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Enhancing Work Incentives for Older Workers: Social Security and Medicare Proposals to Reduce Work Disincentives

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STATEMENT OF INDEPENDENCE

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Many important aspects of Social Security and Medicare that influence the value of continued work were enacted between 1935 and 1983. We believe that several of these provisions are inappropriate and counterproductive for 2020 and beyond. It is our position that rather than discouraging work by older individuals, these programs should encourage continued employment by older people who are able and willing to remain in the labor force. This thought is behind the policy proposals that we suggest and evaluate in this paper.

The American population is aging; and as a result, a larger share of the actual and potential labor force is now age 55 years and over. The Bureau of Labor Statistics reports that the proportion of the labor force age 55 and over rose from 11.9 percent in 1994 to 21.7 percent in 2014, and the bureau projects that it will increase to 24.8 percent by 2024 (Toossi 2015). The increasing share of the labor force age 55 and older is driven in part by the aging of the population;¹ however, another important component is the substantial increase in the labor force participation rate among older cohorts. The participation rate of individuals age 55 and older rose from 30.1 percent in 1994 to 40.0 percent in 2014 (Toossi 2015). Table 1 reports the increase in the labor force participation rates of older age groups that are of particular interest for this paper. Thus, older workers have become more important for the nation's productive capacity due to the aging of the population and increasing proportion of older workers who are delaying their departure from the labor force. We believe that many other older Americans are physically and mentally able to work and have a desire to remain in the labor force. However, they are currently discouraged from continued employment because various provisions of Social Security and Medicare reduce their take-home pay and thus make extra hours of work less rewarding.

Table 1. Labor Force Participation Rate, by Age (percent)

Age (years)	Year		
	1994	2004	2014
62-64	38.7	44.4	50.2
65-74	17.2	21.9	26.2
75 and old	5.4	6.1	8.0

Source: Toossi (2015).

One of the driving forces associated with this population aging is the increase in the remaining life expectancy at older ages. Declines in the age-specific mortality rates at older ages also affect the timing of retirement. With longer life expectancy, retirement at any age requires more savings and pension assets to achieve the same level of annual income. We expect that further increases in life expectancy will lead more individuals to want to work longer and delay retirement. In such an environment, federal policies should be reexamined and modified to remove disincentives for continued work.

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1. Similar statistics for the population show that 26.2 percent of the national population was 55 and older in 1994, and that this increased to 34.2 percent in 2014 and is projected to increase to 38.2 percent in 2024 (Toossi 2015).

Retirement decisions depend on whether employees can remain in their career jobs, on the availability of other jobs for individuals who have left career employment, and on the net earnings that older workers can achieve in the labor market. In this paper, we focus on several aspects of the Social Security and Medicare programs that influence both the labor supply of older individuals and the labor demand for older workers. We assert that there are aspects of Social Security and Medicare that discourage older workers from participating in the labor force and thus are not appropriate for today's economy and aging society. We offer three reform proposals that would remove the disincentives for Social Security beneficiaries to remain in the labor force. First, we consider the impact of eliminating the earnings test for participants between age 62, the early retirement age (ERA), and the full retirement age (FRA), which is currently 66 and 6 months but will increase to 67 by 2022. Second, we examine the effects of creating a paid-up status for Social Security, a point at which employees and employers would no longer be required to pay the payroll tax and earnings would not alter future benefits. Third, we offer a similar proposal for a paid-up status for Medicare, coupled with a policy shift for Medicare that would return the program to its original status as the primary payer for covered expenditures rather than its current status as the secondary payer.

If adopted, each of these proposals would remove significant disincentives for older persons to remain in the labor force by increasing the net value of additional hours of work. In the analysis that follows, we describe our proposals in more detail and consider the new work incentives that would result if our proposals were adopted. A significant concern when considering the adoption of our proposals is their impact on the short- and long-run financial status of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance (OASDI) Trust Funds and the Hospital Insurance Trust Fund. We provide a preliminary review of the impact of our proposals on the long-term deficits these programs face. However, an important reason for our support for these proposals is that we argue that the costs and benefit implications of Social Security and Medicare policy changes should be viewed in a broader fiscal perspective. Therefore, one should not focus solely on the cost implications for Social Security and Medicare; instead, analysts should be concerned with how the adoption of our proposals would affect overall government costs and revenues. Although most of our discussion focuses on the impact of total federal revenues (payroll taxes plus income taxes) in response to our policy changes, one should also consider any gain in revenues to state and local governments and the potential for reductions in welfare programs if labor supply and earnings increase due to the work incentives of our proposals.

Specifically, we argue that a comprehensive assessment of the merits of the proposals must include the labor market responses of older persons, the ensuing increase in hours of work and accompanying higher earnings, and the increase in federal income tax revenues. The work incentives imbedded in our proposals should increase hours of work for individuals already in the labor force and also increase the labor force participation rates of older Americans. A larger labor supply means greater earnings and also higher income tax revenues to federal, state, and local governments. Continued employment and higher incomes should improve the economic well-being of older Americans and help them finance the increasing years in retirement. The key question in evaluating our proposals should be their impact on total government costs and revenue.

Our analysis begins with a brief discussion of the importance of understanding how older workers would likely respond to increases in their net hourly wage rates (e.g., the labor supply elasticity of older persons). Next, we present our three proposals to remove disincentives for work in Social Security and Medicare. In each case, we outline the proposal and discuss how the proposed change would affect the work incentives of older Americans. It is important to note that we are not proposing reductions in benefits that might make

longer work mandatory for low-income Americans. Instead, our proposals provide positive incentives to remain in the labor force. Finally, we discuss how each of our proposals might affect Social Security and Medicare revenues and costs and the long-run financial challenges facing each of these systems. Our analysis posits that any such evaluation must be based on costs and revenues to the federal government as a whole and should not be limited to a narrow assessment of the impact of the retirement programs.

