

# BACKGROUNDER

No. 3877 | MARCH 3, 2025 THOMAS A. ROE INSTITUTE FOR ECONOMIC POLICY STUDIES

# Ending the Retirement Earnings Test: A Pro-Growth Proposal to Cut Social Security Taxes and Improve Program Solvency

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#### **KEY TAKEAWAYS**

Social Security's Depression-era retirement earnings test continues to discourage work among older Americans by functioning like an additional 50 percent tax.

But, in contrast to having too many workers contending for too few jobs in 1935, there are too few workers to meet today's workforce needs.

Ending the earnings test would increase work and income among older Americans, boosting personal incomes, economic output, revenues, and Social Security's solvency. hen Social Security began in 1935 in the wake of the Great Depression, its designers included a retirement earnings test intended to push older workers out of the labor force to reduce competition for jobs among younger workers. Although it has been modified over time, Social Security's retirement earnings test still discourages work among older Americans by taking away \$1 in Social Security benefits for every \$2 in earnings among anyone who claims Social Security benefits between the ages of 62 and 66 and who earns more than \$23,400 per year.<sup>1</sup>

Although the earnings test is perceived as a 50 percent tax on work above the threshold, the money taken out of Social Security benefits between ages 62 and 66 is later added back into future benefits through an updated benefit calculation when recipients reach their normal retirement age—if the individuals live to

This paper, in its entirety, can be found at https://report.heritage.org/bg3877

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their normal retirement age.<sup>2</sup> The updated benefit is considered an actuarially fair adjustment, meaning that if the individual lives to the average life expectancy, the added benefits will equal those previously subtracted through the earnings test. In reality, because not everyone lives to the normal life expectancy, individuals with longer-than-average life expectancies end up getting more back than was taken away, and those with shorter-than-average life expectancies end up getting less back than was taken away.

#### Why Does Social Security Have a Retirement Earnings Test?

When Social Security was established in 1935, in the wake of the Great Depression, the unemployment rate was roughly 20 percent. As a way to encourage older workers to leave the labor force to increase job opportunities for younger workers, Social Security included an earnings test that prevented anyone who was otherwise eligible for Social Security benefits from receiving them unless they were fully retired from gainful employment.<sup>3</sup> In this sense, Social Security's original earnings test was a 100 percent, nonrefundable tax on earnings up to the value of an individual's Social Security benefit.

Over time, various amendments were made to allow individuals to earn increasing amounts of income while still claiming benefits, to change the proportion of benefits withheld, or to reduce the age under which the retirement earnings test applied. The most recent change, in 2000, eliminated the retirement earnings test for beneficiaries at or above the full, or normal retirement age.

In contrast to having too many workers contending for too few jobs in 1935, there are too few workers to meet today's workforce needs. Thus, the original argument in favor of Social Security's retirement earnings test is irrelevant, and the opposite policy—ending the retirement earnings test entirely—could help to reduce the gap between workers and jobs.

If there is any rationale for maintaining a retirement earnings test, it is predominantly paternalistic. Advocates for maintaining the earnings test argue that if someone is still working and earning above roughly 150 percent of the poverty level, he probably should not have claimed early and reduced Social Security benefits as he will likely have higher income needs later in life when he presumably stops working. Thus, the earnings test forcibly shifts incomes from earlier to later in life. This is not always the best outcome for everyone. For example, individuals who have pensions or annuities that kick in down the road, those who need or want to pay one-time expenses, such as a semester of college tuition for a family member, and individuals who are diagnosed with a serious illness would usually be better off without Social Security's earnings test. Moreover, just because someone claims benefits early while still working does not necessarily mean he is depleting his future resources; he may save and invest those benefits, or the benefits may keep him from drawing down on his personal retirement savings.

## How Does the Social Security Earnings Test Affect Individual Beneficiaries?

The majority of Social Security beneficiaries—61 percent of them—claim Social Security benefits before reaching their normal retirement age, and a rising share of older Americans continues working in their 60s.<sup>4</sup> A Social Security Administration analysis of 2008 beneficiaries found that 37 percent of beneficiaries who were younger than the normal retirement age had earnings.

To understand how the Social Security earnings test affects individuals, consider the following examples of workers who decide to claim Social Security benefits as soon as they are able, at age 62, and to continue working. Note that claiming benefits at age 62 results in 30 percent lower benefits than waiting until the normal retirement age of 67.

