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# Social Security: What Would Happen If the Trust Funds Ran Out?

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# Social Security: What Would Happen If the Trust Funds Ran Out?

## Summary

The Social Security trust funds are projected to become exhausted in 2040, according to the 2006 Social Security Trustees Report. If Congress does not act before then, the trust funds would be unable to pay full Social Security benefits on time. If full Social Security benefits could not be paid on time, the lives of millions of people who rely on Social Security could be disrupted. The consequences of waiting to act are also serious. By 2040, the benefit cuts and tax increases required to achieve long-range solvency are projected to be more than twice as large as those needed today.

The Social Security Act does not specify what would happen to benefits if the trust funds became insolvent. However, it is clear that full Social Security benefits could not be paid on time because the Antideficiency Act prohibits government spending in excess of available funds. After insolvency, Social Security would continue to receive tax income, from which some benefits could be paid. Either full benefit checks would be paid on a delayed schedule or reduced benefits would be paid on time. In either case, Social Security beneficiaries and qualifying applicants would remain legally entitled to full benefits and could take legal action to claim the balance of their benefits. The legal conflict between benefit entitlement and the Antideficiency Act would need to be resolved either by Congress or by the courts.

Social Security solvency could be restored by cutting Social Security's spending, increasing its income, or some combination of the two. Over the long range (i.e., through 2080), the Social Security trustees estimate that the trust funds have a shortfall of $4.6 trillion in present value terms. The sooner Congress acts to fill this gap, the smaller the changes to Social Security need to be, because earlier changes could be spread to a larger number of workers and beneficiaries over a longer period of time. If Congress waits until the moment of insolvency to act, the trust funds' annual deficits could be eliminated with benefit cuts of about 26% in 2041 that will gradually rise to about 30% by 2080. Congress could also eliminate annual deficits by raising the Social Security payroll tax rate from 12.40% to 16.65% in 2040, then gradually increasing it to 17.78% by 2080. To maintain annual balance after 2080, larger benefit reductions or tax increases would be required.

Prompt action to restore Social Security solvency would be advantageous. The trustees project that the trust funds will begin to run annual cash-flow deficits in 2017, requiring the redemption of government bonds accumulated in earlier years. Cash-flow deficits will not affect Social Security directly, but the redemption of the trust fund bonds will put pressure on the overall federal budget, which is already in deficit. Earlier changes would also allow workers and beneficiaries time to adjust their retirement plans. Finally, if Congress were to act today, the benefit cuts or tax increases necessary to restore solvency until 2080 would be less than half as large as those needed if Congress waited until the trust funds became insolvent to act.

This report will not be updated.

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## Introduction

Each year when the Social Security trustees release their annual report, attention is focused on the trustees' latest projections of when the Social Security trust funds will become insolvent.[1] Less attention is paid to what trust fund insolvency would mean. What would happen to benefits? What options would Congress have to restore solvency? How would policy changes at this point affect beneficiaries?

There are many misconceptions about what would happen if the Social Security trust funds ran out. For example, many Americans — particularly younger Americans — believe that if the trust funds were exhausted, Social Security will be completely broke and unable to pay any benefits.[2] This is not the case. In fact, in 2041, the first full year of projected insolvency, the program is projected to have enough tax income to pay about 74% of scheduled benefits, declining to about 70% in 2080, the last year for which the trustees have made projections.

Another myth is that the Social Security Act includes a specific "fail-safe" provision in case of trust fund exhaustion — for example, a formula for cutting benefits or raising taxes to eliminate annual deficits. This is also untrue. In fact, the act does not specify what would happen to benefits if the trust funds are exhausted. The most likely scenario seems to be that benefit checks would be delayed.

This report explains what the Social Security trust funds are and how they work. It describes the historical operations of the trust funds and the Social Security trustees' projections of future operations. It explains what could happen if Congress allowed the trust funds to run out. It also analyzes two scenarios that assume Congress waits until the moment of insolvency to act, showing the magnitude of benefit cuts or tax increases needed and how such changes would affect beneficiaries.

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[1] The 2006 Trustees Report projected trust fund exhaustion in 2040. (Social Security Administration, *2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*, May 1, 2006, at [http://www.ssa.gov/OACT/TR/TR06/tr06.pdf]. Hereafter cited as *2006 Social Security Trustees Report.*)

[2] According to the 1997 Retirement Confidence Survey, 30% of Americans age 25 and older believed that trust fund exhaustion meant the "system will be broke and unable to pay any benefits." Nearly half (48%) of Americans age 25 to 33 held this belief. (Employee Benefit Research Institute, *Public and Employer Opinion on Social Security and Social Security Reform*, SR-39, August 2001, at [http://www.ebri.org/pdf/publications/srpdfs/sr39.pdf].)

# Background

## The Social Security Trust Funds

**How the Trust Funds Work.** Social Security provides retirement, disability, and survivor benefits to qualifying workers and their families. These benefits are funded from two trust funds: the Old-Age and Survivors Insurance (OASI) trust fund and the Disability Insurance (DI) trust fund. The two funds operate separately but are closely linked. This report generally assumes the merged operations of the OASI and DI trust funds, treating the two funds as if they were one collective OASDI fund.

