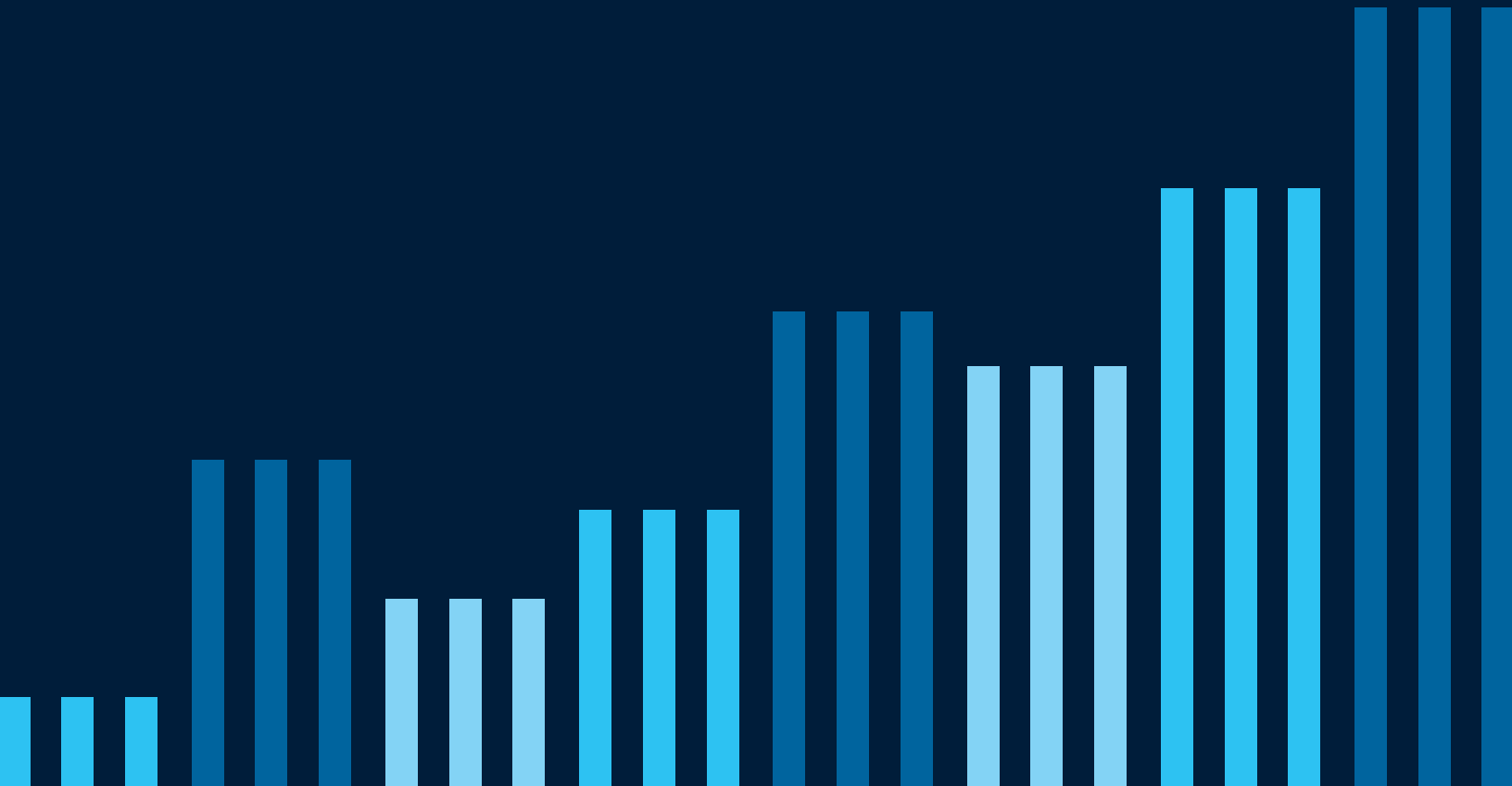




Employer Healthcare Tax Benefits

An Economic Impact Study

PREPARED BY



Executive summary

This report estimates the macroeconomic impacts of limiting the tax exclusion for employment-based health coverage to the 75th percentile of premiums.ⁱ The EY Macroeconomic Model is used to estimate the macroeconomic impacts of this limitation.

Current law

The tax exclusion for employment-based health insurance coverage takes several forms. First, the federal tax system excludes employer-paid premiums from income and payroll taxes, and employee contributions are typically excluded as well.ⁱⁱ Second, contributions made by employees and/or employers to flexible spending arrangements (FSAs), health reimbursement arrangements (HRAs), and health savings accounts (HSAs) qualify for a tax exclusion from income and payroll taxes, though the specific tax treatment varies for each type of account.

The exclusion for employment-based health insurance coverage incentivizes employees to select employer-sponsored insurance and companies to provide health insurance. In 2024, about 75% of employees worked for an employer that offered health insurance coverage, and 57% participated in it, resulting in a 76% take-up rate.ⁱⁱⁱ

Policy change

The policy modeled in this report is to limit the income and payroll tax exclusion for employment-based health coverage to the 75th percentile of premiums effective January 1, 2026. This limit applies to contributions for health insurance premiums, FSAs, HRAs, and HSAs. Specifically, any contributions exceeding this limit would not be excluded from income and payroll taxes.

The 75th percentile of premiums in 2026 are estimated to be:

- ▶ \$11,200 for individual coverage
- ▶ \$27,600 for family coverage

The limits for 2026 are based on the 75th percentile of premiums in 2024 and adjusted for inflation using chained CPI-U. Note that since private insurance premiums are projected to grow faster than this policy's inflation adjustment (chained CPI-U), the policy becomes more stringent over time. Accordingly, by 2032, this policy would limit the tax exclusion to the 50th percentile of premiums (equivalent to \$8,900 for individual coverage and \$21,600 for family coverage in the 2026 US economy), meaning that a larger share of premiums would be subject to the limitation

ⁱ This is based on one of the three alternatives modeled by the Congressional Budget Office and Joint Committee on Taxation that would limit the tax exclusion for contributions to health insurance premiums and health spending accounts.

