

# Executive Summary Backgrounder

No. 1827  
March 2, 2005



Published by The Heritage Foundation

## How Today's Social Security Works

DAVID C. JOHN

### What Is Social Security?

Social Security is probably the most popular federal program, yet most people know almost nothing about it. In practice, Social Security's complex benefit formulas and rules make it difficult for people to understand how their retirement benefits will work.

This paper explains what Social Security is and how it works. The first section explains what Social Security is and which programs are and are not part of Social Security. This includes a discussion about Social Security's retirement, survivors, and disability programs. It also explains why Supplemental Security Income is not part of Social Security, even though it is administered by the Social Security Administration.

### How Social Security Is Financed

The second section explains the payroll taxes that mainly finance Social Security and how they are paid. It explores the level of payroll taxes used to finance the system, how those taxes are collected, and what programs they fund. One fact that is often overlooked is that a worker's paycheck normally shows only half of the Social Security payroll taxes that are paid on his or her behalf.

### The Trust Funds

The third section explains what Social Security's trust funds are and are not. It examines how much goes into the trust funds, the sources of this

money, and how the money is spent. It also discusses the annual trustees report.

As this section explains, there is no pool of actual assets that is being reserved to pay the benefits of future retirees. The Social Security trust fund contains nothing more than IOUs in the form of special-issue U.S. Treasury bonds, which the federal government can repay only through higher taxes, massive borrowing, or massive cuts in other federal programs. While many workers thought that the system's annual surpluses were being used to build a reserve for future retirees, the federal government has been spending this money to fund other government programs and to reduce the government debt.

### How Benefits Are Calculated

The fourth and longest section discusses how Social Security benefits are calculated and who is eligible to receive them. Social Security benefits are determined by a complex formula that is based on past earnings. How those past earnings are indexed so that money earned long ago has the same purchasing power as salaries earned more

This paper, in its entirety, can be found at:  
[www.heritage.org/research/socialsecurity/bg1827.cfm](http://www.heritage.org/research/socialsecurity/bg1827.cfm)

Produced by the Thomas A. Roe Institute for  
Economic Policy Studies

Published by The Heritage Foundation  
214 Massachusetts Avenue, NE  
Washington, DC 20002-4999  
(202) 546-4400 • [heritage.org](http://heritage.org)

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

recently is key to understanding efforts to fix the system. This section explains indexing and how different methods could result in different results.

In addition, this section explains such complex topics as the Government Pension Offset, which affects workers who have worked in government jobs that are not part of Social Security; the Windfall Elimination Provision, which affects every worker who has worked both in a job that is covered by Social Security and in one that is not; and the question of “notch babies.”

A companion paper will discuss the fiscal problems facing the current system and why changes are necessary. All of the information contained in

this paper comes from Social Security Administration sources.

### Conclusion

Social Security is a remarkably complex program, and few people actually understand how it operates. However, if the current program’s impending financial problems are to be avoided, it becomes increasingly important for informed citizens to measure different reform options against the existing program’s actual operating structure and practices.

—David C. John is Research Fellow in Social Security and Financial Institutions in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation.

# Background

No. 1827  
March 2, 2005



Published by The Heritage Foundation

## How Today's Social Security Works

DAVID C. JOHN

Social Security is probably the most popular federal program, yet most people know almost nothing about it. In practice, Social Security's complex benefit formulas and rules make it difficult for people to understand how their retirement benefits will work.

This paper explains what Social Security is and how it works. The first section explains what Social Security is and which programs are and are not part of Social Security. The second section explains the payroll taxes that mainly finance Social Security and how they are paid. The third section explains what Social Security's trust funds are and are not. The fourth and longest section discusses how Social Security benefits are calculated and who is eligible to receive them. A companion paper will discuss the fiscal problems facing the current system and why changes are necessary. All of the information contained in this paper comes from Social Security Administration (SSA) sources.

### What Is Social Security?

Social Security is the most popular government program and touches the life of every worker in America, but most people know little or nothing about how it operates. The following discussion explains what Social Security is and how it operates.

**Social Security's Major Programs.** While most discussions focus only on Social Security's retirement program, Social Security actually consists of three major programs, all of which are administered by the Social Security Administration. Specifically:

### Talking Points

- Social Security is perhaps the most popular government program, but few people understand how it operates.
- A worker's paycheck normally shows only half of the Social Security payroll taxes that are paid on his or her behalf.
- Benefit formulas for Social Security are extremely complex, and terms used by the program often have a meaning that is different from the meaning that the same terms would have in other contexts.
- The Social Security trust fund contains nothing more than IOUs in the form of special-issue U.S. Treasury bonds, not real assets. The trust funds are essentially an accounting mechanism that measures how much the government owes itself.

This paper, in its entirety, can be found at:  
[www.heritage.org/research/socialsecurity/bg1827.cfm](http://www.heritage.org/research/socialsecurity/bg1827.cfm)

Produced by the Thomas A. Roe Institute for  
Economic Policy Studies

Published by The Heritage Foundation  
214 Massachusetts Avenue, NE  
Washington, DC 20002-4999  
(202) 546-4400 • [heritage.org](http://heritage.org)

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

- *Retirement.* Social Security's retirement program provides a lifetime monthly income for qualified workers once they reach their full retirement age. Depending on when they were born, that age ranges from 65 to 67. The amount of retirement benefits that a worker receives depends on his or her income while working. Workers also have the option of receiving a lower monthly income starting at age 62.
- *Survivors.* Social Security's survivors program provides a monthly lifetime income to the surviving spouse of a deceased worker once he or she reaches retirement age. The amount of the monthly benefit depends on both spouses' income while they were working. The survivors program also pays benefits to children under the age of 18 and the surviving spouse caring for them. Unless they are disabled, children's benefits end when the last child either reaches age 18 or graduates from high school, whichever is later.
- *Disability.* Social Security also pays lifetime monthly income to workers who are disabled and, in some cases, to their spouses and children under the age of 18. These benefits depend on the worker's earning history.

