019 Trustees Report baseline (September 18, 2019), https://go.usa.gov/xV6As (PDF, 643 KB).

the 75-year period and would continue to widen thereafter, causing the program's financial shortfall to increase in subsequent years.

Under H.R. 860, as modified, the newly established Social Security Trust Fund would be exhausted in calendar year 2036. In CBO's analysis of H.R. 860, as introduced, the newly established Social Security Trust Fund would be exhausted in calendar year 2041. Under current law, CBO projects, the existing Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) trust funds will be exhausted in calendar year 2032 and fiscal year 2028, respectively. If their balances were combined, the OASDI trust funds would be exhausted in calendar year 2032. (Following common analytical conventions, CBO often considers the two trust funds as combined.)

The estimated effects of H.R. 860 are subject to significant uncertainty, particularly over the longer term, and the effects of the legislation could be larger or smaller than described here.

Summary of the Bill

Beginning in January 2020, H.R. 860, as modified, would increase Social Security benefits for most recipients, change the measure used to determine cost-of-living adjustments (COLAs), increase the minimum benefit for some new recipients with low lifetime earnings, and include earnings above $400,000 in the benefit formula. The bill also would increase revenues by gradually raising the payroll tax rate and subjecting earnings above $400,000 to the payroll tax. In addition, it would reduce the individual income tax liability on Social Security benefits. The bill also would establish a new Social Security Trust Fund to replace the existing OASI and DI trust funds.

Scope of the Analysis

For this estimate, CBO and JCT assume that H.R. 860, as modified, will be enacted in the fall of calendar year 2019. CBO's estimate of changes in direct spending includes only the bill's effects on Social Security; it excludes the effects of applying the new COLA to Supplemental Security Income benefits. Other federal benefits also could be affected indirectly by enactment of the bill. For example, benefits under the Supplemental Nutrition Assistance Program (SNAP) are calculated on the basis of household income, so households with higher Social Security benefits under the bill might have SNAP benefits reduced as a result. CBO did not consider those effects for this analysis. (Typically, CBO would account for such effects in a formal cost estimate transmitted when a bill is ordered reported by a Congressional committee.)

The long-term analysis in this letter focuses on Social Security's finances rather than on total federal revenues and outlays. Similarly, for this analysis, CBO and JCT did not project the overall economic effects of the bill's provisions or the consequences of any economic effects for the federal budget. For example, this analysis does not consider the labor supply effects of the additional payroll tax on earnings above $400,000 or the effects on investment of any change in federal deficits.

Provisions That Affect Direct Spending

Four provisions in H.R. 860 would affect direct spending. The provisions would interact and have consequences that differ from the sum of their separate effects.

Increase Benefits Across the Board. Beginning in January 2020, almost all Social Security recipients would receive a benefit increase under the bill. Under current law, the amount paid to a disabled worker or to a retired worker who claims benefits at the full retirement age is called the primary insurance amount (PIA). The PIA is calculated by applying a formula to the worker's average indexed monthly earnings (AIME)—a measure of average taxable earnings over a worker's lifetime.

In the PIA computation, the AIME is separated into three brackets by using a pair of dollar threshold amounts, called bend points. In calendar year 2019, the first bend point is $926, the second is $5,583. The average indexed earnings in each bracket are multiplied by three corresponding factors—90 percent, 32 percent, and 15 percent—to determine the PIA.[5] (Bend points rise annually with average wages; the three factors remain constant.) Because the PIA factors are smaller for higher earnings brackets, an increase in average indexed earnings translates to a smaller increase in benefits.

Under the bill, the first factor would rise from 90 percent to 93 percent, increasing the benefits associated with the average indexed earnings below the first bend point.[6] CBO estimates that this provision would increase benefits, on average, by about 2 percent. Benefits would increase for nearly everyone, but the percentage increases would be largest for beneficiaries with lower lifetime earnings and smallest for beneficiaries with higher lifetime earnings. Spending on benefits would increase by $219 billion over the 2020-2029 period and by 0.1 percent of GDP in 2093.

Recalculate Cost-of-Living Adjustments. H.R. 860 also would change COLA calculations for all Social Security beneficiaries. Benefits under current law are adjusted annually on the basis of the consumer price index for urban wage earners and clerical workers (CPI-W), a measure of overall inflation calculated by the Bureau of Labor Statistics. Under H.R 860, beginning with the adjustment made in December 2019, COLAs would rise with the CPI for elderly consumers (CPI-E)—an index of consumption among people age 62 or older. On the basis of its analysis of historical

5. For a more detailed explanation of Social Security's benefit formula, see Congressional Budget Office, *Social Security Policy Options, 2015* (December 2015), www.cbo.gov/publication/51011, pp. 13-16.

6. This provision would not change the calculation of Social Security benefits under the Windfall Elimination Provision; those benefits are calculated using a different formula.

trends, CBO expects that annually, on average, the CPI-E will increase 0.2 percentage points faster than the CPI-W.[7]

Although the COLA provision would not alter benefits for people when they become eligible, either now or in the future, their benefits would increase faster in subsequent years. The effect ultimately would be especially large for the longest-lived beneficiaries and for disabled beneficiaries who became eligible before age 62 and whose benefits would be adjusted for a longer time. Under this provision, for example, after 20 years of receiving benefits, a beneficiary would receive about 4 percent more per month than under current law.

Under the bill, the annual cost of the COLA provision would increase over time as the effects of the change compounded. CBO estimates that this provision would increase spending by $134 billion over the 2020-2029 period and by 0.2 percent of GDP in 2093.

Increase the Minimum Benefit. H.R. 860 would set a new minimum benefit to take effect in January 2020 for newly eligible beneficiaries who would receive either the new minimum benefit or their traditional benefit, whichever was greater. Those beneficiaries who had worked for 30 years or more would be entitled to an annual minimum of $15,612.50—125 percent of the 2019 federal poverty guideline amount for a single person. People who worked more than 10 but fewer than 30 years would be entitled to a smaller amount. (Specifically, the minimum benefit would be 6.25 percent of the poverty guideline for each year of earnings, beyond 10 years, above a threshold, up to a maximum of 125 percent. In 2019, the earnings threshold would be $5,440; the threshold would rise annually with the average wage index.)