I. The Importance of Elasticities

The policies that we propose would increase the net take-home wages of eligible workers, who would be age 62 years and over in all cases. The first policy, eliminating the Social Security earnings test, would apply to people 62 to 67 (as of 2022), and the other two policies would apply to those either older than 65 or 67, depending on how they were implemented. The net cost to the federal government of these policies to encourage working longer depends on age-specific labor supply elasticities and the magnitude of increased work in response to the policy changes. It might also depend on the age-specific labor demand elasticities and the change in demand for older workers if employer costs are reduced. Our assumption is that the implicit and explicit taxes that we propose to eliminate are borne by workers in the form of lower net wages (which is equivalent to assuming that the age-specific labor demand elasticity for older workers is much higher than the corresponding labor supply elasticity).²

Most estimates of labor supply elasticities estimate the response of workers in general to a change in hourly wages. We hypothesize that older workers have higher labor supply elasticities because the option of withdrawing from the labor force is a more viable choice for them. There are not many academic papers on age-specific labor supply elasticities. One such paper is by Eric French (2005), who ran special simulations of his model for Goda, Shoven, and Slavov (2007). His simulation results are displayed in table 2. His estimates show that older workers have much higher labor supply elasticities than younger workers. The labor supply elasticity for individuals age 40 is only 0.24, which indicates an inelastic labor supply where these workers do not respond much to wage changes by altering their hours of work. However, the supply elasticity for those age 65 is 2.7, which indicates that they are very responsive to wage changes. The supply elasticity would be even higher for those over 65, the age range affected by most of our proposals. The elasticity goes up with each additional year of age. This is consistent with the idea that work becomes much more optional for people in their 60s and 70s, and therefore their labor supply becomes much more sensitive to either explicit or implicit taxes as they age.

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2. There is a rather old economic literature that examines the incidence of payroll taxes that generally supports the assumption that workers bear some or all of the burden of employer portion of the payroll tax. See Brittain (1971), Gruber (1997), Hammermesh (1980), and Bingley and Lanot (2002). None of these papers consider the special case of the incidence of the employer tax for a specific subgroup of workers.

Table 2. Labor Supply Elasticity for Ages after Permanent Wage Change

Age age 30	0.03045
At age 40	0.24397
At age 50	0.54428
At age 55	0.82345
At age 60	1.4884
At age 61	1.59665
At age 62	1.83915
At age 63	2.08358
At age 64	2.31745
At age 65	2.68932

Source: Goda, Shoven, and Slavov (2007)

A new paper by Hudomiet, Hurd, and Rohwedder (2018) examines the impact of a 20 percent hike in take-home wages on the probability of working at age 70. They rely on interviews with people between 62 and 69 and ask them what they judge to be the probability that they will be working at age 70. They ask the simple question of whether the individual expects to work at age 70, and then follow up by asking the same question conditional on a 20 percent wage increase. They find an implied labor supply elasticity at 70 of about 1.7. However, this only estimates the impact of a net wage increase on the extensive margin (i.e., whether 70 year olds choose to work) and does not include the intensive margin (how many hours per day or week they choose to work). It is likely that the intensive margin also has a positive elasticity. That is, older workers would choose to work more hours when facing a higher effective wage rate. The total hours of labor supply elasticity would therefore be greater than 1.7.

Given this very limited academic literature on the labor supply elasticity of older Americans, we examine a range of elasticities—2.0 to 3.0—for those affected by our policy changes, although our results could be extrapolated to the cases of lower or higher elasticities. The main point is that the labor supply of people in their 60s and 70s is certainly much higher than for so-called prime age men or women. Older people have the luxury of working less or not at all at low wages, and of working more if work becomes more lucrative.

II. Policy Proposal 1: Eliminating the Social Security Earnings Test

From its inception, Social Security has included an earnings or retirement test that reduced the monthly benefits for individuals who claimed benefits but continued to work and have covered earnings. The original Social Security legislation denied any benefit to claimants who had any covered earnings. The objective of this provision was to encourage individuals to stop working and leave the labor force when they claimed benefits. Remember that Social Security was established in the middle of the Great Depression when unemployment rates were very high, and thus a policy encouraging older workers to leave the labor force then seemed appropriate for the federal government. Today, however, providing incentives for older workers to leave the labor force should no longer be a national objective. Instead, national policy should be focused on removing policies that provide disincentives for older persons to remain in the labor force. Our first proposal to completely eliminate the earnings test for Social Security benefits would remove one such disincentive and thus encourage individuals between the ERA of 62 and the FRA to remain in the labor force.

The earnings test has been altered numerous times and now applies only to Social Security beneficiaries between age 62 and the FRA. We propose the complete elimination of the earnings test for all beneficiaries. As we describe here, the earnings test is widely misunderstood and as such creates inefficiencies in the labor market. If individuals believe this is a tax on earnings, they will work less. Because of the future recalculation of benefits due to lost benefits, the earnings test has little or no impact on the financial status of the system. Thus, we argue for the immediate elimination of the earnings test. Our analysis begins with a history of the earnings test and how it has evolved. Next, we describe how the test actually works and its impact on the OASDI Trust Fund's current revenue and the future increase in the program's costs.