**Qualifying for Social Security.** Workers do not automatically qualify for Social Security retirement benefits. Instead, they must work and pay a minimum level of Social Security taxes for at least 40 quarters during their working lives. These 40 quarters do not have to be consecutive. Currently, workers earn a credit for each three-month period in which they earn at least \$900. Once they have worked and paid Social Security taxes for the required 40 quarters, they are fully qualified to receive Social Security retirement benefits. If workers have paid Social Security taxes for a certain number of quarters in the recent past,<sup>1</sup> they are also qualified to receive disability benefits and to have survivors benefits paid to their spouses and to their children who are under the age of 18.

Disability benefits are paid to workers who have been disabled for at least one year. In order to qualify, a worker must have paid Social Security taxes within the recent past. "Disabled" in this case means unable to perform any substantial gainful work due to severe physical or mental impairment. Determination of eligibility is based on medical evidence and made by a government agency in the state in which the worker lives.

There is no requirement that an individual must be an American citizen to qualify for Social Security. While employers are required by other laws to ensure that anyone they hire is either a citizen or a legal immigrant, foreign nationals can earn Social Security credits with a valid Social Security number.

**Supplemental Security Income.** The Supplemental Security Income (SSI) program is not part of Social Security. Even though the Social Security Administration administers SSI, the program is paid for with general tax revenues. No Social Security payroll taxes are used to pay for SSI. SSI helps aged, blind, and disabled people who have little or no income. It provides cash to meet basic needs for food, clothing, and shelter. To get SSI, a worker must be blind, disabled, or at least 65 years of age.

**Medicare.** Medicare is a federal program that helps to pay for older Americans' health costs. Some people incorrectly consider Medicare to be part of the Social Security system because taxes that finance part of Medicare are lumped in with those that pay for Social Security. However, Medicare is also financed by premiums and general revenue, and it is not administered by the Social Security Administration. For these reasons, Medicare is not considered part of Social Security.

**FICA.** The taxes that pay for Social Security's programs are confusing to most people. On most workers' paychecks, the taxes that pay for both Social Security and Medicare are lumped together under the term "FICA" (Federal Insurance Contributions Act). Even the amount under FICA is misleading because it shows only half of the taxes paid on the worker's behalf.

---

1. The number of quarters required to qualify for disability benefits depends on the age at which the worker became disabled.

## Payroll Taxes and Amounts

Unlike most other government programs, Social Security (like Medicare) is funded through explicit taxes that are not supposed to be used for any other purpose. These taxes are based on a worker's earned income and deducted from his or her paychecks. For that reason, Social Security taxes are often referred to as "payroll taxes." These payroll taxes are in addition to any income taxes that the worker must pay.

Separate payroll taxes finance Social Security's retirement and survivors benefit program, Social Security's disability benefit program, and Medicare; yet the three are often lumped together as one line item on a worker's pay stub. The two Social Security taxes are paid only on income up to a certain annual amount. Medicare taxes are collected on all earned income.

In 2005, workers and employers will pay payroll taxes totaling 15.3 percent of the first \$90,000 of income and 2.9 percent of income above that amount. The \$90,000 dividing line is called the "earnings limit"—sometimes referred to as the "wage cap." Of that 15.3 percent total, 10.6 percent of income pays for Social Security's retirement and survivors program, and 1.8 percent pays for Social Security's disability program. The remaining 2.9 percent is used to pay for Medicare programs, but the Medicare taxes are not subject to the earnings limit. In other words, Medicare taxes are collected on all of a worker's earned income, not just the first \$90,000.

The worker and the employer each pay half of the payroll taxes. The self-employed pay both portions.

**FICA Defined.** The paycheck stubs from most employers do not show the individual amounts that the worker pays for Social Security and Medicare. Instead, these taxes are lumped together and shown as a deduction for "FICA."

The Federal Insurance Contributions Act is the part of the Internal Revenue Code that gives the federal government the authority to collect the payroll taxes that pay for the Social Security programs and part of Medicare. The name implies that the taxes for these programs are actually contributions to a social insurance system. In reality, how-

ever, they are nothing more than taxes, and it would be more honest to refer to them as such.

**Matching Deductions by the Employer.** In most cases, only half of the Social Security taxes that a worker pays are shown on the paycheck stub. Employers also pay an equal amount of payroll taxes on the worker's behalf. As far as the employer is concerned, these additional taxes are part of the worker's pay. Even though the worker never sees this income, the employer actually pays \$10,765 for each \$10,000 the worker earns (\$10,000 in wages and \$765 in payroll taxes). If that worker were not employed, the employer would not be required to pay the \$765 in taxes.

If this money was not paid to the government as payroll taxes, it could go to the worker as wages. For this reason, both halves of the FICA tax should be counted as being paid by the worker. Thus, instead of paying taxes equal to 5.3 percent of income for retirement and survivors benefits, the worker is actually paying 10.6 percent of income. The combined total is the true cost to each worker.

**Self-Employed Workers.** This reality is clearly illustrated by self-employed workers, who must pay both the employer and the employee halves of the payroll taxes. Combining the payroll taxes for Social Security's retirement and survivors program, Social Security's disability program, and Medicare, the self-employed pay a total of 15.3 percent of income below \$90,000 in 2005 and 2.9 percent of income above that amount. These payroll taxes are in addition to any income taxes.

**Retirement and Survivors Tax.** The largest portion of FICA payroll taxes is used to pay for a worker's retirement and survivors benefits. The taxes pay for both the monthly benefits to workers who have retired and the monthly benefits (after the worker's death) to their surviving spouses and children (under the age of 18). The worker and employer each pay 5.3 percent for a total of 10.6 percent of income up to the earnings limit for these programs. These taxes go into the Old-Age and Survivors Insurance (OASI) trust fund.