- Mr. Smith earns \$30,000 a year. His annual benefit of \$12,888 is reduced by \$3,300, to \$9,588.
- Ms. Jones earns \$60,000 a year. Her annual benefit of \$19,608 is reduced by \$18,300, leaving her only \$1,308.
- Mr. Davis earns \$80,000 a year. His annual benefit of \$24,088 is eliminated entirely.
- Ms. Williams earns \$150,000 a year. Her annual benefit of \$32,472 is eliminated entirely.

These are individual examples, but the earnings test has broader economic implications because of how it affects labor force participation and earnings. FIGURE 1

### How the Retirement Earnings Test Affect Benefits

Individuals who opt to receive Social Security benefits early (between ages 62 and 66) and continue to work are hit with a reduction in benefits due to the Retirement Earnings Test (RET). The RET affects workers of nearly all income groups.

	Mr. Smith	Ms. Jones	Mr. Davis	Ms. Williams
Annual earnings	\$30,000	\$60,000	\$80,000	\$150,000
Social Security benefit at age 62	\$12,888	\$19,608	\$24,088	\$32,472
<b>RET reduction</b>	-\$3,300	-\$18,300	-\$24,088	-\$32,472
Final Social Security benefit	\$9,588	\$1,308	\$0	\$0

SOURCE: Author's calculations based on Social Security benefit formula and retirement earnings test for 2025.

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## **Economic Effects of the Retirement Earnings Test**

Since the earnings test is perceived, and functions in the short term, as an additional 50 percent tax on earnings, it leads to incredibly high marginal tax rates that discourage work. For example, someone who has median earnings of \$64,000 a year while collecting early Social Security benefits faces a perceived marginal tax rate of 84 percent (22 percent in federal income taxes, roughly 4 percent in state taxes, 7.65 percent in direct<sup>5</sup> Social Security and Medicare taxes, and 50 percent from the retirement earnings test). Even individuals making only \$27,000 face a perceived 72 percent marginal tax rate. Consequently, workers affected by the retirement earnings test generally take home only about \$1 of every \$4 they earn above the earnings test threshold (until their Social Security benefit is reduced to zero).

Not surprisingly, economic studies consistently show that the retirement



earnings test causes people to work and earn less than they otherwise would, and the Social Security Administration acknowledges that the test "affects workforce participation and benefit-claiming behavior."<sup>6</sup>

In particular, studies show that workers subject to the earnings test cluster their earnings right around the earnings test threshold.<sup>7</sup> As a study that examined three different changes in the earnings test found:

The clustering demonstrates that the earnings test leads some beneficiaries to hold down their labor supply. The clustering moves when the exempt amount moves, and disappears when the earnings test is eliminated. Therefore, many beneficiaries are reacting promptly and flexibly to the earnings test rules.<sup>8</sup>

In response to the 2000 change that eliminated the retirement earnings test for individuals who reached their full retirement age (which was 65 and two months in 2000), two studies found that individuals between the ages of 66 to 69 increased their earnings by 16 percent to 20 percent.<sup>9</sup> Earnings increases were largest for those with earnings amounts closest to the earnings test threshold, and among younger workers.<sup>10</sup> Increases in hours worked were largest for men with a high school degree and no post-secondary education.<sup>11</sup>

In addition to increases in work among those already working, the elimination of the earnings test for those above the normal retirement age also caused some beneficiaries who had already retired to rejoin the labor force. Three studies on labor force participation found that it increased by 0.8 percentage points to 3.5 percentage points for all individuals ages 65 to 69.<sup>12</sup> The labor force participation rate among individuals ages 65 to 69 was 33.4 percent in 2024.<sup>13</sup>

#### The Effect of Ending Social Security's Retirement Earnings Test

Ending Social Security's retirement earnings test has the potential to significantly increase work and earnings among older Americans. In addition to boosting personal incomes, wealth, and financial well-being, additional work would also increase economic output and directly increase income tax revenues and Social Security and Medicare tax revenues, as well as indirectly increase other revenues, such as sales taxes. Moreover, an increase in older Americans in the workforce could have positive societal impacts by reducing worker shortages, imparting vocational and institutional knowledge, and fostering intergenerational mentorship.

**Increase the Number of Workers.** According to the U.S. Census Bureau, 20.7 million Americans between the ages of 62 and 66,<sup>14</sup> and 168 million people total, are currently in the U.S. labor force.<sup>15</sup> If the labor force participation rate among people ages 62 to 66 were to increase by 0.8 to 3.5 percentage points—similar to the range of increase found following the 2000 change to the retirement earnings test—that would translate to an additional 166,000 to 724,000 people in the workforce.