It is our conclusion that maintaining the earnings test for any beneficiary is bad public policy because it distorts work/retirement decisions and decreases the labor supply of older persons. It is an unpopular policy that is widely misunderstood, and it has essentially no long-run impact on the system's financial status. In sum, we wonder why this bad policy should be maintained when it could easily be ended at little or no cost.

History of the Earnings Test

Throughout the 80-year history of the U.S. Social Security program, an earnings test has been imposed on some or all beneficiaries. Table 3 provides a summary of the various changes in the earnings test, with successive amendments decreasing the restrictive nature of this provision and reducing the proportion of beneficiaries on whom the test has been imposed.³ Given this history of changes, it is easy to justify the total elimination of the earnings test.

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3. DeWitt (1999, 2000) provides a detailed discussion of changes to the earnings test.

Table 3. History of the Social Security Earnings Test

Year of Provision	Impact of Covered Earnings on Social Security Benefits
1935	Any reported earnings eliminate the full monthly benefit
1939	Monthly earnings in excess of \$15.00 ⁴ eliminate the full monthly benefit
1950	Beneficiaries age 75 and older are exempt from the earnings test
1954	Beneficiaries age 72 and older are exempt from the earnings test Reduction of one month's full benefits for each \$80.00 in earnings or fraction thereof
1960	Established a 50% tax earnings between \$1,201 to \$1,500 and a 100% tax rate on earnings above \$1,500 ⁵
1972	Earnings limits are indexed to national average wage index, with a tax rate of 50% on earnings above the earnings limit ⁶
1977	Establish different earnings limits for beneficiaries below the FRA and those older than the FRA. Earnings limit for those between ERA and FRA was \$3,240; for those above FRA, it was \$4,000.
1981	Eliminated earnings test for those age 70 and older
1996	Increased exempt level of earnings for beneficiaries age 65 to 69
2000	Eliminated earnings test for those who have reached FRA ⁷

Source: DeWitt (1999, 2000)

The initial 1935 Social Security legislation denied any benefits to those who had any reported earnings. Legislation in 1939 provided for an earnings exemption of \$15 per month before the imposition of a 100 percent tax on all earnings above this amount. One should note that at this time, there was no ERA benefit, the FRA was age 65, and there was no delayed retirement credit for postponing claiming. Subsequent legislation in 1950 exempted beneficiaries age 75 and older from the earnings test, and 1954 amendments exempted individuals over the age of 72.

By 1958, earnings below \$100 per month were not subject to the provision. In 1961, the tax was reduced to 50 percent for annual earnings between \$1,201 and \$1,500 but remained at 100 percent for earnings over \$1,500. Both these earnings break points were regularly increased in the 1960s, and in 1972 the earnings levels were indexed to the national average wage index. Finally, legislation in 2000 eliminated the test for

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4. Earnings amount increased periodically by legislation.
5. Earnings limits increased periodically by legislation
6. Exempt amounts from 1975 to 1999 are shown at <https://www.ssa.gov/oact/cola/rteahistory.html>
7. A tax rate of 33 percent established for those reaching FRA in a particular year with a higher earning limit.

all beneficiaries after they reached the FRA, while the claw back rate on earnings for those between the ERA and the FRA remained at 50 percent.⁸

Is the Earnings Test Really a Tax?

Currently, the Social Security earnings test only applies to people under the FRA who have already claimed Social Security benefits. At present, the FRA is 66 and 6 months (in 2019), and it will increase by two months per year until reaching 67 in 2022 for those born in 1960 or after. Under current legislation, the earliest age at which retirement benefits can be claimed will remain 62. Social Security policy provides that benefits are equal to 100 percent of a worker's primary insurance amount if benefits are claimed at the FRA. Monthly benefits are reduced if claimed between the ERA (age 62) and the FRA.⁹ There is also a delayed retirement credit if benefits are claimed between the FRA and age 70, which increases benefits by about 0.67 percent per each month that claiming is delayed, or 8 percent a year.¹⁰

In 2022 and thereafter, the earnings test will apply to people between age 62 and 67 who have already claimed Social Security retirement benefits. In effect, the earnings test “claws back” or “withholds” Social Security benefits when labor market earnings exceed the specified earnings limit. In fact, there are two thresholds: a lower one that applies to the years before the year in which the participant reaches the FRA, and a higher one that applies to the year the participant reaches the FRA. In 2019, the two annual earnings thresholds are \$17,640 and \$46,920. These thresholds are adjusted annually for changes in the economy-wide average wage rate.

Social Security benefits are “withheld” at a rate of \$1 for every \$2 of earnings above the lower threshold when it applies and at a rate of \$1 for every \$3 for earnings above the higher threshold when it applies. In the year when the participant reaches the age of 67 (or the FRA), only earnings before the day of achieving the FRA face this withholding. This direct effect of the earnings test seems to be well understood by individuals who are working or are considering working between the ERA and the FRA. Most older participants seem to believe that the earnings test is a significant tax on their earnings (over and above the personal income tax), and they consider the reduction in their market wage when deciding on the number of hours they desire to work.

How Does the Earnings Test Affect Future Benefits?

