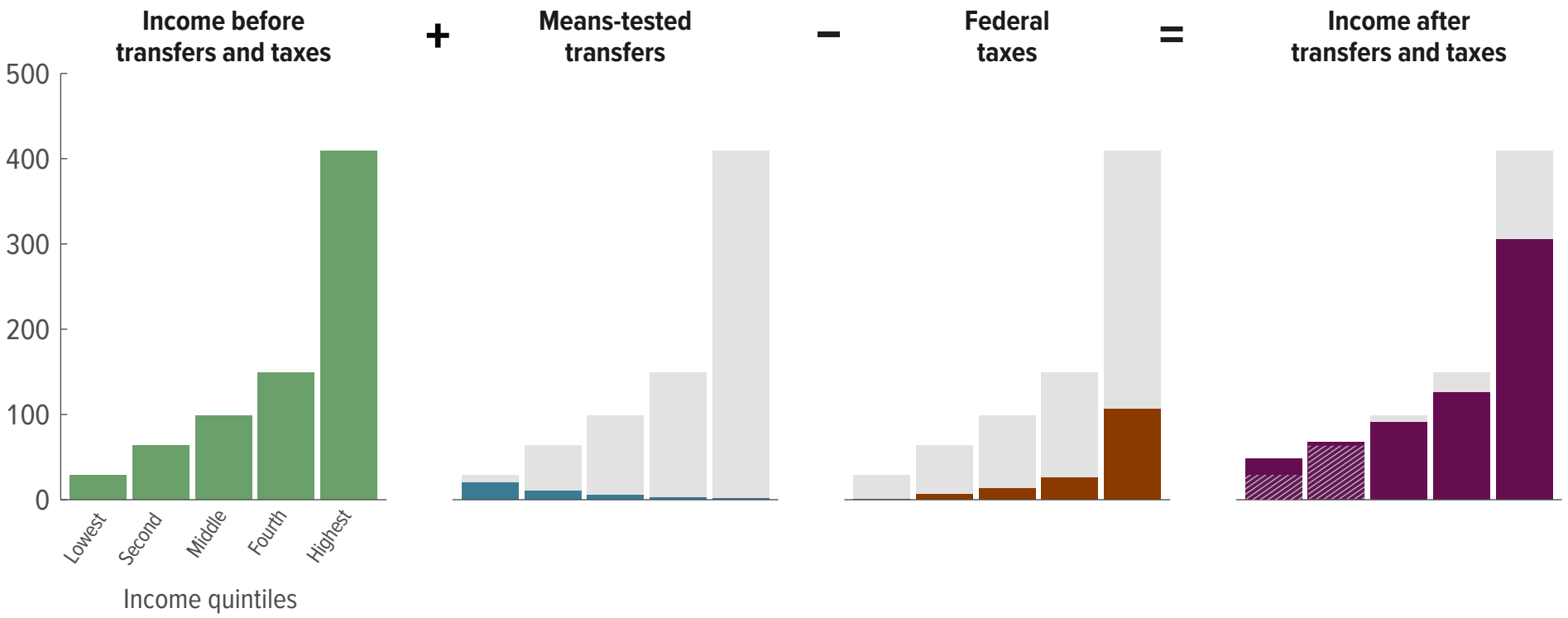
Congressional Budget Office
Nonpartisan Analysis for the U.S. Congress

The Distribution of Household Income, 2023

SEPTEMBER | 2026

Average Income, Means-Tested Transfers, and Federal Taxes in 2023
Thousands of 2023 dollars



Introduction and Summary of Findings

What Is in This Report?

The Congressional Budget Office regularly analyzes how income is distributed among households in the United States to provide Congress with information about the effects of federal taxes and government spending on U.S. households. In this report, CBO examines the distribution of income—and of the means-tested transfers and federal taxes that affect it—from 1979 (the earliest year for which relevant data from tax returns are available) to 2023 (the most recent year for which such data are available).

Terms Used in This Report

Income before transfers and taxes. Market income (which includes labor income, business income, capital income, and realized capital gains) plus social insurance benefits (which include benefits from Social Security, Medicare, unemployment insurance, and workers' compensation).[1]

Means-tested transfers. Cash payments and in-kind benefits (benefits in the form of goods and services instead of cash) provided through federal, state, and local government assistance programs, such as Medicaid and the Children's Health Insurance Program (CHIP), the Supplemental Nutrition Assistance Program (SNAP), and Supplemental Security Income (SSI). Eligibility to receive such transfers is determined primarily on the basis of income, which must be below certain thresholds. This analysis focuses on the average means-tested transfer rate, which is average means-tested transfers for a given group expressed as a percentage of that group's average income before transfers and taxes.

Federal taxes. Individual income taxes, payroll taxes, corporate income taxes, and excise taxes. The average federal tax rate is calculated by dividing total federal taxes for an income group by that group's total income before transfers and taxes.

Income after transfers and taxes. Income before transfers and taxes plus means-tested transfers minus federal taxes.

Gini coefficient. A measure of income inequality that summarizes how equally income is distributed across the population. It ranges from zero (the most equal distribution) to one (the least equal distribution).

1. For detailed definitions of income measures, see Congressional Budget Office, *The Distribution of Household Income in 2021* (September 2024), Appendix D, www.cbo.gov/publication/60341.

CBO's Main Findings for 2023

In 2023, the roughly 134 million households in the United States received a total of about $20 trillion in income. That income was more equally distributed after transfers and taxes than before transfers and taxes.

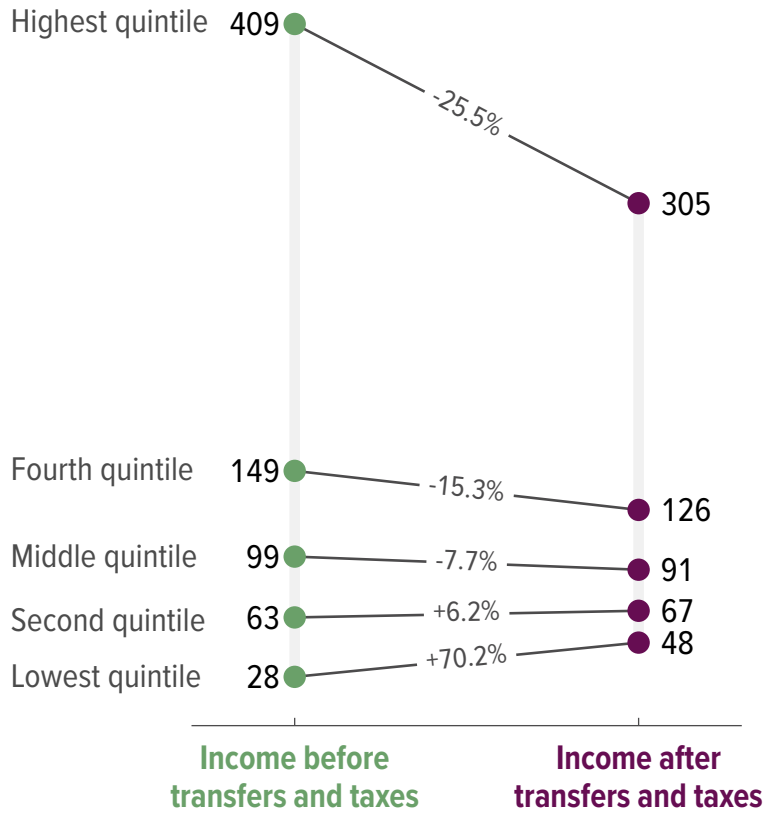
In 2023, average income before transfers and taxes rose for households at the bottom of the income distribution and fell for those at the top. Income increased by 5 percent among households in the lowest quintile (or fifth) of the distribution from 2022 to 2023. (All measures of income in this report have been adjusted to remove the effects of inflation.) By contrast, income decreased by 9 percent among households in the top 1 percent. That decrease was largely due to a reduction in realized capital gains. Average income from other sources, on net, remained relatively unchanged among households in the top 1 percent.

The extent to which transfers and taxes reduced inequality was similar in 2023 and 2022. Measured as a percentage of income before transfers and taxes, means-tested transfers decreased by 2 percentage points among households in the lowest quintile. The effect of that decrease was partially offset by a 1 percentage-point decrease in federal tax rates for households in that quintile.

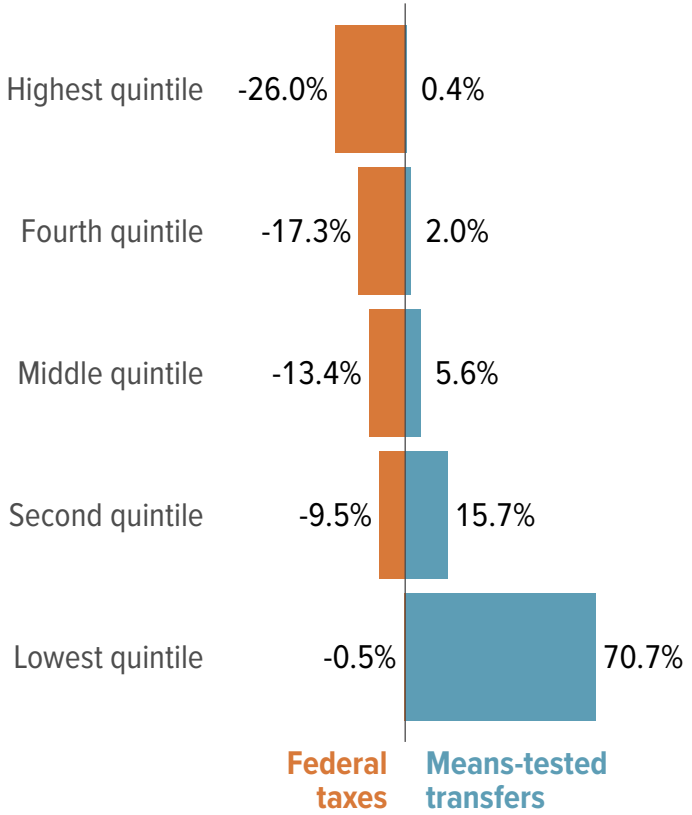
Income inequality decreased in 2023, whether measured before or after transfers and taxes. That decrease was mainly due to changes in income before transfers and taxes at the top and bottom of the income distribution.

Effects of Means-Tested Transfers and Federal Taxes on Income in 2023

Average income before and after means-tested transfers and federal taxes
Thousands of 2023 dollars



Effects of means-tested transfers and federal taxes
Percentage change



Before and after the effects of means-tested transfers and federal taxes are accounted for, household income was unequally distributed in 2023, but transfers and taxes made the distribution more equal.

Percentage-change values may not sum to totals because of rounding.

CBO's Main Findings for the 1979–2023 Period

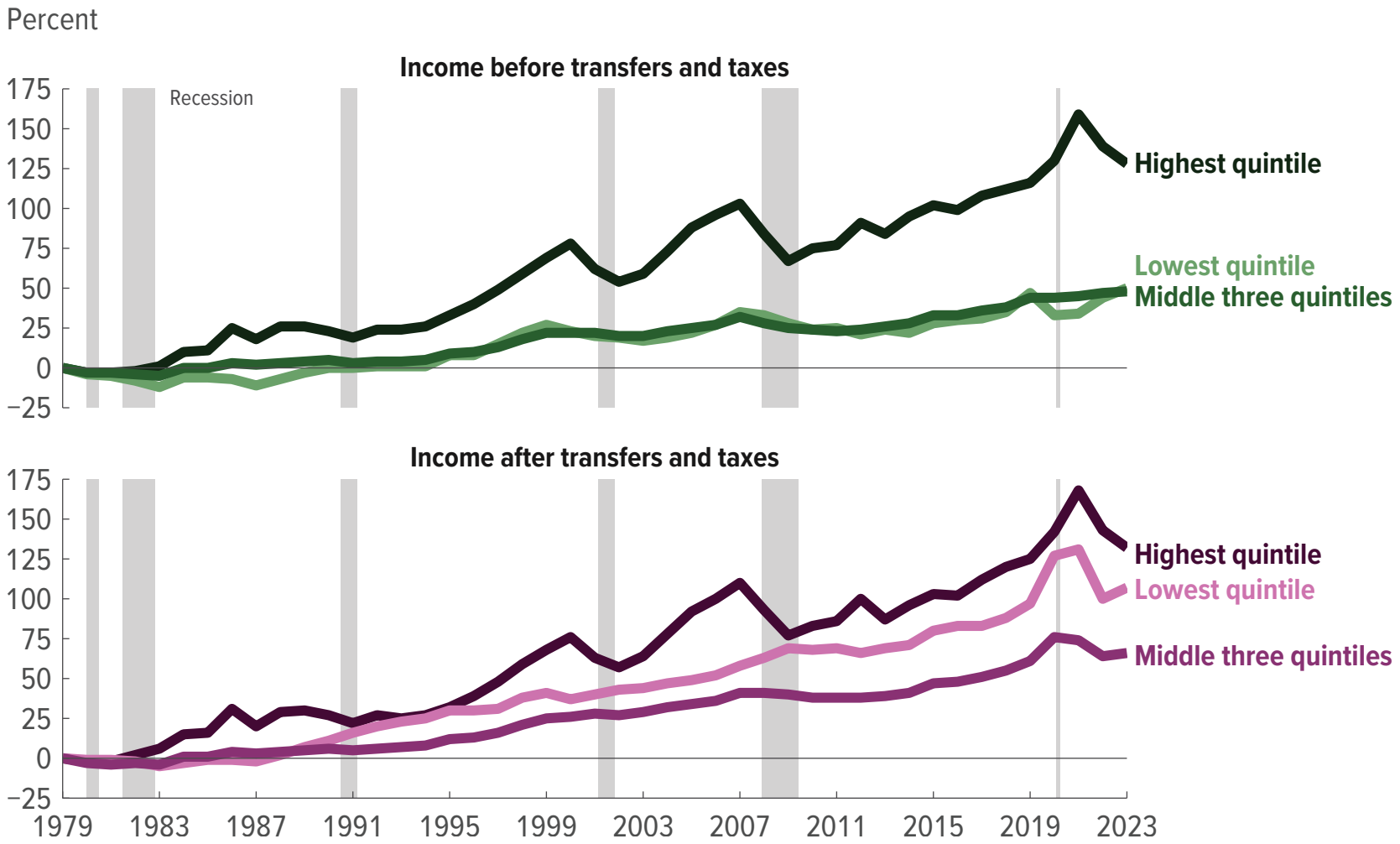
Average income, both before and after transfers and taxes, grew for all quintiles of the income distribution, but it increased most for households in the highest quintile. From 1979 to 2023, average annual income among households in the lowest quintile grew from $19,000 to $28,500, whereas among households in the highest quintile it grew from $179,700 to $409,300.

Means-tested transfers grew, especially for households in the lowest quintile. As a percentage of income before transfers and taxes, means-tested transfers rose over time, driven primarily by an increase in Medicaid spending.

Average federal tax rates fell for all income groups, especially the lowest quintile. Households with higher income typically had a higher average federal tax rate than households with lower income.

Income inequality rose, both before and after transfers and taxes. The degree to which transfers and taxes reduced income inequality increased over time.

Cumulative Growth in Average Income, 1979 to 2023



From 1979 to 2023, average income grew for households in each quintile, both before and after transfers and taxes. Average income growth was fastest for households in the highest quintile.

Income growth was more evenly distributed across quintiles after transfers and taxes than before transfers and taxes.

Notes About This Document

All dollar amounts are expressed in 2023 dollars. They were adjusted using the Bureau of Economic Analysis's price index for personal consumption expenditures. Growth rates were calculated after converting amounts to 2023 dollars.

Some of the figures have shaded vertical bars that indicate the duration of recessions. (A recession begins just after a peak in economic activity and runs through the subsequent trough.)

For details about the methods CBO uses for its analysis of the distribution of household income, see Congressional Budget Office, *The Distribution of Household Income in 2021* (September 2024), Appendix A, www.cbo.gov/publication/60341, and Bilal Habib, *How CBO Adjusts for Survey Underreporting of Transfer Income in Its Distributional Analyses*, Working Paper 2018-07 (Congressional Budget Office, July 2018), www.cbo.gov/publication/54234.

Income Before Transfers and Taxes, 1979 to 2023

Overview of Income Before Transfers and Taxes

Income before transfers and taxes consists of market income plus social insurance benefits.

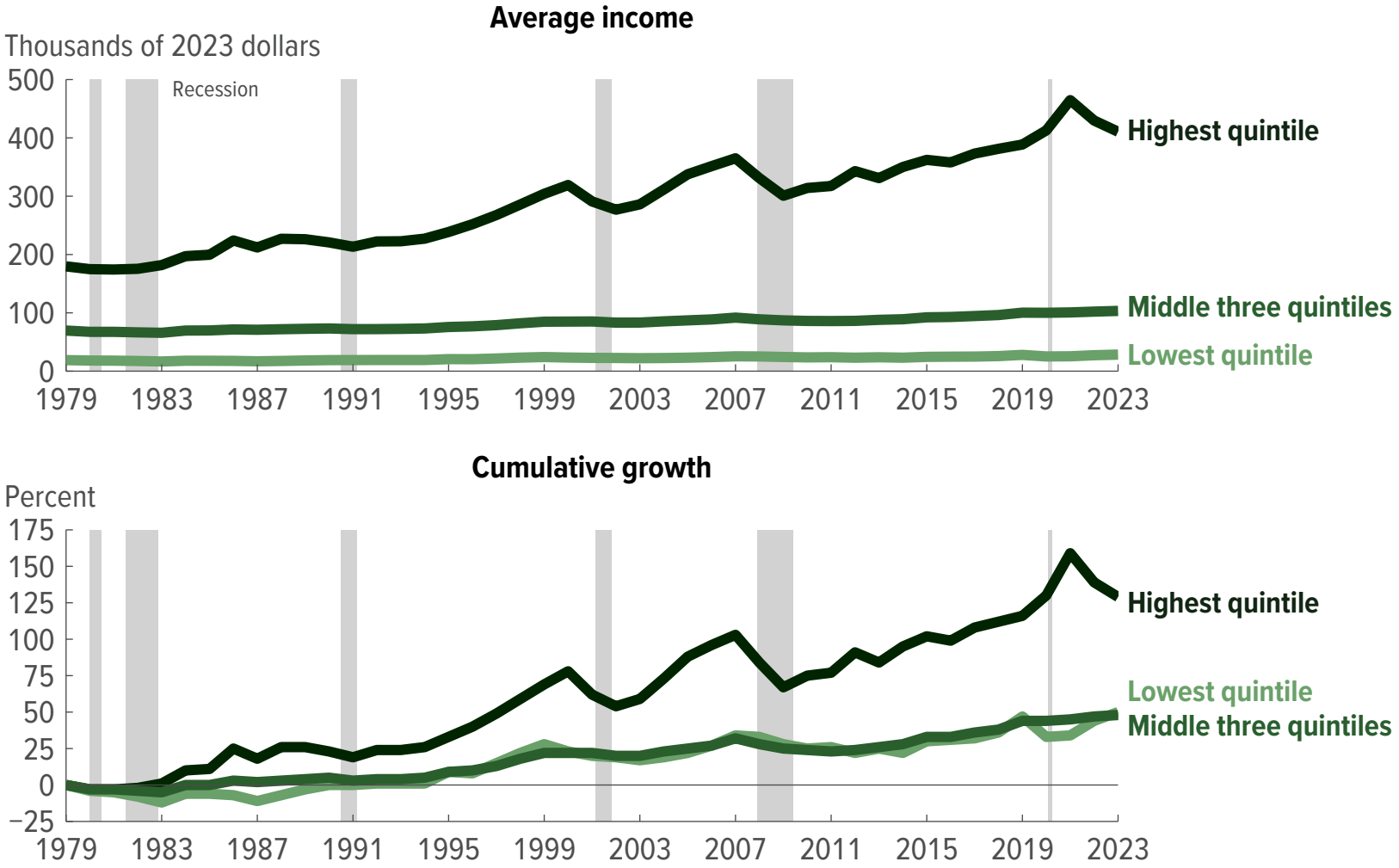
Market income comprises wages and other forms of labor income (including cash wages, employers' contributions for health insurance premiums, and payroll taxes paid by employers), business income, capital income (including realized capital gains), and other income.

Social insurance benefits consist of Social Security and Medicare benefits, regular unemployment insurance (but not expanded unemployment compensation provided during the COVID-19 pandemic), and workers' compensation.[2]

The composition of income before transfers and taxes varies across the income distribution. For example, realized capital gains constitute a greater portion of income for households at the top of the income distribution than for other households. For the average household in each quintile, labor income makes up the bulk of income.

2. In this analysis, regular unemployment insurance is categorized as a social insurance benefit, but expanded unemployment compensation provided in 2020 and 2021 is grouped with means-tested transfers. CBO chose that categorization because the expanded unemployment compensation lacked certain characteristics of social insurance programs, such as mandatory contributions from workers or employers, dedicated revenue sources, and benefit eligibility based on contributions.

Average Income Before Transfers and Taxes and Its Cumulative Growth

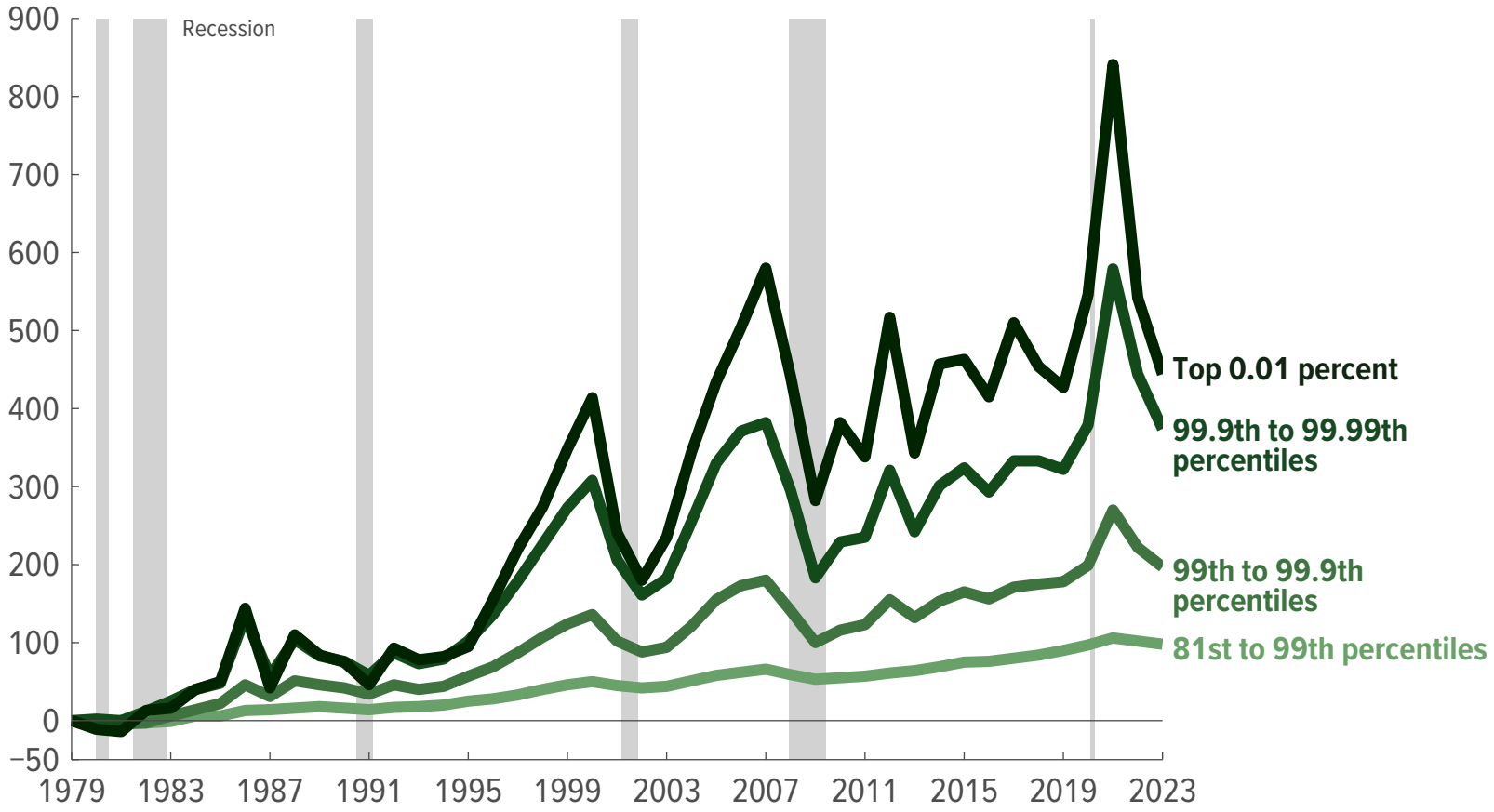


For households in each quintile of the income distribution, average income before transfers and taxes grew from 1979 to 2023. That growth was unevenly distributed: For households in the highest quintile, average income before transfers and taxes more than doubled; the increase for households in the other quintiles was much smaller.

Contrary to that overall pattern, in 2023 income grew by 5 percent for households in the lowest quintile, mainly driven by an increase in labor income, and fell by 5 percent for households in the highest quintile.

Cumulative Growth in Average Income Before Transfers and Taxes for Households in the Highest Quintile

Percent

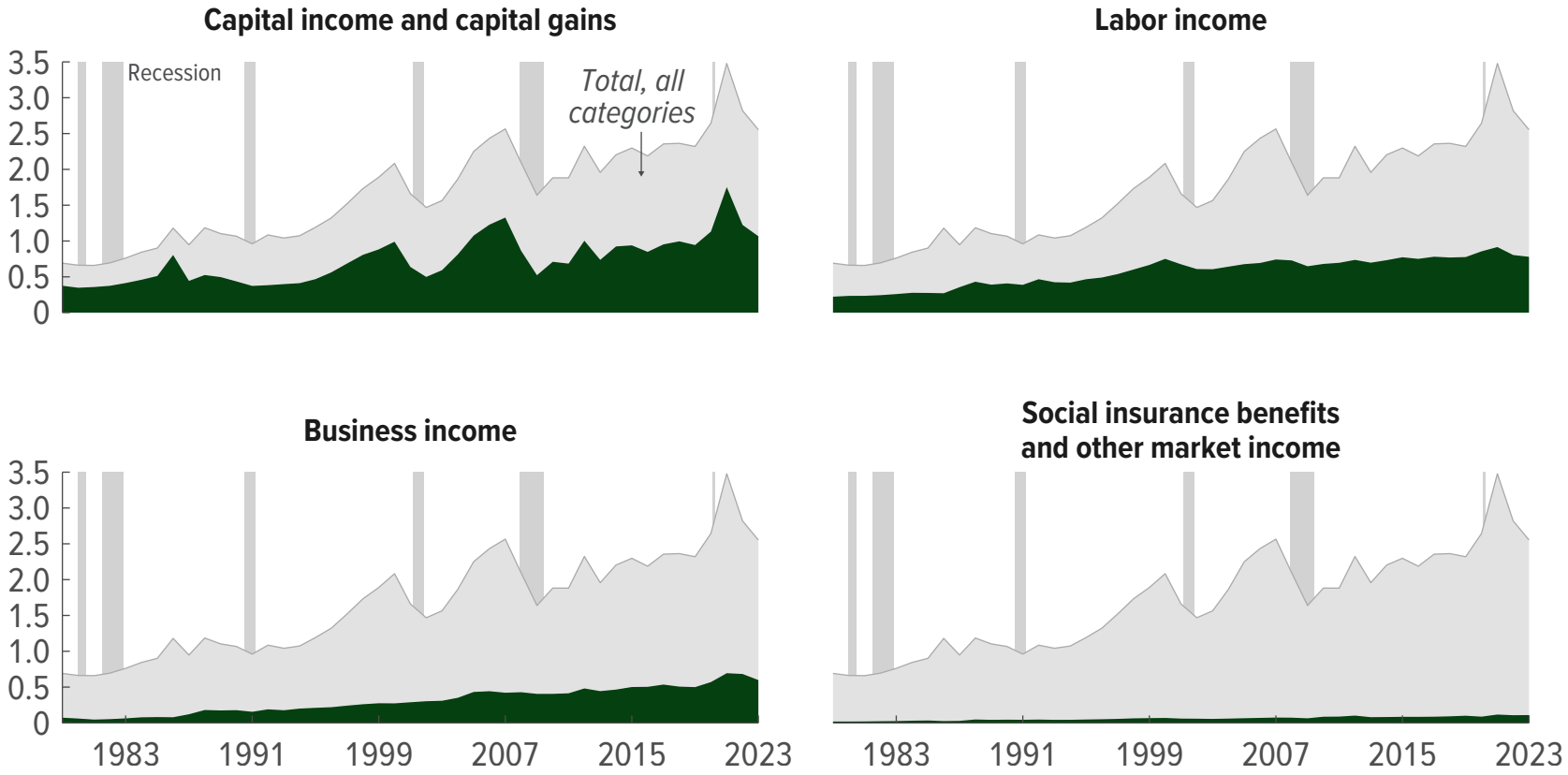


Average income before transfers and taxes grew faster for households in the top 0.01 percent of the distribution than for other households in the highest quintile.

In 2023, average income fell for all subgroups within the highest quintile—mainly because of decreases in realized capital gains, which make up a larger share of income for households at the top of the distribution. Average income from other sources, on net, remained relatively unchanged for those groups.

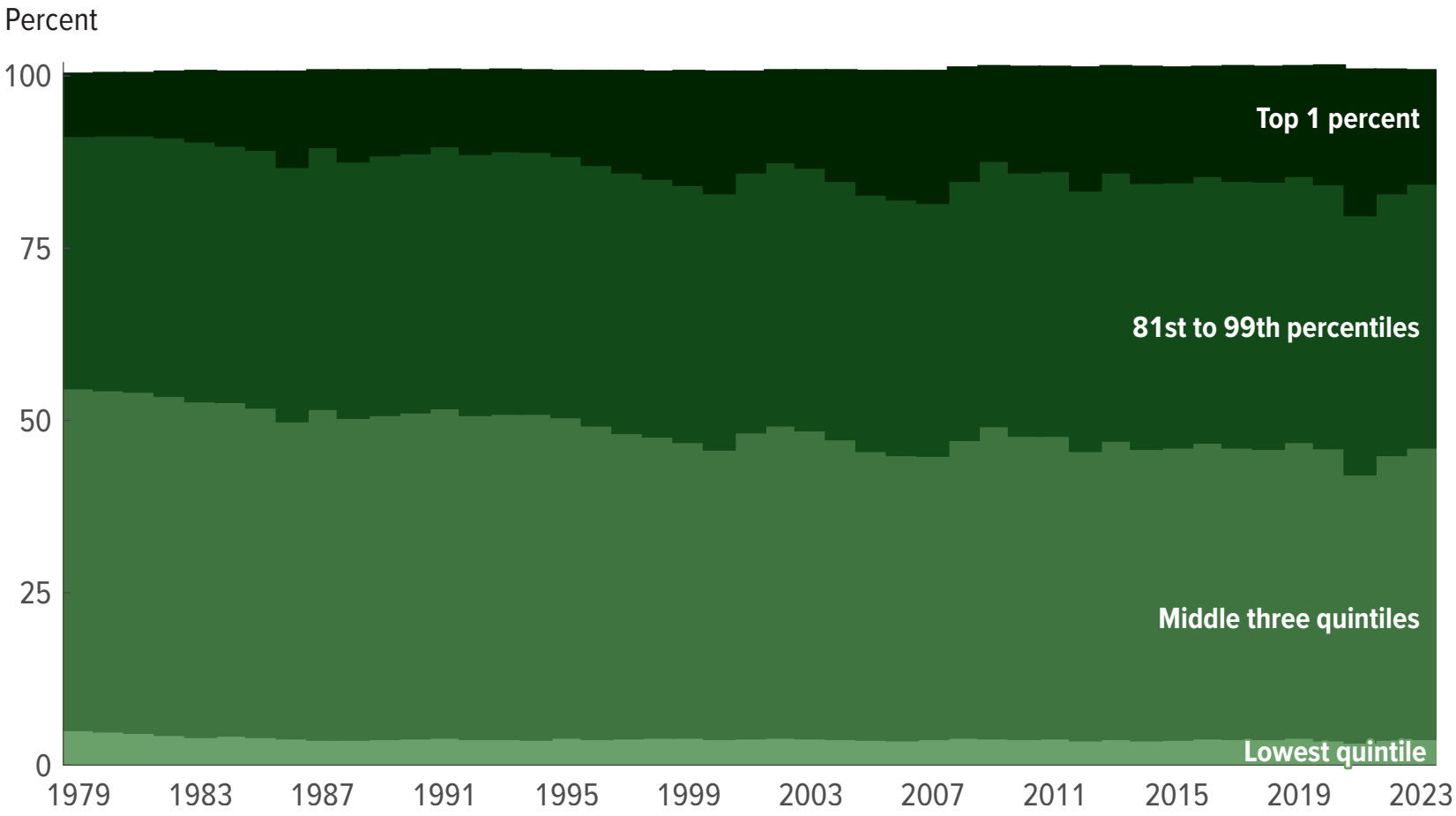
Composition of Income Before Transfers and Taxes for Households in the Top 1 Percent

Millions of 2023 dollars



From 1979 to 2023, average capital income (including realized capital gains) fluctuated more than other forms of income, reflecting cyclical movements in economic activity. Because capital income made up a larger share of income for households in the top 1 percent, they experienced larger swings in their average income before transfers and taxes than households in other income groups. For example, when realized capital gains spiked from 2019 to 2021 and then decreased in 2022 and 2023, those households' average income rose and fell accordingly.

Income Groups' Shares of Income Before Transfers and Taxes



From 1979 to 2023, the share of income before transfers and taxes going to households in the top 1 percent of the distribution increased from 9 percent to 16 percent, while the share going to households in the lowest quintile decreased from 5 percent to 4 percent.

Shares do not add up to 100 percent because households whose income was negative (because their business or investment losses exceeded their other income) are not shown.

Means-Tested Transfers, 1979 to 2023

Overview of Means-Tested Transfers

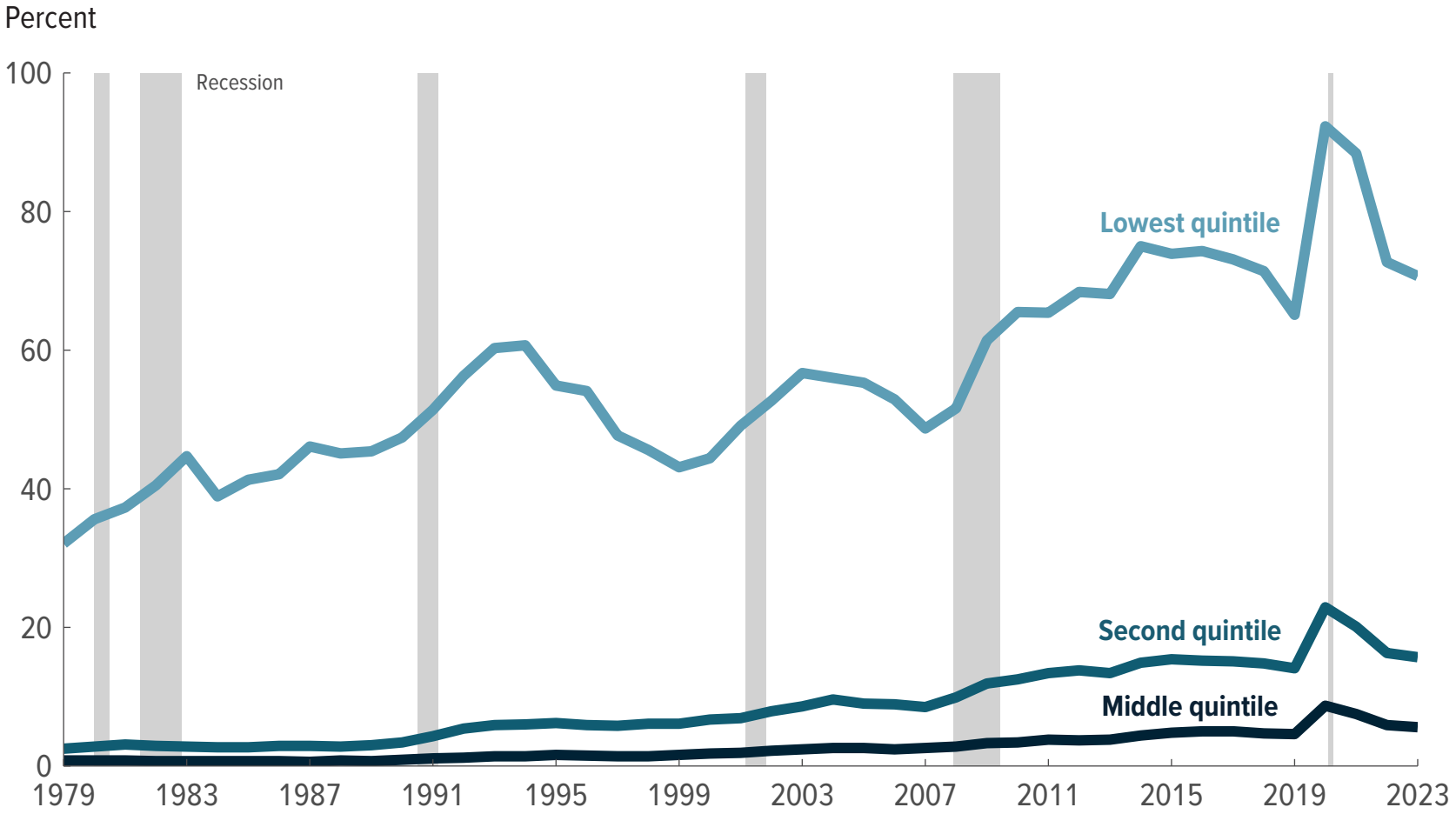
Means-tested transfers are cash payments and in-kind benefits from federal, state, and local governments that are designed to assist people who have low income and few assets. Most means-tested transfers go to households in the bottom two quintiles of the income distribution.

In this analysis, CBO divided means-tested transfers into four categories: Medicaid and CHIP, SNAP, SSI, and other transfers.[3] The last category includes low-income subsidies for Part D of Medicare (which covers prescription drugs), cost-sharing subsidies established by the Affordable Care Act, Temporary Assistance for Needy Families, and benefits from housing assistance programs, child nutrition programs, the Low Income Home Energy Assistance Program, and state and local governments' general assistance programs. One large component of "other transfers" in 2020 and 2021 was expanded unemployment compensation, which was meant to assist households during the economic disruption brought on by the pandemic. (CBO treats that expanded compensation differently from regular unemployment insurance, which it categorizes as a social insurance benefit.)

This analysis focuses on the average means-tested transfer rate, which reflects a group's average means-tested transfers as a percentage of its average income before transfers and taxes.

3. The value of Medicaid and CHIP benefits allocated to households in this analysis is based on the average cost of providing those benefits for federal and state governments.

Average Means-Tested Transfer Rates for Selected Income Groups

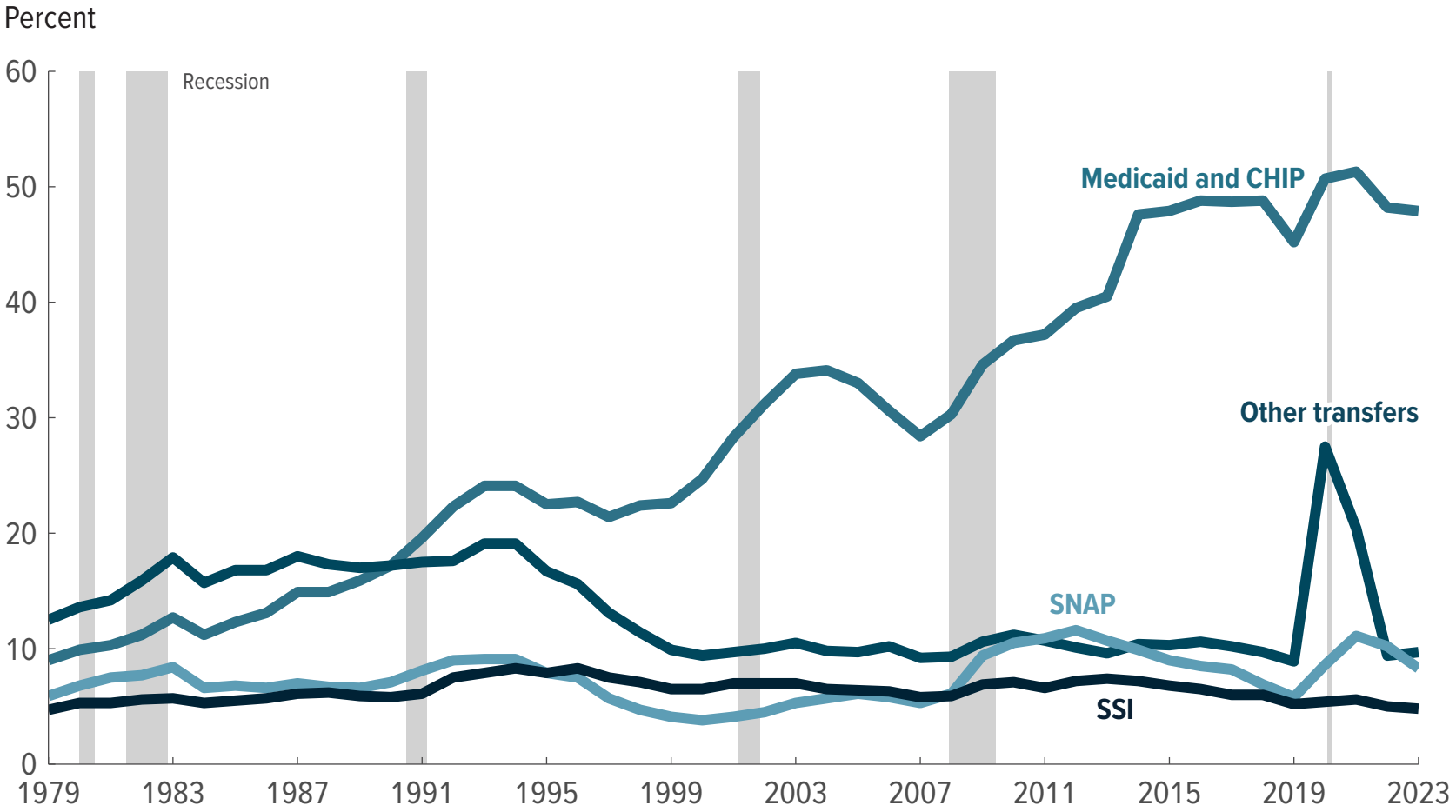


From 1979 to 2023, means-tested transfer rates more than doubled among households in the lowest quintile as both the number of people receiving benefits and the average benefit amount per recipient increased.

In 2023, means-tested transfer rates decreased for households in the lowest quintile. That decrease was mainly due to an increase in income: Whereas average transfers for those households grew by 2 percent, their average income before transfers and taxes grew by 5 percent.

Over the 1979–2023 period, average means-tested transfer rates for households in the highest two quintiles were generally less than 2 percent.

Average Means-Tested Transfer Rates for Households in the Lowest Quintile, by Type of Transfer



For low-income households, the growth of means-tested transfers as a percentage of income before transfers and taxes varied by program from 1979 to 2023. Medicaid and CHIP benefits grew the most, rising from 9 percent of income to 48 percent.

Legislation enacted in 2020 temporarily expanded SNAP and Medicaid benefits. In 2023, that legislation expired, which put downward pressure on those benefits.

The value of Medicaid and CHIP benefits allocated to households in this analysis is based on the average cost of providing those benefits for federal and state governments.

Federal Taxes, 1979 to 2023

Overview of Federal Taxes

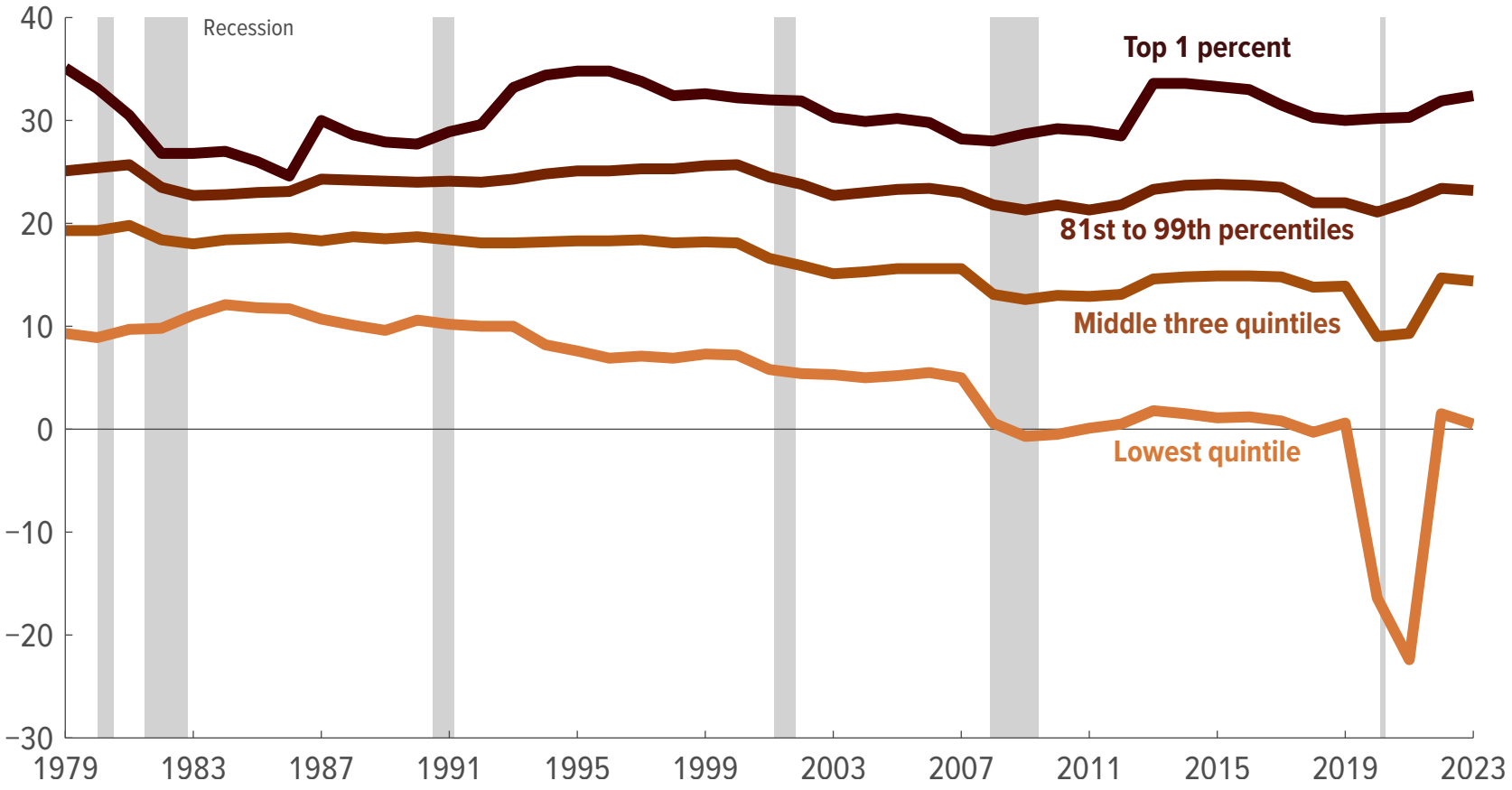
In this analysis, federal taxes consist of individual income taxes, payroll taxes, corporate income taxes, and excise taxes. CBO calculated average federal tax rates by dividing total federal taxes for an income group by that group's total income before transfers and taxes. Average federal tax rates are progressive—that is, they are generally higher for households with higher income.

Estimates of individual income taxes in this report incorporate the effects of refundable tax credits. Those credits include the earned income tax credit, the child tax credit, and premium tax credits (which subsidize the purchase of health insurance through the marketplaces established by the Affordable Care Act).

If a household's refundable tax credits exceed its tax liability before the credits are applied, the household's tax rate is negative; in such cases, the household receives a net payment from the federal government.

Large decreases in average federal tax rates in 2020 and 2021 reflect the effects of temporary tax credits (recovery rebate credits and an expansion of the child tax credit) enacted in response to economic disruption caused by the pandemic.

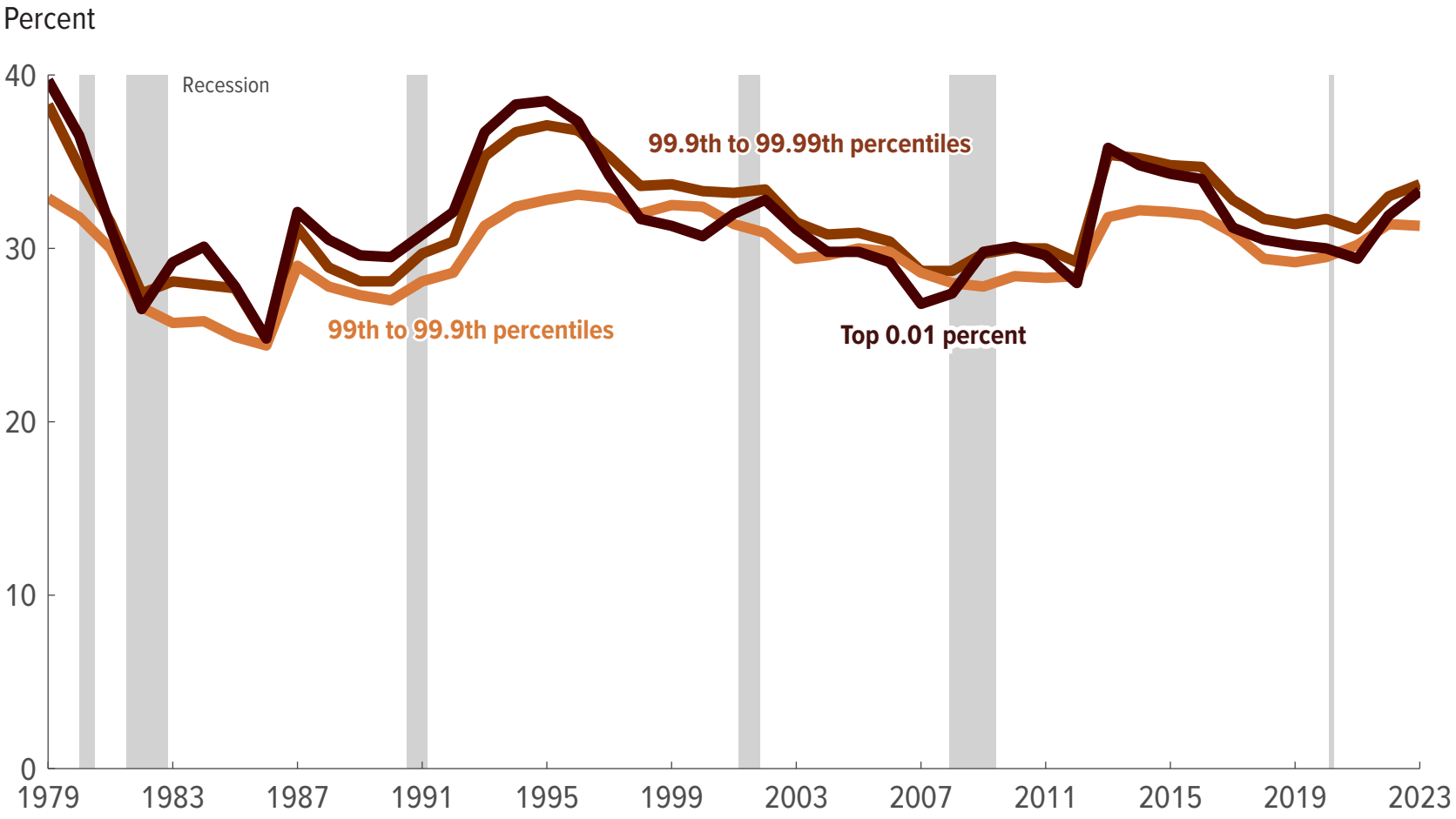
Average Federal Tax Rates



The average federal tax rate for each income group was lower in 2023 than it was in 1979. The decline was largest for households in the lowest quintile and smallest for households in the highest quintile.

In 2023, average federal tax rates fell for all groups other than households in the top 1 percent. The decrease was largest—about 1 percentage point—in the lowest quintile. That decrease was largely due to a rapid increase in premium tax credits after the legislation that had expanded Medicaid enrollment expired and many households shifted to marketplace plans.

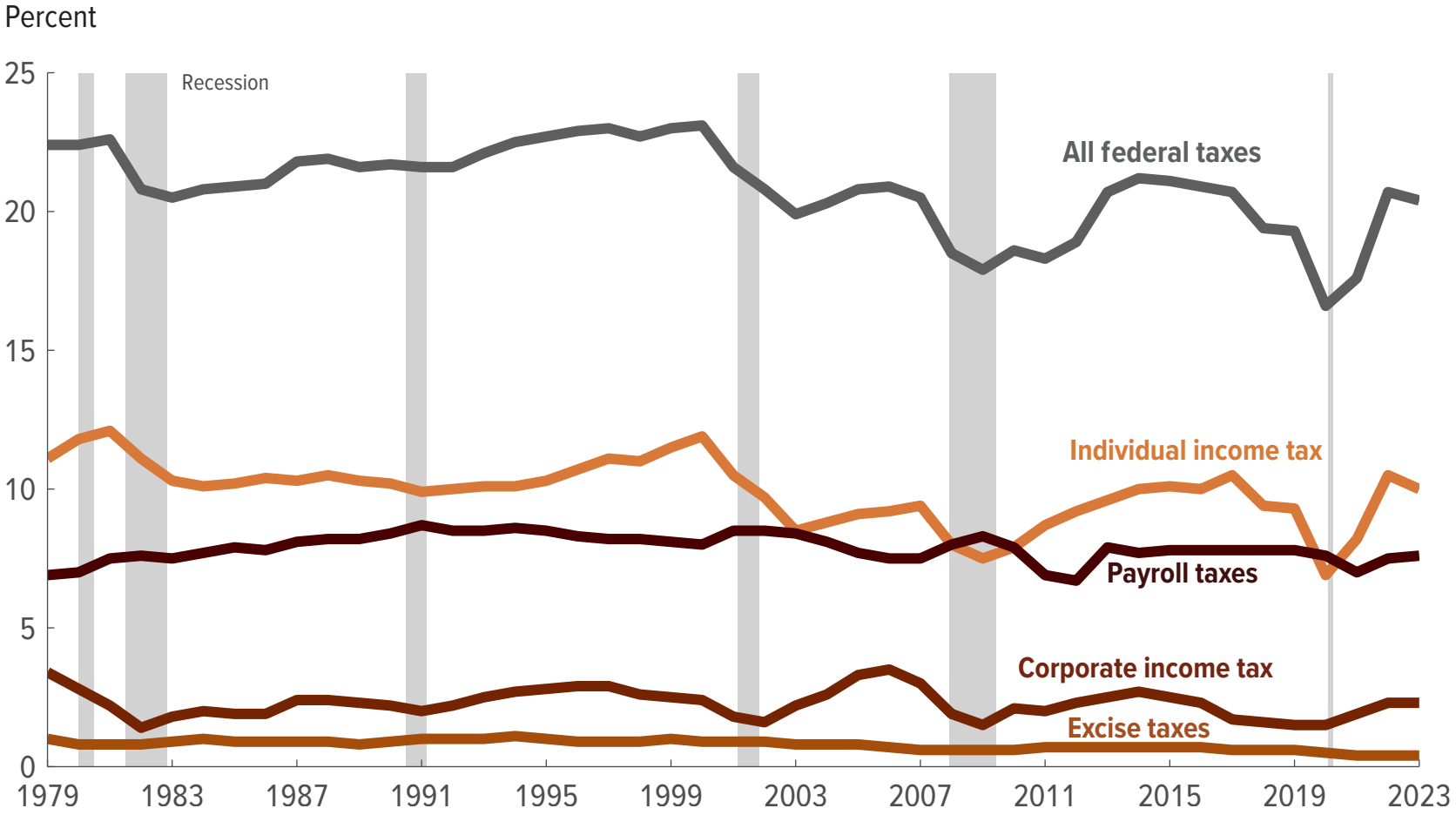
Average Federal Tax Rates for Households in the Top 1 Percent



The average federal tax rate for households in the top 1 percent of the income distribution fluctuated from 1979 to 2023. The average rates for subgroups within that group generally moved in tandem.

In 2023, average federal tax rates rose by 1 percentage point for households in the 99.9th to 99.99th percentiles and the top 0.01 percent, mainly because realized capital gains—which are generally taxed at lower rates than other income—decreased as a share of their total income.

Average Federal Tax Rates, by Type of Tax

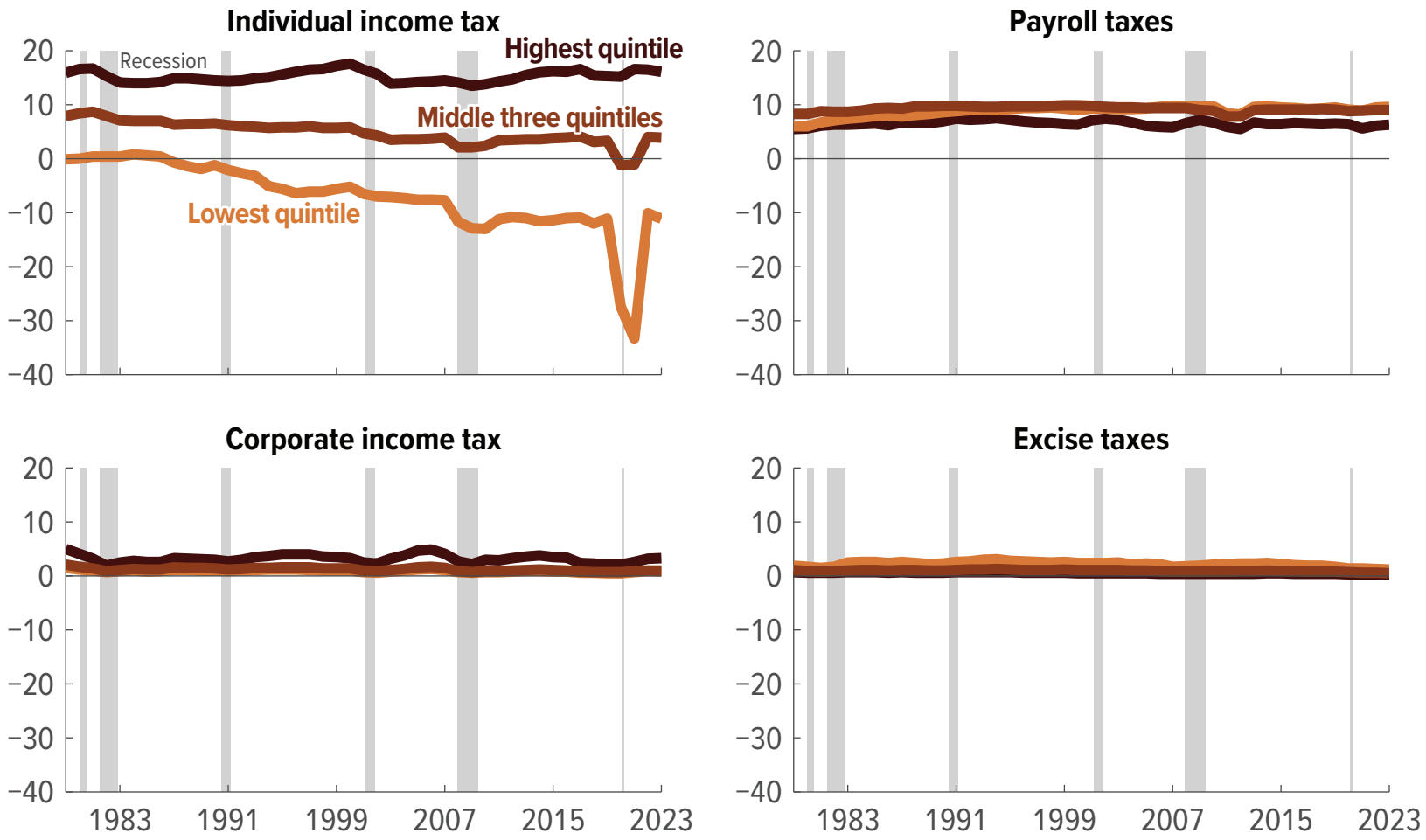


In most years from 1979 to 2023, the average individual income tax rate was higher than the average rates for the other types of federal taxes. That rate also tended to change the most from year to year.

Although tax rules remained largely unchanged in 2023, individual income tax rates decreased. That decrease was partly due to large adjustments to tax brackets and the standard deduction in response to high inflation in 2022.

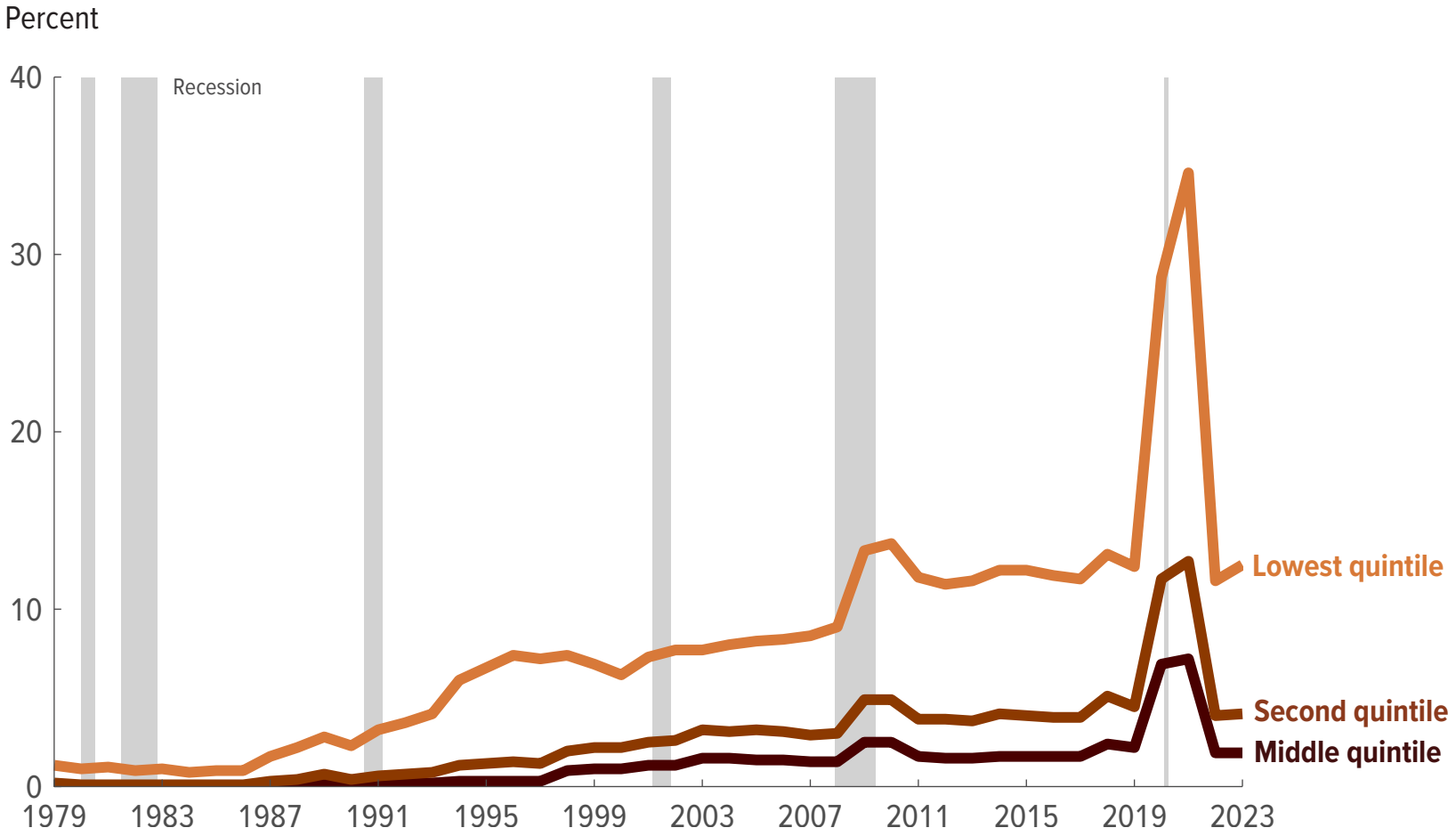
Average Federal Tax Rates, by Type of Tax and Income Group

Percent



Average individual income tax rates varied more among income groups from 1979 to 2023 than did average rates for the other types of federal taxes included in this analysis. In 2023, average individual income tax rates ranged from −11 percent in the lowest quintile to 16 percent in the highest quintile. The difference between the highest and lowest quintiles' average rates increased over the period.

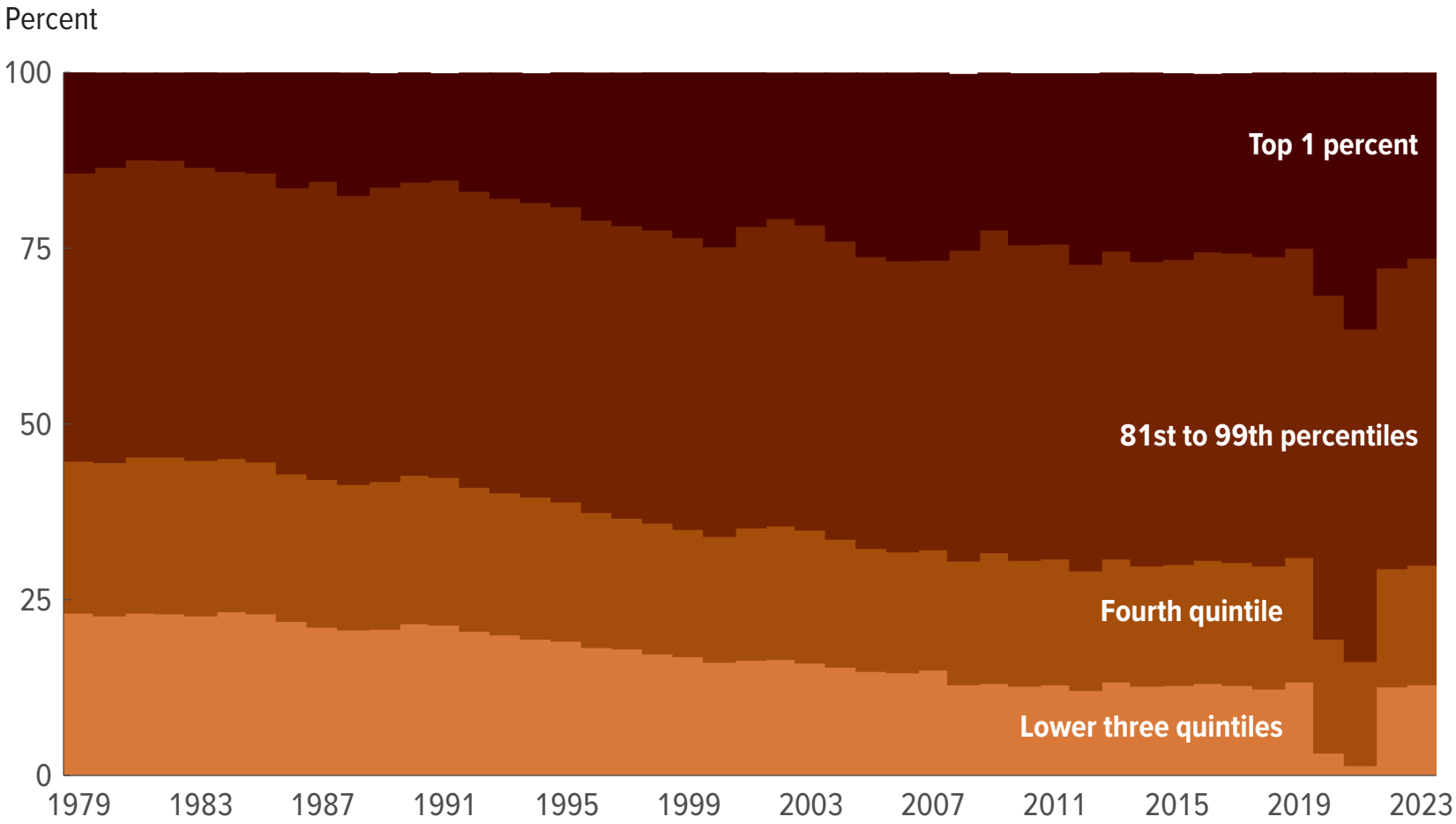
Average Refundable Tax Credits as a Percentage of Income Before Transfers and Taxes for Selected Income Groups



New and expanded refundable tax credits lowered average individual income tax rates in the bottom three quintiles from 1979 to 2023. In the lowest quintile, the average value of refundable tax credits increased from 1 percent to 13 percent of income before transfers and taxes.

In 2023, the average values of those credits relative to income remained similar to their pre-pandemic level, after rising in 2020 and 2021 because of temporary tax credits enacted in response to the economic disruption caused by the pandemic.

Income Groups' Shares of Federal Taxes



The share of federal taxes paid by households in the top quintile of the income distribution increased from 55 percent in 1979 to 70 percent in 2023. Most of that increase was due to the change in the share of federal taxes paid by the top 1 percent of the distribution, which grew by 12 percentage points—from 14 percent in 1979 to 26 percent in 2023.

Shares do not add up to 100 percent because households whose income was negative (because their business or investment losses exceeded their other income) are not shown.

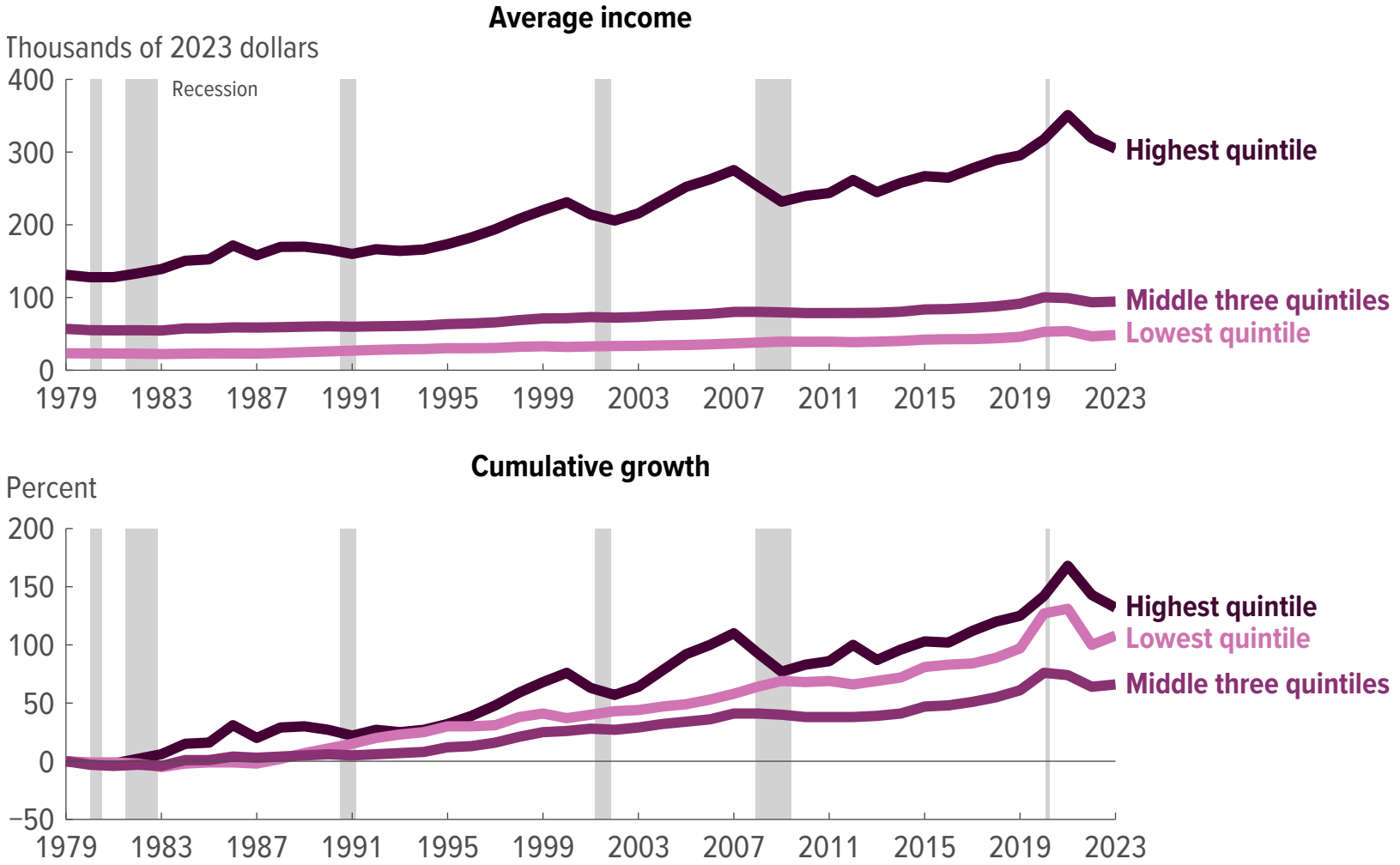
Income After Transfers and Taxes, 1979 to 2023

Overview of Income After Transfers and Taxes

Income after transfers and taxes is income before transfers and taxes plus means-tested transfers minus federal taxes.

Because means-tested transfers make up a larger share of income for low-income households and because higher-income households pay a larger share of their income in federal taxes, income is less skewed toward households at the top of the distribution after transfers and taxes.

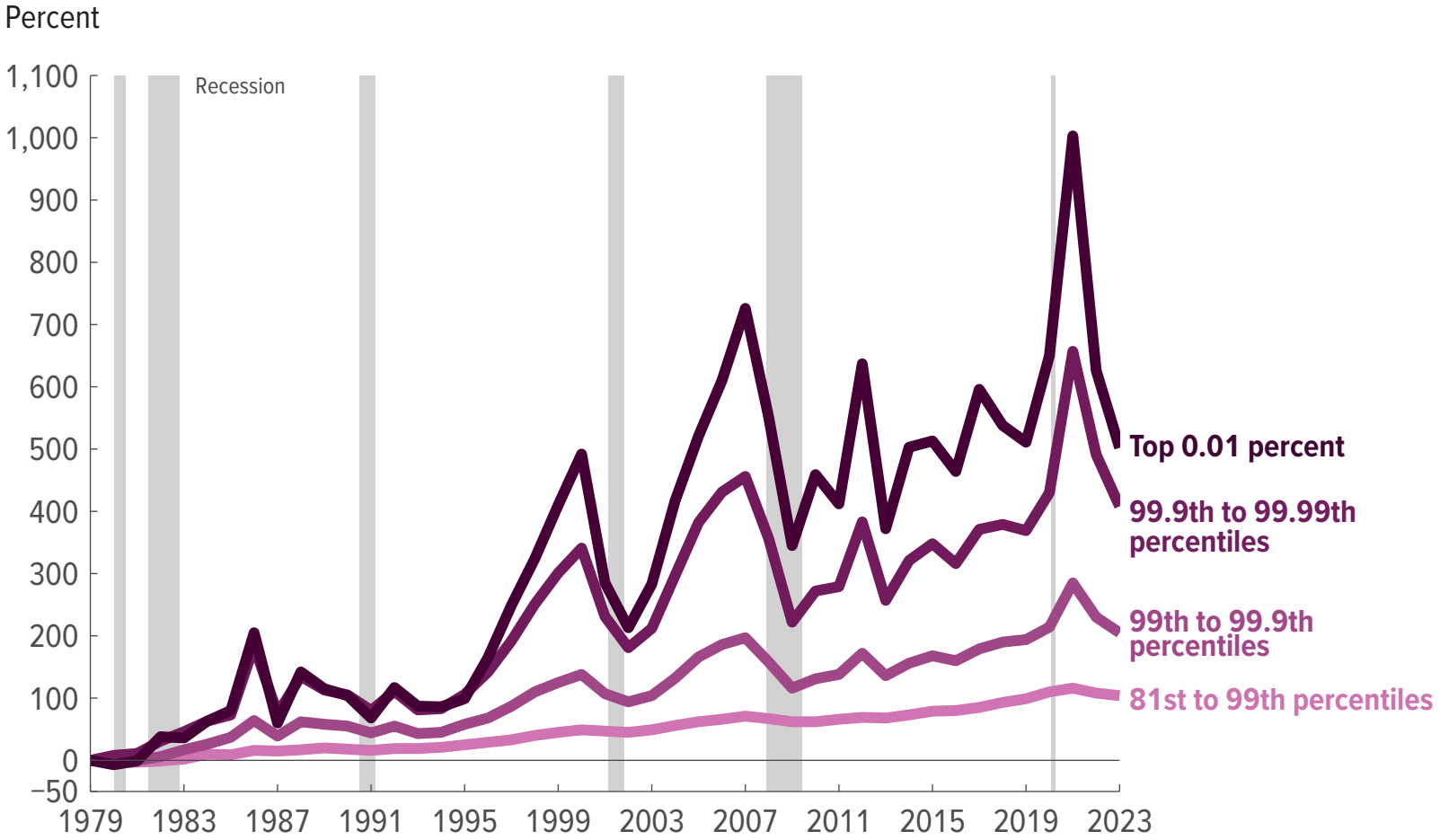
Average Income After Transfers and Taxes and Its Cumulative Growth



From 1979 to 2023, income after transfers and taxes grew fastest for households at the top of the income distribution. Still, that growth was more even across the quintiles than the growth of income before transfers and taxes.

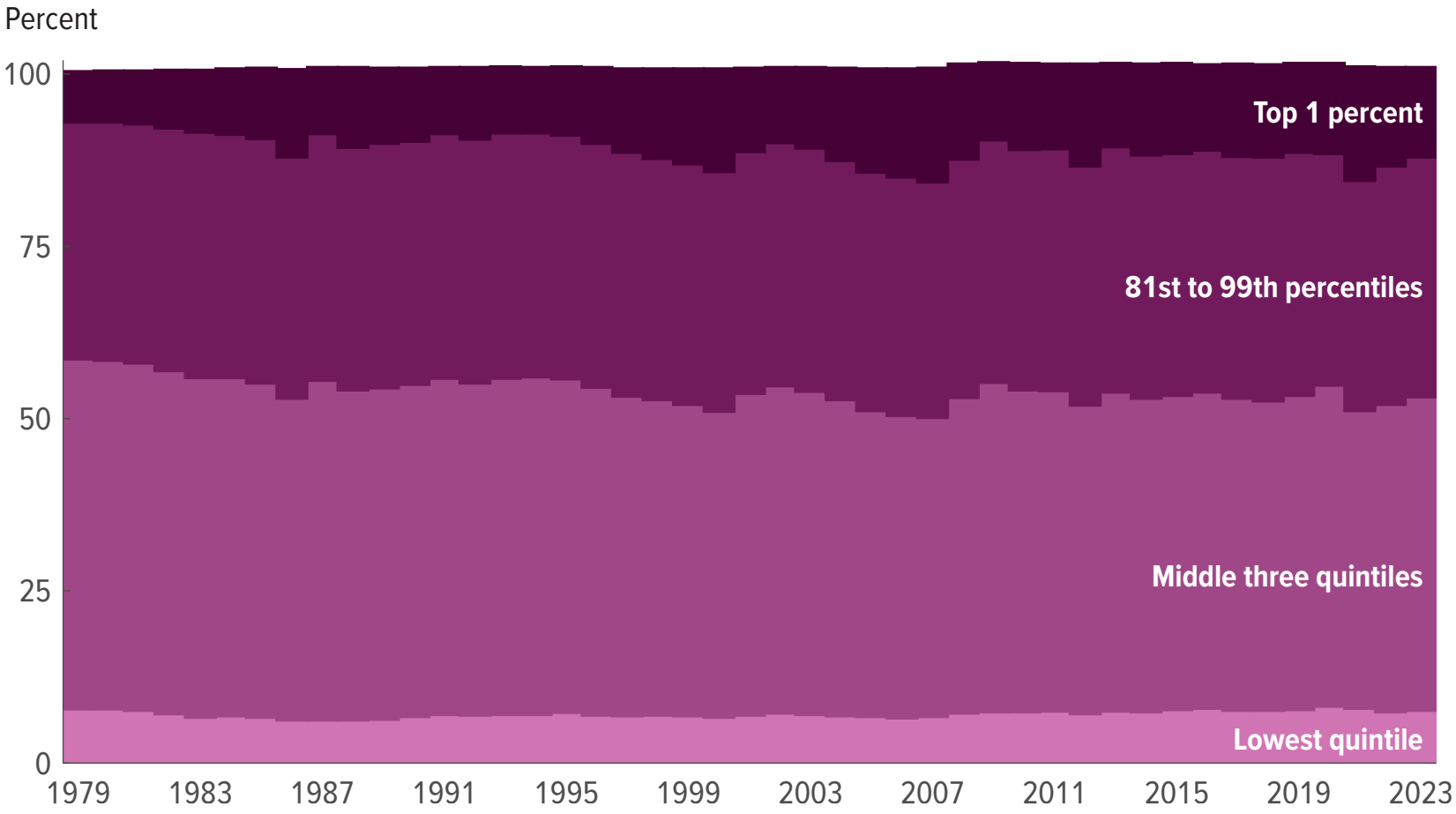
In 2023, income after transfers and taxes rose by 4 percent for households in the lowest quintile and fell by 5 percent for households in the highest quintile. Both changes were mainly attributable to corresponding changes in income before transfers and taxes.

Cumulative Growth in Average Income After Transfers and Taxes for Households in the Highest Quintile



From 1979 to 2023, income after transfers and taxes increased most quickly for households in the top 0.01 percent of the distribution. Spurred by strong growth in market income, that group's income after transfers and taxes grew more than six-fold over the period.

Income Groups' Shares of Income After Transfers and Taxes



The share of income after transfers and taxes going to households in the top 1 percent of the distribution grew from 7 percent in 1979 to 13 percent in 2023—an increase of 6 percentage points.

By contrast, the middle three quintiles' share decreased by 5 percentage points over the period, and the lowest quintile's share remained unchanged at 8 percent.

Shares do not add up to 100 percent because households whose income was negative (because their business or investment losses exceeded their other income) are not shown.

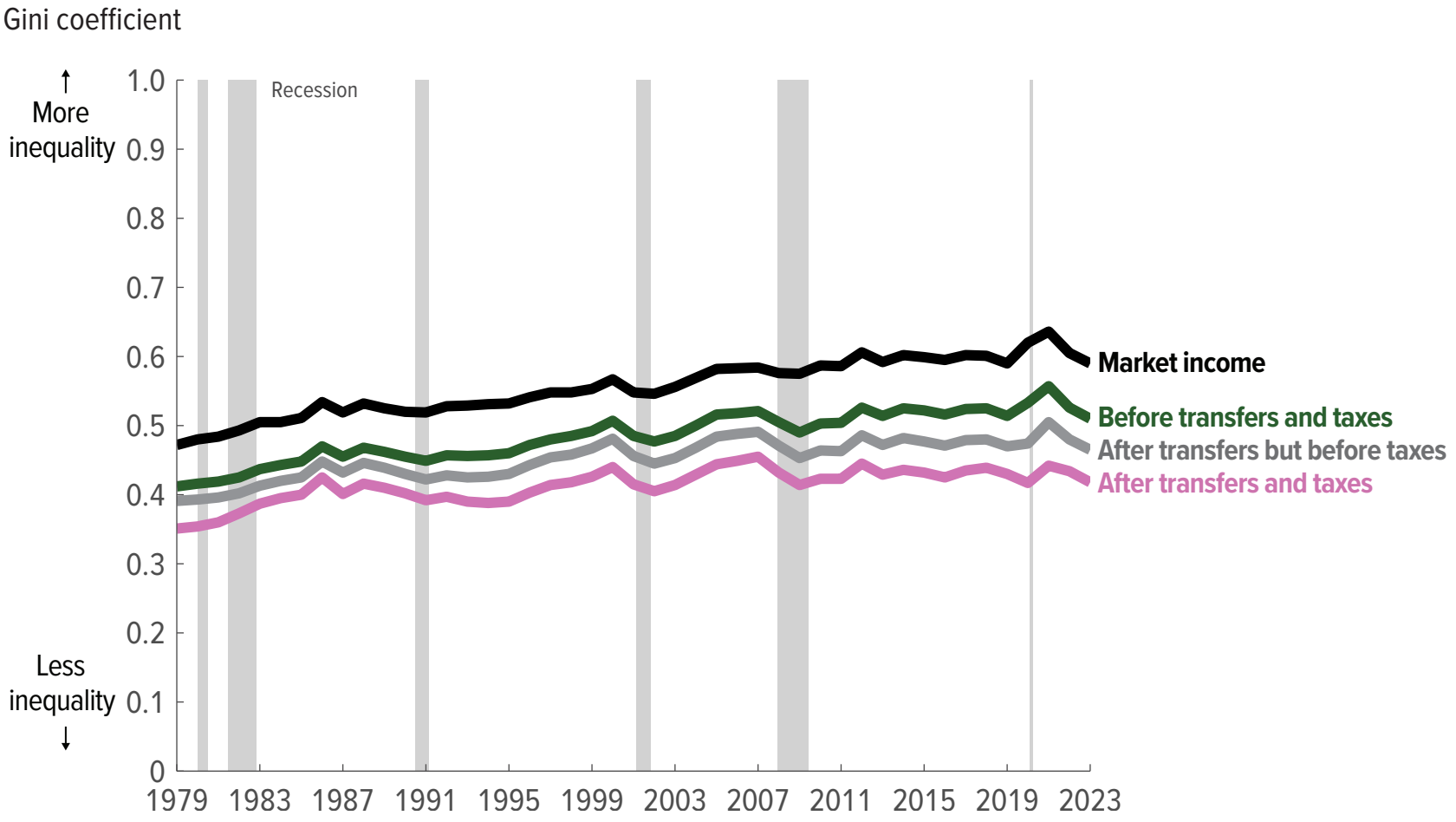
Income Inequality, 1979 to 2023

Overview of Income Inequality

The Gini coefficient summarizes how equally income is distributed across the population in a single number that ranges from zero to one. At the theoretical extremes, a value of zero means that income is distributed equally among all households, whereas a value of one indicates that all income went to a single household.

This analysis compares Gini coefficients for four measures of income: market income, income before transfers and taxes, income after transfers but before taxes, and income after transfers and taxes.

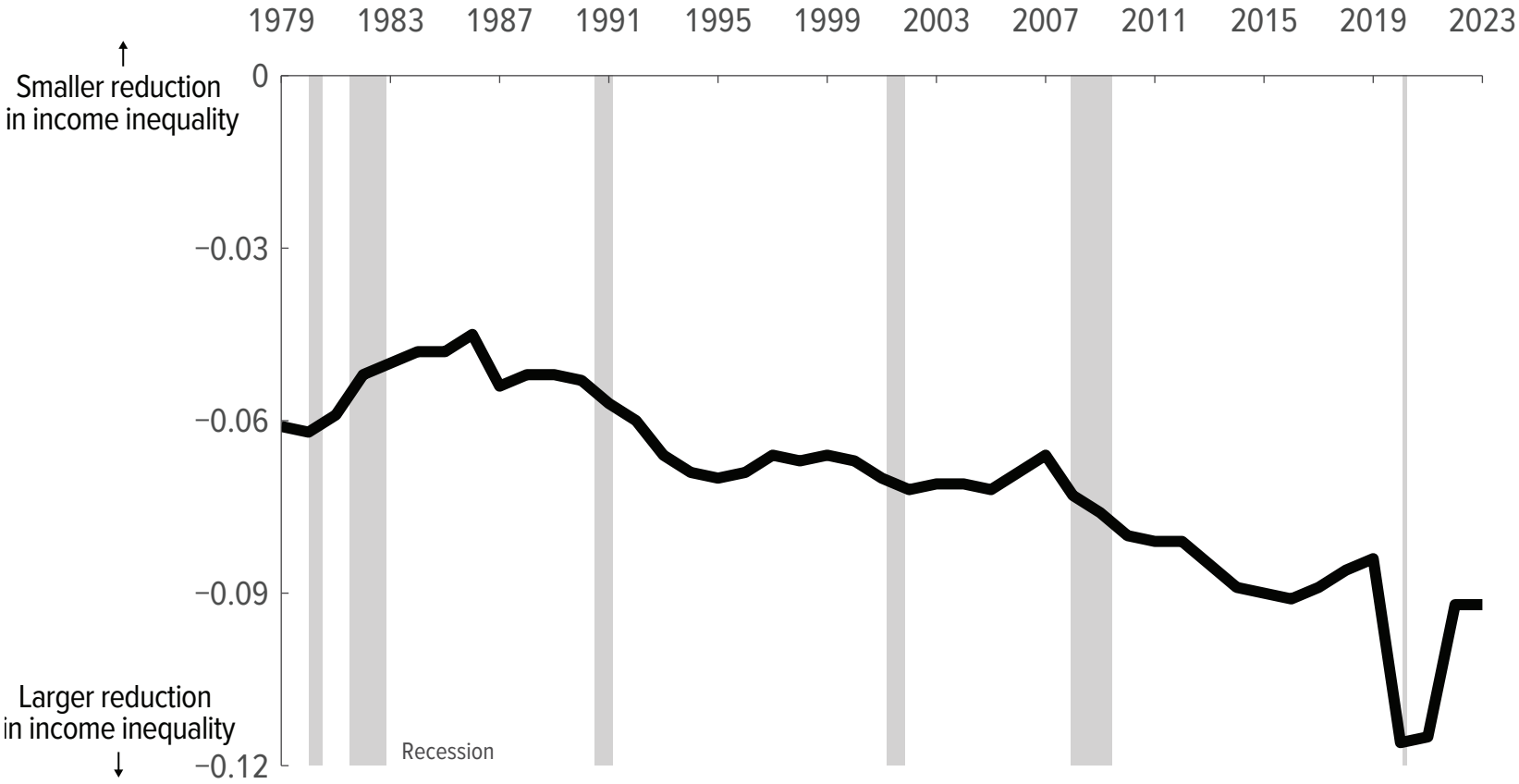
Income Inequality, by Measure of Income



The Gini coefficients for all four income measures indicate that income inequality rose from 1979 to 2023. Much of that rise in income inequality was driven by growth in market income for households at the top of the distribution.

Realized capital gains constitute a larger share of income for households at the top of the distribution. Because realized capital gains decreased more than other major forms of income in 2023, all four measures of income inequality decreased for the second consecutive year (after increasing in 2020 and 2021).

Reduction in Income Inequality Stemming From Means-Tested Transfers and Federal Taxes



Transfers and taxes together reduced income inequality in every year from 1979 to 2023, and their effects on inequality grew larger over time. Transfers and taxes did more to reduce inequality in 2023 than in most years since 1979. (In 2020 and 2021, temporary programs created in response to the pandemic led to larger reductions.)

To measure the effect of transfers and taxes on income inequality in a given year, CBO subtracted the Gini coefficient for income before transfers and taxes from the Gini coefficient for income after transfers and taxes. Because higher Gini coefficients represent greater inequality, the negative changes shown in the figure indicate that inequality was reduced in each year.

About This Document

This document was prepared at the request of the Ranking Member of the Senate Committee on Finance. In keeping with the Congressional Budget Office's mandate to provide objective, impartial analysis, the document makes no recommendations.

Daniel Page and Bilal Habib prepared the document with guidance from Edward Harris, John McClelland, and Molly Saunders-Scott. Kurt Seibert, Naveen Singhal, and Ellen Steele contributed to the analysis, and David Austin provided comments. Kelly Su fact-checked the document.

Jeffrey Kling reviewed the document, Christine Browne edited it, and Casey Labrack created the graphics. The document is available at www.cbo.gov/publication/62761.

CBO seeks feedback to make its work as useful as possible. Please send comments to communications@cbo.gov.

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