***Income to the Trust Funds.*** The trust funds receive income from several sources. Their primary income source is the Social Security payroll tax levied on wages and self-employment income.[3] Social Security covered employees and employers each pay 6.2% of wages up to the taxable maximum ($94,200 in 2006).[4] By law, about 85% of Social Security payroll taxes are credited to the OASI trust fund and about 15% are credited to the DI trust fund.[5] The trust funds also receive income from interest on the trust funds' assets and from the taxation of Social Security benefits. In 2005, 84% of the trust funds' income was from payroll taxes, 13% was from interest on trust fund assets, and 2% was from taxation of benefits.[6] The proportion of income from each of these sources varies over time.[7]

***Outgo from the Trust Funds.*** Almost all of the trust funds' spending is for benefit payments and a small amount goes toward administrative expenses. The OASI trust fund is also party to a financial interchange with the Railroad Retirement Board.[8] This annual exchange of funds places the Social Security trust funds in the same financial position in which they would have been if railroad service had been covered by Social Security. In 2005, more than 98% of the trust funds' spending was

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[3] Payroll taxes are formally known as Federal Insurance Contributions Act (FICA) and Self-Employment Contributions Act (SECA) taxes. FICA and SECA taxes also include a 1.45% payroll tax on each employee and employer for Medicare Hospital Insurance.

[4] Self-employed individuals pay 12.4% of wages up to the taxable maximum. The taxable maximum is indexed to the Average Wage Index (AWI). Economists typically attribute both the employee and employer share of the payroll tax to workers since it is assumed that the employer portion of the tax is passed on to workers in the form of lower wages.

[5] 42 U.S.C. § 401.

[6] For the OASI trust fund, 84% of income was from payroll taxes, 14% was from interest on trust fund assets, and 2% was from taxation of benefits in 2005. For the DI trust fund, 88% of income was from payroll taxes, 11% was from interest on trust fund assets, and 1% was from taxation of benefits in 2005. (Figures may not add to 100% due to rounding.)

[7] The proportion of income from taxation of benefits is projected to increase over time as more people are subject to taxation of benefits. (See CRS Report RL32552, *Social Security: Calculation and History of Taxing Benefits*, by Christine Scott.) The proportion of income from interest is projected to increase in the short term, as Social Security continues to run surpluses, then decrease as the balance of the trust funds are drawn down to pay benefits.

[8] See CRS Report RS22350, *Railroad Retirement Board: Retirement, Survivor, Disability, Unemployment, and Sickness Benefits*, by Kathleen Romig.

for Social Security benefits, less than 1% was for administrative costs, and less than 1% was transferred to the Railroad Retirement Board (RRB).[9] The trust funds spend essentially the same proportion of funds on each of these items each year.

***Annual Cash Flow.*** If, in a given year, the trust funds take in more tax income (i.e., payroll taxes and taxation of benefits) than they spend, the trust funds have a *cash-flow surplus*. By law, surplus revenues are invested in interest-bearing U.S. government securities — usually special issue Treasury bonds.[10] In other words, Social Security's cash surpluses (like proceeds from all government bonds) are borrowed by the U.S. Treasury and can be used for tax cuts, spending, or repaying debt. The Treasury, in turn, incurs an obligation to repay the bonds with interest, which is also credited to the trust funds.

If, in a given year, the trust funds spend more than the tax income they receive, they have a *cash-flow deficit*. In deficit years, Social Security can redeem any bonds (including interest) accumulated in previous years. When the bonds are redeemed, assets are transferred from the Treasury's general fund to the Social Security trust funds. In other words, unless the Treasury's general fund is running a surplus, Congress would need to cut overall spending, raise taxes, or borrow during years in which Social Security has cash-flow deficits.

***Trust Fund Solvency.*** If the trust funds are not able to pay all of current expenses out of current tax income and accumulated trust fund assets, they are *insolvent*. Insolvency means that Social Security's trust funds are unable to pay full benefits on time. It does *not* mean that Social Security will be completely broke and unable to pay any benefits.

**Historical Trust Fund Operations.** The OASI trust fund was established in 1937; the DI trust fund was established in 1957. Neither of the Social Security trust funds has ever become insolvent. In 2005, the combined trust funds had a cash-flow surplus of $172 billion (about 24% of the trust funds' income for that year), which was invested in Treasury bonds.[11] At the end of 2005, the combined trust funds held a total of about $1.9 trillion in Treasury bonds.[12]

***Cash-Flow Surpluses and Deficits.*** The trust funds have run annual cash-flow surpluses in most years. These annual surpluses were typically small relative to the size of the trust funds' expenditures. After the 1983 amendments to the Social

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[9] In 2005, about 99% of OASI trust fund spending was for benefits, less than 1% was for administrative costs, and less than 1% was transferred to the RRB. In 2005, about 97% of DI trust fund spending was for benefits and 3% was for administrative costs. (Figures may not add to 100% due to rounding.)

[10] See CRS Report RS20607, *Social Security: Trust Fund Investment Practices*, by Dawn Nuschler.