The impact of the earnings test is more complicated than it appears because future benefits are increased when benefits are lost or withheld due to the earnings test. The withheld benefits are treated as deferred benefits and the monthly benefit is recomputed at the FRA, taking these deferrals into account. That is, the

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8. Information on changes in the earnings test is provided by the Social Security Administration, *Annual Statistical Supplement, 2008*, <https://www.ssa.gov/policy/docs/statcomps/supplement/2008/2a29-2a32.html>
9. The percentage reduction for claiming benefits before the FRA is 0.56 percent per month for the first 36 months and about 0.42 percent for each additional month.
10. Consistent with encouraging workers to postpone claiming, the delayed retirement credit has been increased over time. For individuals reaching full retirement age before 1982, the increase was only 1 percent a year. See https://www.ssa.gov/OP_Home/handbook/handbook.07/handbook-0720.html.

benefit level at and beyond the FRA is higher because of the earnings test withholding; in essence, the system treats months of lost benefits as a delay in claiming when benefits are recalculated. Thus, the earnings test is more like a forced saving plan than a tax, with the rate of return being the same, relatively generous inflation-adjusted return that applies to all Social Security deferrals. We believe that this recapture of the withheld benefits with above-market interest is not widely understood by participants. The earnings test likely has the distortionary effects of a significant tax, even though that characterization is technically inaccurate. We are not alone in this opinion. We note that Auerbach and others (2016) assumed that the earnings test had the incentive effects of a 50 percent tax on income over the limits.

Would the Elimination of the Earning Test Adversely Impact the Financial Status of the OASDI Trust Fund?

The recomputation of benefits at the FRA means that the earnings test does not improve the long run finances of the Social Security system. In fact, due to the generosity of the return to deferring benefits, eliminating the earnings test would slightly improve the present value of the net liabilities of the system. In 2017, legislation was introduced to eliminate the earnings test (H.R. 3077), and the bill was evaluated by the chief actuary of Social Security. The bill proposed that the earnings test be eliminated in 2019. Because the initial impact would be to pay additional benefits to those who have been or would be facing benefit withholding, the change worsens the short-run deficit of Social Security. Steve Goss, the chief actuary, estimated that an additional \$192 billion of benefits would be paid out between 2017 and 2026. He also estimated that the date when the combined OASDI Trust Fund will be exhausted would be moved forward from 2034 to 2033. In the long run, however, the financial balance of the OASDI Trust Fund would be marginally improved by the elimination of the earnings test.¹¹ This is because the better-than-actuarially fair adjustments to post-FRA benefits would also be eliminated—that is, without the earnings test and the loss of benefits before the FRA, there would be no increase in future benefits after the FRA.

Goss also finds that total labor supply and labor market earnings would be modestly increased due to the elimination of the earnings test. This implies that the elimination of the earnings test would increase total labor income, which would in turn increase federal tax revenues.¹² Thus, in addition to the small favorable impact on the long-run deficit facing Social Security, the elimination of the earnings test would also have a positive impact on total federal revenues.

Reform Proposal for the Elimination of the Earnings Test

The case for eliminating the earnings test is largely based on its complicated nature, the confusion that surrounds it, and the ensuing distortions in labor market decisions. The participants that face the earnings test likely misperceive it and think that they face a major disincentive to work beyond the relatively low

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11. This assessment by Goss is reported in a letter to the authors of the bill, U.S. representatives Sam Johnson and Jackie Walorski; see https://www.ssa.gov/OACT/solvency/JohnsonWalorski_20170629.pdf.

12. A number of past studies have attempted to estimate the impact of changes to the earnings test on the labor supply of beneficiaries. Although the results of these studies vary widely, the general view is that the elimination of the tax for some groups and higher levels of exempt earnings increased hours of work and labor force participation. See, e.g., Friedberg (2000), Baker and Benjamin (1999), Haider and Loughran (2008), Olsen and Romig (2013), Song and Manchester (2007), and Song (2007).

threshold earnings levels. If they perceive that the earnings test is a 50 percent tax on additional earnings, work and retirement decisions will be influenced. Even though their perception is not accurate, it probably does discourage work to a meaningful extent. In summary, the earnings test raises no revenue for the Social Security system in a present value sense, and it probably worsens the long-run fiscal position of the U.S. government. It reduces work by those between age 62 and 67. A “tax” that raises no long-run revenue and likely discourages labor supply seems like a good candidate for elimination. As such, we propose the immediate elimination of the earnings test.

III. Reform Proposal 2: Establish a Paid-Up Status for Social Security

Social Security benefits are determined by a formula that is based on the highest 35 years of indexed covered earnings. To determine potential monthly benefits for a claimant, the Social Security Administration (SSA) first calculates average indexed monthly earnings (AIME). During most of one’s working career, an additional year of earnings replaces a zero year of earnings and AIME increases, resulting in higher retirement benefits.¹³ In a sense, the increase in AIME and the resulting increase in the primary insurance amount represent a return on the payroll tax paid by the employee—that is, working an additional year and paying the payroll tax on earnings yields an increase in future Social Security benefits.¹⁴

Most individuals who attain the initial age of eligibility for claiming benefits, age 62 for early benefits, will already have 35 or more years of covered earnings (or 140 quarters of coverage). This is even more likely for individuals when they reach the age for full retirement benefits (FRA). Using age 67 as the FRA implies that most individuals reaching the FRA will have over 45 years since their last year of schooling. As a result, an additional year of work will at best increase AIME by a relative small amount. Because additional years of work and further earnings do not result in significant benefit increases, the payroll tax becomes almost a pure tax on the earnings of older workers. The fact that the payroll tax turns into a pure tax on work reduces the labor supply of older Americans. This is particularly harmful because the payroll tax turns into a tax on work just when labor supply elasticities are high.