The amount of the new minimum benefit would increase each year after 2020 to keep pace with average wages. It would therefore generally rise faster than the poverty guideline, which is indexed to inflation.

If this provision was enacted on its own, CBO estimates, approximately 12 percent of new beneficiaries in 2020 would be entitled to the new minimum benefit. As more people come into the program, the costs would increase. In total, CBO estimates, this provision

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7. H.R. 860 directs the Bureau of Labor Statistics to publish a consumer price index for elderly consumers. CBO based its analysis on the historical differences between the current CPI-E—an experimental price index for people age 62 or older—and the CPI-W. The CPI-E places more emphasis on prices for housing and medical care and less on prices in other categories, such as transportation and food and beverages, than the CPI-W does. The difference in growth rates between the two indexes has varied substantially from year to year because of differences in price changes in various expenditure categories. Therefore, the realized effect on COLAs from this provision could differ substantially from the estimated effect. For more information, see Bureau of Labor Statistics, "Consumer Price Index for the Elderly," *TED: The Economics Daily* (March 2, 2012), https://go.usa.gov/xVXUT.

would increase spending by $42 billion over the 2020-2029 period and by 0.1 percent of GDP in 2093.

Include Earnings Above $400,000 in the Benefit Formula. Under H.R. 860, beginning in calendar year 2020, in addition to applying to currently taxed earnings, the Social Security payroll tax would apply to earnings over $400,000. The additional earnings would be credited toward benefits separately from earnings below the current-law taxable maximum (in 2019, $132,900, also called the Social Security wage base) and would be included in a second calculation of average indexed monthly earnings. A 2 percent factor would be applied to that second calculated amount, and the result would be added to the PIA, thereby increasing benefits for anyone who contributed payroll taxes on earnings above $400,000.

CBO estimates that including earnings above $400,000 in the benefit formula would increase spending by $4 billion over the 2020-2029 period and by less than 0.05 percent of GDP in the long term. The higher benefits would go entirely to workers with earnings above $400,000 in at least one year.

Interactions Among Benefit Provisions. H.R. 860 would change several aspects of the Social Security program simultaneously, and the combined effects would differ from the sum of the effects individually, relative to CBO's current-law baseline projections.

In total, CBO estimates, those interactions would reduce the costs of H.R. 860 by $13 billion over the 2020-2029 period. Specifically, the new minimum benefit would be less costly, given the across-the-board increase, because for some beneficiaries, the new PIA formula would result in benefits that are closer to or above the new minimum benefit. CBO estimates that 9 percent of new beneficiaries would receive the new minimum benefit in 2020 if the two provisions were enacted simultaneously (compared with 12 percent of new beneficiaries if the minimum benefit provision was implemented alone). CBO estimates that, compared with current law, implementing those two provisions together would reduce costs by $15 billion, relative to the sum of their effects separately. Higher COLAs, by contrast, would be more costly when applied to the larger initial benefits calculated under the bill's other three provisions than if they were applied to initial benefit amounts under current law. CBO estimates that higher COLAs would increase the cost of the other provisions by $2 billion over the 2020-2029 period.

Provisions That Affect Revenues

Three provisions in H.R. 860, as modified, would affect revenues. The Congressional Budget Act of 1974 stipulates that revenue estimates provided by JCT are the official estimates for all tax legislation considered by the Congress. CBO therefore incorporates JCT's estimates into its cost estimates. The analysis described in this letter incorporates revenue estimates provided by JCT for the 2020-2029 period. The long-term effects of the legislation were estimated by CBO in consultation with JCT.

Apply the Payroll Tax to Earnings Above $400,000. Under current law, wages and net income from self-employment up to a maximum amount are subject to the Social Security payroll tax of 12.4 percent. (Workers and their employers each pay half; self-employed people pay the entire amount.) In calendar year 2019, that taxable maximum is $132,900, and it will increase in subsequent years with the average wage index. Under H.R. 860, beginning in calendar year 2020, annual earnings in excess of $400,000 would be subject to the payroll tax. The taxable maximum would continue to keep pace with average wages, but the $400,000 threshold would not change, so the gap between the two would narrow over time.

In CBO's projections, the current-law taxable maximum exceeds $400,000 in calendar year 2052; after that, under H.R. 860, all earnings from work covered by Social Security would be subject to the payroll tax. Currently, less than 1 percent of people in work covered by Social Security earn more than $400,000, but the amount of earnings above that threshold accounts for about 8 percent of the total amount of earnings from work covered by Social Security. In 2052, about 7 percent of people in work covered by Social Security will earn more than $400,000, CBO projects, and the amounts over $400,000 would account for about 22 percent of earnings from work covered by Social Security under the bill.

JCT estimates that this provision of H.R. 860, as modified, would increase federal revenues by $868 billion over the 2020-2029 period. That change to federal revenues reflects the net effect of the increase in payroll tax revenues resulting from the provision and a decrease in income tax revenues. Income tax revenues would decrease as employers and employees respond to the higher payroll tax rate by reducing compensation subject to income taxes. CBO estimates that the provision would increase Social Security revenues by 1.0 percent of GDP in 2093.

Increase the Payroll Tax. Under current law, earnings up to the Social Security taxable maximum are taxed at a rate of 12.4 percent. Under H.R. 860, starting in calendar year 2020, the tax rate would increase by 0.1 percentage point annually to reach 13.4 percent in calendar year 2029 and 14.8 percent in calendar year 2041 and then hold at that rate permanently.