**Disability Tax.** Taxes equal to 1.8 percent of income (up to the earnings limit) go into the Disability Insurance (DI) trust fund and pay monthly

benefits to workers who are unable to work due to a long-term physical or mental disability. As with all payroll taxes, half of the amount (0.9 percent of income) is deducted from the worker's pay, and the employer pays the other half on the worker's behalf.

**The Earnings Limit.** In 2005, Social Security taxes will be collected on only the first \$90,000 that a worker earns. This figure is known as the "earnings limit" and is adjusted each year. Social Security benefits are paid only on the amount of income that is subject to the Social Security payroll tax. Thus, in Social Security's eyes, both Michael Jordan and Bill Gates earn \$90,000 per year regardless of their actual incomes, and their Social Security retirement benefits will reflect this.

The earnings limit protects Social Security from having to pay benefits on Bill Gates's entire income. It allows the program to say that it covers all Americans without paying the very rich benefits that are much higher than those that go to average-income workers. Every October, Social Security calculates and announces the earnings limit for the following calendar year, based on the growth of wages in the economy. Wage growth is slightly higher than the rate of inflation (growth of prices).

Developed as part of the 1983 Social Security reforms, this formula for increasing the amount of wages that are taxed for Social Security was supposed to cover 90 percent of the nation's total wages. However, this proportion has gradually declined and is now closer to 85 percent.

**Income Taxes on Some Social Security Benefits.** Since 1983, retirees with annual income above a certain amount have been required to pay income taxes on a portion of their Social Security benefits. The money raised through this tax is returned to either Social Security or Medicare.

Retirees who earn between \$25,000 and \$34,000 and file as individuals may have to pay income taxes on up to 50 percent of their benefits. If they earn more than \$34,000, they may have to pay income taxes on up to 85 percent of their benefits. Married retirees who earn between \$32,000 and \$44,000 may have to pay income taxes on up

to 50 percent of their benefits, and if they earn over \$44,000, up to 85 percent of their benefits may be taxable. These income thresholds are not indexed for inflation. Income taxes on Social Security benefits are paid at the same rates as on other types of earned income.

Until 1983, all Social Security benefits were income tax free. In that year, Congress decided to tax 50 percent of the Social Security benefits of workers with total retirement incomes over \$25,000 (for single retirees) because Social Security needed additional revenue. Congress justified the move by pointing out that the half of payroll taxes paid by employers can also be deducted from the employer's corporate income taxes, while workers must pay income taxes on the amount of their check that is deducted as payroll taxes. Congress decided that since companies received a tax deduction on the amount of payroll taxes paid on behalf of their workers, Congress could recapture that tax benefit by assessing income taxes on half of some retirees' benefits.

In 1993, problems with financing Medicare led Congress to raise the proportion of Social Security benefits that is subject to income taxes to 85 percent for workers with incomes over \$34,000 (for single retirees). The money raised from this tax goes to the Health Insurance trust fund.

### **The Social Security Trust Funds**

Many people tend to think of their Social Security benefits as coming from an actual account, in their name, which contains cash or investments. People who believe this often point to the existence of the Social Security trust funds to justify their belief. However, this belief is fallacious for two reasons. First, Social Security has no individual accounts at all, other than a bookkeeping record of an individual's yearly earnings and payroll taxes. Second, the program's trust funds do not contain cash or saleable assets. They only represent the amount of Social Security taxes collected beyond what the program needs to pay current benefits.

In reality, the Social Security trust funds contain nothing more than IOUs that have no value beyond a promise to impose higher taxes on future

workers. The annual surpluses that many thought were being used to build up a reserve for baby boomers have been spent to fund other government programs or to reduce the government debt.

**The OASI and DI Trust Funds.** Social Security has two trust funds: the Old-Age and Survivors Insurance trust fund and the Disability Insurance trust fund. These two trust funds are linked and are often referred to as a single trust fund, the Old-Age, Survivors, and Disability Insurance trust fund, or OASDI.

Despite the fact that there are two trust funds, most of the estimates of Social Security's finances use the combined OASDI trust fund, which is an important distinction. For instance, according to the 2004 trustees report, OASDI will begin to spend more than it takes in by 2018. Considered separately, the OASI trust fund is also predicted to begin to spend more than it takes in each year starting in 2018, but the DI trust fund will begin to spend more than it takes in starting in 2009.

In addition to the two Social Security trust funds, there is a Health Insurance (HI) trust fund that partially funds Medicare. The HI trust fund is managed and invested in the same way as the OASI and DI trust funds but is outside the scope of this paper.

**The Trustees and Their Annual Report.** The same trustees manage the OASI, DI, and HI trust funds. Three of the six trustees are Cabinet officials: the Secretary of the Treasury, Secretary of Labor, and Secretary of Health and Human Services. The Secretary of the Treasury serves as the managing trustee. In addition, the Commissioner of Social Security is a trustee, and two public trustees are appointed by the President and confirmed by the Senate for four-year terms. The terms of public trustees John L. Palmer and Thomas R. Saving expired in October 2004, but they can continue in their roles until the 2005 trustees report is released.

Every year, the trustees are required to issue a report that details both the financial activities in the trust funds and the long-term and short-term outlooks for Social Security's programs. Available from SSA both on-line and in published copies, these annual reports contain a wealth of numbers,

statistics, and predictions. In addition to the numbers from the most recent year, the reports predict Social Security's financial status for both the next 10 years and the next 75 years.

Recently, the trustees have also developed a perpetual measure that extends well beyond the 75-year measure. This is intended to respond to critics who fail to understand that any reform that is based on the 75-year measure alone could leave the system on a path that would result in huge new deficits just one year beyond that 75-year horizon.