In comparison to prior changes in the retirement earnings test that tweaked the earnings threshold and that applied to workers who were older than the normal retirement age, ending the test entirely would almost certainly produce larger benefits today. That is because it would apply to a broader and younger age cohort than past changes—everyone ages 62 to 66—and past studies show that younger workers are more likely to respond to changes in the retirement earnings test. Additionally, this cohort includes the baby boom population who are large in number and have demonstrated higher labor force participation rates at older ages. Lastly, demand for workers in the U.S. labor market is currently high, as the number of job openings has exceeded the number of people looking for jobs since 2021,<sup>16</sup> and nearly half of small businesses report that they have job openings they want to fill but have few or no qualified applicants for the positions.<sup>17</sup>

Since ending the retirement test entirely would affect a younger cohort of individuals than prior changes and there is no shortage of job openings in the U.S., the increase in labor force participation will almost certainly be greater than after past tweaks to the earnings test. An increase of 5.0 percentage points would amount to 1.035 million additional workers.

**Increase Earnings and Tax Revenues.** While hours and earnings vary for different workers, the entry of up to one million additional workers into the labor force would increase individual earnings and government tax revenues. If older workers spurred to re-enter or to remain in the workforce earned the U.S. average of about \$63,500 per year, an additional 166,000 to 1.035 million additional full-time workers would generate \$10.5 billion to \$65.7 billion in additional earnings per year.<sup>18</sup> Those earnings would lead to an additional \$1.3 billion to \$8.2 billion in annual Social Security revenues, an additional \$305 million to \$1.9 billion in annual Medicare tax revenues, an additional \$421 million to \$2.6 billion in annual state and local tax revenues.<sup>20</sup> In total, ending Social Security's retirement earnings test could increase government revenues by \$2.9 billion to \$17.9 billion per year.

In addition to increasing the labor force participation rate, ending the retirement earnings tax would also increase work hours and earnings among older workers who are already in the labor force and who limit their work due to the Social Security earnings test. This increase in work among those already employed would further increase economic output, personal income, and tax revenues.

**Improve Social Security's Solvency.** Ending Social Security's retirement earnings test would be scored as revenue neutral in a static analysis because the money taken out of people's paychecks when they work is factored back into their future benefits after they reach retirement age. However, because the test functions like a 50 percent tax and economic studies find that it significantly reduces work and earnings, ending it would increase work and earnings, 12.4 percent of which would equal new Social Security revenues. While additional earnings

#### TABLE 1

# Impact on Earnings and Tax Revenues from Eliminating the Retirement Earnings Test

RANGE OF ESTIMATES

Percentage Point Increase in Labor Force	Additional Workers (ages 62-66)	Earnings	Social Security	Medicare	Federal	State	Total Annual
0.008	165,595	\$10,541,264,605	\$1,307,116,811	\$305,696,674	\$843,301,168	\$421,650,584	\$2,877,765,237
0.035	724,479	\$46,118,032,646	\$5,718,636,048	\$1,337,422,947	\$3,689,442,612	\$1,844,721,306	\$12,590,222,912
0.05	1,034,970	\$65,882,903,781	\$8,169,480,069	\$1,910,604,210	\$5,270,632,302	\$2,635,316,151	\$17,986,032,732

**SOURCE:** Author's calculations based on federal income tax rates for 2025, an assumed average state income tax rate of 4 percent, and average weekly earnings as of December 2024 (which translate to \$63,657 per year), as reported by the Federal Reserve Bank of St. Louis, "Average Weekly Earnings of All Employees, Total Private," https://fred.stlouisfed.org/series/CES0500000011 (accessed January 24, 2025).