JCT estimates that this provision would increase revenues by $474 billion over the 2020-2029 period, assuming enactment of the change that applies payroll taxes to earnings above $400,000. CBO estimates that the provision by itself would increase Social Security revenues by 0.8 percent of GDP in 2093.

By itself, this provision would increase the tax burden of lower-income workers by a larger percentage than that for higher-income workers because, on average, a larger share of the income of lower-income households is from earnings that are below the taxable maximum and thus subject to the payroll tax. However, assuming enactment of the provision that subjects earnings above $400,000 to payroll taxation, CBO estimates that the increase in the tax burden would be largest for the workers at the top of the earnings distribution.

Reduce the Amount of Benefits Subject to the Individual Income Tax. In general, under current law, up to 50 percent of either Social Security or the equivalent in tier I Railroad Retirement benefits is taxable if the sum of a recipient's modified adjusted gross income (typically, adjusted gross income plus certain other excluded items and tax-exempt interest) and half of those retirement benefits exceeds $32,000 for a couple filing jointly or $25,000 for a single taxpayer. As much as 85 percent may be taxable above a threshold of $44,000 for joint filers and $34,000 for single filers.

H.R. 860 would replace that two-tier system with a single set of thresholds: $100,000 for joint filers and $50,000 for most others. The bill also would subject as much as 85 percent of benefits to income taxation. As under current law, those new threshold amounts would not be indexed to inflation. The changes would take effect starting in calendar year 2020.

Under current law, a portion of receipts from income taxation of Social Security benefits is credited to Medicare's HI trust fund. Under H.R. 860, as introduced, all federal income taxes paid on Social Security benefits would be credited to the new Social Security Trust Fund and none would be credited to the HI trust fund.[8] The government would transfer from its general fund to the HI trust fund amounts equal to those that trust fund would otherwise have received from income taxes on Social Security benefits.

As requested, CBO has revised its analysis to reflect a proposed modification to this provision of H.R. 860: In contrast to the bill as introduced, transfers of a portion of the income taxes paid on Social Security benefits would continue to be made to the HI trust fund in the same manner and amount as under current law. Any revenues remaining from those taxes after the transfer would be credited to the newly established Social Security Trust Fund; those revenues would be smaller than the income taxes on benefits credited under the introduced bill.

JCT estimates that lowering the amount of benefits subject to the individual income tax would reduce total revenues by $431 billion over the 2020-2029 period, and revenues credited to the Social Security Trust Fund would decline by the same amount. CBO projects that this provision would decrease revenues to the Social Security trust funds by less than 0.05 percent of GDP in 2093.

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8. See Congressional Budget Office, letter to the Honorable Kevin Brady providing an analysis of effects on Social Security of H.R. 860, the Social Security 2100 Act (September 13, 2019), www.cbo.gov/publication/55627.

Provision That Would Form a Single Social Security Trust Fund

CBO projects that under current law, the DI trust fund will be exhausted in fiscal year 2028, and the OASI trust fund will be exhausted in calendar year 2032. The combined OASDI trust funds will be exhausted in calendar year 2032.[9]

H.R. 860, as modified, would combine the two into a single Social Security Trust Fund, which CBO projects would reach exhaustion in calendar year 2036.[10]

Effects on Social Security's Long-Term Finances

CBO estimates that implementing the bill would reduce the 75-year actuarial deficit from 1.5 percent to 0.4 percent of GDP, closing 77 percent of that deficit (see Table 2). Relative to taxable payroll as calculated under current law, the 75-year actuarial deficit would decline from 4.6 percent to 1.0 percent.[11] (Taxable payroll under the bill would be larger than taxable payroll in CBO's extended baseline projections because the bill would subject earnings above $400,000 to the payroll tax. The decline in the 75-year actuarial deficit would be larger when using that larger taxable payroll; see Table 3.)

H.R. 860, as modified, would shrink the annual gap in finances (the difference between the program's costs and its revenues) by 1.5 percent of GDP in 2093 (see Figure 1). However, by the end of the 75-year period, the annual gap would be widening, indicating a growing financial shortfall in subsequent years.

Long-Term Distributional Effects

CBO also analyzed the long-term distributional effects of H.R. 860. The agency analyzed three measures: mean initial benefits, the ratio of mean lifetime benefits to lifetime earnings, and the ratio of mean lifetime payroll taxes to lifetime earnings. For each measure, the results were calculated for different groups, varying by 10-year birth cohort and lifetime household earnings quintile. The results are shown in Table 4 with scheduled benefits (benefits paid as scheduled, regardless of the trust fund's balances) and in Table 5 with payable benefits (benefits limited to amounts that are payable from revenues received by the trust fund after it is exhausted).

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9. See Congressional Budget Office, *The 2019 Long-Term Budget Outlook* (June 2019), www.cbo.gov/publication/55331.

10. In keeping with the rules in section 257 of the Balanced Budget and Emergency Deficit Control Act of 1985, CBO's baseline incorporates the assumption that scheduled payments will continue to be made in full after a trust fund has been exhausted, even though there is no legal authority to make such payments. Because projected exhaustion of a trust fund does not affect projected spending, the proposal to combine the funds also would have no budgetary effects relative to the baseline.

11. The letter that CBO transmitted on September 13, 2019, included in a footnote some preliminary estimates of the policy described here. The results described here differ slightly from those, reflecting more precise modeling of H.R. 860, as modified.

Under both current law and H.R. 860, as modified, the Social Security trust funds are projected to be depleted. After trust fund exhaustion, trust fund balances would no longer be available to make up the gap between benefits specified in law and annual trust fund receipts. If benefits were limited to amounts that are payable from revenues received by the trust fund after it is exhausted, the bill would boost benefits (relative to current law) by a greater percentage than if benefits were paid as scheduled. That would occur because the increase in payable benefits would be determined by the amount of the increase in trust fund revenues, which would be greater than the increase in scheduled benefits.

