
TAX POLICY CENTER
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# OPTIONS FOR INCREASING MEDICARE REVENUES

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# ABSTRACT

Medicare faces serious short-term and long-term financial pressures. Given that cost containment measures need to be implemented gradually, it seems likely that Congress will have to address at least some of the Medicare's financial shortfall with additional tax revenues. This report examines the revenue and distributional effects of options to increase revenues for Medicare and discusses their relative pros and cons. We use the Tax Policy Center microsimulation model to estimate the effect of each option on revenues over ten years and on the distribution of after-tax income in one year. We analyze 12 options including increasing Medicare tax rates, increasing individual income tax rates, broadening the tax base, increasing corporate income tax rates, and enacting a value-added tax.


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## INTRODUCTION

The Medicare program, which provides health insurance coverage to 66 million elderly and disabled Americans, faces serious short-term and long-term financial pressures.[1] In the near-term, Medicare's Hospital Insurance (HI) trust fund, which pays for hospital and most institutional services, is expected to be depleted sometime around 2028. Were this to occur, in the absence of legislative action, Medicare would not be able to make full and timely payments to HI health care providers. Longer-term, total spending on Medicare (including the component that pays for physician services and drugs) is projected to grow faster than national income, putting great pressure on the federal budget.

Given the immediate and visible adverse effects that HI trust fund insolvency would cause, some type of congressional action seems inevitable. Tackling HI insolvency—and more broadly, Medicare's impact on the federal budget—requires a slowdown in the rate of growth in Medicare spending, increased funding, or a combination of the two. Given that cost containment measures need to be implemented gradually, it seems likely that Congress will have to address at least some of Medicare's financial shortfall with additional tax revenues. An expert panel on Medicare solvency convened in 2020 generally agreed that increased revenue would be needed, but there was no consensus on how to do it (Garrett, Shartzer, and Arnos 2021).

This report examines the revenue and distributional effects of 12 options to increase revenues for Medicare and discusses their relative pros and cons. We use the Tax Policy Center microsimulation model to estimate the effect of each option on federal revenues over 10 years and on the distribution of after-tax income in one year. (See the appendix for information on the Tax Policy Center microsimulation model).

## BACKGROUND

### *Medicare's Current Financing Structure*

Medicare has two components that are financed in different ways. The first component, Hospital Insurance (HI), helps pay for hospital and most institutional services. The HI trust fund is funded, in part, with receipts from a payroll tax (HI tax) imposed on workers' earnings. The HI trust fund also receives a dedicated portion of income tax on Social Security cash benefits. When the inflows of payroll taxes and other receipts, along with accumulated surpluses, are insufficient to cover HI costs, the law requires that payments to providers somehow be reduced to the level of incoming receipts.

The HI tax is levied on earnings at a rate of 2.9 percent, split evenly between employers and employees. The self-employed pay both portions of the tax. Unlike the Social Security payroll tax, there is no upper limit to the earnings subject to the HI tax. Since 2013, single households earning more than $200,000 and married households earning more than $250,000 have paid the Additional Medicare Tax, an additional 0.9 percent HI tax on earnings over those thresholds.[2]

The net investment income tax (NIIT), enacted by the Affordable Care Act (ACA), is a 3.8 percent tax on interest, dividends, capital gains, rents, royalties, and passive business income[3] of taxpayers with incomes exceeding $200,000 for single filers and $250,000 for married filers. Although intended to fund Medicare, due to procedural issues related to the congressional reconciliation process, the ACA did not dedicate NIIT revenue toward the HI trust fund (Van de Water 2020).

The second component of Medicare, Supplementary Medical Insurance (SMI), helps pay for physicians' outpatient services and prescription drugs. SMI is financed by beneficiary premiums and federal general revenues, which are deposited into the SMI trust fund. Unlike the HI trust fund, when the balances in the SMI trust fund run low, they are automatically replenished with general revenues, and beneficiary premiums are increased.

### *Financial Pressures*

Due to increasing costs per enrollee and the aging of the population, Medicare faces substantial financial pressures. Total spending on Medicare has risen historically and continues to grow as a share of gross domestic product (GDP), resulting in ever greater pressure on the federal budget. Total Medicare spending increased from just above 2 percent of GDP in 2000 to about 4 percent in 2020 and is projected to reach 6 percent of GDP by 2040 (Medicare Trustee 2022, Steuerle and Garrett 2022 3). For perspective, 2 percentage points of GDP is about $500 billion in today's dollars.

In addition, according to the trustees of the HI trust fund, its reserves may be exhausted sometime before 2029 (Medicare Trustees 2022). At that point of exhaustion, only 90 percent of scheduled HI benefits could be paid.

Although measures implementing cost containment might eventually bring the HI system into balance and slow growth in overall Medicare spending, Congress typically implements such policies gradually. And funding the entire HI shortfall or projected increase in Medicare spending solely through additional borrowing seems unlikely given current budget deficits and the scale of the shortfall. Accordingly, some additional tax revenues for Medicare are likely needed. The total financing gap (projected spending in excess of projected revenues) for HI over the next 10 years (from 2022 to 2031) is $390 billion (Medicare Trustees 2022, 27).[4] The HI trust fund balance of over $170 billion (estimated at the end of 2022) will be spent down to fill a portion of that gap, but the trust fund is projected to be exhausted in 2028.

## REVENUE OPTIONS

We provide revenue estimates over ten years for 12 revenue raising options (table 1). These options can be put into four broad categories:

- Increases in dedicated Medicare payroll taxes already in place
- Higher individual income tax rates
- Expansion of the tax base for individual income and/or payroll taxes
- Other proposals

TABLE 1

### Revenue Effects of Options to Increase Medicare Revenues

Fiscal years 2022–31[a, b]

| | Billions of dollars |
|---|---|
| ***Medicare tax rates*** | |
| (1) Increase combined Medicare tax rate by 1 percentage point | 1,024 |
| (2) Increase combined Medicare tax rate by 1 percentage point on earnings above $200,000 ($250,000 for married households) | 221 |
| (3) Increase combined Medicare tax rate by 1 percentage point on earnings above $400,000 ($500,000 for married households) | 117 |
| ***Individual income tax rates*** | |
| (4) Increase individual income tax rates by 1 percentage point | 977 |
| (5) Increase individual income tax rates by 1 percentage point on ordinary income only | 945 |
| (6) Increase individual income tax rates by 1 percentage point for taxpayers in higher tax brackets[c] | 444 |
| ***Broadening tax base*** | |
| (7) Limit income and payroll tax exclusion for employer-provided health benefits at 75th percentile of premiums | 376 |
| (8) Repeal HI tax exclusion for employer-provided health benefits | 414 |
| (9) Expand NIIT base to include income of certain business owners not subject to Medicare taxes for incomes over $400,000 ($500,000 for married households) | 238 |
| (10) Expand NIIT base to include income of certain business owners not subject to Medicare taxes for incomes over $200,000 ($250,000 for married households) | 260 |
| ***Other taxes*** | |
| (11) Increase corporate income tax rates by 1 percentage point | 87 |
| (12) Enact one percent broad-based value-added tax with rebate[d] | 997 |

**Source:** Tax Policy Center Microsimulation Model (version 0721-2).
(a) Baseline is the law currently in place before passage of the Inflation Reduction Act of 2022. Policies assumed effective 1/1/2022.
(b) For options 1-6 and 11-12, rates could be scaled lower or higher to achieve desired revenue goals.
(c) Increase tax rates by one percentage point for taxpayers in the third tax bracket and higher.
(d) Revenue estimate includes the reduction in federal income and payroll taxes due to the VAT reducing factor incomes but does not include the impact of the VAT on federal outlays or state and local government budgets.

Under current law, any revenue gain from changes to existing Medicare taxes would go directly to the HI trust fund. General revenue gains from the other options, however, could be dedicated to the HI trust fund, used to help finance rising SMI costs, or used within a broader reform in which the financing of HI and SMI is no longer separated.