The aim of this paper is to present proposals that would eliminate policies and regulations that introduce negative work incentives or job opportunities for older individuals. With this objective in mind, we consider the introduction of a “paid-up” status for Social Security. A paid-up status would mean that once an individual had achieved a certain age and covered career length criteria, they would no longer be subject to the payroll tax, and thus further work and additional earnings would not influence their future benefits. Paid-up status and the accompanying elimination of the payroll tax for included workers should stimulate an increased labor supply. Adopting a paid-up policy would somewhat reduce payroll tax revenues to the SSA; but due to increased hours of work, it should increase revenues to the general fund from greater income tax proceeds.

Although our discussion focuses on a single proposal for a paid-up status for Social Security, several options for achieving this status can also be considered. In general, one should consider simple and straightforward

13. The calculation of AIME is described at <https://www.ssa.gov/oact/progdata/retirebenefit1.html>.

14. The calculation of the primary insurance amount is described at <https://www.ssa.gov/oact/cola/piaformula.html>.

criteria for paid-up status, such as those that depend only on a designated age or years of credited earnings or both. Our initial proposal is for paid-up status to be achieved when the individual reaches the FRA or age 67. As noted above, most individuals who reach age 67 before claiming benefits will have 45 or more years of credited service. It is likely that using 45 years of credited service would result in about the same effect as setting the FRA as the sole criterion.¹⁵ In this option, we propose that paid-up status means that both the employee and employer would be exempt from the payroll tax.¹⁶

The impact of establishing a paid-up status for Social Security on the take-home pay of workers over the FRA depends on the incidence of the employer component of the payroll tax. Obviously, if a worker is no longer required to pay the employee component of the payroll tax, net earnings will rise. For example, a person currently earning \$100.00 will pay \$6.20 for the payroll tax and, as a result, will have take-home pay of \$93.80. Thus, net income will rise by 6.6 percent ($\$6.20/\93.80).

But what happens to the employer's payroll tax? Although there is some debate over the incidence of the employer's portion of the payroll tax, most economists think that the employer's portion is also borne by the worker in the form of lower wages. Both the employer and the employee face a Social Security payroll tax of 6.2 percent of earnings up to the earnings cutoff (\$132,900 in 2019). This means that below the earnings cap, an additional \$100 in earnings actually costs the employer \$106.20, with the employee receiving only \$93.80 in net pay. When economists say that the employee bears both halves of the tax, they mean that if the Social Security payroll tax were removed, the worker would receive take-home pay of \$106.20. Therefore, ending the payroll tax would result in the worker receiving 13.2 percent more in take-home pay ($\$12.40/\93.80). Because we have argued that the labor supply elasticity of workers age 65 or 67 and over might range from 2.0 to 3.0, the labor supply response to a 13.2 percent increase in take-home pay could result in a 26 to 40 percent increase in labor supply for those affected.

Even if the incidence of the payroll tax is shared by the employer and the employee, there still is a 13.2 percent wedge between what labor costs the employer and what the worker receives after payroll taxes. In the case of shared incidence, the affected workers would receive a higher net wage and the employers would face a lower cost of hiring older workers. Thus, both labor demand and labor supply would increase. Due to concerns over a loss of revenues to the SSA, one could consider paid-up proposals that would only eliminate the employees' portion of the payroll tax. None of these proposals would necessarily affect the increase in benefits from delaying the initial age of claiming benefits; that is, individuals would not be required to claim benefits when they achieve paid-up status.

Although the direct effect of establishing a paid-up status would clearly have an adverse impact on the long-run deficit of Social Security, a comprehensive analysis of the cost and value of this proposal must include an assessment of this change on the unified federal budget. If, as we expect, the increase in the hourly wage from working rises by 10 percent or more, current older workers are expected to increase hours of work and some individuals who would be outside the labor force under current rules would decide to enter the labor force. The labor supply effect would increase the earnings of those individuals who have achieved paid-up

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15. The Office of the Chief Actuary issued an assessment of the impact of setting 45 years (180 quarters) of credited service on the long-run financial status of Social Security. A statement issued in 2008 indicated that the long-run deficit would be increased by 0.28 percent of payroll; however, a similar study in 2018 estimated a larger impact of 0.52 percent of payroll. See https://www.ssa.gov/OACT/solvency/provisions/charts/chart_run363.html and https://www.ssa.gov/OACT/solvency/Warshawsky_20080917.pdf.

16. Using a paid-up criterion of 35 years has some appeal because the return on the payroll tax for individuals with 35 years of service drops substantially. If one is considering the paid-up status for Medicare at age 65, a rationale could be made for using 65 for Social Security to provide a uniform rule for these two programs.

status, which implies higher income tax revenues for the federal government. In the next section, we provide an estimate of the magnitude of this response. Policymakers should also consider that higher earnings in response to being paid up might also reduce federal welfare payments and increase tax revenues to state and local governments. Our main point is that though the policy change is limited to the Social Security program, the labor supply response would have an impact well beyond this program.

IV. Policy Option 3: Combining Paid-Up Status for Medicare with Switching Medicare to Primary Payer Status

The payroll tax for Medicare Part A is 2.9 percent of earnings, split 50/50 between the employer and the employee. That is, the contribution rate for each is 1.45 percent. Unlike the Social Security payroll tax, there is no upper limit on taxable earnings. If one had \$1 million in earnings, the total Medicare payroll tax would be \$29,000, or 2.9 percent of total earnings. In addition, there is a 3.8 percent Medicare tax on net investment income for married tax filers with an adjusted gross income in excess of \$250,000 (\$200,000 for single filers).