Because of that increase in trust fund revenues, if payments were limited to the amounts payable from those revenues, the necessary reduction in benefits after the trust funds' exhaustion would be much smaller under H.R. 860 than under current law. Under current law, total benefits would need to be reduced by 24 percent in 2033, the year after the OASDI trust funds' exhaustion, and by larger percentages in subsequent years. Under H.R. 860, as modified, larger amounts of revenue would delay trust fund exhaustion until 2036 and require a benefit reduction of 7 percent in 2037. The required reduction would average about 6 percent over the rest of the projection period.[12]

As with scheduled benefits, the increase in payable benefits relative to CBO's baseline projection with payable benefits would be the largest in percentage terms for retired workers with low lifetime earnings. For example, mean initial payable benefits for workers born in the 1980s with earnings in the lowest quintile would be 64 percent higher under H.R. 860, as modified, than under that baseline projection. For workers with earnings in the highest quintile, mean initial payable benefits would be 37 percent higher under the bill than under that baseline projection.

How CBO's Projections of H.R. 860, as Modified, Differ From Those of OCACT

The Social Security Administration's Office of the Chief Actuary (OCACT) also has estimated the effects of H.R. 860, as modified. In OCACT's projections, the bill results in a positive 75-year actuarial balance and a Social Security system that is sustainably solvent.[13] That is, in years beyond the 75-year projection period, annual revenues to the

12. For annual values for the percentages of benefit reductions, see "Supplemental Data and Data Underlying Figure 1," accompanying Congressional Budget Office, letter to the Honorable John Larson providing additional information about the effects on Social Security of H.R. 860, the Social Security 2100 Act" (October 8, 2019), www.cbo.gov/publication/55711.

13. OCACT's estimates of H.R. 860 reflect the intermediate assumptions and baseline projections of the 2019 trustees report. See Social Security Administration, *The 2019 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (April 2019), www.ssa.gov/OACT/TR/2019.

system exceed and continue to grow relative to annual costs.[14] CBO, by contrast, projects that the bill as modified would delay exhaustion of the Social Security Trust Fund by only four years and that in the long run, the gap between annual costs and annual revenues would widen.

The differences in the projected effects of H.R. 860, as modified, largely reflect differences in projections for the Social Security system's finances in CBO's baseline projections and in the current-law projections of the Social Security Trustees. In their 2019 annual report, the Social Security Trustees project a 75-year actuarial deficit of 1.0 percent of GDP; CBO projects a deficit of 1.5 percent of GDP.

That difference is largely explained by differences in several key inputs into CBO's baseline projections of Social Security finances—notably, characteristics of the population, earnings subject to Social Security payroll taxes, real interest rates, and growth of GDP.[15] Specifically, CBO projects greater longevity and therefore a larger share of elderly people in the nation, continued widening of earnings inequality resulting in a smaller share of earnings subject to the payroll tax, lower real interest rates, and a lower average annual growth in nominal GDP than the trustees do.

In part because of those differences in key inputs, CBO estimates that H.R. 860, as modified, would improve Social Security's 75-year actuarial deficit by 1.2 percent of GDP, whereas OCACT projects an improvement of 1.1 percent. CBO's estimate of the improvement is larger because it projects a smaller share of earnings subject to the payroll tax under current law. As a result, the provision that would apply payroll taxes to earnings above $400,000 has a larger effect on the system's finances in CBO's projections than in OCACT's projections.

Overall, both CBO and OCACT anticipate that the bill would have a large effect on the financial status of the Social Security system relative to projections under current law, although CBO's estimate of that effect is slightly greater. Nonetheless, because CBO also projects a larger actuarial deficit under current law, the actuarial deficit under H.R. 860, as modified, is greater in CBO's projections than in OCACT's projections.

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14. See Social Security Administration, Office of the Chief Actuary, letter to the Honorable John Larson, the Honorable Richard Blumenthal, and the Honorable Chris Van Hollen concerning estimates of the financial effects on Social Security of the Social Security 2100 Act, updated to reflect the 2019 Trustees Report baseline (September 18, 2019), https://go.usa.gov/xV6As (PDF, 643 KB).

15. For a discussion of the basis of CBO's demographic and economic projections, see Congressional Budget Office, *The 2019 Long-Term Budget Outlook* (June 2019), Appendix A, www.cbo.gov/publication/55331. For a discussion of the comparison of CBO's projections with the projections of the Social Security Trustees, see Congressional Budget Office, *CBO's Long-Term Social Security Projections: Changes Since 2017 and Comparisons With the Social Security Trustees' Projections* (December 2018), www.cbo.gov/publication/54711.

Uncertainty

The estimates described in this letter are subject to significant uncertainty. For example, the budgetary effects estimated under H.R. 860, as modified, depend in part on the distribution of earnings in the economy, particularly over the long term. If more earnings fall below the Social Security taxable maximum than CBO currently projects, raising the payroll tax rate would result in more revenues than described here. At the same time, if relative earnings for low earners in the economy were higher, the cost of the new minimum benefit would be lower. As another example, the estimated increases in outlays under the bill depend in part on CBO's projections of life expectancy. If people live longer on average than CBO projects, the increase in outlays from the new COLA computation would be larger than described because that provision's effects would compound over a longer period.

CBO's Analytical Methods

The analysis in this letter is based on CBO's May 2019 baseline projections, which were developed from economic projections published in January 2019.[16] The most recent long-term projections were published in *The 2019 Long-Term Budget Outlook* and are consistent with the agency's May 2019 baseline projections. They form the basis for the long-term analysis in this letter.

All of those long-term projections, and CBO's projections of long-term Social Security spending and revenues, are based on a detailed microsimulation model, which starts with data about individuals from a 1-in-1,000 sample of the population and projects demographic and economic outcomes for that sample through time.[17] For each person in the sample, CBO's model simulates birth, death, immigration and emigration, marital status and changes to it, fertility, labor force participation, hours worked, earnings, and payroll taxes along with Social Security retirement, disability, and dependent benefits. The long-term analysis of the provisions presented in this letter is based on average results from 30 simulations of the model.[18]

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16. See Congressional Budget Office, *The Budget and Economic Outlook: 2019 to 2029* (January 2019), www.cbo.gov/publication/54918.