### *Medicare Tax Rates*

Currently, the 1.45 percent HI tax on both employers and employees and the 0.9 percent Additional Medicare Tax on high-wage workers result in a combined Medicare tax rate of 2.9 percent on earnings below $200,000 for single households ($250,000 for married households) and 3.8 percent on earnings above those levels.[5]

**1. Increase combined employer and employee regular Medicare payroll tax rate by 1 percentage point**

This option would increase both the employer and employee HI tax rate by 0.5 percentage point, resulting in a combined Medicare rate of 3.9 percent below $200,000 ($250,000) of earnings and a rate of 4.8 percent at higher earnings levels.[6] The option would increase federal revenues over the next 10 years by more than $1 trillion. This amount would be more than sufficient to fill the 10-year HI financing gap of $390 billion, though not enough to cover the projected long-term growth in Medicare's overall costs. Alternatively, increasing the regular Medicare payroll tax by just enough to fill the 10-year HI financing gap would require increasing the payroll tax rate by approximately 0.4 percentage point.

**2. Increase combined Medicare payroll tax rate by 1 percentage point on earnings above $200,000 ($250,000)**

This option would increase the Additional Medicare Tax rate by 1 percentage point, which would result in the current Medicare tax rate of 2.9 percent on earnings below $200,000 for single households and $250,000 for married households and a rate of 4.8 percent at higher earnings levels. The option would increase revenues over the next 10 years by more than $220 billion.

**3. Increase the combined Medicare tax rate by 1 percentage point on earnings above $400,000 ($500,000)**

This policy is similar to option 2 but would limit the increase in the Additional Medicare Tax rate to earnings above $400,000 for single households and $500,000 for married households. The combined Medicare tax rate would then have three tiers: 2.9 percent on initial earnings, 3.8 percent from $200,000 to $400,000 ($250,000 to $500,000), and 4.8 percent for earnings above $400,000 ($500,000). The option would increase revenues over the next 10 years by more than $115 billion.

### *Individual Income Tax Rates*

The federal individual income tax applies taxes on income in excess of the standard deduction or allowable itemized deductions. There are seven tax brackets with rates increasing from 10 to 37 percent as taxable

income exceeds various thresholds.[7] A separate schedule of tax rates applies to capital gains and dividends with rates increasing from 0 to 20 percent as taxable income increases.[8]

**4. Increase individual income tax rates by 1 percentage point**

This option increases rates for all tax brackets for ordinary income and capital gains and dividends by 1 percentage point. The option would increase revenues over the next 10 years by nearly $980 billion.

**5. Increase individual income tax rates by 1 percentage point on ordinary income only**

This is the same as option 4 but would only raise rates on ordinary income, and not the separate rate schedule that applies to capital gains and dividends. In recent history, most proposals to change income tax rates have left the long-term rate on gains unchanged. The option would increase revenues over the next 10 years by more than $940 billion.[9]

**6. Increase individual income tax rates by 1 percentage point for taxpayers in higher tax brackets**

This option would increase tax rates by 1 percentage point in each of the tax brackets beyond the first two brackets. For those taking the standard deduction, this means rate increases would start between $54,000 and $55,000 of income for single filers and between $109,000 and $110,000 for joint filers in 2022.[10] About 20 percent of single tax filing units and 40 percent of joint tax filing units are projected to be in the third tax bracket or higher in 2022.[11] The option would increase revenues over the next 10 years by more than $440 billion.

### *Broadening the Tax Base*

These options would increase revenues by extending income and/or payroll taxes to currently excluded income.

**LIMITING THE TAX EXCLUSION FOR EMPLOYER-PROVIDED HEALTH BENEFITS**

Employer-paid premiums for health insurance are exempt in unlimited amounts from federal income and payroll taxes despite being a form of compensation. The portion of premiums that employees pay is typically excluded from taxable income and wages as well. The tax exclusion for health benefits is very expensive, costing the federal government about $300 billion a year in revenues that would otherwise be collected. Because the exclusion reduces taxable income, it is worth more to taxpayers in higher income tax brackets than to those in lower income tax brackets. And while the exclusion encourages employers to offer coverage, it may also contribute to higher health care costs. Because the exclusion effectively subsidizes additional spending on health insurance, employers may choose to offer employees health plans that cover more services, are less tightly managed, or have lower cost sharing than they would otherwise.[12]

### 7. Limit income and payroll tax exclusion for employer-provided health benefits at 75th percentile of premiums

This option would establish a limit to the exclusion at the 75th percentile of health insurance premiums for single and family coverage. Health benefits in excess of the thresholds would be subject to individual income, Social Security, and Medicare taxes.[13] The option would increase federal revenues over the next 10 years by nearly $380 billion. The option is similar to the excise tax on high-cost health plans (the "Cadillac" tax) enacted by the ACA that was delayed and ultimately repealed before implementation. The Cadillac tax would have been levied on insurers and would have applied a 40 percent rate on premiums in excess of thresholds that initially would have been higher than the ones used in this option.[14] But unlike this policy, the Cadillac tax thresholds would have been indexed only by consumer price inflation rather than growth in health insurance premiums. Because health premiums grow considerably faster than general price inflation, the share of plans subject to the Cadillac tax would have grown substantially over time.

### 8. Repeal HI tax exclusion for employer-provided health benefits

This option would classify employer contributions for health benefits as earnings for computation of HI and Additional Medicare taxes, but continue to exempt the contributions from income and Social Security taxes. By taxing all health benefits, it avoids some complications of taxing benefits in excess of thresholds.[15] Because health benefits would be subject to Medicare taxes, the revenue would be credited automatically to the HI trust fund. The option would increase revenues over the next 10 years by more than $410 billion.

## EXTEND 3.8 PERCENT TAX TO MORE HIGH-INCOME FAMILIES

In general, high-income workers, business owners, and investors pay a 3.8 percent tax on their income above certain thresholds. Workers pay a combined Medicare tax rate (HI tax and Additional Medicare Tax) of 3.8 percent on earnings above $200,000 if single and $250,000 if married. Many business owners pay the same 3.8 percent Medicare tax through self-employment taxes. Investors and some passive business owners pay the 3.8 percent NIIT on income above the same thresholds. However, portions of income for some active business owners do not count as wages, self-employment income, or passive investment income and so are not subject to Medicare taxes or the NIIT.[16]

### 9. Expand the NIIT base to include income of certain business owners not currently subject to Medicare taxes or the NIIT for incomes over $400,000 ($500,000)

This option would extend the NIIT to income that is not currently subject to Medicare taxes or the NIIT for certain business owners. The option would only extend the NIIT for taxpayers with incomes above $400,000 for single filers and $500,000 for married filers, as was proposed in President Biden's Build Back Better legislation (JCT 2021, 81). The option would increase revenues over the next 10 years by almost $240 billion.

A similar approach would extend self-employment taxes and, therefore, Medicare taxes to the same excluded income.[17] The revenue and distributional impacts of the approaches would be similar, but to the extent self-employment taxes are expanded, HI revenues would automatically be credited to the trust fund. Additionally, extending self-employment taxes also potentially applies Social Security taxes to the excluded income.[18]

**10. Expand the NIIT base to include income of certain business owners not currently subject to Medicare taxes or the NIIT for incomes over $200,000 ($250,000)**

This option is similar to option 9 but would use the same lower income thresholds as the existing Additional Medicare Tax and NIIT. This policy would unify the taxation of income across different business ownership/organization structures. The option would increase revenues over the next 10 years by $260 billion.

### *Other Taxes*

#### CORPORATE INCOME TAXES

Most large US businesses are subject to the corporate income tax. Profits from those corporations can also be subject to a second layer of taxation at the individual shareholder level, both on dividend payments and on capital gains from the sale of shares. Other businesses are taxed as "pass-through" entities, meaning profits are allocated to the owners who pay individual income tax on that income. The Tax Cuts and Jobs Act of 2017 reduced the top corporate income tax rate from 35 to 21 percent.

**11. Increase corporate income tax rates by 1 percentage point**

This option would increase the corporate income tax rate to 22 percent. The option would increase federal revenues over the next 10 years by nearly $90 billion.