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could translate into marginally higher Social Security benefits for some workers, most workers would see little or no change in their Social Security benefits as a result of the additional taxes they pay.<sup>21</sup> As noted, the increased labor force participation caused by ending the retirement earnings test would result in an additional \$1.3 billion to \$8.2 billion per year in new Social Security revenues. This could slightly delay Social Security's insolvency—currently projected to occur in the first half of 2033—by up to three months.<sup>22</sup>

**Potentially Reduce the Poverty Rate.** Eliminating the retirement earnings test is also likely to have the positive impact of reducing the poverty rate among older Americans. While ending the retirement earnings test would cause more people to receive early, and thus reduced, monthly Social Security benefits—both because it would increase the percentage of people who claim early, reduced, Social Security benefits, and because it would eliminate the transfer of benefits from earlier in life to later in life for those affected by the earnings test—total lifetime benefits should remain the same (or potentially slightly higher) while personal earnings and incomes would rise. In a simulation of the impact of eliminating the retirement earnings test, a 2013 study by the Social Security Administration estimated that the change would have no effect on the long-term poverty rate if behavioral effects are not taken into account, and would have a positive effect on the CHART 2

#### **Research Finds Older Americans Can Work Longer**

Using two methods for estimating work capacity—Health and Mortality—a recent study shows that most older men can work longer than they do currently.



**SOURCE:** Author's calculations using data from Courtney Coile, Kevin S. Milligan, and David A. Wise, "Health Capacity to Work at Older Ages: Evidence from the U.S.," National Bureau of Economic Research, *Working Paper* No. 21940, http://www.nber.org/papers/w21940.pdf (accessed February 3, 2025).

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poverty rate—causing a 0.1 percentage point reduction in poverty among individuals younger than the full retirement age—when including behavioral effects.<sup>23</sup> As noted in the study, "Poverty rates decline because some beneficiaries are assumed to have greater income from earnings or additional benefits for claiming a year earlier."<sup>24</sup> In other words, additional work and earnings leads to a decline in poverty.

**Include Societal Benefits.** Economic studies show that continued engagement in work—including part-time—can have positive impacts on mental and physical health, including delaying cognitive decline, increasing social interactions, and maintaining a sense of purpose.<sup>25</sup> For example, a 2006 study by Dhaval Dave, Inas Rashad, and Jasmine Spasojevic found, "Retiring at a later age may lessen or postpone poor health outcomes for

older adults, raise well-being, and reduce the utilization of health care services, particularly acute care."<sup>26</sup> Moreover, older workers have decades of knowledge and skills that they can pass down to younger generations, and intergenerational collaboration can enhance production and innovation while fostering mutual respect.

While some people—particularly those in physically demanding occupations—cannot continue working into their mid-60s, economic studies find that Americans' work capacity has significantly increased over the past three to four decades.<sup>27</sup> In particular, an analysis that projected that if older men in 2010 were to work at the same rates as men<sup>28</sup> in 1977 who had similar mortality rates, they would work an additional 4.2 years, on average—more than a 50 percent increase—between the ages of 55 and 69.<sup>29</sup> Using a different metric based on health comparisons of current workers, the study estimated that men and women could work an additional 2.7 years—a roughly 30 percent increase—between the ages of 55 and 69.<sup>30</sup> The known benefits that accrue to individuals who work longer and the additional work capacity of older Americans suggest significant room for widespread societal gains from even small increases in older Americans' labor force participation.

#### Conclusion

By functioning like an additional 50 percent tax on certain earnings, Social Security's retirement earnings test suppresses the work and earnings of older Americans. While that was the intent of the original, Depression-era earnings test—to push older people out of the labor force to free up jobs for younger workers—today's workforce skews much older demographically and society would instead benefit from the continued labor force participation of older Americans.

Moreover, improvements in health care and life expectancy alongside a reduction in the physical demands of most work have expanded older Americans' work capacity. By removing Social Security's disincentive to work at older ages, policymakers could increase the size of the U.S. labor force by up to one million workers. The additional full-time and part-time work of older Americans would: help to fill labor shortages; contribute to economic output; increase federal, state, and local tax revenues by up to \$18 billion per year; and modestly improve the solvency of the Social Security and Medicare programs. Additionally, individuals, workplaces, and society could benefit from improved physical and mental health and enhanced intergenerational mentorship and collaboration. As Social Security faces serious near-term shortfalls, most reforms involve substantial trade-offs. But eliminating Social Security's retirement earnings test offers a win-win reform—it would boost economic output, alleviate workforce shortages, increase personal incomes, improve Social Security's finances, and generate growth-induced revenue increases. Ending the outdated retirement earnings test would also provide a way for President Donald Trump to achieve his desire to cut taxes on Social Security benefits, and to do so without shortchanging Social Security's solvency.