The Medicare payroll tax is a pure tax on work for most people. People who have paid Medicare payroll taxes for at least 10 years are eligible for free Medicare Part A when they reach 65. This means that contributions in all years beyond the first 10 have no effect on the insurance value of Medicare. Working an additional year or earning an extra \$10,000 in a given year would result in additional payroll taxes, but no additional benefits. Hence, our characterization of the Medicare payroll tax as a pure tax on work.

The first part of our third proposal is to introduce a paid-up status for the Medicare payroll tax at the same time that the Social Security payroll tax is eliminated via proposal 2. That is, under our base assumption, the Medicare payroll tax would be eliminated at the FRA. Variants of this policy could be considered. In particular, another policy that has some logic to it would be to have Medicare grant paid-up status at age 65, the age of eligibility for Medicare.

It is important to note that the payroll taxes for Social Security (12.4 percent) and for Medicare (2.9 percent) are on top of the marginal personal income tax rate applying to earnings. Most middle-income Americans face marginal personal income tax rates of either 12 percent or 22 percent under the new tax law. Under the standard assumption of economists that both halves of the payroll taxes are borne by workers, the effective tax rate on earnings for those with more than 35 years in the workforce is raised to 25.4 percent or 34.6 percent. Table 4 shows how this works.

Table 4. The Cost of an Employer versus Take-Home Pay for an Extra \$100 in Earnings

Factor	12%	12% with Paid-Up Status	22%	22% with Paid-Up Status
Cost to employer	107.65	107.65	107.65	107.65
Less employer payroll tax	7.65	0	7.65	0
Incremental earnings	100.00	107.65	100.00	107.65
Less income tax	12.00	12.92	22.00	23.68
Less employee payroll tax	7.65	0	7.65	0
Net take home pay	80.35	94.73	70.35	83.97
Effective tax rate	25.4%	12%	34.6%	22%

A key takeaway for us from table 4 is that instituting paid-up status for older workers for both Social Security and Medicare would amount to a 17.9 percent increase in the net wage for those in the 12 percent personal income tax bracket and a 19.4 percent take-home pay raise for those in the 22 percent bracket. These percentage raises are implied by the numbers in the next to last row of table 4.

Now, let us examine the impact of the elasticity of labor supply of those affected by the new paid-up rule. First, note that comparing the last two columns of table 4, Social Security loses \$15.30 per \$100 in earnings for the affected workers. However, in the case of someone in the 22 percent federal income tax bracket, income taxes go up by \$1.68/\$100 of earnings. So far, the net cost to the federal government is \$13.72. However, the big part of the income tax offset comes from the extra labor supply induced by the 19.4 percent increase in the net wage. If the elasticity is 2.0, then the extra earnings results in an extra \$8.54 in income tax proceeds, whereas if the elasticity is 3.0, the amount is \$12.80. The paid-up status does not pay for itself, but the forgone \$15.30 in payroll taxes is offset by a total of \$10.22 in income tax proceeds in the 2.0 elasticity case and by \$14.48 in the higher 3.0 case. These all use an effective federal marginal tax rate of 22 percent. The extra income tax proceeds reduce the cost of the paid-up policy by between 67 percent and 95 percent.

The first part of our third proposal is thus to extend the paid-up status to the Medicare portion of the payroll tax. We would not alter the 3.8 percent tax on net investment income for high-income taxpayers because that has essentially no impact on labor markets.

The second part of our third proposal is to switch Medicare's status from Medicare as a secondary payer (MSP) to Medicare as a primary payer (MPP) for participants age 65 and over. From 1965 through 1982,

people who reached age 65 with 10 years of payroll tax contributions to Medicare were provided with Medicare Part A (hospital insurance) coverage for free and with Medicare Part B (doctor visits) on a subsidized basis. The Medicare coverage was effective whether or not one was still working for an employer who offered employer-sponsored health insurance. This policy was referred to as Medicare as a primary payer. It meant that employers of older workers were not responsible for the major medical coverage included in Medicare.

Starting on January 1, 1983, Medicare switched to the MSP role, meaning that that if you worked for an employer with 20 or more employees that offered health insurance, the employer-sponsored plan became the primary payer. Medicare assumed a secondary payer role. Because employer plans are typically more comprehensive than Medicare, it basically meant that if one worked for such an employer, you lost your Medicare coverage and you and your employer were jointly responsible for health insurance coverage. The logic behind this switch was to provide Medicare for only those people over 65 who would not otherwise have health insurance. The idea was to target Medicare spending on people for whom the alternative was no group coverage. However, like all targeted benefits, MSP created a large, implicit tax. Someone over 65 considering whether to work or not now must consider whether Medicare will be available to them. If one does not work, they receive valuable Medicare insurance. If they do work and they are covered by an employer-provided health plan, they do not receive this insurance. The effect is a major tax on work, which has only gotten bigger as health costs have grown faster than wages. We argue that though this targeting policy saves Medicare money, it may not save the overall federal budget much money because the implicit tax discourages work and thus taxable earnings.

There can be no doubt that Medicare as MPP can be made to work. After all, it worked for 17 years between 1965 and 1982. What is in doubt is how large an implicit tax the current MSP policy puts on workers 65 and over. One can approximate the magnitudes. The average full-time employee 65 and over makes about \$46,000. About 4.1 million people are in this category, or about 9 percent of the population 65 and older. Certainly, many additional people in this age range work less than full time. In 2017, Medicare spent \$710.2 billion on its 58.4 million beneficiaries, for an average benefit of about \$12,000 per participant. The workers who are 65 and over are clearly younger and healthier than the average Medicare participant. However, if they work for an established employer, under current policy they must replace Medicare with employer-sponsored insurance that has substantially higher marketing and overhead costs than Medicare, as well as the need for the insurance company to make a profit. An educated guess would be that the employer-sponsored health insurance that is replacing Medicare due to the MSP policy costs about 20 percent of the gross earnings of the average full-time worker over the age of 65. The actual number could be between 15 and 25 percent, but 20 percent seems to us a reasonable estimate for our purposes.