17. For a description, see Congressional Budget Office, *The 2019 Long-Term Budget Outlook* (June 2019), Appendix A, www.cbo.gov/publication/55331, and *An Overview of CBOLT: The Congressional Budget Office Long-Term Model* (April 2018), www.cbo.gov/publication/53667.

18. The model's outcomes differ slightly from one simulation to another because of variation that is mitigated by taking the average of 30 simulations. For details, see Michael Simpson, Principal Analyst, Health, Retirement, and Long-Term Analysis Division, Congressional Budget Office, "Investigating Monte Carlo Variation in a Dynamic Microsimulation Model" (presentation to the Fifth World Congress of the International Microsimulation Association, September 2, 2015), www.cbo.gov/publication/50736.

I hope this information is helpful to you. If you have any questions, please contact me or Julie Topoleski.

Sincerely,

Phillip L. Swagel
Director

Enclosure

cc: Honorable Tom Reed
Ranking Member
Subcommittee on Social Security
Committee on Ways and Means

Honorable Richard Neal
Chairman
Committee on Ways and Means

Honorable Kevin Brady
Ranking Member
Committee on Ways and Means

Table 1.

Estimated Effects of H.R. 860, as Modified, on Social Security Spending and Total Federal Revenues, Fiscal Years 2020 to 2029

Millions of dollars

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020-2024	2020-2029
				Increases or Decreases (-) in Direct Spending (Outlays)								
Across-the-Board Benefit Increase	12,700	18,000	19,100	20,300	21,500	22,700	24,000	25,400	26,800	28,300	91,600	218,800
Cost-of-Living Adjustment	1,500	3,700	6,100	8,700	11,400	14,200	17,200	20,500	23,800	27,300	31,400	134,400
Increase Minimum Benefit	100	500	1,000	1,700	2,700	4,000	5,500	7,100	8,800	10,200	6,000	41,600
Include Earnings Above $400,000 in Benefit Formula	10	60	120	190	280	390	520	660	830	970	660	4,030
Interaction Among Benefit Provisions	-30	-120	-270	-470	-770	-1,200	-1,710	-2,260	-2,810	-3,270	-1,660	-12,910
Subtotal, Benefit Changes (Off-budget)[a]	14,280	22,140	26,050	30,420	35,110	40,090	45,510	51,400	57,420	63,500	128,000	385,920
Reduction in Transfer of Taxes on Social Security Benefits From the General Fund (On-budget)[b]	-1,700	-34,200	-36,500	-39,000	-41,500	-44,100	-47,300	-59,000	-62,300	-65,600	-152,900	-431,200
Reduction in Offsetting Receipts From Transfer of Taxes on Social Security Benefits to Social Security Trust Fund (Off-budget)[a,b]	1,700	34,200	36,500	39,000	41,500	44,100	47,300	59,000	62,300	65,600	152,900	431,200
Subtotal, Intragovernmental Transfers	0	0	0	0	0	0	0	0	0	0	0	0
Estimated Changes in Direct Spending	**14,280**	**22,140**	**26,050**	**30,420**	**35,110**	**40,090**	**45,510**	**51,400**	**57,420**	**63,500**	**128,000**	**385,920**
On-budget	-1,700	-34,200	-36,500	-39,000	-41,500	-44,100	-47,300	-59,000	-62,300	-65,600	-152,900	-431,200
Off-budget[a]	15,980	56,340	62,550	69,420	76,610	84,190	92,810	110,400	119,720	129,100	280,900	817,120
					Increases or Decreases (-) in Revenues							
Apply Payroll Taxes to Earnings Above $400,000	21,600	71,700	77,000	81,900	87,300	93,700	99,400	105,000	111,800	118,900	339,500	868,200
On-budget	-9,900	-20,500	-21,900	-23,300	-24,800	-26,700	-29,400	-32,100	-34,100	-36,100	-100,400	-258,700
Off-budget[a]	31,400	92,300	98,900	105,100	112,100	120,300	128,700	137,100	145,900	155,000	439,000	1,126,900
Increase Payroll Tax Rate by 0.1 Percentage Point Annually[c]	7,600	12,800	21,000	29,800	39,300	49,600	60,200	71,500	84,100	97,600	110,500	473,600
On-budget	-400	-1,300	-2,300	-3,300	-4,400	-5,600	-7,300	-9,300	-10,900	-12,600	-11,700	-57,300
Off-budget[a]	8,000	14,100	23,200	33,100	43,700	55,200	67,500	80,800	95,000	110,200	122,200	530,900
Change Taxation of Benefits (On-budget)[b]	-1,700	-34,200	-36,500	-39,000	-41,500	-44,100	-47,300	-59,000	-62,300	-65,600	-152,900	-431,200
Estimated Changes in Revenues	**27,500**	**50,300**	**61,500**	**72,700**	**85,100**	**99,200**	**112,300**	**117,500**	**133,600**	**150,900**	**297,100**	**910,600**
On-budget	-12,000	-56,000	-60,700	-65,600	-70,700	-76,400	-84,000	-100,400	-107,300	-114,300	-265,000	-747,200
Off-budget[a]	39,400	106,400	122,100	138,200	155,800	175,500	196,200	217,900	240,900	265,200	561,200	1,657,800

Continued

Table 1. Continued

Estimated Effects of H.R. 860, as Modified, on Social Security Spending and Total Federal Revenues, Fiscal Years 2020 to 2029

Millions of dollars

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020-2024	2020-2029
	Net Increase or Decrease (-) in the Deficit From Changes in Direct Spending and Revenues											
Effect on the Deficit	**-13,220**	**-28,160**	**-35,450**	**-42,280**	**-49,990**	**-59,110**	**-66,790**	**-66,100**	**-76,180**	**-87,400**	**-169,100**	**-524,680**
On-budget	10,300	21,800	24,200	26,600	29,200	32,300	36,700	41,400	45,000	48,700	112,100	316,000
Off-budget[a]	-23,420	-50,060	-59,550	-68,780	-79,190	-91,310	-103,390	-107,500	-121,180	-136,100	-280,300	-840,680

Sources: Congressional Budget Office and the Joint Committee on Taxation.