The report includes predictions based on the most likely economic scenario as well as both more optimistic and more pessimistic outcomes. Some analysts make the mistake of assuming that the three outcomes are equally likely to happen. However, a deeper analysis shows that there is only an extremely small chance that either the optimistic or the pessimistic outcome will happen, while there is a very high chance that the most likely outcome will occur. For that reason, the most recent trustees reports include a stochastic analysis that shows the probabilities of each outcome's actually happening.

Often, press reports focus on the simplest statistics, such as the year in which the trust funds are predicted to run out of assets. However, a more careful examination reveals other important information, such as the amount that Social Security owes in promised benefits beyond what it can pay with payroll taxes. The report also indicates the year in which the programs must begin to spend more than they receive in payroll taxes. These are actually more important to determining the programs' ability to meet the needs of those who depend on them.

**The OASI Trust Fund.** The Old-Age and Survivors Insurance trust fund—by far the larger of the two Social Security trust funds—pays retirement and survivors benefits. In 2003, the OASI trust fund had a total income of \$543.8 billion. Of that total, \$456.1 billion (83.9 percent) came from payroll taxes; \$12.5 billion (2.3 percent) came from income taxes paid on higher-income retirees' Social Security benefits; and \$75.2 billion (13.8

percent) came from interest paid on special-issue Treasury bonds in the trust fund.

During 2003, the trust fund paid out \$399.8 billion in benefits (73.5 percent of tax receipts) and \$2.6 billion (0.5 percent) for administrative expenses. The remaining \$137.8 billion (25.3 percent) was retained in the trust fund. As a result, the trust fund's assets grew from \$1.217 trillion at the beginning of the year to \$1.355 trillion at the end of 2003.<sup>2</sup>

**The Disability Insurance Trust Fund.** The Disability Insurance trust fund—the smaller of the two Social Security trust funds—pays disability benefits. In 2003, the DI trust fund had a total income of \$88.1 billion. Of that total, \$77.4 billion (87.9 percent) came from payroll taxes; \$0.9 billion (1.0 percent) came from income taxes paid on higher-income workers' disability benefits; and \$9.7 billion (11.0 percent) came from interest paid on special-issue Treasury bonds in the trust fund.

During 2003, the trust fund paid out \$70.9 billion (80.5 percent of tax receipts) in benefits and \$2.0 billion (2.3 percent) for administrative expenses. The remaining \$15.0 billion (17.0 percent) was retained in the trust fund. As a result, the trust fund's assets grew from \$160.4 billion at the beginning of the year to \$175.4 billion at the end of 2003.<sup>3</sup>

The disability program's separate trust fund and tax structure, combined with the completely different eligibility criteria for receiving disability benefits, distinguish it from the retirement and survivors program. The disability program is a true insurance program, while the retirement and survivors program is much closer to a retirement investment program.

**How the Social Security Trust Funds Differ from Real Trust Funds.** Private-sector trust funds

invest in real assets, ranging from stocks and bonds to mortgages and other financial instruments. Assets are held only for a specific purpose, and the fund managers are liable if the money is mismanaged. Funds are managed in order to maximize earning within a pre-agreed risk level. Investments are chosen to provide cash at set intervals so that the trust fund can pay its obligations.

The Social Security trust funds are very different. As explained by the Office of Management and Budget (OMB):

The Federal budget meaning of the term "trust" differs significantly from the private sector usage.... [T]he Federal Government owns the assets and earnings of most Federal trust funds, and it can unilaterally raise or lower future trust fund collections and payments, or change the purpose for which the collections are used.<sup>4</sup>

Even more important, the Social Security trust funds are "invested" only in a special type of Treasury bond that can only be issued to and redeemed by the Social Security Administration. These bonds cannot be sold to the public to raise money. They are only a measure of what the government owes itself. As the Congressional Research Service noted:

When the government issues a bond to one of its own accounts, it hasn't purchased anything or established a claim against another entity or person. It is simply creating a form of IOU from one of its accounts to another.<sup>5</sup>

As a result:

These [Trust Fund] balances are available to finance future benefit payments and other

2. Social Security Administration, *2004 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds* (Washington, D.C.: U.S. Government Printing Office, 2004), p. 19, at [www.ssa.gov/OACT/TR/TR04](http://www.ssa.gov/OACT/TR/TR04) (February 18, 2005).

3. *Ibid.*, p. 23.

4. Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2000: Analytical Perspectives* (Washington, D.C.: U.S. Government Printing Office, 1999), p. 335.

5. David Koitz, "Social Security and the Federal Budget: What Does Social Security's Being Off-Budget Mean?" Congressional Research Service, May 5, 1998.



trust fund expenditures—but only in a bookkeeping sense. These funds are not set up to be pension funds, like the funds of private pension plans. They do not consist of real economic assets that can be drawn down in the future to fund benefits. Instead, they are claims on the Treasury, that, when redeemed, will have to be financed by raising taxes, borrowing from the public, or reducing benefits or other expenditures. The existence of large trust fund balances, therefore, does not, by itself, make it easier for the government to pay benefits.<sup>6</sup>

In short, the Social Security trust funds are really only an accounting mechanism. They show how much the government has borrowed from Social Security but do not provide any way to finance future benefits.

**How Money Goes to and from the Trust Fund.** An employer pays taxes to the Treasury by periodically sending a check (or electronic transfer) that includes both income taxes and payroll taxes. The check is sent without distinguishing between payroll and income taxes. There is also no indication of which individual employees' taxes are being paid or how much those employees earned.

On a regular basis, the Treasury estimates how much of its aggregate tax collections are due to Social Security taxes and credits the trust funds with that amount. No money actually changes hands: This is strictly an accounting transaction. These estimates are corrected after income tax returns show how much in payroll taxes was actually paid in a specific year. In addition, the Treasury credits the trust funds with interest paid on its balances and with the amount of income taxes that higher-income workers pay on their Social Security benefits.

To pay benefits, the Social Security Administration directs the Treasury to pay monthly benefits, and that amount is subtracted from the total in the trust funds. Any remainder is converted into special-issue Treasury bonds, which are really nothing more than IOUs.