As with all such implicit taxes, there is uncertainty about the incidence of the cost of the employer-sponsored health insurance made necessary because of MSP. Our base case is that the worker bears the cost and earns less than the value of his or her marginal product by the employer's share of the health insurance cost. Now, let us look at the difference between the treatment of workers who are 65 and over today versus how such workers would fare if they had full paid-up status for the payroll tax and Medicare had been shifted to MPP. This would cause either a dramatic reduction in the cost of employer-provided health insurance or, in some cases, its complete elimination.¹⁷ Table 5 repeats the analysis of table 4, but now assumes that

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17. Most labor economist believe that workers bear the cost of employee benefits in the form of lower cash earnings. If the cost of employer-provided health insurance for workers over the age of 65 is eliminated by our MPP proposal, we would expect that this saving would be passed on to the worker in the form of higher wages. The ensuing higher earnings would be subject to the personal income tax and thus increase federal revenues.

employers currently spend \$127.65 for each \$100 they pay their workers who are 65 and older. The extra \$27.65 consists of \$20 in health insurance benefits and \$7.65 as the employer portion of the payroll tax. Our proposal is to eliminate these costs. Our base-case assumption is that the worker would now earn the extra money (\$127.65 instead of \$100), but in any event the employee and the employer have this extra money to split between themselves.

Table 5. Cost to Employer versus Take-Home Pay for an \$100 in Earnings with MPP and Paid-Up Status

Factor	12%	12% with Paid-Up Status	22%	22% with Paid-Up Status
Cost to employer	127.65	127.65	127.65	127.65
Less employer payroll tax	27.65	0	27.65	0
Incremental earnings	100.00	127.65	100.00	127.65
Less income tax	12.00	15.32	22.00	28.08
Less employee payroll tax	7.65	0	7.65	0
Net take home pay	80.35	112.33	70.35	99.37
Effective tax rate	37.1%	12%	44.9%	22%

Table 5 shows the impact of full paid-up status plus the switch to MPP on the incentive to work. Today, without paid-up status and with MSP, a worker over 65 in the 22 percent federal income tax bracket brings home \$70.35 per \$100 of incremental earnings. With the full paid-up policy and with Medicare on an MPP basis, the worker would bring home \$99.37, while costing the employer exactly the same amount (\$127.65) as with current policies. This is a 41.3 percent increase in the net return to work. The increase in take-home pay would be 39.8 percent for those in the 12 percent federal income tax bracket. It is certainly possible that the worker would experience a smaller percentage raise than these figures; but in that event, the firm would enjoy a lower cost of employing older workers. The point that we want to emphasize is that these policy changes have the potential to dramatically increase the incentive to work for those subject to them.

Now, we turn to the cost of these policies for Social Security, Medicare, and the federal government as a whole. Part of the picture is the lost payroll tax receipts and the additional Medicare benefits received for work that is already being done by people who would be eligible for these new treatments. The current workers who would become eligible for the new policies would no longer pay payroll taxes (and neither would their employer) and would start receiving Medicare benefits that they currently do not enjoy. Per \$100 of existing pay received by this group, this might amount to roughly \$35.30 in additional cost to Social

Security and Medicare. The breakdown with our estimates is that Medicare costs would go up by \$20 per \$100 of existing earnings of this group and the payroll tax receipts would go down by \$15.30 per \$100. Although we have not done the calculation, it should be straightforward to come up with the payroll taxes paid on behalf of those who would become paid up and also to estimate the cost of the additional Medicare expenditures.

This is not the end of the accounting for the costs of these policies, however. The Internal Revenue Service (IRS) would enjoy increased receipts. Note that in table 5, the people in the 12 percent bracket end up paying the IRS an extra \$3.32 per \$100 of earnings, and those in the 22 percent bracket would pay an extra \$6.08. This is for their existing hours. However, the big bucks arise from the highly elastic labor supply of older workers. Table 6 sums up the impact of paid-up status plus MPP on IRS receipts for two elasticities (2.0 and 3.0) and two marginal tax rates (12 and 22 percent).

Table 6. Net Cost of Paid-Up Status and MPP per \$100 of Existing Payroll of Affected Employees

Labor Supply Elasticity	2.0	2.0	3.0	3.0
Income Tax Rate	0.12	0.22	0.12	0.22
Cost of paid up status and MPP per \$100 in existing Earnings	35.30	35.30	35.30	35.30
Extra Income Tax on Existing Hours	3.32	6.08	3.32	6.08
Percentage Increase in Take Home Pay	39.8	41.3	39.8	41.3
Increase in Earnings Due to Extra Work	101.61	105.44	152.41	158.16
Income Tax on Extra Work	12.19	23.20	18.29	34.79
Total Increase in IRS Revenue	15.51	29.28	21.61	40.88
Net Cost to the Federal Government	19.79	6.02	13.69	(5.58)

Table 6 starts by noting, in the third row, that Social Security and Medicare would lose \$35.30 for every \$100 of existing earnings for those who become eligible for the new paid-up and MPP policies. The fourth row simply reflects the extra personal income tax that these people would pay on their existing hours due to the higher taxable wage. The big effects are due to the extra hours of work or the extra workers that the higher net wage brings about. What costs does this additional work impose on Social Security and Medicare? The answer seems to be zero. There are no payroll taxes being paid on this work that is currently not being done. Similarly, there is no incremental Medicare expense for these extra workers or extra hours by

existing workers. The only significant impact of this extra work on the federal government's budget is the additional personal income tax receipts received by the IRS.