ⁱⁱ Here and throughout "insurance" refers to both commercial insurance arrangements and self-insured arrangements. Additionally, the 75th percentile benchmark includes both insured premiums and premium equivalents for self-insured arrangements. Contributions refer to employee and employer contributions unless otherwise specified. Note that, for tax purposes, salary reduction contributions to major medical plans under a Section 125 cafeteria plan (sometimes referred to as "employee contributions") are treated as employer contributions, even though they are funded through employee salary reductions.

ⁱⁱⁱ The take up rate, as defined by the Bureau of Labor Statistics (BLS), is calculated as the share of employees who participate in employment-based health insurance as a share of employees who work for an employer who offers employment-based health insurance.

over time. That is, 50% of premiums would fall above the limit in 2032 rather than 75% of premiums due to the projected growth of private insurance premiums.^{iv}

Key results

Imposing a limit on the tax exclusion for employment-based health coverage to the 75th percentile of premiums is estimated to have the following impacts on the US economy (relative to the size of the 2026 US economy):

Employment and compensation. A significant portion of the impact of limiting the tax exclusion for employment-based health coverage is estimated to fall on US workers through decreased compensation and employment. The policy is estimated to result in:

- ▶ 75,000 fewer US jobs, on average, in each of the first ten years, growing over time to 240,000 fewer jobs each year in the long run.
- ▶ \$75 billion less after-tax employee compensation annually, on average, over the first 10 years, growing to \$280 billion less after-tax employee compensation annually in the long run.^v

Gross domestic product (GDP). This policy is estimated to reduce the total amount of economic activity in the United States. Specifically, this policy is estimated to result in:

- ▶ \$10 billion less GDP, on average, in each of the first 10 years, growing over time to \$40 billion less GDP annually in the long run.

Health coverage impacts. A limit on the tax exclusion for employment-based health coverage is estimated to increase the uninsured rate. This increase in the uninsured rate is estimated to increase US mortality and decrease US labor productivity. Specifically, this policy is estimated to result in:^{vi}

- ▶ a 0.3 percentage-point higher uninsured rate (1.0 million people each year), on average, over the first 10 years, growing to a 0.4 percentage-point increase (1.5 million people each year) by 2035.^{vii}
- ▶ 2.8 million fewer individuals having employer-sponsored health insurance by 2035. Of these individuals:
 - Around 800,000 would obtain health insurance through the nongroup market

^{iv} The 50th percentile, also known as the median, represents the value at which half of the values fall below and half fall above. These projections are from the Congressional Budget Office.

^v Employee compensation includes wages and salaries, which are direct cash payments for labor, as well as non-wage benefits, such as employer-provided health insurance, retirement contributions, bonuses, stock options, and other perks. Health coverage above the limit would no longer be excluded from income and payroll tax, reducing after-tax employee compensation. Additionally, if this health coverage was replaced with wages, for example, these wages would generally be subject to income and payroll tax, which would also lead to lower after-tax employee compensation.

^{vi} These results are primarily based on estimates and methodology from the CBO. See Congressional Budget Office, *Options for reducing the deficit, 2023 to 2032 -- Volume I: Larger reductions*, December 7, 2022, (<https://www.cbo.gov/publication/58164>); and, Jaeger Nelson, "Economic effects of five illustrative single-payer health care systems," Congressional Budget Office Working Paper 2022-02, February 2022 (<https://www.cbo.gov/publication/57637>).

^{vii} Over the 10-year budget window, approximately 10% of the macroeconomic impacts are from the change in mortality rates and labor productivity due to changes in health care coverage. This grows to 25% of the macroeconomic impacts in the long run.

- Around 500,000 would enroll in Medicaid or CHIP
 - Around 1.5 million would be uninsured.
- The increase in mortality is estimated to result in approximately 1,000 additional deaths each year during the budget window, growing to approximately 4,000 additional deaths each year by 2050.^{viii}

Figure ES-1. Long-run macroeconomic impacts of a limitation on the tax exclusion for employment-based health coverage



Note: Results are scaled to the size of the US economy in 2026. The long run is when the economy has fully adjusted to the policy change. Since private insurance premiums are projected to grow faster than inflation (chained CPI-U), the policy becomes more stringent over time. This analysis models this increase in stringency through 2050. Nearly 1/3 of long-run macroeconomic impact is reached by year 10 (2035) and nearly 2/3 of the long-run macroeconomic impact is reached by year 20 (2045). Figures are rounded.

Source: EY analysis.

Note that it is not possible to separate entirely the impact of a given tax increase from the impact of how the revenue raised is used. The way in which the revenue is used can affect the estimated impacts. Typical revenue uses in analyses like this have included lower government deficits, increases in government spending or transfers, decreases in other taxes, or a combination thereof. This analysis assumes that the additional revenue associated with the limit on the tax exclusion for employment-based health coverage funds government transfers, a standard assumption for macroeconomic analyses of tax changes as it generally isolates the tax incentive effects.

^{viii} Estimates are produced following the methodology used by the Congressional Budget Office. See Nelson, Jaeger, "Economic Effects of Five Illustrative Single-Payer Health Care Systems," Congressional Budget Office, Working Paper 2022-02, February 2022.