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#### Endnotes

- 1. The earnings test level is updated annually; \$23,400 is the amount for 2025.
- 2. The normal retirement age is 67 for anyone born in 1960 or later. The normal retirement age is 66 for individuals born in 1954 and increases by two months per birth year, to 66 and 10 months for individuals born in 1959.
- Anya Olsen and Kathleen Romig, "Modeling Behavioral Responses to Eliminating the Retirement Earnings Test," Social Security Administration, Social Security Bulletin, Vol. 73, No. 1, 2013, https://www.ssa.gov/policy/docs/ssb/v73n1/v73n1p39.pdf (accessed January 2, 2025).
- 4. Emerson Sprick, "Social Security Claiming Age: Importance, Claiming Behavior, and Trends," Bipartisan Policy Center, February 2024, https:// bipartisanpolicy.org/blog/social-security-claiming-age-importance-claiming-behavior-and-trends/ (accessed December 12, 2024).
- 5. The full Social Security and Medicare tax rate is 15.3 percent, including 7.65 percent paid by the employee and 7.65 percent paid by the employer. Economists agree that workers generally pay the employer's portion through lower base wages. Factoring in the entire \$1.0765 in wages plus the employer's share of Social Security and Medicare taxes would translate to a marginal tax rate of 85.1 percent.
- 6. Olsen and Romig, "Modeling Behavioral Responses to Eliminating the Retirement Earnings Test."
- 7. Steven J. Haider and David S. Loughran, "The Effect of the Social Security Earnings Test on Male Labor Supply: New Evidence from Survey and Administrative Data," *Journal of Human Resources*, Vol. 43, No. 1 (February 2008), pp. 57–87, https://www.researchgate.net/publication/24142180\_The\_Effect\_of\_the\_Social\_Security\_Earnings\_Test\_on\_Male\_Labor\_Supply\_New\_Evidence\_from\_Survey\_and\_Administrative\_Data (accessed February 3, 2025); Leora Friedberg, "The Social Security Earnings Test and Labor Supply of Older Men," in James M. Poterba, ed., *Tax Policy and the Economy*, Vol. 12 (Cambridge, MA: MIT Press, 1998), pp. 121–150, http://www.nber.org/chapters/c10915 (accessed February 3, 2025); Cordelia Reimers and Marjorie Honig, "Responses to Social Security by Men and Women: Myopic and Far-Sighted Behavior," *Journal of Human Resources*, Vol. 31, No. 2 (1996), pp. 359–382; Michael V. Leonesio, "The Effects of the Social Security Earnings Test on the Labor-Market Activity of Older Americans: A Review of the Evidence," *Social Security Bulletin*, Vol. 53, No. 5 (1990), pp. 2–21, http://www.socialsecurity.gov/policy/docs/ssb/v53n5/v53n5p2.pdf (accessed January 3, 2025); and Gary Burtless and Robert A. Moffitt, "The Joint Choice of Retirement Age and Postretirement Hours of Work," *Journal of Labor Economics*, Vol. 3, No. 2 (1985), pp. 209–236.
- 8. Friedberg, "The Social Security Earnings Test and Labor Supply of Older Men."
- 9. Haider and Loughran, "The Effect of the Social Security Earnings Test on Male Labor Supply," and Theodore F. Figinski, "Women and the Social Security Earnings Test," University of California, Irvine, unpublished manuscript, 2012.
- 10. Haider and Loughran, "The Effect of the Social Security Earnings Test on Male Labor Supply."
- 11. Gary V. Engelhardt and Anil Kumar, "The Repeal of the Retirement Earnings Test and the Labor Supply of Older Men," Center for Retirement Research *Working Paper* No. 2007-1, 2007, http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1299703 (accessed January 3, 2025).
- 12. Friedberg, "The Social Security Earnings Test and Labor Supply of Older Men"; Jae G. Song and Joyce Manchester, "How Have People Responded to Changes in the Retirement Earnings Test in 2000?" *Social Security Bulletin*, Vol. 67, No. 1 (2007), http://www.socialsecurity.gov/policy/docs/ssb/v67n1/v67n1p1.html (accessed January 3, 2025); and Figinski, "Women and the Social Security Earnings Test."
- 13. U.S. Bureau of Labor Statistics, "Labor Force Statistics," Current Population Survey, https://www.bls.gov/data/home.htm (accessed December 19, 2024).
- 14. In 2023, the U.S. Census Bureau estimated 20,699,395 people between the ages of 62 and 66: U.S. Census Bureau, "Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2020 to July 1, 2023," https://www.census.gov/data/tables/time-series/demo/ popest/2020s-national-detail.html (accessed December 19, 2024).
- 15. In November 2024, 168.268 million people ages 16 and older were in the labor force. U.S. Bureau of Labor Statistics, "Labor Force Statistics," Current Population Survey, https://www.bls.gov/data/home.htm (accessed December 19, 2024).
- 16. U.S. Bureau of Labor Statistics, "Job Openings and Labor Turnover Survey," https://www.bls.gov/jlt/ (accessed January 2, 2025).
- 17. William C. Dunkelberg and Holly Wade, "Small Business Economic Trends," National Federation of Independent Businesses, November 2024, https:// www.nfib.com/news-article/monthly\_report/industry-report/#:-:text=Five%20percent%20of%20owners%20reported,up%20two%20points%20 from%20October (accessed January 2, 2025).
- 18. Federal Reserve Band of St. Louis, "Average Weekly Earnings of All Employees, Total Private," FRED Economic Data, November 2024, https://fred. stlouisfed.org/series/CES0500000011 (accessed January 3, 2025).
- 19. This number conservatively assumes an average federal income tax rate of 8 percent across total additional income, which is lower than the lowest 10 percent bracket, factoring in the effect of standard and itemized deductions on average tax rates. The average tax rate for an older American, ages 62 to 66, who has average earnings and takes the standard deduction is 8.65 percent.
- 20. This number assumes an average of 4.0 percent in additional state and local tax revenues generated on behalf of the additional income. These added taxes would primarily include income and sales tax revenues.