Table 6 makes these calculations. For each \$100 of current earnings of those eligible for the new policies, there would be an extra \$101.61 to \$105.44 of earnings due to extra hours of work in the 2.0 elasticity case and an extra \$152.41 to \$158.16 in the 3.0 elasticity case. Most of this is due to the extra hours, but a considerable amount is due to the higher taxable wages that MPP and paid-up status would produce. The next to last row of the table sums up the extra IRS receipts to be compared with the \$35.30 in extra costs to Social Security and Medicare. Again, this is all relative to each \$100 of earnings before the policy change. The first thing to note is that the IRS offset would be substantial, even for the case of a 12 percent tax rate and a 2.0 elasticity. In that case, the extra IRS receipts would amount to about 44 percent of the total cost to Social Security and Medicare. In the case of a 22 percent tax rate and 2.0 elasticity, the IRS offset would be 83 percent of the cost to the entitlement programs. And in the case of a 3.0 elasticity and a 22 percent tax rate, the IRS would gain more than Social Security and Medicare would lose.

Our main point is that these policies would create more taxable income and would cost a lot less than their initial outlays, if the government checks all its pockets. The IRS pocket, in particular, would have lots of extra money in it. It would not be unprecedented for the IRS to share some of these additional revenues with the OASDI Trust Fund. Under current law, funds raised by the personal income tax from taxing Social Security benefits are returned to the SSA. In 2017, the OASDI Trustees reported that this transfer total \$37.9 billion. We have not included any consideration of additional state and local tax receipts, but they certainly would go up as well.

There are clearly several back-of-the-envelope quality assumptions in this analysis. But the important point is that the additional IRS receipts could be a major offset to the cost of these policies to Social Security and Medicare.

V. Summary of the Proposals and an Evaluation Their Impact

The retirement crisis is in no small measure caused by trying to do the impossible. What we mean by this is that it is nearly impossible to finance 30-year retirements with 40-year careers. Yet with today's average retirement ages (62 for women and 64 for men), we are trying to do just that. If a 64-/62-year-old couple retired today, the survivor of the couple would have about a 40 percent chance of living an additional 30 years. This division of adult life between work and retirement is at the heart of the financial problems of Social Security and state and local pension plans, and it threatens the adequacy of retirement resources for millions of Americans.

With this in mind, we advocate three policies that could be adopted to make working longer more financially attractive. They are (1) eliminating the Social Security earnings test, (2) establishing a paid-up category for the Social Security payroll tax, and (3) also establishing a paid-up category for the Medicare payroll tax and simultaneously switching Medicare from secondary to primary payer status. We think the most obvious of our policy proposals is eliminating the earnings test. It is widely misunderstood and produces no long-run

revenue for Social Security. It discourages work, not because of what it actually is but because it appears to be a major tax on work for those between the ERA and the FRA.

Both the paid-up idea and the MPP idea have major appeal. We estimate if both our second and third proposals were adopted, the net wage would go up by about 40 percent for workers over age 65. This is exactly the age group that is most responsive to wages. In fact, with the higher wages and the resulting additional labor supply, IRS revenues would increase to substantially offset the cost of these programs to Social Security and Medicare. We think the reasonable range for the IRS offset is between 44 and 116 percent of the cost of these new policies. This means, at a minimum, that the offset is significant. With two reasonable assumptions—a labor supply elasticity of 3.0, and a tax rate of 22 percent—the IRS would collect more than enough revenue to completely offset the cost of the initiatives to Social Security and Medicare.

Some of these policies, such as the earnings test, were initially implemented during the Great Depression with the explicit goal of encouraging people to retire. We think it is time to turn this thinking on its head and come up with policies to encourage people to work longer. We think our three proposals are a good start.

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Appendix A: Evaluation of Paid-Up Status—45 Years of Coverage

SSA, https://www.ssa.gov/OACT/solvency/provisions/charts/chart_run363.html. Starting in 2019, exempt individuals with more than 180 quarters of coverage from the OASDI Trust Fund’s payroll tax. Earnings exempted from this payroll tax would not be used in computing benefits.

Estimates based on the intermediate assumptions of the 2018 OASDI Trustees’ Report

Summary Measures					
Current law [percentage of payroll]		Change from current law [percentage of payroll]		Shortfall eliminated	
Long- range actuarial balance	Annual balance in 75th year	Long-range actuarial balance	Annual balance in 75th year	Long-range actuarial balance	Annual balance in 75th year
-2.84	-4.32	-0.52	-0.71	-18%	-16%

Estimate of the impact of establishing a paid-up status for individuals with 45 years of credited earnings. Letter from the Office of the Chief Actuary, September 2008. https://www.ssa.gov/OACT/solvency/Warshawsky_20080917.pdf.

“Exemption from Paying Payroll Tax after Working 45 Years”

This provision would exempt workers and their employers from the OASDI [Trust Fund’s] payroll tax starting in 2009, after the employee has earned 180 quarters of coverage. Earnings not subject to the payroll tax under this provision would not be used for the computation of the [primary insurance amount] for the worker. The effect of this provision, taken alone, would be to increase the size of the long-range OASDI [Trust Fund’s] actuarial deficit by 0.28 percent of taxable payroll, and the 75th year annual deficit by 0.49 percent of payroll.”



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