Contents

I. Introduction	1
II. Limitation on the income and payroll tax exclusion.....	4
III. Insurance coverage and health impacts	6
IV. Macroeconomic impacts	7
V. Caveats and limitations.....	9
Appendix A. EY Macroeconomic Model	11
Endnotes.....	14

Macroeconomic impacts of a limitation on the tax exclusion for employment-based health coverage

I. Introduction

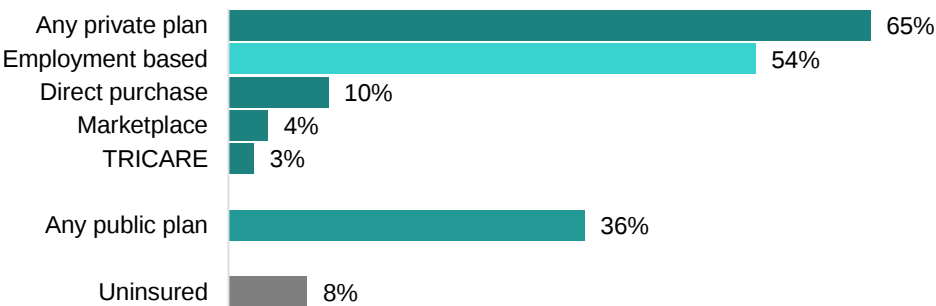
This report estimates the macroeconomic impacts of limiting the tax exclusion for employment-based health coverage to the 75th percentile of premiums.¹ The EY Macroeconomic Model is used to estimate the macroeconomic impacts of this limitation.

Employment-based health insurance

Employment-based health insurance is a benefit plan provided by an employer or employee organization, or a combination of both, that offers medical coverage to employees and/or their dependents, either directly or through insurance, reimbursement, or other mechanisms. In 2024, about 75% of employees worked for an employer that offered health insurance coverage, and 57% participated in it, resulting in a 76% take-up rate.²

Approximately 65% of the US population is covered by any private health insurance plan, 36% is covered by any public health insurance plan, and 8% of the US population is uninsured. Employment-based health insurance is the most common type of coverage among those with private health insurance, covering a majority of the insured population for all or part of the year.

Figure 1. Share of US population by type of health insurance coverage, 2023

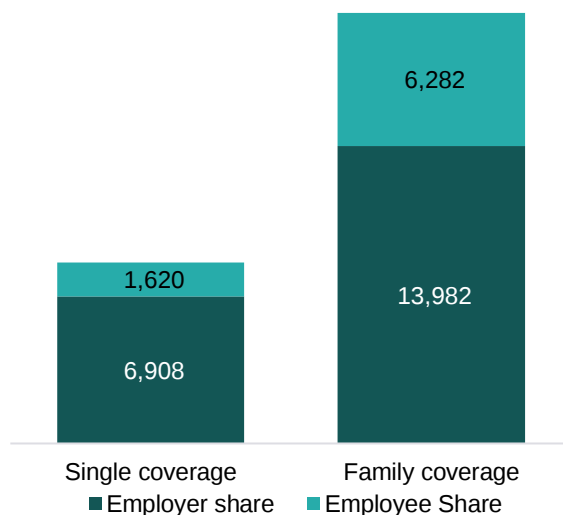


Note: Shares do not sum to 100%. The coverage estimates by type are not mutually exclusive, as individuals may be covered by more than one form of health insurance throughout the year.
Source: US Census Bureau.

Premium contributions

Figure 2 presents the median annual premium amounts for employees and employers in 2024. For single coverage, employees pay a median of \$1,620, while employers contribute \$6,908. For family coverage, employees pay a median of \$6,282, and employers contribute \$13,982.

Figure 2. Median annual employee and employer premium amounts, for single and family coverage, 2024



Note: Figures rounded.

Source: US Bureau of Labor Statistics and EY analysis.

On average, employees contribute 19% of the premium cost for single coverage plans and employers contribute 81%. For family coverage plans, employees contribute 31% and employers contribute 69% of the premiums.³

Current tax treatment of employment-based health insurance

Under current law, employer payments for employees' health insurance premiums are excluded from income and payroll taxes, unlike cash compensation. For most workers enrolled in employment-based coverage, the amount they pay for their share of premiums is also excluded from income and payroll taxes. These workers are typically enrolled in cafeteria plans, which allow them to choose between taxable benefits, such as cash wages, and nontaxable fringe benefits.⁴

Tax-free accounts for out-of-pocket costs

Health care costs not covered by insurance (i.e., out-of-pocket expenses) are sometimes subsidized through certain health spending accounts. Specifically, contributions to these accounts, which employees can use to cover such costs, are sometimes excluded from income and payroll taxes. Examples include:⁵

- ▶ *Flexible Spending Arrangements (FSAs)*: FSAs are employer-established benefits that reimburse employees for specific medical expenses. FSAs are typically funded through employee salary reductions under a cafeteria plan, though employers may also contribute. Employee contributions are excluded from federal income and payroll taxes, subject to annual limits.
- ▶ *Health Reimbursement Arrangements (HRAs)*: HRAs are employer-funded accounts that reimburse employees and, in some cases, former employees, for qualified medical

expenses. Only employers can contribute, and reimbursements are tax-free for employees.

- ▶ *Health Savings Accounts (HSAs)*: HSAs are tax-advantaged accounts used to save and pay for unreimbursed medical expenses. To contribute, individuals must be enrolled in a high-deductible health plan (HDHP). Both employees and employers can contribute. Employer contributions are excluded from income and payroll taxes. Employee contributions made through payroll deductions in a cafeteria plan are excluded from income and payroll taxes. Direct employee contributions made outside of payroll deductions are tax-deductible but subject to payroll taxes.

II. Limitation on the income and payroll tax exclusion

The policy modeled in this report is to limit the income and payroll tax exclusion for employment-based health coverage to the 75th percentile of premiums effective January 1, 2026. This limit applies to contributions for health insurance premiums, FSAs, HRAs, and HSAs. Specifically, any contributions exceeding this limit would not be excluded from income and payroll taxes.