[11] In 2005, the OASI trust fund had a cash-flow surplus of $162.4 billion and the DI trust fund had a cash-flow surplus of $9.4 billion.

[12] At the end of 2005, the OASI trust fund was credited with $1.7 trillion and the DI trust fund was credited with $196 million.

Security Act, which increased Social Security's income and reduced its spending, the OASI trust fund began to run larger surpluses.[13] The combined trust funds have run annual cash-flow deficits during 21 years, the last of which was in 1983.[14] The trust funds made up the difference between income and outgo during these years by redeeming some of the bonds accumulated in earlier years. In other words, the Social Security trust funds received net transfers from the Treasury's general fund.

***Near-Insolvency in the Early 1980s.*** The Social Security trust funds have never been exhausted. However, in the early 1980s, a solvency crisis loomed for the OASI trust fund. The 1982 Social Security Trustees Report projected that in the absence of legislative changes the OASI trust fund would become insolvent by July 1983.[15] To relieve the pressure on the OASI trust fund temporarily, Congress permitted the fund to borrow from the DI and Medicare Hospital Insurance (HI) trust funds.[16] Money was transferred to the OASI fund in 1982 and repaid by 1986.[17] This temporary measure allowed policymakers time to develop a more sustainable solution to Social Security's solvency problem — the 1983 amendments, which increased tax income and reduced benefits.[18] Absent another act of Congress, the Social Security Act does not permit further interfund borrowing.[19]

**The Trustees' Projections.** The Social Security trustees issue an annual report in which they describe their short- and long-range projections of trust fund financial operations.[20] The Trustees Report describes a range of possible outcomes using different sets of demographic and economic assumptions, including intermediate assumptions, high cost (pessimistic) assumptions, and low cost (optimistic) assumptions. Each set of assumptions results in different projections of both when cash-flow deficits will begin and when the trust funds will become

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[13] There is little evidence to suggest that the 1983 amendments were intended to create surpluses or to "advance fund" future benefits. Records of Congressional proceedings at the time show that the primary goal of the legislation was to assure that Social Security would not be threatened by insolvency if economic conditions were worse than expected.

[14] The OASI trust fund has run cash-flow deficits in 21 years; the DI trust fund has run cash-flow deficits in 20 years. (Tables VI.A2, VI.A3, and VI.A4, *2006 Social Security Trustees Report.*) See CRS Report RL33028, *Social Security: The Trust Fund*, by Christine Scott.

[15] Social Security Administration, *1982 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*, Apr. 1, 1982. (Hereafter cited as *1982 Social Security Trustees Report.*)

[16] P.L. 97-123.

[17] The OASI trust fund borrowed $17.5 billion in November and December of 1982; about $5.1 billion was from the DI trust fund and $12.4 billion was from Medicare's HI trust fund.

[18] P.L. 98-21.

[19] Even if interfund borrowing were legally permitted, it is unlikely that the Social Security trust funds would be able to borrow from Medicare's HI trust fund. According to the 2006 Medicare Trustees Report, the HI trust fund is projected to become insolvent in 2018.

[20] For more information, see CRS Report RS22139, *Social Security: Summary of Program Solvency and Projections*, by Gary Sidor.

insolvent.[21] This CRS report focuses on the trustees' long-range projections under their intermediate assumptions, which reflect their "best estimates" of future trends. However, it is important to note that the trustees' projections — like all long-term projections — are uncertain. Other estimates differ from the trustees' projections. For example, the Congressional Budget Office (CBO) projects that the trust funds will begin cash-flow deficits and become insolvent later than the trustees project.[22]

***Cash-Flow Projections.*** The Social Security trustees project that the trust funds will continue to have a cash-flow surplus (i.e., more tax income than spending on an annual basis) until early 2017. From 2017 forward, the trustees project annual cash-flow deficits.[23] Once cash-flow deficits emerge, the trust funds will need to redeem the Treasury bonds accumulated during earlier years. Redeeming the bonds will require transfers from the Treasury's general fund to the Social Security trust funds. These transfers will create pressure on the overall federal budget.

***Trust Fund Solvency Projections.*** According to the trustees' intermediate projections, redemption of trust fund assets will allow the trust funds to pay full benefits on time until 2040, when the trust funds will become exhausted.[24] At that time, the trust funds will continue to receive tax income (i.e., payroll taxes and taxation of benefits). The trustees project that tax income will be sufficient to cover about 74% of scheduled benefits during the first full year of trust fund insolvency in 2041, gradually declining to about 70% of scheduled benefits in 2080.

## Legal Background on Trust Fund Insolvency

**The Antideficiency Act.** The Social Security Act specifies that benefit payments shall be made *only* from the trust funds (i.e., accumulated trust fund assets and current tax income).[25] Another law, the Antideficiency Act, prohibits government spending in excess of available funds.[26] Consequently, if the Social Security trust funds become insolvent — that is, if current tax income and accumulated assets are not sufficient to pay the benefits to which people are entitled — the law effectively prohibits full Social Security benefits from being paid on time.