After the trust fund has been credited with the IOUs, Social Security's extra tax revenue is then spent by the Treasury just as any other taxes are spent. If the federal budget is running a surplus, that amount could be used to repay federal debt owned by the public. Otherwise, it is spent on any other type of federal program, ranging from aircraft carriers to education research.

**Special Securities Issued to the Trust Funds.** The Social Security trust fund consists only of special-issue Treasury bonds. These bonds are special in that they can only be issued to and redeemed by the Social Security trust funds. They cannot be sold in the open market.

The Social Security trust fund bonds pay the same interest rate as regular Treasury bonds issued on the same day with the same maturity date. When the bonds mature, they are rolled over into new bonds that include both the original issue amount and any interest due. The new bonds also pay the same interest rate as comparable Treasury bonds.

Because these are special-issue bonds that are payable only to the Social Security Administration, the SSA cannot sell them to a third party to raise money to pay benefits. This reinforces the fact that these bonds are really nothing more than IOUs from one branch of government to another. They are not a real financial asset.

Until relatively recently, these bonds existed only as entries in a record book. Now, however, when a new bond is issued, it is printed on a laser printer located at the Bureau of the Public Debt office in Parkersburg, West Virginia. The bond is then carried across the room and put in a fireproof filing cabinet. That filing cabinet is the Social Security trust funds.

**How Trust Fund IOUs Would Be Repaid.** At some point in the future, probably starting about 2018, Social Security will start to pay more in benefits than it receives from payroll taxes. At that point, it will begin to cash in the bonds in the trust fund. According to the most recent trustees report, Social Security will cash about \$5.7 trillion (in 2004 dollars) in special-issue

6. Office of Management and Budget, *Analytical Perspectives*, p. 337; emphasis added.

bonds, cashing the first special-issue bond in 2018 and the last bond in 2042.

According to the OMB, there are only four ways that Congress can repay these bonds: raise other taxes, authorize the Treasury to borrow the needed funds from the public, reduce spending on other federal programs and use the savings to redeem Social Security's bonds, or simply reduce Social Security benefits. None of these options is easy or attractive.

### Determining Social Security Benefits

Social Security benefits are based on earnings averaged over most of a worker's lifetime. Most people know about Social Security's retirement benefits, but the program also pays benefits to disabled workers. In addition, families can receive benefits under certain circumstances. The formula that the agency uses to determine the benefits for a worker or the worker's family is complex. Complicating matters even more are a number of special circumstances that can alter those benefits.

What follows is a general analysis that is suitable for policymakers. For individual cases, it would be wiser to seek guidance from either the SSA or other sources.

**When Can a Worker Retire?** There are two answers to this question. A worker can begin to collect Social Security retirement benefits as early as age 62 but cannot begin to receive full retirement benefits until between ages 65 and 67. The exact age for full benefits depends on the worker's birth date. Workers born before 1938 can receive full retirement benefits starting at age 65. The full retirement age increases by two months per year for workers born between 1938 and 1942 and is 66 for those born between 1943 and 1954. The full benefits age then increases by two months per year for those born between 1955 and 1959 and is 67 for anyone born in 1960 or after.

If a worker decides to receive benefits starting at age 62, the monthly benefits will be reduced by a set percentage for each month that the worker receives benefits before full retirement age. As the full retirement age increases from 65 to 67, workers who retire early will receive an even greater

reduction in their monthly benefits. Currently, a worker who retires at 62 will receive 80 percent of the full retirement age amount. This will eventually drop to 70 percent for those with a full retirement age of 67.

Even after a worker reaches full retirement age, the worker's benefits continue to increase every month until that worker applies to receive retirement benefits. This benefit growth continues until age 70.

**Qualifying for Retirement Benefits.** Not everyone is qualified to receive Social Security benefits. To qualify, a worker must earn at least 40 quarterly credits. A worker earns one credit by earning at least \$900 in a three-month period and paying Social Security taxes on that amount. Workers who earn \$3,600 during a year earn four credits.

The amount of income required to earn a credit is adjusted annually, but this does not affect credits that have already been earned. Once a worker has earned the required 40 credits, he or she is permanently qualified. However, the level of benefits depends on worker's income history.

The Disability Insurance program has similar requirements, but the number of credits necessary to qualify varies depending on the age at which the worker becomes disabled. In general, the younger the person who is disabled, the lower the number of credits required to qualify for benefits.

**The General Formula for Retirement Benefits.** Retirement benefits are based on a worker's highest 35 years of earnings. Those wages are indexed so that all 35 have the purchasing power of the year when the person retires. The worker's Average Indexed Monthly Earnings (AIME), or average monthly salary, is calculated using the 35 years of indexed earnings. The AIME is then run through a formula that calculates benefits equal to 90 percent of AIME up to a certain level of monthly income, 32 percent of AIME from that level to a higher point, and 15 percent of the remaining AIME.

The dividing points between the three payment levels are known as "bend points." The three payment levels are added up to find the worker's monthly Social Security retirement benefit. Both steps are detailed below.

**Determining Average Indexed Monthly Earnings (AIME).** Retirement benefits are calculated using a worker's highest 35 years earnings. They do not have to be consecutive years. If the worker has an earnings record for more than 35 years, only the 35 years of highest earnings are included in the calculation; years with lower earnings are dropped. Only those earnings on which the worker paid Social Security taxes are counted. Thus, if the worker earned \$100,000 in 2004, that year's income would be counted as \$87,900 for determining benefits, since the worker only paid Social Security taxes on the lower amount.

Except for the two years immediately prior to retirement, earnings for previous years are indexed so that all years are measured by the same ability to purchase goods and services; the two years immediately before retirement are not indexed. This indexing increases past earnings to account for both inflation and increases in average wage growth. For instance, it would take \$12.05 in 2004 dollars to equal \$1.00 earned in 1951, and \$1.61 to equal \$1.00 earned in 1990.