Here and throughout “insurance” refers to both commercial insurance arrangements and self-insured arrangements.⁶ Additionally, the 75th percentile benchmark includes both insured premiums and premium equivalents for self-insured arrangements. Contributions refer to employee and employer contributions unless otherwise specified.⁷

The 75th percentile of premiums in 2026 are estimated to be:⁸

- ▶ \$11,200 for individual coverage
- ▶ \$27,600 for family coverage

Note that these contributions include employee and employer contributions.

The limits for 2026 are based on the 75th percentile of premiums in 2024 and the policy adjusts these limits for inflation using chained CPI-U.⁹

Modeling approach

To estimate the average and marginal tax effects of limiting the income and payroll tax exclusion for employment-based health coverage to the 75th percentile of premiums, the analysis used Internal Revenue Service (IRS) individual income tax return microdata combined with health insurance premium data. This model also included taxpayer behavior and was calibrated to be consistent with Congressional Budget Office (CBO) and Joint Committee on Taxation (JCT) estimates.¹⁰

Fiscal impacts of the policy

Limiting the exclusion from income and payroll taxes is estimated to increase federal revenue mainly because there would be a smaller tax benefit for workers with employment-based health coverage. However, this policy change would also lead to shifts in employee and employer behavior that, on net, would reduce federal revenue and increase federal outlays, partially offsetting the expected revenue gains from the policy.¹¹ Behavioral changes include:

- ▶ *Some employees would enroll in lower-premium plans or drop employment-based health coverage.* To avoid the higher after-tax cost of employer-based health coverage, some employees would switch to lower-premium employer-based health coverage plans or enroll in Medicaid, Children’s Health Insurance Program (CHIP), or plans through the Health Insurance Marketplace (Marketplace). Employees who enroll in plans through the Marketplace may qualify for subsidies or tax credits to lower premiums based on income and household size.
- ▶ *Some employers would offer lower-premium plans or discontinue offering health coverage.* This would reduce the amount of revenue collected from the policy, as there would be fewer plans with premiums exceeding the limit. This could also lead to more

employees enrolling in Medicaid, CHIP, or plans through the Marketplace. Employees who enroll in plans through the Marketplace may qualify for subsidies or tax credits to lower premiums based on income and household size. Large employers might be subject to Affordable Care Act (ACA)-related penalties if they stop offering affordable coverage to their employees, which could lead to a relatively small increase in revenue. Additionally, if employers reduce spending on health benefits, they may compensate employees with higher wages, which would increase taxable income and partially offset revenue losses from behavior.

III. Insurance coverage and health impacts

Imposing a limit on the tax exclusion is estimated to decrease the number of individuals covered by employment-based insurance, increase the uninsured rate, and worsen health outcomes. By reducing the tax incentive for employment-based health insurance, fewer employees would have health insurance due to the increase in the after-tax cost of health insurance. Specifically, this policy is estimated to result in:

- ▶ a 0.3 percentage-point higher uninsured rate (1.0 million people each year), on average, over the first 10 years, growing to a 0.4 percentage-point increase (1.5 million people each year) by 2035.¹²
- ▶ 2.8 million fewer individuals with employment-based insurance by 2035 relative to current law.¹³ Of these individuals:
 - Around 800,000 would obtain health insurance through the nongroup market;
 - Around 500,000 would enroll in Medicaid or CHIP; and
 - Around 1.5 million would be uninsured.

This reduction in health insurance coverage would generally increase the after-tax cost for health care, which is estimated to increase US mortality and decrease US labor productivity. Several studies provide evidence that the lack of health insurance can lead to higher mortality rates and reduced labor productivity.¹⁴ This is because without insurance:

- ▶ Some individuals would forego or delay necessary health care, leading to worsened health outcomes and higher mortality rates.
- ▶ Employees would be more likely to experience health conditions when they have reduced access to preventive care and treatment. This could reduce work performance.

Specifically, this policy is estimated to result in approximately 1,000 additional deaths each year during the budget window, growing to approximately 4,000 additional deaths each year by 2050.

IV. Macroeconomic impacts

The macroeconomic impacts of a limitation on the tax exclusion for employment-based health coverage are estimated using the EY Macroeconomic Model, an overlapping generations model similar to models used by the JCT, CBO, and US Department of the Treasury to analyze changes in tax policy. CBO has also used this type of model to estimate the macroeconomic impacts of changes in health policy.¹⁵

The EY Macroeconomic Model includes a detailed modeling of industries and inter-industry linkages. Businesses choose the optimal mix of capital and labor based on relative prices and industry-specific characteristics. Each industry has a different relative size of capital, labor, and intermediate inputs associated with its output.

The model is designed to include key economic decisions of businesses and households affected by tax policy, as well as major features of the US economy. The post-tax returns from work and savings are incorporated into business and household decisions on how much to produce, save, and work.

The model also incorporates the impact of changes in mortality and productivity from changes in health policy. As the uninsured rate increases, labor productivity is estimated to decrease, and the mortality rate is estimated to increase. Specifically, lower insurance coverage reduces access to health care, leading to poorer health outcomes that decrease productivity across all age groups and increase the risk of premature death, particularly for individuals aged 45 to 64.¹⁶

A description of the EY Macroeconomic Model can be found in Appendix A.

Use of revenues

Note that it is not possible to separate entirely the impact of a given tax increase from the impact of how the revenue raised is used. The way in which the revenue is used can affect the estimated impacts. Typical revenue uses in analyses like this have included lower government deficits, increases in government spending or transfers, decreases in other taxes, or a combination thereof. This analysis assumes that the additional revenue associated with the limit on the tax exclusion for employment-based health coverage funds government transfers, a standard assumption for macroeconomic analyses of tax changes as it generally isolates the tax incentive effects.¹⁷ Government transfer programs are assumed not to boost private-sector productivity or private-sector output but could achieve other policy objectives.

Macroeconomic estimates

Imposing a limit on the tax exclusion for employment-based health coverage to the 75th percentile of premiums is estimated to have the following US impacts (relative to the size of the 2026 US economy).¹⁸ These results take into consideration the increased uninsured rate and worsened health outcomes discussed above.

Employment and compensation. A significant portion of the impact of limiting the tax exclusion for employment-based health coverage would fall on US workers through decreased compensation and employment. The policy is estimated to result in:

- ▶ 75,000 fewer US jobs, on average, in each of the first ten years, growing over time to 240,000 fewer jobs each year in the long run.
- ▶ \$75 billion less after-tax employee compensation annually, on average, over the first 10 years, growing to \$280 billion less after-tax employee compensation annually in the long run.
 - Employee compensation includes wages and salaries, which are direct cash payments for labor, as well as non-wage benefits, such as employer-provided health insurance, retirement contributions, bonuses, stock options, and other perks.
 - Health coverage above the limit would no longer be excluded from income and payroll taxation, reducing after-tax employee compensation. Additionally, if this health coverage was replaced with wages, for example, these wages would generally be subject to income and payroll tax, which would also lead to lower after-tax employee compensation.

Gross domestic product (GDP). This policy (including health impacts) is estimated to reduce the total amount of economic activity in the United States. Specifically, this policy is estimated to result in:

- ▶ \$10 billion less GDP, on average, in each of the first 10 years, growing over time to \$40 billion less GDP annually in the long run.

Increased uninsured rate and worsened health outcomes affect economic growth. Health impacts from reduced health insurance, which are included in the above macroeconomic impacts, account for about 10% of the macroeconomic effects over the 10-year budget window, stemming from changes in mortality rates and labor productivity. This increases to 25% of the macroeconomic impacts in the long run. Specifically, the health impacts are estimated to result in \$1 billion less GDP, on average, in each of the first 10 years, growing over time to \$10 billion less GDP annually in the long run. That is, an increase in the uninsured rate would worsen health outcomes, which is estimated to decrease economic growth.

More detailed results can be seen in Appendix A.

V. Caveats and limitations

Any modeling effort is only an approximate depiction of the economic forces it seeks to represent, and the economic models developed for this analysis are no exception. Although various limitations and caveats might be listed, several are particularly noteworthy:

- ▶ **Estimated macroeconomic impacts are based on a stylized depiction of the US economy.** The economic models used for this analysis are, by their very nature, stylized depictions of the US economy. As such, they cannot capture all the detail of the US economy, the existing US tax system, the tax policy change, or the health policy change and health coverage impacts.
- ▶ **Estimates are limited by available public information.** The analysis relies on information reported by government agencies (primarily BLS, CBO, and IRS). The analysis did not attempt to verify or validate this information using sources other than those described in this report.
- ▶ **Macroeconomic estimates are sensitive to how tax revenue from the policy change is used.** It is not possible to separate entirely the impact of a given tax increase from the impact of how the revenue raised is used. The additional revenue must eventually be used in some way, which can affect the estimated impacts. Typical revenue uses in analyses like this have included lower government deficits, increases in government spending or transfers, decreases in other taxes, or a combination thereof. This analysis assumes that the additional revenue associated with the limit on the tax exclusion for employment-based health coverage funds government transfers, a standard assumption for macroeconomic analyses of tax changes as it generally isolates the tax incentive effects.
- ▶ **Full employment model.** The EY Macroeconomic Model focuses on the longer-term incentive effects of policy changes. It also assumes that all resources throughout the economy are fully employed; that is, there is no slack in the economy (i.e., a full employment assumption with no involuntary unemployment). Any increase in labor supply is a voluntary response to a change in income or the return to labor that makes households choose to substitute between consumption and leisure. This is a common assumption used in many macroeconomic models, including some used by the CBO, JCT, and US Department of the Treasury to analyze tax policy.
- ▶ **Industries are assumed to be responsive to normal returns on investment.** The industries comprising the United States economy in the EY Macroeconomic Model are assumed to be responsive to the normal returns on investment. This contrasts to industries that earn economic profits and thereby have an increased sensitivity to statutory tax rates relative to marginal effective tax rates.
- ▶ **Estimates depend on the assumed policy baseline.** This analysis estimates the macroeconomic impacts relative to the current-law baseline. Assuming a different policy baseline could result in different estimates than those produced by this analysis.
- ▶ **The estimates for the relationship between insurance rates and productivity, as well as insurance rates and mortality, are central estimates derived from experimental studies and data outlined in the empirical literature.** However, the academic literature from which

the central tendency estimates are derived includes a range of results. Assuming a different impact of changes in health care coverage on mortality rates and labor productivity could result in different estimates than those produced by this analysis.

- **The estimates presented rely heavily on microsimulation modeling conducted by the CBO and JCT.** This microsimulation modeling simulates the complex interactions between employers, households, insurers, and other entities under the proposed policy change. Uncertainty arises from insurers' potential responses to taxation on health-related contributions, including adjustments to premiums, benefits, cost-sharing, networks, administrative expenses, and provider pricing, all of which could alter the policy's economic impacts. The willingness of employers to continue offering health insurance without the full benefit of the tax exclusion introduces further uncertainty; employer behavior will significantly influence both workers' coverage decisions and the resulting changes in federal deficits. Deficit reductions are sensitive to workers' enrollment decisions; if more workers decline employment-based insurance than anticipated, greater tax revenues and larger deficit reductions would occur, while smaller-than-expected declines in coverage would lead to smaller reductions in deficits. The estimates also depend on baseline projections of premium growth for employment-based health insurance; if premiums grow faster than anticipated, fewer individuals would likely maintain such coverage, amplifying the policy's revenue and deficit effects.

