



## WORK INCENTIVES IN THE SOCIAL SECURITY DISABILITY BENEFIT FORMULA

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With Social Security's Disability Insurance trust fund facing depletion in 2016, it has become urgent that policymakers implement measures to improve the program's economic efficiency. One important option would be to reduce any work disincentives the program creates, which could increase labor supply and boost revenue to the program.

A study published by the Mercatus Center at George Mason University offers a new and important perspective on how Social Security Disability Insurance (SSDI) creates work disincentives for older healthy workers. The study finds that the value of SSDI benefits, relative to taxes paid, declines as an individual grows older. In particular, SSDI discourages individuals from earning additional income starting around age 40 and from working at all beyond age 60. The paper also reviews a policy option that could reduce this disincentive for older workers. To read the study and learn more about its authors—Gopi Shah Goda of Stanford University, John B. Shoven of Stanford and the National Bureau of Economic Research (NBER), and Sita Nataraj Slavov of George Mason University and NBER—please see [“Work Incentives in the Social Security Disability Benefit Formula.”](#)

### BACKGROUND

Determining SSDI's impact on work incentives is done by comparing the impact of additional work on the value of potential benefits and the duration of eligibility, compared to the amount of taxes paid. As the relative value of benefits compared to taxes declines, the incentive to work and earn more also drops—or becomes a disincentive.

SSDI is financed by a 1.8 percent payroll tax—a portion of the overall Social Security tax—and the revenues are credited to a separate DI trust fund. It is a flat tax levied on income up to a maximum amount (\$118,500 in 2015) that increases each year with the average wage index. Although employers pay half the tax, economists generally assume the 1.8 percent tax liability falls entirely on workers. Determining whether SSDI creates incentives or disincentives to work depends on whether the value of potential benefits earned is greater or less than the 1.8 percent tax.

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Eligibility for SSDI benefits is determined by various factors, but they are essentially based on work history—how recently a person has worked, and for how long—and the individual’s earnings levels.

- To qualify, an individual must earn a minimum amount per quarter—the number is \$1,220 per quarter in 2015, and the amount increases each year with average wages—and the amount of benefits earned generally rises at higher income levels.
- The work history requirements generally rise with age; that is, the older that individuals are, the more years they must have worked to qualify for benefits. In addition, the individual must meet a “recent work test.” Rules for the recent work test vary before age 31, but after that point the individual has to have worked 5 of the prior 10 years to qualify. The result of this is that someone who has worked for several years before exiting the labor force will continue to have eligibility for another five years.

When the individual reaches normal retirement age, SSDI benefits are converted to Social Security retirement benefits, although these retirement benefits are typically greater than those received by a nondisabled individual with the same work history.

## RESULTS OF THE STUDY

To isolate the impact of SSDI program rules on work incentives, this study develops stylized, hypothetical earnings levels and work histories based on methodologies employed by the actuaries at the Social Security Administration. Because they are stylized, these figures do not reflect fluctuations in earnings that may occur during an individual’s career or years spent outside the workforce.

The work incentive effects largely come from two factors. The first factor is the amount an individual gains in potential benefits for each additional dollar earned. In economic terms, this is known as the “intensive margin.” The analysis suggests the SSDI program creates incentives to earn more income earlier in life, when workers have a greater chance of influencing the level of potential benefits and a longer period in which to receive them.

- For both men and women, the relative benefit of earning an extra dollar is low early in life, as these low-earning years fall out of the SSDI benefits calculation and are replaced by subsequent higher-earning years. However, the benefit rises rapidly soon after that.
- The benefit from earning an extra dollar peaks at age 27, then declines gradually until the value of the benefit at age 40 is less than the 1.8 percent payroll tax. By age 63, the benefit from earning additional income is almost zero.
- This pattern arises because the number of years of potential eligibility declines as the individual approaches retirement age (when disability insurance payments are replaced by Social Security retirement benefits). Starting at age 66, the benefit from earning an additional dollar at this age is exactly zero.

The second factor affecting work incentives, called the “extensive margin,” is how much return an individual gains for each additional year of working. In short, the analysis indicates SSDI creates strong incentives to earn minimum income levels through age 60, but much weaker incentives to earn more than the minimum. Starting at age 57, workers face an actual disincentive to receive a full year of earnings.

- The return for working an additional year at an income level just large enough to qualify for benefits is large and positive through age 60. It peaks at age 50, and then begins declining, falling below the 1.8 percent SSDI tax rate at age 61 for both men and women. It becomes zero at age 62 and on as the additional year of work at such a low level of income neither extends eligibility nor increases benefits in the event of disability.
- Earning more than the minimum provides smaller returns, which drop below 1.8 percent at age 57. It reaches close to zero at age 62, as additional years of work at full earnings do not extend eligibility but do modestly increase benefits in the event of disability.

## POLICY IMPLICATIONS

Two key factors in the SSDI program affect work incentives and disincentives.

- First, the requirements concerning how recently an individual worked at any given point implies that leaving the labor force could reduce potential benefits in the future.
- Second, SSDI benefits are converted to retirement benefits at the normal retirement age. After this point the SSDI program merely boosts retirement benefits that would have been available anyway. These two features combine to discourage working beyond age 61.

One way to reduce work disincentives for older workers is to exempt earnings from the SSDI payroll tax beyond age 60. Under this policy, workers would remain eligible for SSDI after age 60. The payroll tax at younger ages could be increased slightly to keep the system revenue-neutral. This policy could either increase labor supply among older workers by boosting their take-home pay, or it could boost labor demand by encouraging more firms to hire older workers.