Once the 35 years of highest earnings are determined, they are totaled and divided by 420 (the number of months in 35 years). The result is the Average Indexed Monthly Earnings, which is used to calculate Social Security benefits.

Some jobs—usually for state or local governments—are not covered by Social Security, and earnings for those jobs are not included in calculated AIME. For the purposes of determining Social Security benefits, those years count the same as if the worker was not employed.

If a worker did not work for a full 35 years—perhaps due to raising a family or because of illness—the missing years are counted as zeros. For example, if a worker is either employed for only 25 years or worked in a job covered by Social Security for only 25 years, the indexed earnings from those 25 years are added together and divided by 420. This lowers that worker's AIME to account for the missing years. Social Security ben-

efits earned by state and local government workers are adjusted in other ways, as explained in the sections on the Government Pension Offset and the Windfall Elimination Provision.

**Wage Indexing vs. Price Indexing.** In creating AIME, a worker's past wages are indexed to bring them to the same level as today's earnings. There are two general ways to index past earnings and potentially dozens of variations on these two that would create results that lie in between the two general methods. This calculation is done only once in a worker's life—when he or she first applies for Social Security benefits. Once the worker's initial monthly benefit has been determined, it is price indexed in each successive year to protect the retiree from inflation.

Price indexing is based upon the Consumer Price Index (CPI) and compensates for inflation. Price indexing benefits ensures that they maintain their constant purchasing power. In this case, if inflation had increased by 5 percent since last year, simply multiplying the previous year's benefit by 1.05 would preserve the retiree's ability to buy the same amount of goods as last year.

By contrast, wage indexing is based on the growth in average wages in the economy over a set period of time and is supposed to allow workers to retire with the same standard of living. The growth in average wages includes both inflation and growth in the overall economy. As a result, wage indexing almost always results in a higher AIME than price indexing. Social Security uses wage indexing only when calculating AIME, determining the annual level of bend points in the benefit level, and determining the annual level of the payroll tax earnings cap.

The difference between the two forms of indexing can be important. If a worker had been a bricklayer throughout his or her career and earned \$4.00 per hour in 1980, indexing that amount for inflation (an increase of 129.3 percent) would result in an indexed wage of \$9.17 per hour.<sup>7</sup> On the other hand, indexing for average growth in wages (an

7. Social Security Administration, "CPI for Urban Wage Earners and Clerical Workers," updated January 19, 2005, at [www.socialsecurity.gov/OACT/STATS/cpiw.html](http://www.socialsecurity.gov/OACT/STATS/cpiw.html) (February 18, 2005).

increase of 172 percent) would result in \$10.88 per hour.<sup>8</sup> While it is true that \$9.17 in 2004 would buy the same amount as \$4.00 in 1980, the average wage for a bricklayer could have increased to something closer to \$10.88 per hour in 2002.

Wage indexing allows retirees to take advantage of the increase in the standard of living over their working careers. However, it is often criticized as giving workers a retroactive credit for improvements in the economy. In other words, the worker's 1980 wages are being measured according to the economy of 2004 rather than according to the 1980 economy in which they were earned.

The key difference is in replacement rates. The replacement rate is the proportion of a worker's average monthly earnings that is paid by that worker's Social Security retirement benefit. Currently, Social Security pays average-income workers a retirement benefit that is equal to between 40 percent and 45 percent of their average monthly earnings. Lower-income workers generally receive a higher proportion of their average monthly earnings, while higher-income workers receive a lower proportion.

With wage indexing, these replacement rates will remain roughly stable. On the other hand, changing to price indexing will gradually reduce the replacement rates. While this would bring promised Social Security benefits closer to what the program can afford to pay, it would also require workers to make up the difference from either savings or some other form of retirement plan. Most experts believe that a retiree needs an income equal to roughly 70 percent of pre-retirement income for a comfortable retirement.

**Annual COLA Increases.** Once a worker's monthly benefits have been determined, they are increased every year by the rate of inflation. This Cost of Living Adjustment (COLA), is intended to preserve the purchasing power of a recipient's benefits. The amount of the annual increase is announced each October and takes effect the following January.

The COLA is based on the inflation rate for the preceding 12 months from October 1 to September 30. For example, in October 2004, the SSA announced a COLA increase of 2.7 percent for all checks issued after January 1, 2005. This increase was based on the change in CPI-W from October 1, 2003, through September 30, 2004.

The SSA currently uses the Department of Labor's Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) to measure inflation, but the law allows it to substitute other inflation indexes or the annual increase in average wages under some circumstances.

**Using Bend Points to Calculate the Monthly Benefit.** Once an AIME has been determined, the SSA calculates a worker's monthly retirement benefit using a formula that pays a higher benefit relative to income to lower-income workers than to higher-income workers. In 2004, Social Security paid 90 percent of the first \$612 of a worker's AIME, 32 percent of the AIME amount between \$612 and \$3,689, and 15 percent of any AIME amount over \$3,689. The dividing points in this formula are called "bend points." The SSA adjusts the bend points each year.

The bend points ensure that a lower-income worker receives Social Security retirement benefits that are comparatively higher relative to pre-retirement income than upper-income workers receive. For example, a worker with an AIME of \$4,000 (or an average annual income of \$48,000) would receive 90 percent of the first \$612 (\$550.80); 32 percent of the amount between \$612 and \$3,689 (\$984.64); and 15 percent of the amount between \$3,689 and \$4,000 (\$46.65). Thus, the worker's monthly benefit would be \$1582.09, or about 40 percent of AIME.

On the other hand, a worker with an AIME of only \$1,200 (or an average annual income of \$14,400) would receive 90 percent of the first \$612 (\$550.80) and 32 percent of the amount between \$612 and \$1,200 (\$188.16), for a total monthly benefit of \$738.96. This lower monthly benefit amount would equal 61 percent of his or her AIME.