Appendix A. EY Macroeconomic Model

The EY Macroeconomic Model used for this analysis is similar to those used by the CBO, JCT, and US Treasury Department. In this model, changes in tax policy affect the incentives to work, save and invest, and to allocate capital and labor among competing uses. Representative individuals and firms incorporate the after-tax return from work, savings, and investment, into their decisions on how much to produce, save, and work. CBO has also used this type of model to estimate the macroeconomic impacts of changes in health policy.¹⁹

The general equilibrium methodology accounts for changes in equilibrium prices in factor (i.e., capital and labor) and goods markets and simultaneously accounts for the behavioral responses of individuals and businesses to changes in taxation (or other policies). Behavioral changes are estimated in an overlapping generations (OLG) framework, whereby representative individuals with perfect foresight incorporate changes in current and future prices when deciding how much to consume and save in each period of their lives.

High-level description of model's structure

Production

Firm production is modeled with the constant elasticity of substitution (CES) functional form, in which firms choose the optimal level of capital and labor subject to the gross-of-tax cost of capital and gross-of-tax wage. The model includes industry-specific detail through use of differing costs of capital, factor intensities, and production function scale parameters. Such a specification accounts for differential use of capital and labor between industries as well as distortions in factor prices introduced by the tax system. The cost of capital measure models the extent to which the tax code discriminates by asset type, organizational form, and source of finance.

The industry detail included in this model corresponds approximately with three-digit North American Industry Classification System (NAICS) codes and is calibrated to a stylized version of the US economy. Each of 36 industries has a corporate and pass-through sector except for owner-occupied housing and government production. Because industry outputs are typically a combination of value added (i.e., the capital and labor of an industry) and the finished production of other industries (i.e., intermediate inputs), each industry's output is modeled as a fixed proportion of an industry's value added and intermediate inputs to capture inter-industry linkages. These industry outputs are then bundled together into consumption goods that consumers purchase.

Consumption

Consumer behavior is modeled through use of an OLG framework that includes 55 generational cohorts (representing adults aged 21 to 75). Thus, in any one year, the model includes a representative individual optimizing lifetime consumption and savings decisions for each cohort aged 21 through 75 (i.e., 55 representative individuals) with perfect foresight. The model also distinguishes between two types of representative individuals: those that have access to capital markets (savers) and those that do not (non-savers or rule-of-thumb agents).

Non-savers and savers face different optimization problems over different time horizons. Each period non-savers must choose the amount of labor they supply and the amount of goods they consume. Savers face the same tradeoffs in a given period, but they must also balance consumption today with the choice of investing in capital or bonds. The model assumes 50% of US households are permanently non-savers and 50% are permanently savers across all age cohorts.

The utility of representative individuals is modeled as a CES function, allocating a composite commodity consisting of consumption goods and leisure over their lifetimes. Representative individuals optimize their lifetime utility through their decisions of how much to consume, save, and work in each period subject to their preferences, access to capital markets, and the after-tax returns from work and savings in each period. Representative individuals respond to the after-tax return to labor, as well as their overall income levels, in determining how much to work and thereby earn income that is used to purchase consumption goods or to consume leisure by not working. In this model the endowment of human capital changes with age — growing early in life and declining later in life — following the estimate of Altig et al. (2001).²⁰

Government

The model includes a simple characterization of both federal and state and local governments. Government spending is assumed to be used for either: (1) transfer payments to representative individuals, or (2) the provision of public goods. Transfer payments are assumed to be either Social Security payments or other transfer payments. Social Security payments are calculated in the model based on the 35 years in which a representative individual earns the most labor income. Other transfer payments are distributed on a per capita basis. Public goods are assumed to be provided by the government in fixed quantities through the purchase of industry outputs as specified in a Leontief function.

Government spending in the model can be financed by collecting taxes or borrowing. Borrowing, however, cannot continue indefinitely in this model. Eventually, the debt-to-GDP ratio must stabilize so that the government's fiscal policy is sustainable. The model allows government transfers, government provision of public goods, or government tax policy to be used to achieve a selected debt-to-GDP ratio after a selected number of years. This selected debt-to-GDP ratio could be, for example, the initial debt-to-GDP ratio or the debt-to-GDP ratio a selected number of years after policy enactment.

Modeling the United States as a large open economy

The model is an open economy model that includes both capital and trade flows between the United States and the rest of the world. International capital flows are modeled through the constant portfolio elasticity approach of Gravelle and Smetters (2006).²¹ This approach assumes that international capital flows are responsive to the difference in after-tax rates of return in the United States and the rest of the world through a constant portfolio elasticity expression. Trade is modeled through use of the Armington assumption, wherein products made in the United States versus the rest of the world are imperfect substitutes.

Table A-1. Key model parameters

Intertemporal substitution elasticity	0.400
Intratemporal substitution elasticity	0.487
Leisure share of time endowment	0.309
International capital flow elasticity	3.000
Capital-labor substitution elasticity	1.000
Adjustment costs	2.000

Source: Key model parameters are generally from Joint Committee on Taxation, *Macroeconomic Analysis Of H.R. 7024, The "Tax Relief For American Families And Workers Act of 2024," As Ordered Reported By The Committee on Ways And Means, On January 19, 2024, January 24, 2024 (JCX-6-24)*; Joint Committee on Taxation, *Macroeconomic Analysis of the Conference Agreement for H.R. 1, The 'Tax Cuts and Jobs Act,'* December 22, 2017 (JCX-69-17); and Jane Gravelle and Kent Smetters, "Does the Open Economy Assumption Really Mean that Labor Bears the Burden of a Capital Income Tax?" *Advances in Economic Analysis and Policy*, 6(1) (2006): Article 3.

Table A-2. Macroeconomic impacts of a limitation on the tax exclusion for employment-based health coverage

	First ten years	Long run
GDP	*	-0.1%
Consumption	*	-0.2%
Investment	*	-0.1%
After-tax wage rate	-0.3%	-0.8%
Labor supply	*	-0.1%
Private capital	*	-0.1%

Note that * indicates a value of less than 0.05% in magnitude.
Source: EY analysis.