Components may not sum to totals because of rounding.

For this analysis, CBO assumes enactment of H.R. 860, the Social Security 2100 Act, as it would be modified to include a revised provision. Specifically, with the modification, a portion of the income taxes collected on Social Security benefits would be transferred to the Medicare Hospital Insurance (HI) Trust Fund in the same manner and amount as under current law. Any residual amount of those income taxes would be credited to a new Social Security Trust Fund that would be established by the bill.

Changes in direct spending shown here include only effects on Social Security. The change in cost-of-living adjustments also would affect spending on the Supplemental Security Income program. Other federal benefits also could be affected indirectly by enactment of the bill, including benefits under the Supplemental Nutrition Assistance Program. CBO did not consider other effects for this analysis.

a. The revenues and outlays of the Social Security trust funds and the net cash flow of the Postal Service are classified as off-budget.

b. Under current law, revenues from the taxation of Social Security benefits are initially credited to Treasury's general fund, and thus are classified as on-budget. A portion of those revenues is transferred from the general fund to Medicare's HI trust fund, which also is classified as on-budget; the remainder is transferred to the Social Security Old-Age and Survivors Insurance and Disability Insurance Trust Funds, which are classified as off-budget. Those transfers are categorized as outlays from the general fund and offsetting receipts to the trust funds.

Enacting the provision that changes the taxation of Social Security benefits would reduce on-budget revenues initially received by the general fund, as shown in the line "Change Taxation of Benefits." Under the bill as modified, transfers to Medicare's HI trust fund would remain the same as under current law, but the amount transferred to the Social Security trust funds would be smaller. The change in the amount of that transfer is shown as a reduction in outlays from the general fund (in the line "Reduction in Transfer of Taxes on Social Security Benefits From the General Fund") and as an equal reduction in the receipts credited to the Social Security trust fund (in the line "Reduction in Offsetting Receipts From Transfer of Taxes on Social Security Benefits to Social Security Trust Fund").

c. This estimate measures the effect of the provision relative to a projection that includes the change that applies Social Security taxes to earnings over $400,000.

Table 2.

Social Security Finances Under Current Law and H.R. 860, as Modified, in Selected Years

Percentage of Gross Domestic Product

	Actual, 2018	Projected 2029	Projected 2049	Projected 2093	75-Year Summarized Value (2019-2093)[a]
			Under Current Law		
Tax Revenues	4.48	4.62	4.42	4.32	4.64
Outlays	4.89	5.96	6.19	6.33	6.16
Difference	-0.41	-1.34	-1.77	-2.01	-1.53
			Effect of H.R. 860		
Outlays					
Across-the-board benefit increase	n.a.	-0.10	-0.10	-0.09	-0.09
Cost-of-living adjustment	n.a.	-0.09	-0.18	-0.19	-0.15
Increase minimum benefit	n.a.	-0.03	-0.10	-0.12	-0.09
Include earnings above $400,000 in benefit formula	n.a.	*	-0.01	-0.04	-0.01
Total Change in Outlays, Excluding Interactions	**n.a.**	**-0.23**	**-0.39**	**-0.44**	**-0.36**
Revenues					
Apply payroll taxes to earnings above $400,000	n.a.	0.51	0.97	0.98	0.83
Increase payroll tax rate by 0.1 percentage point annually	n.a.	0.34	0.78	0.77	0.64
Change taxation of benefits	n.a.	-0.21	-0.10	-0.03	-0.09
Total Change in Revenues, Excluding Interactions	**n.a.**	**0.64**	**1.65**	**1.72**	**1.38**
Interaction Among All Provisions	n.a.	0.04	0.19	0.20	0.15
			Under H.R. 860		
Tax Revenues	4.48	5.31	6.24	6.20	6.15
Outlays	4.89	6.20	6.56	6.73	6.50
Difference	-0.41	-0.89	-0.32	-0.53	-0.35

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

Components may not sum to totals because of rounding; n.a. = not applicable; * = between -0.005 percent and 0.005 percent.

For this analysis, CBO assumes enactment of H.R. 860, the Social Security 2100 Act, as it would be modified to include a revised provision. Specifically, with the modification, a portion of the income taxes collected on Social Security benefits would be transferred to the Medicare Hospital Insurance (HI) Trust Fund in the same manner and amount as under current law. Any residual amount of those income taxes would be credited to a new Social Security Trust Fund that would be established by the bill.

In this table, tax revenues are Social Security trust fund receipts, consisting of payroll taxes and income taxes on benefits, which are intragovernmental transfers to the trust fund. Outlays consist of scheduled benefits and administrative costs. Scheduled benefits are benefits as calculated under the Social Security Act, regardless of trust fund balances.

a. The 75-year summarized value of revenues is the present value of tax revenues for the period, plus the trust fund's initial balance, divided by the present value of gross domestic product over the same period. The 75-year summarized value of outlays is the present value of outlays for the period, plus the present value of a year's worth of benefits at the end of the period, divided by the present value of gross domestic product over the same period. A present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) at a specific time.

Table 3.