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[21] Under the intermediate assumptions, the trust funds are projected to begin cash-flow deficits in 2017 and to become insolvent in 2040. Under the low cost assumptions, the trust funds are projected to begin cash-flow deficits in 2022 and are not projected to become insolvent within the 75-year projection period. Under the high cost assumptions, the trust funds are projected to begin cash-flow deficits in 2013 and to become insolvent in 2030.

[22] CBO projects that the combined trust funds will run cash-flow deficits starting in 2019 and will become insolvent in 2046. (Congressional Budget Office, *Updated Long-Term Projections for Social Security*, June 2006, at [http://www.cbo.gov/ftpdocs/72xx/doc7289/06-14-LongTermProjections.pdf].)

[23] The OASI trust fund is projected to begin cash-flow deficits in 2018; the DI trust fund is projected to begin cash-flow deficits in 2013.

[24] Under the trustees' intermediate assumptions, the OASI trust fund is projected to become insolvent in 2042 and the DI trust fund is projected to become insolvent in 2025.

[25] 42 U.S.C. § 401(h).

[26] 31 U.S.C. § 1341.

**Legal Entitlement to Social Security Benefits.** The Social Security Act states that every individual who meets program eligibility requirements is entitled to benefits.[27] In other words, Social Security is an *entitlement program*, which means that the government is legally obligated to pay Social Security benefits to all those who are eligible for them as set forth in the statute.[28] If the government fails to pay the benefits stipulated by law, beneficiaries could take legal action. Insolvency would not relieve the government of its obligation to provide benefits. If benefits were reduced, beneficiaries would remain legally entitled to the balance.

**What Happens to Benefits in the Case of Insolvency?** The Social Security Act does not stipulate what would happen to benefits if the trust funds ran out. Because the Antideficiency Act would effectively prohibit the government from paying full benefits on time and the Social Security Act entitles beneficiaries and qualifying applicants to scheduled benefits, the conflict between these two laws would need to be resolved by Congress or by the courts. In the meantime, either full benefit checks would be paid on a delayed schedule or reduced benefits would be paid on time, according to trust fund experts in multiple federal agencies.[29]

To see how a delay could affect beneficiaries, consider the current Social Security benefit payment schedule, shown in **Table 1**. (This schedule may be changed at the discretion of the Social Security Commissioner.) New beneficiaries' payment dates are generally based on their day of birth — for example, if a retired worker was born on the first of the month (e.g., June 1), his or her benefit check is paid on the second Wednesday in the month.[30] If trust fund insolvency caused delays in the benefit payment schedule, benefit checks could be paid in the usual order — first to those who receive benefits on the third of the month, then to those on the second Wednesday of the month, and so on, until the balance of the trust funds' balance reached zero. At that point, no benefits could be paid until more tax receipts were credited to the trust funds. When more tax income was credited to the trust funds, benefit payments could be picked up where they left off when the trust funds ran out. This cycle could continue indefinitely. Under these circumstances, all beneficiaries would receive full benefit checks in about nine months of each year

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[27] 42 U.S.C. §§ 402 and 423.

[28] However, Congress retains the right to modify provisions of the Social Security Act at any time, which could affect the benefits current and future beneficiaries may receive. (42 U.S.C. § 1304.) For more details, see CRS Report RL32822 *Social Security Reform: Legal Analysis of Benefit Entitlement Issues*, by Kathleen S. Swendiman and Thomas J. Nicola.

[29] It seems most likely that benefits would be delayed (thus reducing the number of full benefit checks paid). It is unclear whether the Social Security Commissioner or the other trustees would have the authority to reduce the benefit amounts specified by law. The 1982 Trustees Report, which projected impending trust fund insolvency, stated that unless legislative changes were made, "inability to pay some benefits *on time* would result." (*1982 Trustees Report*, p. 2, emphasis added.)

[30] For beneficiaries who receive Social Security benefits based on another person's work record (e.g., spouse benefits), their payment date depends on the birth date of the worker on whose record they receive benefits. The current benefit payment schedule was first implemented for new beneficiaries in May 1997. By 2040, the number of beneficiaries being paid each week of the month will be approximately equal.

after the trust funds first became exhausted. The timing of these checks would be unpredictable.

### Table 1. Current Social Security Benefit Payment Schedule

| Benefits Paid On | Birth Date of Worker on Whose Record Benefits are Paid |
|---|---|
| Third of every month | Any birth date for:<br>(1) Beneficiaries who receive both Social Security and SSI benefits;<br>(2) Most beneficiaries who began to receive benefits prior to May 1997. |
| Second Wednesday | 1st to 10th day of the month |
| Third Wednesday | 11th to 20th day of the month |
| Fourth Wednesday | 21st to 31st day of the month |

**Source:** Social Security Administration.

**Notes:** For beneficiaries scheduled to receive payments on the third of the month, benefits may be paid earlier if the third is on a weekend or holiday.