#### CONSUMPTION TAXES

A value-added tax (VAT) is a broad-based tax on consumption, similar to retail sales taxes imposed by most US states and some localities. But, unlike sales taxes, which are collected at the retail level, a VAT is incrementally collected at each stage of the production and distribution of goods and services. That is, when firm A provides inputs to firm B, which provides a final set of inputs to firm C, which then sells a good for final consumption, each firm pays tax on the increase in value of goods sold relative to the cost of inputs used in production. The process helps improve compliance: each firm (in the example, firms B and C), can take credit for taxes paid on value added at the previous stage, so each firm has an incentive to ensure that its input providers have accurately paid the taxes they owed. Unlike income taxes, VATs effectively tax income only when spent and therefore they do not provide a disincentive to save. But VATs, in general, are less progressive than income taxes. VATs are an important revenue source for the national governments of nearly every country in the world, except the United States.[19]

### 12. Enact a 1 percent broad-based value-added tax with rebate

The option would enact a 1 percent VAT covering all household consumption. To address progressivity concerns, the option would rebate the VAT burden by providing a refundable income tax credit that increases with income up to the federal poverty line. The credit would generally offset the full burden of the VAT for single households with incomes below the single-person poverty threshold, $13,790, and for married households with incomes below twice that amount, $27,580.[20] The option would increase revenues over the next 10 years by nearly $1 trillion.[21] Keep in mind that VAT administrative costs for both firms and the tax collecting agency are sufficiently high that a higher tax rate is usually applied upon enactment to help offset those costs.

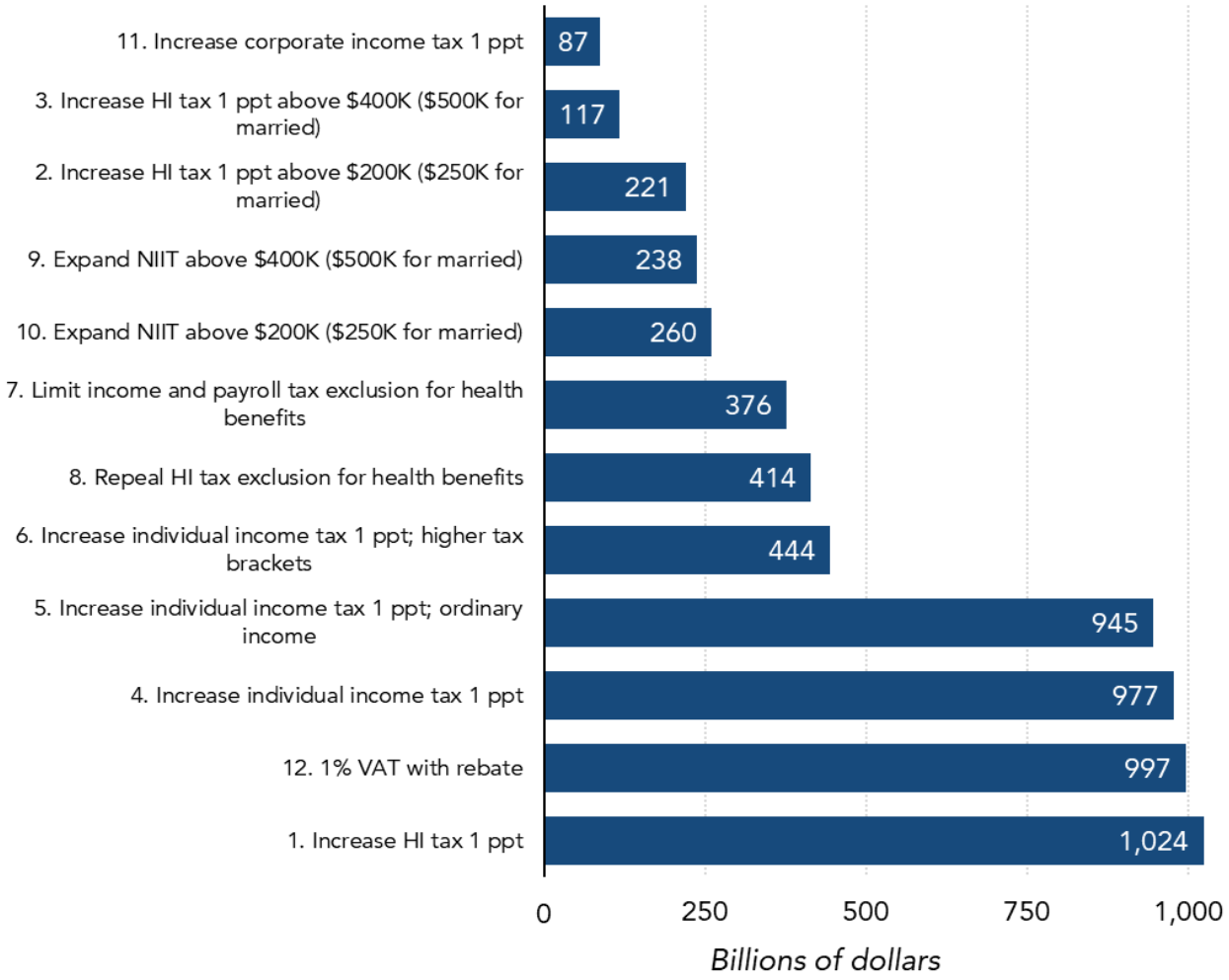
### *Summary of Revenue Impacts*

Figure 1 shows the 10-year revenue impacts of the options considered here ranked by size of increase. The revenue estimates range from $90 billion to $1 trillion. The broad-based options that increase taxes on most households increase revenues the most because they apply to a relatively large pool of income. Increasing the HI tax rate (option 1), broadly increasing income tax rates (options 4 and 5), and enacting a VAT (option 12), all increase revenues over 10 years by about $1 trillion. We modeled 1 percentage point increases in each of these taxes, but the rates could of course be scaled lower or higher to achieve desired revenue goals.

The options that raise taxes only on high-income households or corporations raise substantially less revenue because they apply to a smaller proportion of overall income. Revenue estimates for increasing the combined Medicare tax rate at high earnings levels (options 2 and 3), expanding the NIIT base at higher income levels (options 9 and 10), and increasing the corporate income tax rate (option 11) range from $90 to $260 billion over 10 years.

FIGURE 1

## Revenue Effects of Options, Fiscal Years 2022–31




**Source**: Tax Policy Center Microsimulation Model (version 0721-2).
**Note**: For options 1-6 and 11-12, rates could be scaled lower or higher to achieve desired revenue goals.

## DISTRIBUTIONAL IMPACTS OF THE REVENUE POLICY OPTIONS

To see how the options affect households, table 2 shows the average tax change by income group for each option in 2022. Across policies, the average tax change per household ranges from $50 to $670.[22] Average tax changes vary substantially by income and the overall average change is, in general, not indicative of how typical households fare. For example, increasing the combined Medicare tax rate for filers above $200,000 ($250,000) (option 2) results in an average tax increase of $90 but in fact only households in the top income quintile experience a tax increase. For that option, the average tax increase for the top income quintile is $650 with tax increases rising from $10 for households in the 80th to 90th percentile of income to nearly $8,800 for households in the top 1 percent.

Figures 2 and 3 show the distributional impacts of the options measured as the percent change in after-tax income by income group. This is the Tax Policy Center's preferred measure for examining the progressivity of tax proposals.[23] A tax increase that decreases after-tax income proportionately more for higher-income taxpayers than for lower-income taxpayers is classified as progressive. Figure 2 shows change by income quintile and figure 3 shows change by group within the top quintile. The most progressive options are increasing the combined Medicare tax rate at higher earnings levels (options 2 and 3), expanding the NIIT base at higher income levels (options 9 and 10), and increasing the corporate income tax rate (option 11). Other than the corporate rate change, those options reduce incomes only for households in the top 5 percent of income.[24] Under the two options to increase the combined Medicare tax at higher earnings levels, the percent reduction in after-tax income increases as income increases from the 95-99th percentile to the top one percent, but then declines or remains unchanged at the top .1 percent of income. This pattern at the top reflects earnings declining as share of income at the highest income levels. In contrast, expanding the NIIT base and increasing the corporate income tax options have a larger impact on households in the top 0.1 percent of income than for the rest of the top quintile.