Social Security Finances Under Current Law and H.R. 860, as Modified, in Selected Years

Percentage of Taxable Payroll

	Actual, 2018	Projected 2029	Projected 2049	Projected 2093	75-Year Summarized Value (2019-2093)[a]
			Under Current Law		
Tax Revenues	12.6	13.1	13.3	13.7	13.8
Outlays	13.8	16.9	18.6	20.0	18.4
Difference	-1.2	-3.8	-5.3	-6.4	-4.6
			Under H.R. 860, Using Taxable Payroll Under Current Law		
Tax Revenues	12.6	15.1	18.8	19.7	18.4
Outlays	13.8	17.6	19.7	21.3	19.4
Difference	-1.2	-2.6	-0.9	-1.6	-1.0
			Under H.R. 860, Using Taxable Payroll Under H.R. 860[b]		
Tax Revenues	12.6	13.5	15.3	15.8	15.4
Outlays	13.8	15.8	16.1	17.2	16.3
Difference	-1.2	-2.3	-0.8	-1.4	-0.9

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

This analysis assumes enacting H.R. 860, the Social Security 2100 Act, as it would be modified to include a revised provision. Specifically, under the modification, a portion of the income taxes collected on Social Security benefits would be transferred to the Medicare Hospital Insurance Trust Fund in the same manner and amount as under current law. Any residual amount of those income taxes would be credited to a new Social Security Trust Fund that would be established under the bill.

In this table, tax revenues are Social Security trust fund receipts, consisting of payroll taxes and income taxes on benefits, which are intragovernmental transfers to the trust fund. Outlays consist of scheduled benefits and administrative costs. Scheduled benefits are benefits as calculated under the Social Security Act, regardless of trust fund balances.

a. The 75-year summarized value of revenues is the present value of tax revenues for the period, plus the trust fund's initial balance, divided by the present value of the taxable payroll over the same period. The 75-year summarized value of outlays is the present value of outlays for the period, plus the present value of a year's worth of benefits at the end of the period, divided by the present value of the taxable payroll over the same period. A present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) at a specific time.

b. Taxable payroll would be larger under H.R. 860 than under current law because the bill would subject earnings above $400,000 to payroll taxes.

Table 4.

Changes to Social Security's Benefits and Payroll Taxes for Different Groups Under H.R. 860, as Modified, With Scheduled Benefits

Lifetime Household Earnings Quintile[a]	Mean Initial Benefits for Retired Workers by 10-Year Birth Cohort (Thousands of 2019 dollars)			Ratio of Mean Lifetime Benefits to Lifetime Earnings for All Beneficiaries by 10-Year Birth Cohort			Ratio of Mean Lifetime Payroll Taxes to Lifetime Earnings for All Beneficiaries by 10-Year Birth Cohort		
	1960	1980	2000	1960	1980	2000	1960	1980	2000
				Under Current Law					
Lowest	10	12	18	0.31	0.33	0.33	0.12	0.12	0.12
Middle	19	22	30	0.17	0.19	0.17	0.12	0.12	0.12
Highest	26	33	44	0.08	0.07	0.07	0.08	0.07	0.07
				Under H.R. 860					
Lowest	11	15	21	0.34	0.40	0.39	0.12	0.13	0.14
Middle	20	23	31	0.18	0.20	0.19	0.12	0.13	0.14
Highest	27	34	46	0.08	0.08	0.07	0.10	0.12	0.14
	Percentage Change From Current Law			Difference Between Ratios					
Lowest	13	23	20	0.03	0.06	0.06	*	0.01	0.02
Middle	5	4	3	0.01	0.01	0.01	*	0.01	0.02
Highest	3	3	4	0.01	0.01	0.01	0.02	0.04	0.06

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

* = between zero and 0.005.

For this analysis, CBO assumes enactment of H.R. 860, the Social Security 2100 Act, as it would be modified to include a revised provision. Specifically, with the modification, a portion of the income taxes collected on Social Security benefits would be transferred to the Medicare Hospital Insurance (HI) Trust Fund in the same manner and amount as under current law. Any residual amount of those income taxes would be credited to a new Social Security Trust Fund that would be established by the bill.

All benefits are net of income taxes paid on those benefits.

Initial benefits are computed for people who are eligible to claim retirement benefits at age 62 and who have not yet claimed any other Social Security benefits. All workers are assumed to claim benefits at age 65.

Lifetime benefits are measured as the present value of all benefits received. To calculate present value, benefits are adjusted for inflation (to arrive at constant dollars) and discounted to age 65. A present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) at a specific time.

Scheduled benefits are benefits as calculated under the Social Security Act, regardless of trust fund balances.

a. The lowest, middle, and highest fifths of people within a 10-year birth cohort ranked by lifetime household earnings.

Table 5.

Changes to Social Security's Benefits and Payroll Taxes for Different Groups Under H.R. 860, as Modified, With Payable Benefits

Lifetime Household Earnings Quintile[a]	Mean Initial Benefits for Retired Workers by 10-Year Birth Cohort (Thousands of 2019 dollars)			Ratio of Mean Lifetime Benefits to Lifetime Earnings for All Beneficiaries by 10-Year Birth Cohort			Ratio of Mean Lifetime Payroll Taxes to Lifetime Earnings for All Beneficiaries by 10-Year Birth Cohort		
	1960	1980	2000	1960	1980	2000	1960	1980	2000
				Under Current Law					
Lowest	10	9	12	0.27	0.25	0.24	0.12	0.12	0.12
Middle	18	16	21	0.13	0.14	0.12	0.12	0.12	0.12
Highest	24	24	32	0.06	0.05	0.05	0.08	0.07	0.07
				Under H.R. 860					
Lowest	11	15	21	0.33	0.39	0.38	0.12	0.13	0.14
Middle	20	22	30	0.17	0.20	0.18	0.12	0.13	0.14
Highest	27	33	45	0.08	0.08	0.07	0.10	0.12	0.14
	Percentage Change From Current Law			**Difference Between Ratios**					
Lowest	19	64	65	0.07	0.14	0.14	*	0.01	0.02
Middle	11	39	41	0.04	0.06	0.06	*	0.01	0.02
Highest	9	37	41	0.02	0.03	0.02	0.02	0.04	0.06

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

* = between zero and 0.005.