## What If Congress Waits to Act?

There are many options to restore Social Security solvency, which could be combined or targeted in a variety of ways. For example, Congress could decrease Social Security spending. This essentially means cutting benefits, since more than 98% of Social Security spending is on benefits. Benefit cuts could be applied proportionately to all beneficiaries or structured to protect certain beneficiaries (e.g., disabled or low-income beneficiaries). Congress could also increase Social Security's income by raising tax revenue (e.g., raising payroll tax rates or the amount of wages taxed), boosting interest income (e.g., investing surpluses in stocks), or adding a new source of revenue (e.g., transferring funds from the Treasury's general fund). Tax increases could be applied proportionately to all workers or targeted to certain workers (e.g., those who earn more than the taxable maximum).

Over the long range (through 2080), the Social Security trustees estimate that the trust funds have a shortfall of $4.6 trillion in present value terms. The following section presents two of the policy options Congress could choose to fill this gap:

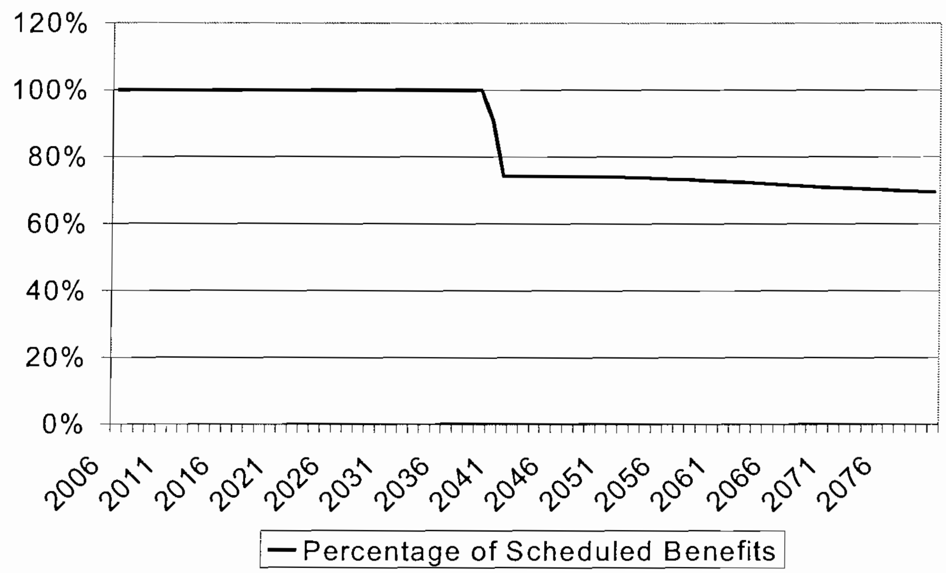
- The *benefit cut scenario* assumes that Congress covers the annual cash-flow deficit by cutting benefits across the board.
- The *tax increase scenario* assumes that Congress covers the annual cash-flow deficit by raising the payroll tax rate.

Both scenarios assume that Congress waits until the trust funds become insolvent to make changes. If made sooner, the changes could be smaller, since earlier changes could be spread to a larger number of workers and beneficiaries over a longer period of time.[31] Either scenario would essentially convert Social Security to a pure pay-as-you-go system, in which income and outgo are equal on an annual basis and there are no trust fund assets. These scenarios are only two of a wide range of possibilities.

## Benefit Cut Scenario

**Size of Benefit Cuts.** If the trust funds were allowed to run out, Congress could eliminate annual cash-flow deficits by cutting benefits so that spending equals tax income on an annual basis. According to the trustees, achieving annual balance would require benefit cuts of 26% in 2041, the first full year of insolvency, rising to 30% by 2080.[32] To maintain balance after 2080, the Social Security trustees project that larger benefit reductions would be needed, since the aging of the U.S. population is causing the cost of Social Security to grow over time. **Figure 1** shows the percentage of scheduled benefits that are payable each year with scheduled revenues.

**Figure 1. Proportion of Scheduled Benefits Payable with Scheduled Payroll Taxes, 2006-2080**




**Source:** Congressional Research Service calculations, based on Social Security Administration memorandum by Chris Chaplain, Actuary, "OASDI Cost Covered with Present-Law Taxes, Estimated for Years Beginning with the Year of Trust Fund Exhaustion, Based on 2006 Trustees Report Assumptions," May 5, 2006. (Hereafter cited as *SSA Payable Benefits Memo.*)

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[31] The trustees estimate that 75-year solvency could be restored through an immediate payroll tax increase of 2.02 percentage points (split between employers and employees) or benefit reduction of about 13% (for all current and future beneficiaries). These changes are half as large as those required in 2040. (*2006 Social Security Trustees Report.*)

[32] In 2040, the benefit cut required to eliminate the cash-flow deficit is projected to be 9%, since trust fund assets are expected to be available to pay benefits for part of the year.

**Notes:** Although not shown in the figure, the trustees project that more than 100% of scheduled benefits could be payable with scheduled payroll taxes prior to 2017. However, without changes to the law, higher benefits would not actually be paid.

**Impact of Benefit Cuts.** There are several ways to measure how beneficiaries would be affected under the benefit cut scenario. This report analyzes projected replacement rates and real benefit amounts for a series of hypothetical workers developed by the actuaries at the Social Security Administration (SSA).