Among the broad-based options, the options increasing income tax rates are the most progressive, as the percent reduction in after-tax income increases with income. Even the income tax options that increase rates across the board (options 4 and 5) are progressive because the standard deduction limits the impact on many low-income households. Increasing rates only on ordinary income is less progressive than the other income tax option because capital gains and dividends are a larger share of income at the highest income levels.

TABLE 2

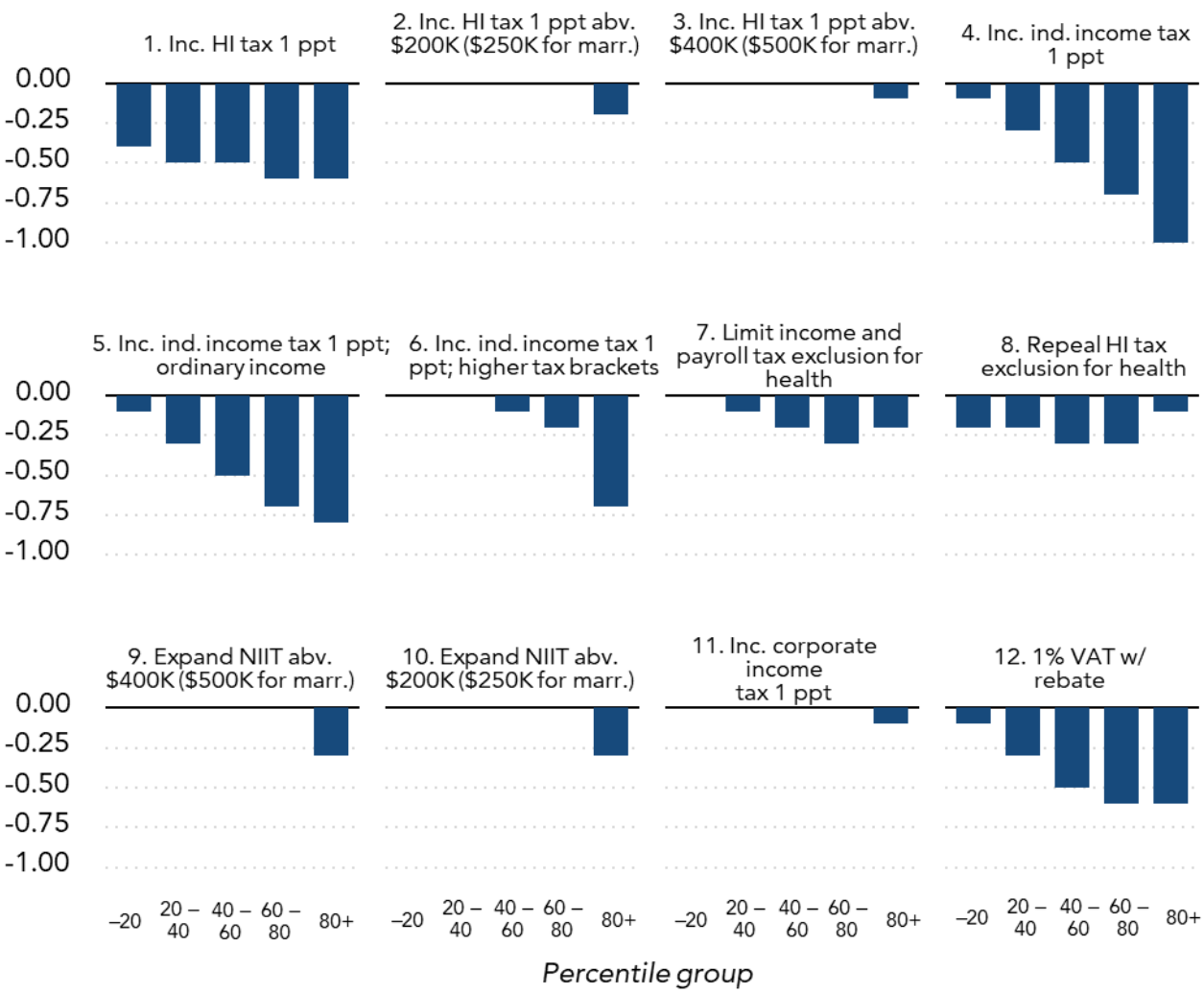
## Average Federal Tax Change by Income Quintile for Options to Increase Medicare Revenues, 2022[a]

| | Expanded Cash Income Percentile[b] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | All | Lowest Quintile | Second Quintile | Middle Quintile | Fourth Quintile | Top Quintile | 80–90 | 90–95 | 95–99 | Top 1 Percent | Top 0.1 Percent |
| ***Medicare tax rates*** | | | | | | | | | | | |
| (1) Increase combined Medicare tax rate by 1 percentage point | 500 | 70 | 180 | 350 | 640 | 1,870 | 1,100 | 1,590 | 2,640 | 8,690 | 27,480 |
| (2) Increase combined Medicare tax rate by 1 percentage point on earnings above $200,000 ($250,000 for married households) | 90 | 0 | 0 | 0 | 0 | 650 | 10 | 110 | 1,150 | 8,760 | 32,300 |
| (3) Increase combined Medicare tax rate by 1 percentage point on earnings above $400,000 ($500,000 for married households) | 50 | 0 | 0 | 0 | 0 | 360 | 0 | * | 190 | 6,950 | 30,600 |
| ***Individual income tax rates*** | | | | | | | | | | | |
| (4) Increase individual income tax rates by 1 percentage point | 670 | 10 | 110 | 370 | 810 | 3,130 | 1,460 | 2,200 | 3,960 | 23,520 | 119,450 |
| (5) Increase individual income tax rates by 1 percentage point on ordinary income only | 600 | 10 | 110 | 360 | 790 | 2,640 | 1,410 | 2,080 | 3,610 | 15,430 | 59,940 |
| (6) Increase individual income tax rates by 1 percentage point for taxpayers in higher tax brackets[c] | 370 | 0 | 0 | 40 | 210 | 2,390 | 710 | 1,450 | 3,210 | 22,820 | 118,850 |
| ***Broadening tax base*** | | | | | | | | | | | |
| (7) Limit income and payroll tax exclusion for employer-provided health benefits at 75th percentile of premiums | 180 | * | 30 | 140 | 330 | 660 | 570 | 710 | 800 | 800 | 460 |
| (8) Repeal HI tax exclusion for employer-provided health benefits | 190 | 30 | 90 | 200 | 330 | 460 | 440 | 480 | 480 | 420 | 340 |
| (9) Expand NIIT base to include income of certain business owners not subject to Medicare taxes for incomes over $400,000 ($500,000 for married households) | 110 | 0 | 0 | 0 | 0 | 810 | 0 | * | 410 | 15,900 | 95,070 |
| (10) Expand NIIT base to include income of certain business owners not subject to Medicare taxes for incomes over $200,000 ($250,000 for married households) | 120 | 0 | 0 | 0 | 0 | 880 | * | 30 | 730 | 15,910 | 95,070 |
| ***Other taxes*** | | | | | | | | | | | |
| (11) Increase corporate income tax rates by 1 percentage point | 50 | * | 10 | 20 | 50 | 270 | 90 | 140 | 280 | 2,910 | 18,780 |
| (12) Enact one percent broad-based value-added tax with rebate[d] | 480 | 10 | 100 | 300 | 630 | 2,070 | 1,120 | 1,640 | 2,690 | 12,480 | 58,390 |

**Source:** Tax Policy Center Microsimulation Model (version 0721-2).
(*) Non-zero value rounded to zero.
(a) Baseline is the law currently in place before passage of the Inflation Reduction Act of 2022. Policies assumed effective 1/1/2022.
(b) Includes both filing and non-filing tax units. For a description of expanded cash income, see taxpolicycenter.org/TaxModel/income.cfm.
(c) Increase tax rates by one percentage point for taxpayers in the third tax bracket and higher.
(d) Table shows the distributional effects of a VAT as if it had been in place permenently as opposed to transitional impact when first enacted.