- 21. Social Security benefits are calculated based on individuals' top 35 years of earnings. If an individual's additional earnings prompted by elimination of the retirement earnings test were to be higher than any one of his 35 years already included in his benefit calculation, then the higher-earnings year would replace one of the lower-earnings years in his benefit calculation and result in a slightly higher annual benefit. If the individual's additional earnings after eliminating the retirement earnings test were not higher than his next-highest 35 years of earnings, he would have no change in his benefit despite paying more in total Social Security taxes.
- 22. Author's estimates based on financial projections from the Social Security Trustees and author's revenue estimates in Table 1.
- 23. Olsen and Romig, "Modeling Behavioral Responses to Eliminating the Retirement Earnings Test."
- 24. Ibid.
- Young-Mee Kim, Soong-nang Jang, and Sung-il Cho, "Working Hours, Social Engagement, and Depressive Symptoms: An Extended Work-Life Balance for Older Adults," *BMC Public Health*, Vol. 23, Article No. 2442, December 6, 2023, https://doi.org/10.1186/s12889-023-17072-x (accessed January 10, 2025), and Anna Krzeczkowska et al., "A Systematic Review of the Impacts of Intergenerational Engagement on Older Adults' Cognitive, Social, and Health Outcomes," *Ageing Research Reviews*, Vol. 71 (November 2021), https://pubmed.ncbi.nlm.nih.gov/34237435/ (accessed January 10, 2025).
- 26. Dhaval Dave, Inas Rashad, and Jasmine Spasojevic, "The Effects of Retirement on Physical and Mental Health Outcomes," National Bureau of Economic Research *Working Paper* No. 12123, revised January 2008, https://www.nber.org/papers/w12123 (accessed January 10, 2025).
- 27. Rachel Greszler, "Rescuing Entitlements and Pensions: Study Shows Americans Can Work Longer," Heritage Foundation *Issue Brief* No. 4539, April 6, 2016, https://www.heritage.org/jobs-and-labor/report/rescuing-entitlements-and-pensions-study-shows-americans-can-work-longer.
- 28. Due to the significant increase in women's labor force participation between 1977 and 2010, the study only estimated the increase in men's labor force participation when using the mortality rate comparison.
- 29. Courtney Coile, Kevin S. Milligan, and David A. Wise, "Health Capacity to Work at Older Ages: Evidence from the U.S.," National Bureau of Economic Research *Working Paper* No. 21940, January 2016, http://www.nber.org/papers/w21940.pdf (accessed January 16, 2025).
- 30. Ibid. The study used two separate metrics based on mortality and health. The mortality metric analysis examined how much older Americans would work if they worked at the same rate as previous generations of Americans who had the same mortality rates worked (mortality rate equals the percentage of individuals in each age group who die at that age). The study compared older workers in 2010 to younger workers in 1977 who had the same mortality rates. The health metric analysis examined how much older Americans could work if they were employed at the same rates as slightly younger workers (ages 51 to 54) who have similar health characteristics.