For this analysis, CBO assumes enactment of H.R. 860, the Social Security 2100 Act, as it would be modified to include a revised provision. Specifically, with the modification, a portion of the income taxes collected on Social Security benefits would be transferred to the Medicare Hospital Insurance (HI) Trust Fund in the same manner and amount as under current law. Any residual amount of those income taxes would be credited to a new Social Security Trust Fund that would be established by the bill.

All benefits are net of income taxes paid on those benefits.

Initial benefits are computed for people who are eligible to claim retirement benefits at age 62 and who have not yet claimed any other Social Security benefits. All workers are assumed to claim benefits at age 65.

Lifetime benefits are measured as the present value of all benefits received. To calculate present value, benefits are adjusted for inflation (to arrive at constant dollars) and discounted to age 65. A present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) at a specific time.

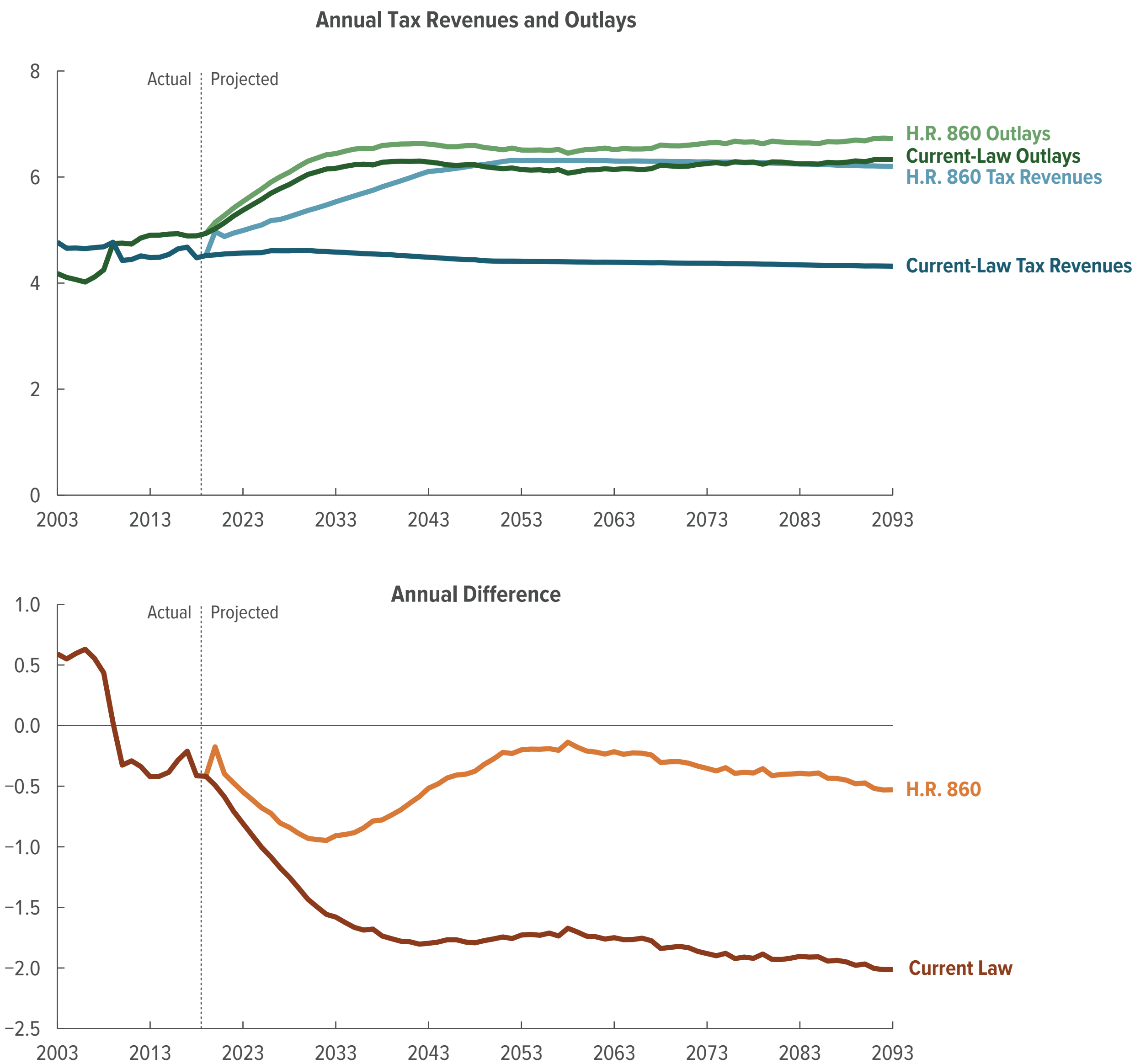
Payable benefits are benefits as calculated under the Social Security Act, reduced as necessary to ensure that outlays do not exceed the Social Security system's revenues once the trust fund balance is exhausted.

a. The lowest, middle, and highest fifths of people within a 10-year birth cohort ranked by lifetime household earnings.

Figure 1.

Annual Social Security Tax Revenues and Outlays Under Current Law and H.R. 860, as Modified

Percentage of Gross Domestic Product



Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

For this analysis, CBO assumes enactment of H.R. 860, the Social Security 2100 Act, as it would be modified to include a revised provision. Specifically, with the modification, a portion of the income taxes collected on Social Security benefits would be transferred to the Medicare Hospital Insurance (HI) Trust Fund in the same manner and amount as under current law. Any residual amount of those income taxes would be credited to a new Social Security Trust Fund that would be established by the bill.

Tax revenues are Social Security trust fund receipts, consisting of payroll taxes and income taxes on benefits, which are intragovernmental transfers to the trust fund. Outlays consist of scheduled benefits and administrative costs. Scheduled benefits are benefits as calculated under the Social Security Act, regardless of trust fund balances.