Endnotes

¹ This is based on one of the three alternatives modeled by the Congressional Budget Office and Joint Committee on Taxation that would limit the tax exclusion for contributions to health insurance premiums and health spending accounts. See Congressional Budget Office. (2022). *Options for reducing the deficit, 2023 to 2032 volume I: Larger reductions*. <https://www.cbo.gov/publication/58164>

² Bureau of Labor Statistics. (2024, March). *Employee benefits in the United States – March 2024*. U.S. Department of Labor.

³ Bureau of Labor Statistics. (2024, September 19). *Table 3. Medical plans: Share of premiums paid by employer and employee for single coverage, March 2024*. U.S. Department of Labor. <https://www.bls.gov/news.release/ebs2.t03.htm>; Bureau of Labor Statistics. (2024, September 19). *Table 4. Medical plans: Share of premiums paid by employer and employee for family coverage, March 2024*. U.S. Department of Labor. <https://www.bls.gov/news.release/ebs2.t04.htm>

⁴ See Congressional Budget Office. (2022). *Options for reducing the deficit, 2023 to 2032 volume I: Larger reductions*. <https://www.cbo.gov/publication/58164>. EY modeling is calibrated to be consistent with these CBO and JCT estimates.

⁵ See Congressional Research Service. (2021, May 3). *A comparison of tax-advantaged accounts for health care expenses* (R46782). <https://crsreports.congress.gov/product/pdf/R/R46782>

⁶ A self-insured group health plan is a type of health insurance where the employer directly pays for the health care expenses of its employees, rather than purchasing a traditional insurance policy from an insurance company.

⁷ Contributions refer to employee and employer contributions unless otherwise specified. Note that, for tax purposes, salary reduction contributions to major medical plans under a Section 125 cafeteria plan (sometimes referred to as “employee contributions”) are treated as employer contributions, even though they are funded through employee salary reductions.

⁸ See Congressional Budget Office. (2022). *Options for reducing the deficit, 2023 to 2032 volume I: Larger reductions*. <https://www.cbo.gov/publication/58164>. EY modeling is calibrated to be consistent with these CBO and JCT estimates.

⁹ The Chained Consumer Price Index for All Urban Consumers (Chained CPI-U) is a measure of inflation that accounts for changes in consumer behavior in response to price changes. Unlike the traditional Consumer Price Index (CPI-U), which assumes consumers buy the same basket of goods over time, the Chained CPI-U adjusts for substitutions between items as prices rise. For example, if the price of beef increases, consumers may purchase more chicken instead. This method tends to show a lower inflation rate than CPI-U, as it reflects consumers’ ability to adjust their purchasing habits in response to price fluctuations.

¹⁰ To estimate how limiting the income and payroll tax exclusion for employment-based health coverage to the 75th percentile of premiums affects average and marginal tax rates, this analysis used the Individual Public Use File (PUF) from the IRS. The 2012 PUF was used and projected to 2026 by adjusting the amounts per return and tax return population weights to align with more recent IRS data and CBO projections. The analysis focused on the subset of the population eligible for employer-based health coverage. The distribution of premium contributions by employees and employers for the population in the analysis was added to this dataset using BLS employee benefits data, and the distribution of contributions to health savings accounts was estimated using data from IRS individual statistical tables. Finally, to evaluate how the population responds to the increase in employee-based health coverage prices caused by the rise in tax liability resulting from the limitation on the tax exclusion, the analysis used a price elasticity of demand from the RAND Health Insurance Experiment, which is the same source used by the CBO to estimate the price elasticity of demand for health care services. Note that the impact of this policy on health insurance coverage choices used in the macroeconomic analysis were estimated by CBO and JCT microsimulation; that is, they were not estimated by this tax model. The changes in average and marginal income and payroll tax rates were estimated for the years 2026, 2030, 2035, 2040, 2045, and 2050. The model was calibrated to match estimates produced by the CBO and JCT for how much revenue this policy would raise. See Congressional Budget Office. (2022). *Options for reducing the deficit, 2023 to 2032 volume I: Larger reductions*. <https://www.cbo.gov/publication/58164>; Internal Revenue Service. (2012). *2012 Public use tax file*; U.S. Bureau of Labor Statistics. (2024, March). *Employee benefits in the United States – March 2024*. U.S. Department of Labor; Congressional Budget Office. (2025). *CBO’s historical data and economic projections*; RAND. (2010). *RAND’s health insurance experiment*; Congressional Budget Office. (2020, December). *How CBO analyzes the costs of proposals for single-payer health care systems that are based on Medicare’s fee-for-service program* (Working Paper 2020-08)

¹¹ A limit on the tax exclusion for employment-based health coverage is estimated to increase tax revenue and outlays, netting to an overall reduction in federal deficits. Specifically, this limit on the tax exclusion is estimated to reduce federal deficits by \$904 billion between 2026 and 2035, including a \$926 billion increase in revenues and a \$22 billion increase in outlays. This estimate is primarily based on an estimate available from the CBO. Congressional Budget Office. (2022). *Options for reducing the deficit, 2023 to 2032 volume I: Larger reductions*. <https://www.cbo.gov/publication/58164>

¹² The macroeconomic impacts include the mortality and productivity impacts.

¹³ This estimate is primarily based on an estimate available from the CBO. Congressional Budget Office. (2022). *Options for reducing the deficit, 2023 to 2032 volume I: Larger reductions*. <https://www.cbo.gov/publication/58164>.

¹⁴ The estimates for the relationship between insurance rates and productivity, as well as insurance rates and mortality, are central estimates derived from experimental studies and data outlined in the empirical literature, as summarized by CBO. This analysis uses the same central estimate as used in CBO modeling.