***Replacement Rates.*** One way to illustrate the effect of across-the-board benefit cuts on beneficiaries is to use replacement rates. A *replacement rate* is a comparison between a person's income before and after retirement; it is one way of measuring the adequacy of a person's post-retirement income. Replacement rates can be calculated in different ways. This report uses the same methodology as SSA's actuaries, which is to calculate a worker's initial Social Security benefit as a percentage of his or her average indexed monthly earnings, thus showing the proportion of earnings replaced by benefits.[33] Benefits tend to replace a higher proportion of lower earners' wages than of higher earners' wages since the Social Security benefit formula is progressive. In 2006, the estimated replacement rate for a medium earner retiring at age 65 is 41%. Under current law, beneficiaries' replacement rates are gradually decreasing as the full retirement age gradually increases from 65 to 67.

Replacement rates are an important measure of the adequacy of Social Security benefits. Social Security was established to replace income lost to a family as a result of the retirement, death, or disability of a worker. To ensure that benefit levels keep up with increases in wages over time — thus providing a steady replacement rate to beneficiaries — initial Social Security benefits are indexed to wage growth. Historically, wages have generally risen faster than prices, which has allowed the standard of living to rise from one generation to the next.[34] Indexing initial Social Security benefits to wages has allowed beneficiaries to reap the benefits of rising living standards.[35] Replacement rates show the extent to which initial Social Security benefits keep up with wage growth and with rising standards of living.

**Figure 2** shows projected initial replacement rates under the benefit cut scenario for a hypothetical low, medium, and high earner.[36] The *low earner* is assumed to

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[33] This formula uses the highest 35 years of earnings covered by Social Security, indexed to wages using the Average Wage Index (AWI).

[34] The *standard of living* is usually measured in terms of income and reflects the quality of life that people enjoy, including factors such as the quality of housing, medical care, transportation, and communication.

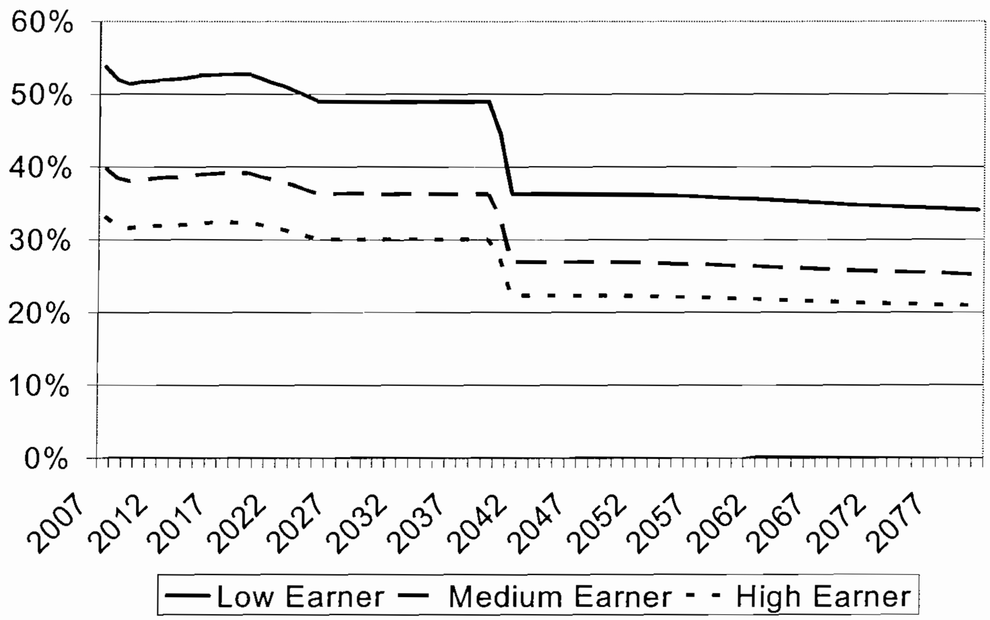
[35] For more information on how benefits are indexed, see: CRS Report RL32900, *Indexing Social Security Benefits: The Effects of Price and Wage Indexes*, by Patrick Purcell, Laura Haltzel, and Neela Ranade.

[36] For information on the development of the hypothetical workers, see: Social Security Administration, Office of the Chief Actuary, Actuarial Note Number 144, "Internal Rates of Return Under the OASDI Program for Hypothetical Workers," by Orlo R. Nichols, et al.,

(continued...)

have earned 45% of the national average wage during each year of his or her career (about $17,000 in 2006) and to receive a monthly Social Security benefit of $780 in 2006.[37] The *medium earner* is assumed to have earned the average wage during each year of his or her career (about $37,000 in 2006) and to receive a monthly Social Security benefit of $1,284 in 2006. The *high earner* is assumed to have earned 160% of the average wage during each year of his or her career (about $59,000 in 2006) and to receive a monthly Social Security benefit of $1,697 in 2006. Each year in the graph shows the projected replacement rate for each beneficiary if he or she turned 65 and retired in January of that year.

**Figure 2. Initial Replacement Rates Under Benefit Cut Scenario, 2006-2080**




**Source:** Congressional Research Service calculations, using figures from the *2006 Social Security Trustees Report* and the *SSA Payable Benefits Memo.*

**Notes:** The workers in this figure are assumed to retire at age 65. The age at which beneficiaries may receive full Social Security benefits is currently rising from 65 to 67, so the early retirement reduction for workers in this example would increase over time. In particular, new 65-year-old beneficiaries who retire between 2006 and 2008 will be affected as the full retirement age (FRA) rises to 66, and those who retire between 2020 and 2025 will be affected as the FRA rises to 67. Most new beneficiaries are subject to the early retirement reduction. For example, in 2004 more than two-thirds (68.3%) of new retirement beneficiaries filed their claims before age 65. (Social Security Administration, *Annual Statistical Supplement*, 2005, Table 6.A4, at [http://www.ssa.gov/policy/docs/statcomps/supplement/2005/6a.html].)

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[36] (...continued)
June 2001, at [http://www.ssa.gov/OACT/NOTES/note2000s/note144.html].

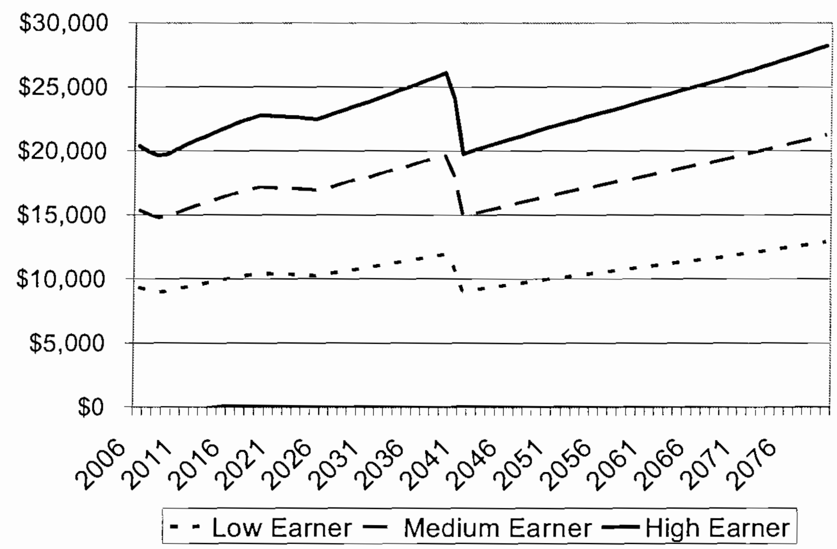
[37] The *average wage* is defined by SSA's Average Wage Index (AWI).

Replacement rates for the beneficiaries in this example are projected to decline in the near term. Between 2006 and projected trust fund exhaustion, initial replacement rates are projected to decrease about 12%.[38] This decline is mostly due to the increase in the full retirement age over the first two decades of that period.

Under the benefit cut scenario, replacement rates are projected to drop significantly when the trust funds become insolvent, then level off. Between 2039 and 2041, the first full year of projected insolvency, initial replacement rates are projected to decrease about 26%.[39] Replacement rates are expected to continue to decline after 2041 as benefit cuts under this scenario grow larger. Between 2041 and 2080, the last year for which the trustees have projections, initial replacement rates are projected to fall about 6%.[40]

***Real Benefit Levels.*** Another way to illustrate the effect of across-the-board benefit cuts is to look at projected initial annual benefit amounts in real terms (i.e., after inflation). Since benefits are based on workers' lifetime earnings, higher earners tend to receive higher benefit amounts than lower earners.

**Figure 3. Initial Annual Benefits Payable Under Benefit Cut Scenario, 2006-2080**




**Source**: Congressional Research Service calculations, using figures from the *2006 Social Security Trustees Report* and the *SSA Payable Benefits Memo.*

**Note**: Please see notes for **Figure 2**.

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[38] Initial replacement rates are estimated to be 56% for the low earner, 41% for the medium earner, and 35% for the high earner in 2006, and 49% for the low earner, 36% for the medium earner, and 30% for the high earner by 2039.

[39] In 2041, replacement rates are estimated to be 36% for the low earner, 27% for the medium earner, and 22% for the high earner.

[40] In 2080, replacement rates are estimated to be 34% for the low earner, 25% for the medium earner, and 21% for the high earner.

The change in real benefit levels over time illustrates how well Social Security benefits are projected to keep up with inflation (i.e., price growth). The real benefit levels in **Figure 3** show future initial benefit amounts in 2006 dollars — in other words, they illustrate the extent to which future beneficiaries could afford *today's* living standards. Wage growth is expected to exceed price growth over the long term, which would allow living standards to rise over time. Real benefit levels do *not* show the extent to which future beneficiaries could afford these rising living standards.

Real benefit levels are expected to rise in the near term. The trustees project that Social Security benefits will rise as a result of growing wages, causing initial real benefit amounts to increase about 28% between 2006 and projected trust fund insolvency.[41]

Under the benefit cut scenario, real benefit levels are projected to drop significantly after the trust funds become insolvent, then to rise gradually. Between 2039, the last full year of projected trust fund solvency, and 2041, the first full year of projected insolvency, initial real benefit levels are projected to decline about 24%.[42] Initial real benefit levels under the benefit cut scenario are projected to be about 3% lower in 2041 than in 2006. Between 2041 and 2080, the last year for which the trustees have projections, initial real benefit levels under this scenario are expected to increase by about 42% as wages continue to rise.[43]

## Tax Increase Scenario

**Size of Payroll Tax Rate Increases.** Congress could also eliminate cash-flow deficits by raising the payroll tax rate so that the trust funds' tax income would equal spending each year. The trustees project that taking such an action at the point of insolvency would require combined employee and employer payroll taxes to increase from their current rate of 12.40% to 16.65% in 2040, the year in which the trust funds are projected to be exhausted, rising to 17.78% by 2080, the last year for which the trustees have projections. To maintain balance after 2080, the Social Security trustees project that the payroll tax rate would likely need to increase further. This is because the cost of Social Security is expected to grow, due to U.S. population aging and the design of the Social Security system. **Figure 4** shows the payroll tax rates needed to pay scheduled benefits each year from 2006 to 2080.

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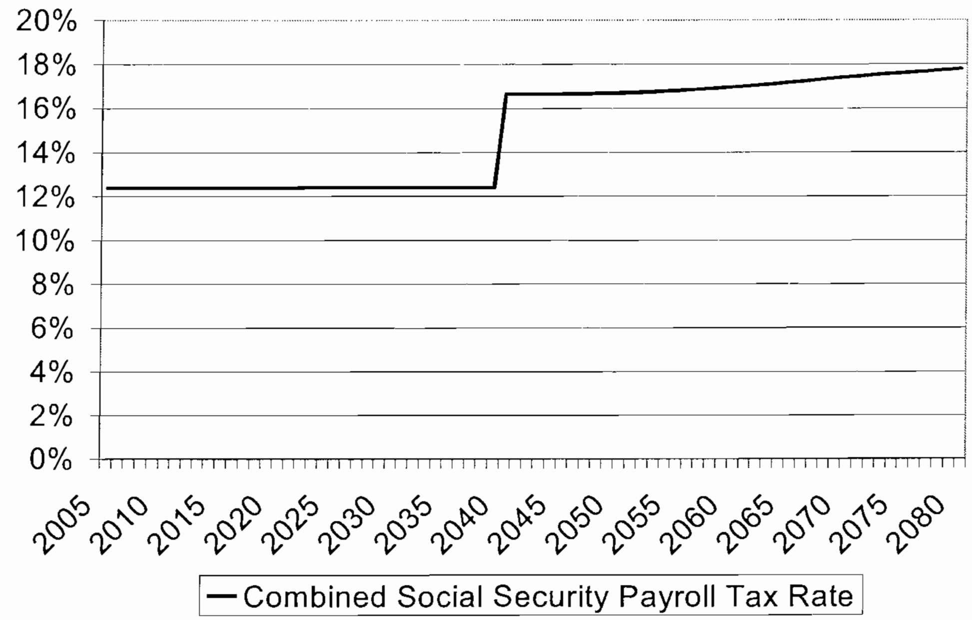
[41] Annual real benefits are estimated to be $9,354 for the low earner, $15,413 for the medium earner, and $20,367 for the high earner in 2006, rising to $11,945 for the low earner, $19,688 for the medium earner, and $26,101 for the high earner in 2039.

[42] In 2041, annual real benefits are projected to be $9,066 for the low earner, $14,934 for the medium earner, and $19,803 for the high earner.

[43] In 2080, annual real benefits are projected to be $12,912 for the low earner, $21,272 for the medium earner, and $28,202 for the high earner.

**Figure 4. Combined Payroll Tax Rate Needed to Fund Scheduled Benefits, 2006-2080**




**Source:** Congressional Research Service calculations, using figures from the *2006 Social Security Trustees Report*.

**Note:** Prior to 2017, scheduled payroll tax rates could fund more than scheduled benefits.

**Impact of Payroll Tax Increases.** Raising the payroll tax rate would increase most workers' taxes by the same proportion. However, since covered wages are taxable only up to a specified maximum ($94,200 in 2006), the effective increase in the payroll tax would be smaller for people who earn more than the taxable maximum than for other workers. About 6% of workers currently earn more than the taxable maximum.[44] Unlike the federal income tax, the Social Security payroll tax is levied at a flat rate starting at the first dollar of wages. As a result of this flat structure and the cap on taxable wages, the Social Security payroll tax places a relatively greater burden on low- and middle-income workers.[45]

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[44] CRS Report RL32896, *Social Security: Raising or Eliminating the Taxable Earnings Base*, by Debra Whitman.

[45] In 2003, about 74% of tax filers owed more in combined payroll taxes than in individual income taxes, including 85% of those with incomes of less than $40,000. ("Three-Quarters of Filers Pay More in Payroll Taxes Than in Income Taxes," Tax Facts from the Tax Policy Center, *Tax Notes*, by William G. Gale and Jeffrey Rohaly, Jan. 6, 2003, available at [http://www.taxpolicycenter.org/UploadedPDF/1000456_payroll_income.pdf].)