FIGURE 2

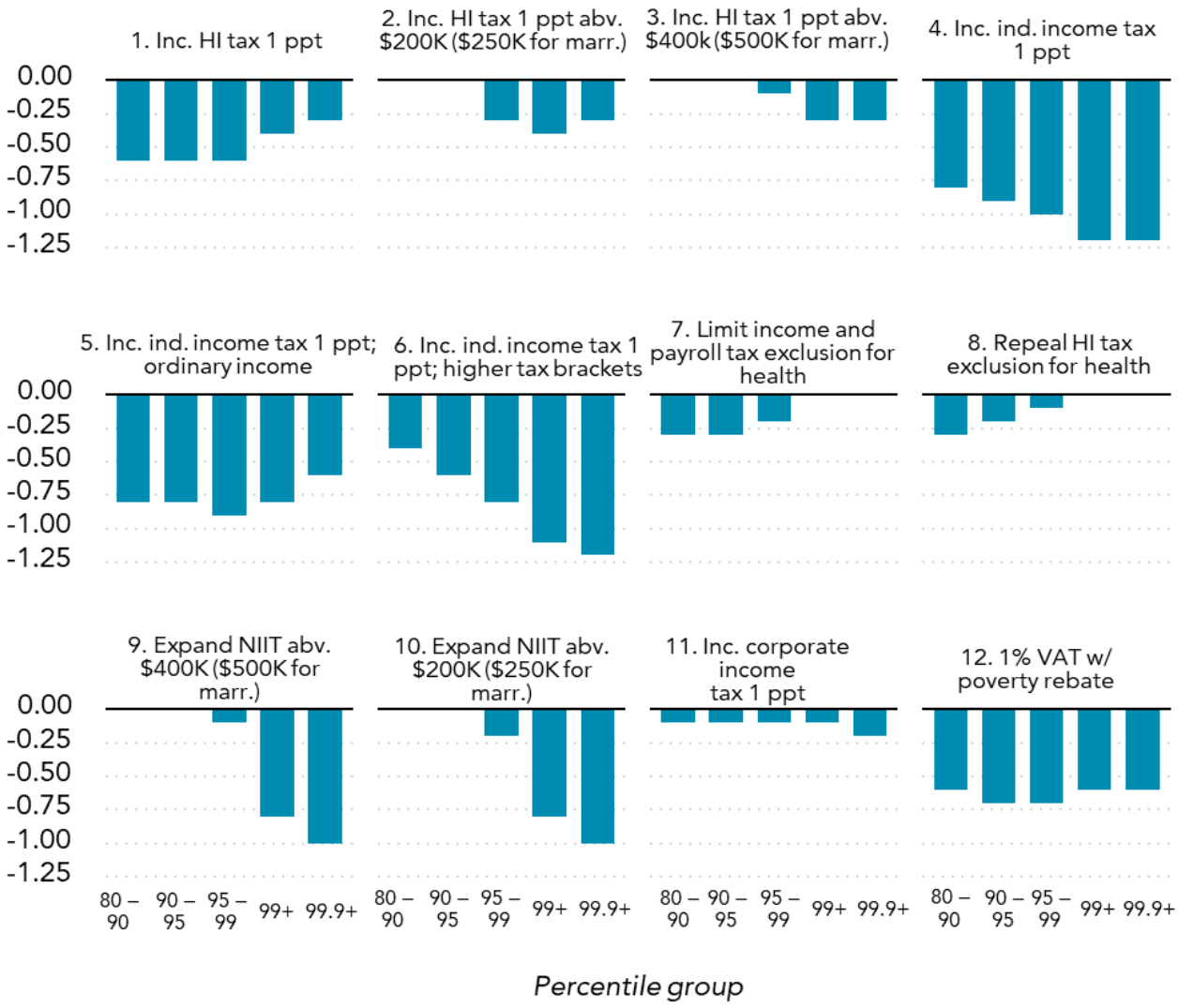
# Percent Change in After-Tax Income by Income Quintile for Revenue Options, 2022




**Source:** Tax Policy Center Microsimulation Model (version 0721-2).
**Notes:** Baseline is the law currently in place before passage of the Inflation Reduction Act of 2022. Tax units are classified by expanded cash income, see taxpolicycenter.org/TaxModel/income.cfm.
Abbreviation key: abv. = above; inc. = increase; ind. = individual; marr. = married; ppt = percentage point.

FIGURE 3

# Percent Change in After-Tax Income for Top Income Quintile for Revenue Options, 2022




**Source:** Tax Policy Center Microsimulation Model (version 0721-2).
**Notes:** Baseline is the law currently in place before passage of the Inflation Reduction Act of 2022. Tax units are classified by expanded cash income, see taxpolicycenter.org/TaxModel/income.cfm. Abbreviation key: abv. = above; inc. = increase; ind. = individual; marr. = married; ppt = percentage point.

Limiting the tax exclusion for employer-provided health insurance (option 7) and introducing a VAT (option 12) are both initially progressive but become regressive at the highest income levels. Limiting the tax exclusion for employer-provided health insurance is progressive through the first four quintiles as the exclusion provides more subsidy per dollar of benefits for taxpayers in higher tax brackets and because insurance coverage rates increase with income. But, measured by percent change in after-tax income, the option becomes regressive at the highest income levels. That happens because health benefits do not grow proportionally with income as income gets very high, meaning health benefits become small relative to income at those levels. The VAT is progressive through the 95th percentile because of the rebate, but it becomes regressive at the highest income levels because consumption comprises a smaller share of income at high income levels.[25]

Increasing the combined Medicare tax rate at all income levels (option 1) and repealing the Medicare tax exclusion for employer-provided health insurance (option 8) are less progressive than other broad-based options considered here, such as raising income tax rates (option 4), enacting a VAT with rebate (option 12), and limiting the income and payroll tax exclusion for health (option 7). Increasing the Medicare tax rate results in percent reductions in income that increase slightly through the first four quintiles and then hold steady before declining at the highest income levels. Unlike the income tax or the VAT with rebates, the first dollar of earnings is burdened by the Medicare tax for wage earners, so those taxes apply to more low-wage households. In addition, wages (the base for the Medicare tax) comprise a smaller share of income for high-income households. Repealing the Medicare tax exclusion for health benefits results in a similar pattern, except that the percent change in income falls off even more sharply at the highest income levels. This option is less progressive than limiting the income and payroll tax exclusion for health because the Medicare tax rate does not increase with income like income tax rates, other than when the Additional Medicare Tax begins at $200,000 of earnings ($250,000 for married workers). Consequently, the Medicare tax exclusion generally is worth the same per dollar of health benefits across the income distribution.

Table 3 shows the share of federal tax change paid by each income quintile in 2022. The table is useful for providing an overview of who is providing the additional revenues under each option.[26] Nearly all the additional tax burden is borne by families in the top quintile for the two options to increase the combined Medicare tax rate at high earnings levels (options 2 and 3) and the options to expand the NIIT base (options 9 and 10). And nearly 90 percent of tax increases would be paid by families in the top 1 percent of income for increasing the Medicare tax rate and expanding the NIIT base above $400,000 of earnings ($500,000 for married workers). Limiting the tax exclusion for health (option 7) is the option affecting the middle quintile the most, with the middle quintile bearing more than 20 percent of the additional tax burden. Increasing the HI rate (option 1) and repealing the Medicare tax exclusion for health (option 8) have the most impact on the bottom quintile as compared with the other options, with between 3.5 and 3.8 percent of burden on the bottom quintile.