8. Social Security Administration, "National Average Wage Index," updated October 19, 2004, at [www.socialsecurity.gov/OACT/COLA/AWI.html](http://www.socialsecurity.gov/OACT/COLA/AWI.html) (February 18, 2005).

**The Spousal Benefit.** In addition to the retirement benefits that a worker can receive, the worker's spouse can also receive a benefit in some circumstances. Almost all spouses who qualify for the full benefit come from single-earner families in which one spouse was employed and the other stayed at home to care for the family. The spousal benefit is equal to 50 percent of the employed spouse's benefit, which means that such families could receive a total Social Security income of 150 percent of the working spouse's benefit while both are still alive.

The "dual entitlement rule" prevents spouses who qualify for their own Social Security retirement benefits from receiving both their own benefits and a spousal benefit. An exception is made if the lower-earning spouse's benefits are less than 50 percent of the higher-earning spouse's benefits. In that case, the lower-earning spouse would also qualify for a spousal benefit equal to the difference between his or her retirement benefits and 50 percent of the higher-earning spouse's benefits.

Some special circumstances—for example, if one spouse was employed by a state or local government that is not part of Social Security—can make it appear that someone qualifies for spousal benefits even though they may have substantial income or retirement benefits from the non-Social Security job. The Government Pension Offset addresses this circumstance and limits spousal benefits to families that truly qualify for it.

**Survivors Benefits.** The amount of the survivors benefits paid to spouses and children under the age of 18 depends on the earnings history of the deceased worker. The same formula that calculates retirement benefits is also used for survivors benefits. They are usually calculated as a percentage of the benefit for which a worker would have been eligible at the time of death.

Surviving spouses near retirement age receive a benefit that is based on the worker's retirement benefit. If the worker began to receive benefits at a full retirement benefits age, the surviving spouse will receive an amount equal to 100 percent of the worker's benefits. This is also true if the worker died before beginning to receive Social Security.

However, if the surviving spouse is also entitled to receive benefits, he or she will receive only the larger of the two amounts. The survivor will not receive both the worker's benefit and his or her own benefit.

If the deceased worker began to receive a reduced amount of retirement benefits before full retirement age, the surviving spouse will also receive a reduced monthly benefit. The exact amount depends on the survivor's age and the level of the worker's benefit. A surviving spouse can receive benefits as young as age 60, but in that case would receive only 71.5 percent of the worker's full retirement-age benefit. As the full retirement age increases, this percentage will also change.

In addition to the monthly benefit, surviving spouses receive a one-time \$255 death benefit. This benefit is payable only to spouses or children eligible to receive benefits.

Another situation occurs if the worker dies leaving children under the age of 18. In that case, both the child and the surviving spouse are eligible to receive a benefit equal to 75 percent of the retirement benefit for which the worker was qualified at the time of death. Both children and the spouse continue to receive this benefit until the last child reaches age 18 or graduates from high school, whichever is later. Benefits are also payable up to age 19 if the child is in high school at that date or age 22 if the child is disabled. The total annual amount that the family can receive from Social Security depends on a number of factors but is between 150 percent and 188 percent of the worker's full retirement benefit amount. Once the last child has reached an age at which benefits end, benefits also end for the surviving spouse until he or she qualifies for retirement benefits.

**Disability Benefits.** Currently, disability benefits are calculated using the same formula as the one used to calculate retirement benefits. However, disability benefits for a worker who is disabled before having worked 35 years are calculated using a shorter work history so that the worker is not penalized for not having worked as long.

Obtaining approval for Social Security disability benefits is not easy. The agency's definition of dis-

ability is extremely strict, and about half of workers who apply for benefits are turned down. Some of these applicants will be approved on appeal, but the process can be long and complicated.

To qualify, a worker must be unable to do any kind of substantial work because of physical or mental disabilities, which are expected either to last at least 12 months or to result in death. Merely being unable to do the job that he or she held before the disability does not automatically qualify a worker for disability benefits. Depending on the worker's age, experience, and education, the worker may be regarded as qualified for other work and thus be denied disability benefits, even if the work is at a lower salary. Family members may also be eligible to receive benefits because of a worker's disability.

Because the disability insurance program functions as a true insurance program with its own tax, trust fund, and eligibility process, it is considered to be separate from Social Security's retirement and survivors program.

**The Retirement Earnings Limit: Working During Retirement.** Until recently, any worker under the age of 70 who received Social Security retirement benefits and chose to return to work would lose a substantial portion of his or her Social Security benefits. However, Congress eliminated this penalty for workers who have reached full retirement age. Workers between 62 and full retirement age still risk losing much or most of their benefits if they choose to work after applying for retirement benefits.

In 2005, workers under full retirement age can earn up to \$12,000 without any consequences. However, for every two dollars they earned over that amount, their Social Security benefits were reduced by one dollar. A higher limit applies to the year in which the worker reaches age 65.

Rather than equally reducing each monthly benefit, Social Security frontloads the reduction until the amount of the reduction is reached. Thus, if annual benefits were to be reduced by \$4,500 and the worker's monthly benefit was \$1,000 per month, the worker would not receive Social Security checks for the first four months, and the check

for May would be for only \$500. Starting in June, the worker would again receive \$1,000 per month through December.

**The Government Pension Offset.** The Government Pension Offset affects the Social Security benefits for spouses of workers who held jobs that were not covered by Social Security. Most of these workers were either state or local government employees or were federal employees prior to 1984. Since government workers who were not covered by Social Security do not have an earnings record for those jobs or any Social Security benefits based on that employment, they would theoretically qualify for a full spousal benefit, even though the spouse would not qualify if both workers had been part of Social Security.

Thus, a person who joined the federal government prior to 1984 would, in theory, be able to receive both a full Civil Service Retirement System (CSRS) pension and a Social Security spousal benefit. To eliminate this dual benefit, Congress created the Government Pension Offset in 1977.