¹⁵ See Nelson, J., & Jaeger, D. (2022, February). *Economic effects of five illustrative single-payer health care systems* (Working Paper 2022-02). Congressional Budget Office.

¹⁶ The estimates for the relationship between insurance rates and productivity, as well as insurance rates and mortality, are central estimates derived from experimental studies and data outlined in the empirical literature, as summarized by CBO. This analysis uses the same central estimate as used in CBO modeling. See Nelson, J., & Jaeger, D. (2022, February). *Economic effects of five illustrative single-payer health care systems* (Working Paper 2022-02). Congressional Budget Office; Finkelstein, A., Taubman, S. L., Wright, B. J., et al. (2012). The Oregon Health Insurance Experiment: Evidence from the first year. *Quarterly Journal of Economics*, 127(3), 1057–1106. <https://doi.org/10.1093/qje/qjs020>; Goldin, J. R., Lurie, I. Z., & McCubbin, C. (2021). Health insurance and mortality: Experimental evidence from taxpayer outreach. *Quarterly Journal of Economics*, 136(1), 1–49. <https://doi.org/10.1093/qje/qjaa029>; Black, D. A., Devereux, P. J., & Salvanes, K. G. (2021). Simulated power analyses for observational studies: An application to the Affordable Care Act Medicaid expansion. *National Bureau of Economic Research, Working Paper 25568*. <https://doi.org/10.3386/w25568>; Miller, S., Johnson, R., & Wherry, L. R. (2021). Medicaid and mortality: New evidence from linked survey and administrative data. *Quarterly Journal of Economics*, 136(3), 1783–1829. <https://doi.org/10.1093/qje/qjab004>; Kaestner, R. (2021). Mortality and science: A comment on two articles on the effects of health insurance on mortality. *Econ Journal Watch*, 18(2), 192–211. <https://tinyurl.com/4yywp79t>; Jäckle, R., & Himmeler, O. (2010). Health and wages: Panel data estimates considering selection and endogeneity. *Journal of Human Resources*, 45(2), 364–406. <https://jhr.uwpress.org/content/45/2/364.short>; Pelkowski, J. M., & Berger, M. C. (2004). The impact of health on employment, wages, and hours worked over the life cycle. *Quarterly Review of Economics and Finance*, 44(1), 102–121. <https://doi.org/10.1016/j.qref.2003.08.002>; Charles, K. K. (2003). The longitudinal structure of earnings losses among work-limited disabled workers. *Journal of Human Resources*, 38(3), 618–646. <https://doi.org/10.3368/jhr.XXXVIII.3.618>; Chung, Y. (2013). Chronic health conditions and economic outcomes (draft). *Korea Energy Economics Institute*. www.sole-jole.org/assets/docs/14225.pdf; Meyer, B. D., & Mok, W. K. C. (2019). Disability, earnings, income, and consumption. *Journal of Public Economics*, 171, 51–69. <https://doi.org/10.1016/j.jpubeco.2018.06.011>; Tipirneni, R., et al. (2019). Association of expanded Medicaid coverage with health and job-related outcomes among enrollees with behavioral health disorders. *Psychiatric Services*, 71(1), 4–11. <https://doi.org/10.1176/appi.ps.201900179>; Tipirneni, R., et al. (2019). Changes in health and ability to work among Medicaid expansion enrollees: A mixed methods study. *Journal of General Internal Medicine*, 34(2), 272–280. <https://tinyurl.com/2pxrd73y>; Sommers, B. D., et al. (2017). Three-year impacts of the Affordable Care Act: Improved medical care and health among low-income adults. *Health Affairs*, 36(6), 1119–1128. <https://tinyurl.com/23ubxa8p>; Cawley, J., Soni, A., & Simon, K. (2018). Third year of survey data shows continuing benefits of Medicaid expansions for low-income childless adults in the U.S. *Journal of General Internal Medicine*, 33(9), 1495–1497. <https://tinyurl.com/n2t4dhr2>.

¹⁷ This is discussed, for example, in Congressional Research Service. (2023). *Dynamic scoring for tax legislation: A review of models*. <https://crsreports.congress.gov>. For papers modeling a tax increase where changes in revenue are offset by changes in government spending (transfers or government consumption) see, for example, Moore, R., & Pecoraro, B. (2023). Quantitative analysis of a wealth tax for the United States: Exclusions and expenditures. *Journal of Macroeconomics*, 78. <https://doi.org/10.1016/j.jmacro.2023.103390>; Nishiyama, S. (2013). Fiscal policy effects in a heterogeneous-agent overlapping-generations economy with an aging population. *Congressional Budget Office, Working Paper 2013-07*. <https://www.cbo.gov/publication/44649>; U.S. Department of the Treasury. (2006). *A dynamic analysis of permanent extension of the President's tax relief*.

¹⁸ The long run is when the economy has fully adjusted to the policy change. Since private insurance premiums are projected to grow faster than inflation (chained CPI-U), the policy becomes more stringent over time. This analysis models this increase in stringency through 2050. Nearly 1/3 of long-run macroeconomic impact is reached by year 10 (2035) and nearly 2/3 of the long-run macroeconomic impact is reached by year 20 (2045).

¹⁹ See Nelson, J., & Jaeger, D. (2022, February). *Economic effects of five illustrative single-payer health care systems* (Working Paper 2022-02). Congressional Budget Office.

²⁰ See Altig, D., Auerbach, A., Kotlikoff, L., Smetters, K., & Walliser, J. (2001). *Simulating fundamental tax reform in the United States*. *American Economic Review*, 91(3), 574–595. <https://doi.org/10.1257/aer.91.3.574>

²¹ See Gravelle, J., & Smetters, K. (2006). Does the open economy assumption really mean that labor bears the burden of a capital income tax? *Advances in Economic Analysis and Policy*, 6(1), 1–42. <https://doi.org/10.2202/1538-0637.1548>