TABLE 3

## Share of Federal Tax Change by Income Quintile for Options to Increase Medicare Revenues, 2022[a]

| | Expanded Cash Income Percentile[b] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | All | Lowest Quintile | Second Quintile | Middle Quintile | Fourth Quintile | Top Quintile | 80–90 | 90–95 | 95–99 | Top 1 Percent | Top 0.1 Percent |
| ***Medicare tax rates*** | | | | | | | | | | | |
| (1) Increase combined Medicare tax rate by 1 percentage point | 100.0 | 3.5 | 7.9 | 14.3 | 21.7 | 52.3 | 15.8 | 11.2 | 14.2 | 11.2 | 3.7 |
| (2) Increase combined Medicare tax rate by 1 percentage point on earnings above $200,000 ($250,000 for married households) | 100.0 | 0.0 | 0.0 | 0.0 | 0.1 | 99.4 | 0.6 | 4.1 | 33.5 | 61.2 | 23.4 |
| (3) Increase combined Medicare tax rate by 1 percentage point on earnings above $400,000 ($500,000 for married households) | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 99.3 | 0.0 | 0.1 | 10.0 | 89.3 | 40.7 |
| ***Individual income tax rates*** | | | | | | | | | | | |
| (4) Increase individual income tax rates by 1 percentage point | 100.0 | 0.3 | 3.4 | 11.1 | 20.3 | 64.8 | 15.4 | 11.4 | 15.7 | 22.4 | 11.8 |
| (5) Increase individual income tax rates by 1 percentage point on ordinary income only | 100.0 | 0.3 | 3.8 | 12.4 | 22.3 | 61.2 | 16.7 | 12.1 | 16.0 | 16.4 | 6.6 |
| (6) Increase individual income tax rates by 1 percentage point for taxpayers in higher tax brackets[c] | 100.0 | 0.0 | 0.0 | 2.0 | 9.6 | 88.3 | 13.4 | 13.4 | 22.7 | 38.8 | 20.9 |
| ***Broadening tax base*** | | | | | | | | | | | |
| (7) Limit income and payroll tax exclusion for employer-provided health benefits at 75th percentile of premiums | 100.0 | 0.5 | 3.7 | 15.2 | 30.3 | 50.3 | 22.3 | 13.5 | 11.6 | 2.8 | 0.2 |
| (8) Repeal HI tax exclusion for employer-provided health benefits | 100.0 | 3.8 | 10.1 | 21.5 | 30.0 | 34.3 | 17.0 | 9.0 | 6.9 | 1.4 | 0.1 |
| (9) Expand NIIT base to include income of certain business owners not subject to Medicare taxes for incomes over $400,000 ($500,000 for married households) | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 9.7 | 90.2 | 55.8 |
| (10) Expand NIIT base to include income of certain business owners not subject to Medicare taxes for incomes over $200,000 ($250,000 for married households) | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.1 | 1.0 | 15.9 | 83.0 | 51.3 |
| ***Other taxes*** | | | | | | | | | | | |
| (11) Increase corporate income tax rates by 1 percentage point | 100.0 | 1.5 | 4.2 | 8.6 | 14.8 | 70.0 | 11.6 | 9.2 | 14.1 | 35.1 | 23.5 |
| (12) Enact one percent broad-based value-added tax with rebate[d] | 100.0 | 0.6 | 4.6 | 12.7 | 21.9 | 59.6 | 16.5 | 11.8 | 14.8 | 16.5 | 8.0 |

**Source:** Tax Policy Center Microsimulation Model (version 0721-2).
(a) Baseline is the law currently in place before passage of the Inflation Reduction Act of 2022. Policies assumed effective 1/1/2022.
(b) Includes both filing and non-filing tax units. For a description of expanded cash income, see taxpolicycenter.org/TaxModel/income.cfm.
(c) Increase tax rates by one percentage point for taxpayers in the third tax bracket and higher.
(d) Table shows the distributional effects of a VAT as if it had been in place permenently as opposed to transitional impact when first enacted.

### *Discussion*

This report focuses on the revenue and distributional impacts of revenue raising options for Medicare. Amount of revenue raised and distributional effects are essential items for policymakers to consider if they address Medicare's funding shortfall through increased revenues. Other important factors to consider are whether additional revenues would be dedicated to the HI trust fund and the impact of options on the complexity of the tax system, economic efficiency, and the extent the tax system treats people in the same circumstances the same.

#### INCREASING MEDICARE TAX RATES

Raising the base HI rate (option 1) can raise significant revenues with limited increases in complexity. The additional revenues would be credited automatically to the HI trust fund. Raising rates equally on all workers would also be consistent with policymakers' original intent of all workers paying at least some amount for their future Medicare benefits (at least for Part A benefits). However, that option is less progressive than the other options, it can increase incentives to shift compensation to tax-free benefits, and it can reduce incentives to work (though research suggests taxes play only a modest role in labor supply decisions for most workers) (McClelland and Mok 2012). Raising only the rate on the existing Additional Medicare Tax that applies to high-income taxpayers (option 2) is also a fairly simple option. Although that option is significantly more progressive, it raises far less revenue than a general increase in the HI tax rate of the same size (about one-fifth as much revenue). Raising the rate only at even higher levels of earnings—such as above $400,000 ($500,000)—is more progressive still, but it raises even less revenue and adds complexity to the system because it creates a second bracket to the Additional Medicare Tax.

#### INCREASING INCOME TAX RATES

Increasing income tax rates across the board would be another option for raising significant revenues for Medicare without changing systems of tax collection and administration (option 4). Because it applies to capital income and leaves a significant amount of initial income untaxed, that option is more progressive than raising Medicare tax rates. Excluding the rates on capital gains and dividends from the increase (option 5) makes the policy less progressive, but this option has only a modest impact on revenues. Increasing rates only on the top brackets (option 6) would be considerably more progressive than options 4 or 5. However, raising income taxes can reduce incentives to work (again, these effects can be small) and to save and can increase incentives to shift compensation to untaxed forms, such as health benefits, and to shift spending to deductible expenses, such as mortgage interest.[27] Increases in general revenues also raise issues as to whether that revenue can be used to address shortfalls in the HI trust fund. Crediting the new revenue to the trust fund would require additional congressional action, increase the complexity of the Medicare system, and essentially change the nature of trust fund financing.

### BROADENING THE TAX BASE

Broadening the tax base would raise funds for Medicare while potentially reducing inefficiencies in the tax system by limiting rate increases and the disincentives they provide. Limiting the income and payroll tax exclusions for employer-provided health benefits (option 7) could raise substantial revenue while potentially reducing overall health care costs by reducing incentives to buy high-cost insurance. It would also create greater parity among workers because the current system discriminates between those with high- and low-cost plans, those with high and low tax rates, and those with and without employer-provided benefits. However, absent other adjustments, the option could result in employers switching to health plans with cost-sharing that is too high for low-wage workers. Setting thresholds for limiting the exclusion may also require complex adjustments if policymakers wish to protect health plans with high-cost enrollees.[28] Most of the revenue gain would not go to the HI trust fund without additional congressional action. Repealing the Medicare tax exclusion for health while retaining the income and Social Security payroll tax exclusions (option 8), would be relatively simple to implement and administer and the funds would be credited automatically to the HI trust fund. However, the impact would be less progressive than limiting the full tax exclusion.

Expanding the income subject to the 3.8 percent tax (options 9 and 10) would be very progressive. In addition, unlike the current system, it would treat high-income families the same regardless of how they receive their income and thereby increase horizontal equity. It would also reduce distortions in choice of business organization and form of payout from certain businesses to owners.[29] If implemented through NIIT expansion, which goes to general revenues, rather than expanding self-employment taxes, it would require additional action to credit the HI trust fund. And, like any tax on capital, it would reduce incentives to invest in those businesses.

### INCREASING CORPORATE INCOME TAX RATE

Increasing the corporate income tax rate (option 11) would be a simple way to raise revenue and would be very progressive. This option, too, would require additional action to credit the HI trust fund. Raising the corporate rate can result in inefficiencies by encouraging firms to organize as pass-through businesses rather than corporations, to finance through debt rather than through equity, to shift profits overseas, as well as discourage investment in the US by foreign firms. The inefficiencies would be lower starting from today's rate of 21 percent, as opposed to higher rates such as 35 and 46 percent in the past. And some studies suggest the latest corporate rate reduction had limited impact on domestic investment.[30]

### ENACTING VAT WITH A REBATE

Enacting a VAT with a rebate (option 12) would raise substantial revenues without affecting household saving and business investment decisions. This option might even be used to provide dedicated revenues sufficient to finance SMI or all of Medicare. Trust fund financing might better encourage budgetary rigor if it covered all of the program, not just HI.[31] A rebate could address many concerns about progressivity. But enacting a VAT would require a substantial investment as the federal government currently lacks the infrastructure to administer

a national consumption tax. For that reason, a 1 percent VAT as estimated here is probably unrealistic. In practice, to be worth the effort and expense of implementing a VAT, a higher rate would be required. In other countries, the lowest VAT rates are 5 percent and they are often much higher.[32] Enacting a 5 percent VAT in the US would raise sufficient revenues to both address HI insolvency in the near-term and reduce other taxes or help fund increasing Medicare spending as a share of national income over the long-term.

### *Conclusion*

This paper examines revenue and distributional effects and other factors that policymakers might consider when weighing various options for raising revenues as part of Medicare reform. It is not an endorsement of any of them. Each option has pros and cons, and policymakers will need to make value judgements and weigh tradeoffs between simplicity, equity, and efficiency. In addition, when considering revenue options, policymakers should consider some broader issues. Perhaps most important is whether Medicare reform will focus primarily on HI trust fund solvency in the near-term or if it will focus also on long-term solutions to the overall program's growing costs. Other issues policymakers should consider are the distributional effects of any related reforms of Medicare spending, the distributional impacts of current Medicare spending and revenues, and general goals of tax and budget reform.

# APPENDIX A

## THE TAX POLICY CENTER MICROSIMULATION MODEL

The Urban-Brookings Tax Policy Center (TPC) large-scale microsimulation model produces estimates of how current and proposed tax policies will affect federal revenues and the distribution of tax burdens by income.[33] The model is similar to those used by the Congressional Budget Office, the Joint Committee on Taxation of the US Congress, and the Department of the Treasury's Office of Tax Analysis. The version of the TPC tax model used in this report (TM21) produces revenue and distributional estimates for each individual year from 2011 to 2032 (covering the 10-year budget window starting in 2022).

The model's primary data source is the 2006 public-use file (PUF) produced by the Statistics of Income Division of the Internal Revenue Service (IRS). The 2006 PUF contains 145,858 records with detailed information from federal individual income tax returns from tax years 2003 to 2006 filed in calendar year 2007. The data are aged forward to match characteristics of the 2011 tax filing population based on information from the IRS.

We add information on other demographic characteristics and sources of income that are not reported on tax returns to the resulting data through a constrained statistical match with data from the US Census Bureau's March Current Population Survey (CPS). That match also generates a sample of individuals who do not file individual income tax returns (nonfilers).

We then augment the tax model database by imputing wealth, education, consumption, health, retirement, and other variables for each record in the matched PUF-CPS file. These imputations allow us to analyze a wide variety of policy proposals. Finally, to extend the database to more recent and future years, we "age" the 2011 data using the actual 2012 through 2018 tax data as well as projections from various sources.

Simulations of proposals to limit tax subsidies for health insurance use the model's health module, which includes imputations for health insurance status and employer-provided health benefits. We impute health insurance status and health insurance premiums using a statistical match with the Urban Institute's Health Insurance Policy Simulation Model (HIPSM). HIPSM is a detailed microsimulation model of the health care system designed to estimate the cost and coverage effects of proposed health care policy options.[34] We impute other employer-provided health benefits based on regressions estimated in the 2015, 2017, and 2018 annual surveys of employer-sponsored health benefits sponsored by the Kaiser Family Foundation and Health Research & Educational Trust. Other employer-provided health benefits include employer and employee contributions for health, dental, and vision insurance; Health Savings Accounts; Health Reimbursement Arrangements; and Medical Flexible Spending Accounts. We calibrate these imputations, such that simulations align with tax expenditure, revenue, and distributional estimates from the Joint Committee on Taxation, the Congressional Budget Office, and the Treasury's Office of Tax Analysis.

# APPENDIX B

TABLE B1

## Percent Change in After-Tax Income by Income Quintile for Options to Increase Medicare Revenues, 2022[a]

| Options | Expanded Cash Income Percentile[b] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | All | Lowest Quintile | Second Quintile | Middle Quintile | Fourth Quintile | Top Quintile | 80–90 | 90–95 | 95–99 | Top 1 Percent | Top 0.1 Percent |
| ***Medicare tax rates*** | | | | | | | | | | | |
| (1) Increase combined Medicare tax rate by 1 percentage point | -0.6 | -0.4 | -0.5 | -0.5 | -0.6 | -0.6 | -0.6 | -0.6 | -0.6 | -0.4 | -0.3 |
| (2) Increase combined Medicare tax rate by 1 percentage point on earnings above $200,000 ($250,000 for married households) | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | 0.0 | -0.3 | -0.4 | -0.3 |
| (3) Increase combined Medicare tax rate by 1 percentage point on earnings above $400,000 ($500,000 for married households) | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | -0.3 | -0.3 |
| ***Individual income tax rates*** | | | | | | | | | | | |
| (4) Increase individual income tax rates by 1 percentage point | -0.7 | -0.1 | -0.3 | -0.5 | -0.7 | -1.0 | -0.8 | -0.9 | -1.0 | -1.2 | -1.2 |
| (5) Increase individual income tax rates by 1 percentage point on ordinary income only | -0.7 | -0.1 | -0.3 | -0.5 | -0.7 | -0.8 | -0.8 | -0.8 | -0.9 | -0.8 | -0.6 |
| (6) Increase individual income tax rates by 1 percentage point for taxpayers in higher tax brackets[c] | -0.4 | 0.0 | 0.0 | -0.1 | -0.2 | -0.7 | -0.4 | -0.6 | -0.8 | -1.1 | -1.2 |
| ***Broadening tax base*** | | | | | | | | | | | |
| (7) Limit income and payroll tax exclusion for employer-provided health benefits at 75th percentile of premiums | -0.2 | 0.0 | -0.1 | -0.2 | -0.3 | -0.2 | -0.3 | -0.3 | -0.2 | 0.0 | 0.0 |
| (8) Repeal HI tax exclusion for employer-provided health benefits | -0.2 | -0.2 | -0.2 | -0.3 | -0.3 | -0.1 | -0.3 | -0.2 | -0.1 | 0.0 | 0.0 |
| (9) Expand NIIT base to include income of certain business owners not subject to Medicare taxes for incomes over $400,000 ($500,000 for married households) | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.3 | 0.0 | 0.0 | -0.1 | -0.8 | -1.0 |
| (10) Expand NIIT base to include income of certain business owners not subject to Medicare taxes for incomes over $200,000 ($250,000 for married households) | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.3 | 0.0 | 0.0 | -0.2 | -0.8 | -1.0 |
| ***Other taxes*** | | | | | | | | | | | |
| (11) Increase corporate income tax rates by 1 percentage point | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.2 |
| (12) Enact one percent broad-based value-added tax with rebate[d] | -0.5 | -0.1 | -0.3 | -0.5 | -0.6 | -0.6 | -0.6 | -0.7 | -0.7 | -0.6 | -0.6 |

**Source:** Tax Policy Center Microsimulation Model (version 0721-2).
(a) Baseline is the law currently in place before passage of the Inflation Reduction Act of 2022. Policies assumed effective 1/1/2022.
(b) Includes both filing and non-filing tax units. For a description of expanded cash income, see taxpolicycenter.org/TaxModel/income.cfm.
(c) Increase tax rates by one percentage point for taxpayers in the third tax bracket and higher.
(d) Table shows the distributional effects of a VAT as if it had been in place permenently as opposed to transitional impact when first enacted.

# NOTES

[1] See Steuerle and Garrett (2022), for further discussion of Medicare's financing challenges.

[2] There is no employer portion of the Additional Medicare Tax.

[3] Income from a business in which a person does not actively participate.

[4] In recent past years, actual Medicare spending has grown at rates lower than CMS actuarial projections. See, for example, Holahan and McMorrow (2015).

[5] The Tax Policy Center assumes workers bear the full burden of employer payroll taxes. We use "households" to refer to tax units that are people filing income taxes on the same return or people who would file together if they were to file.

[6] The thresholds for the Additional Medicare Tax are not indexed for inflation under current law or these options. All the options raising Medicare tax rates apply to the self-employed as well as workers.

[7] Current law individual income tax rates are 0.10, 0.12, 0.22, 0.24, 0.32, 0.35, and 0.37.

[8] Only long-term capital gains and qualified dividends are taxed under the alternative schedule. Short-term gains and nonqualified dividends are taxed as ordinary income.

[9] Excluding capital gains only modestly affects the revenue gain because we follow the Joint Committee on Taxation's assumption that capital gains realizations are highly sensitive to tax rates. Our model would only estimate a large impact on revenue from raising the gains rate if it were combined with other structural changes such as ending step-up basis for inherited assets.

[10] In 2022, the third tax bracket (0.22) starts at $83,550 of taxable income for joint filers and $41,775 for single filers. The standard deduction is $25,900 for joint filers and $12,950 for single filers.

[11] Tax filing units include tax filers and individuals and families not filing tax returns.

[12] For a further discussion of how the tax exclusion for health benefits subsidizes health insurance coverage and its distributional impacts, see Mermin and others (2020).

[13] Tax-excluded health benefits limited by the option include premiums for employer-sponsored health insurance and contributions to Health Savings Accounts, Health Reimbursement Arrangements, and Medical Flexible Spending Accounts. The thresholds would grow over time at the same rate as health insurance premiums.

[14] The Cadillac tax would have been applied to health plans with premiums in excess of $11,200 for single coverage and $30,100 for family coverage in 2022. Based on Congressional Budget Office projections of the 75th percentile of employer-provided health benefits in 2024, we estimate the 75th percentile is $9,900 for single coverage and $24,400 for family coverage in 2022. See CBO (2022, 32). Although the Cadillac tax would have been levied on insurers, the burden would ultimately fall on workers with employer-sponsored insurance and distributional impacts would likely be very similar to limiting the health exclusion. See Blumberg, Holahan, and Mermin (2015). Shortly before Congress repealed the Cadillac tax, the Joint Committee on Taxation estimated that repealing the tax would reduce revenues by $200 billion between 2022 and 2029. See JCT (2019).

[15] If policies limiting the health exclusion above thresholds aim to tax generous health plans as opposed to plans that are high cost simply because they have high-cost enrollees, the IRS would need to apply actuarial adjustment factors to the thresholds. Taxing all health benefits avoids this complication.

[16] For example, owners of S corporations that materially participate in the operation of the business do not pay self-employment taxes or the NIIT on profits. S corporations are corporations, with 100 or fewer shareholders, that elect to pass corporate income, losses, deductions, and credits through to their shareholders for federal tax purposes. S corporations are required to pay reasonable compensation in the form of wages for any services provided by owners. While passive owners of S corporations are subject to the NIIT, active owners pay Medicare taxes on their wages but do not pay self-employment taxes or the NIIT on profits. This treatment gives active owners a strong incentive to pay themselves lower wages and receive higher profits. See Hemel, Holtzblatt, and Rosenthal (2022).

# NOTES

[17] See option 22 in CBO (2018), for a proposal to tax this income through expanding self-employment taxes and see US Department of Treasury (2021, 65), for a proposal to tax the excluded income partly by extending self-employment taxes and partly by extending the NIIT.

[18] The impact on Social Security revenues would be modest as most affected business owners have earnings in excess of the maximum taxable earnings for Social Security. An additional difference between the approaches is that expanding self-employment taxes would allow affected business owners to deduct a portion of the additional tax on their individual income tax returns.

[19] For further discussion of VATs, see Toder, Nunns, and Rosenberg (2012).

[20] The Tax Policy Center assumes consumption taxes lower real incomes in proportion to each tax unit's share of labor income and super normal returns—the portion of capital income that exceeds the normal rate of return. The option provides a refundable income tax credit that offsets burden on labor income up to thresholds tied to the federal poverty line. Tax units with incomes below the thresholds will still bear some VAT burden to the extent they have super normal returns, for example, if they own stock mutual funds in a retirement account. All tax units with labor incomes above the thresholds receive the maximum rebate, which offsets a smaller share of VAT burden as income increases.

[21] The revenue estimate includes the reduction in federal income and payroll taxes due to the VAT reducing factor incomes but does not include the impact of the VAT on federal outlays or state and local government budgets. For a discussion of how the Tax Policy Center distributes consumption taxes, see Toder, Nunns, and Rosenberg (2011).

[22] The options rank somewhat differently by average tax change in 2022 than by change in revenues over 10 years. In particular, the general increase in income taxes (option 4) results in the largest average tax in table 2 but not the largest 10-year revenue increase in figure 1. The annual revenue gain from increasing income tax rates declines when many provisions in the Tax Cuts and Jobs Act expire in 2026, lowering 10-year revenue estimates relative to the other options that grow steadily over time. In addition, the average tax change in Tax Policy Center distributional estimates differs conceptually from revenue estimates. Unlike revenue estimates, distributional estimates exclude the impact of microdynamics, such as increased sheltering of income or reduced capital gains realizations in response to higher tax rates. Also, whereas revenue estimates measure actual cash flows in a given year, distributional estimates book tax increases on contributions to tax-deferred retirement contributions in the year income is earned, as opposed to when the taxes are paid on withdrawal. Both of these conceptual differences increase the size of distributional estimates relative to revenue estimates for the options to increase income tax rates.

[23] For a discussion of how the Tax Policy Center measures the distributional impacts of tax policies, see "Measuring the Distribution of Tax Changes," Urban-Brookings Tax Policy Center, https://www.taxpolicycenter.org/resources/measuring-distribution-tax-changes.

[24] Raising the corporate income tax rate affects some tax units at all income levels; but for a 1 percentage point increase, the percent change in after-tax income for the first four income quintiles rounds to zero.

[25] The Tax Policy Center distributes VAT burden using the "sources" method, meaning VAT burden is distributed by share of labor income and super normal returns as opposed to the "uses" method, which would distribute by share of consumption. Still, tax units that consume less of their income will have more capital income and therefore a greater share of their income will consist of normal returns that are not burdened by the VAT.

[26] It is less useful for assessing the progressivity of a single proposal because much of the difference in shares across income group simply reflects the distribution of income.

[27] While tax rates have limited impact on labor supply, research suggests that taxpayers, particularly at higher income levels, are able to reduce taxable incomes in response to higher tax rates. Ways to shelter income include increased spending on tax deductible expenses (for example, larger mortgages), and shifting compensation to untaxed forms, such as employer-provided benefits. Based on the literature, the Tax Policy Center tax model assumes the elasticity of taxable income with respect to the net of tax rate rises with income and equals 0.25 for those in the top 1/10th of 1 percent of the income distribution. For a summary of the literature on the impact of tax rates on taxable income, see Saez, Slemrod, and Giertz (2012).

# NOTES

[28] See endnote 14.

[29] Extending the 3.8 percent tax would reduce incentives for businesses to organize as S corporations and limited partnerships. It also would reduce incentives for active S corporation owners to classify their income as profits as opposed to wages. See Congressional Budget Office (2018, 223).

[30] See Matheson and others (2022), for a review of studies examining the impact of corporate rate reductions from the Tax Cuts and Jobs Act of 2017 on domestic investment spending.

[31] On the other hand, creating a new dedicated revenue source adds to the complexity of an already confusing system. See Steuerle and Garett (2022), for a discussion of the relative merits of addressing Medicare's financial challenges through dedicated revenues or general revenues.

[32] "Value-added tax (VAT) rates," PwC, accessed December 22, 2022, https://taxsummaries.pwc.com/quick-charts/value-added-tax-vat-rates.

[33] For more information on the tax model. See "Brief Description of the Tax Model," Urban-Brookings Tax Policy Center, https://www.taxpolicycenter.org/resources/brief-description-tax-model.

[34] For a detailed description of HIPSM, see Buettgens and Banthin (2020).

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