Under the Government Pension Offset, two-thirds of the CSRS pension (or in other cases, the pension that comes from a state or local government that does not participate in Social Security) is treated as if it were a Social Security benefit, and the worker's Social Security spousal benefit is reduced dollar for dollar by this amount.

For example, if the CSRS worker's spouse receives \$1,200 per month from Social Security, the worker would technically be eligible for a Social Security spousal benefit of \$600 (one-half of the spouse's basic retirement benefit). However, if the worker has a \$1,200 per month CSRS pension, \$800 of his or her pension (two-thirds) would be treated as coming from Social Security. This would eliminate the spousal benefit because two-thirds of the CSRS pension (\$800) is larger than the potential spousal benefit (\$600).

As a result of the Government Pension Offset, the CSRS worker and the worker's spouse are treated the same as married workers who are both covered by Social Security. The Government Pension Offset affects about 300,000 retirees and reduces Social Security's aggregate benefits by

approximately \$1 billion annually. A major proportion of those affected by this rule are retired federal workers, and most of the rest were employed by state and local governments that do not participate in Social Security. The vast majority of these workers come from eight states: Alaska, California, Colorado, Louisiana, Maine, Massachusetts, Nevada, and Ohio.

**The Windfall Elimination Provision.** The Windfall Elimination Provision is similar to the Government Pension Offset, except that it applies to the retirement benefits instead of spousal benefits. It applies only to workers who have both a Social Security retirement benefit and a pension from a job that was not part of Social Security.

Under the Windfall Elimination Provision, only 40 percent (as opposed to the usual 90 percent) of the first \$612 (the first bend point in 2004) of the AIME is counted toward the worker's monthly retirement benefit. This in turn lowers the affected worker's total monthly benefit. For example, the monthly benefit for a worker with an AIME of \$1,200 would be reduced from \$739 to \$433, and a worker with an AIME of \$4,000 would receive \$1,276.09 per month instead of \$1582.09.

There are exceptions to this provision that take into account how long the worker was employed in a job covered by Social Security. The longer a worker was employed in a job covered by Social Security, the lower the benefit reduction. If the worker received "substantial" Social Security covered earnings for 30 years or more, there is no reduction in benefits. In the case of a worker with that level of earnings for 21 and 29 years, the 90 percent multiplier would be reduced to between 45 percent and 85 percent, depending on the exact number of years worked.

The Windfall Elimination Provision adjusts the benefit formula to reflect retirement income from employment not covered by Social Security. It was created because the basic Social Security benefit formula is designed to give lower-income workers more for their Social Security taxes than higher-income workers. If a government worker spent 30 years in a job not covered by Social Security and only 12 years in one that is covered, his or her

Social Security earnings record (AIME) would appear to be very low when compared to his or her actual average income including both jobs. This is because all of the income not covered by Social Security would be excluded from the AIME calculation. Without this provision, a middle-income or even upper-income worker would receive a low-income worker's Social Security benefit.

**The Dual Entitlement Rule.** A long-standing principle of Social Security holds that a worker cannot qualify for both full retirement benefits and full spousal benefits. Accordingly, although a married worker theoretically qualifies for both retirement benefits from his or her own earnings record and a spousal benefit equal to 50 percent of the spouse's retirement benefit, the dual entitlement rule limits the spousal benefit.

The dual entitlement rule reduces the spousal benefit dollar for dollar by the amount of the retirement benefits for which a worker qualifies under his or her own earnings record. Thus, if two spouses each qualify for \$1,200 per month from their own earnings records and for spousal benefits of \$600 per month (one-half of the basic retirement benefit), they would still receive a total benefit of only \$2,400 (\$1,200 per worker). Both spouses are ineligible for the \$600 spousal benefit because their individual retirement benefits are greater.

On the other hand, if one spouse received \$1,200 per month and the other received \$400 per month from Social Security, the lower-earning spouse would qualify for a \$200 spousal benefit. In this case, the \$600 spousal benefit from the higher-earning spouse would be reduced by the lower-earning spouse's benefit (\$600-\$400), leaving a \$200 spousal benefit. The dual entitlement rule potentially affects 96 percent of the workforce.

**Notch Babies.** "Notch babies" are certain workers who were born between 1917 and 1921. Due to a technical error in a 1972 law, they receive slightly lower benefits than workers born before them, although they also receive slightly higher benefits based on their earnings record than workers born after them. As a result, legislation has reg-

ularly been introduced in Congress that would either raise their benefits or provide them with a lump-sum payment.

However, a 1994 commission found that, although they do receive slightly lower benefits than workers born before them, notch babies receive a fair return for their taxes. As a result, no legislation concerning notch babies has been passed, and this situation is unlikely to change.

Notch babies get their name from a line graph showing average benefits by age of birth. Because those born between 1917 and 1921 tend to receive slightly lower benefits than those born before them, the line has a slight notch for those years.

The problem was caused in 1972 when benefits were first indexed for inflation. Regrettably, Congress made a technical error in writing the law that resulted in workers receiving a double adjustment for inflation. By the time Congress corrected this error in 1977, some workers had already retired with higher benefits than they should have received. Rather than lowering their benefits, Congress decided to correct the problem for only those

who had not yet retired. In addition, rather than just correcting the law to lower benefits to where they should have been, Congress phased in the change over a five-year period, affecting retirees born between 1917 to 1921.

## Conclusion

Social Security is a remarkably complex program, and few people actually understand how it operates. In many cases, terms used by Social Security (e.g., trust fund) have meanings that are different from the meanings conveyed by the same terms when they are used in the private sector. However, if the current program's impending financial problems are to be avoided, it becomes increasingly important for informed citizens to measure different reform options against the existing program's actual operating structure and practices.

—David C. John is Research Fellow in Social Security and Financial Institutions in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation.