# EFFECTIVE FEDERAL TAX RATES, 1979-1997 

The Congress of the United States
Congressional Budget Office

## NOTES

Numbers in the text and tables may not add up to totals because of rounding.

Unless otherwise indicated, all dollar values are in 1997 dollars and all years are calendar years.
In many tables and at some points in the text, this study presents data for 1997 that are calculated "using 2000 law." Tax year 2000 law differs from 1997 law only for estimates of the individual income tax portion of the tax burden. The differences arise from provisions of the Taxpayer Relief Act of 1997 (for example, the $\$ 500$ child credit and education credits), most of which were not in effect in 1997. To calculate taxes under 2000 law, the Congressional Budget Office deflated parameters for actual 2000 law by the change in the consumer price index between 1997 and 2000.

## Preface

This Congressional Budget Office (CBO) study examines effective federal tax ratestax liabilities measured as a percentage of income-over the 1979-1997 period for all households and for quintiles, or fifths, of the income distribution. The analysis uses a comprehensive measure of household income that encompasses not only cash income but also the value of benefits received in kind, such as health care and food stamps. The study provides information on the four major federal taxes: individual and corporate income taxes; social insurance, or payroll, taxes; and excise taxes. It also considers the combination of the four.

CBO issued the study in a preliminary form -some appendixes were not includedin May of this year. As noted then, the numbers in the appendix tables were final, and they have not changed in this version. The study was prepared at the request of the Chairman and Ranking Member of the Senate Budget Committee.

Ed Harris, David Weiner, and Roberto Williams of CBO's Tax Analysis Division (TAD) wrote the study under the direction of G. Thomas Woodward. Barbara Edwards of CBO and Rick Kasten, Frank Sammartino, and Robert Taylor (all former TAD staff) reviewed drafts and provided valuable criticism and suggestions. The study also benefited from discussions at a conference on distributional measurement held at CBO in March 2000.

Leah Mazade edited the manuscript, and Christine Bogusz proofread it. Simone Thomas typed early drafts of both the text and tables, and Kathryn Winstead prepared the report for final publication. Annette Kalicki prepared the electronic versions for CBO's World Wide Web site.


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This study and other CBO publications are available at CBO's Web site:

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## Summary and Introduction

The past two decades have witnessed the passage of 15 federal tax bills, the longest peacetime economic expansion in U.S. history, and major demographic and labor-market shifts. A backward look at the period also reveals substantial growth of real (inflation-adjusted) pretax household income, distributed unevenly among income groups. That higher income, although accompanied by lower effective tax rates (total taxes as a percentage of total income) throughout the income distribution, led to record federal revenues that claimed the largest share
of gross domestic product since World War II. Six major observations stand out in the analysis of taxes and incomes reported in this study:
o Between 1979 and 1997, the effective federal tax rate fell for every quintile, or fifth, of the income distribution. Had 2000 tax law been in effect in 1997, the declines in effective rates would have been even greater (see Summary Figure 1).

## Summary Figure 1.

Reduction in Total Effective Federal Tax Rates Between 1979 and 1997, by Income Quintile


SOURCE: Congressional Budget Office.
NOTES: The effective tax rate equals total tax liabilities (individual income, corporate income, payroll, and excise) as a percentage of total income.

Quintiles, or fifths, of the income distribution contain equal numbers of people.
o Over the same period, however, the income of households with the highest income (which therefore face the highest tax rates) grew substantially faster than the income of other households. As a result, the effective federal tax rate for all households as a group increased by onehalf of a percentage point, or from 22.3 percent to 22.8 percent.
o Trends in effective tax rates varied widely among the major sources of federal revenues. Social insurance, or payroll, taxes (which finance Social Security, Medicare, and federal unemployment insurance) claimed a larger share of income in 1997 than in 1979, and corporate income taxes accounted for a smaller share. Effective individual income tax rates changed little overall, but they dropped for the 80 percent of households with the lowest income and rose for the 20 percent with the highest income (see Summary Figure 2).

## Summary Figure 2.

Effective Federal Tax Rates, by Revenue Source and Income Quintile, 1979 and 1997


SOURCE: Congressional Budget Office.
NOTES: The effective tax rate equals tax liabilities as a percentage of total income.
Quintiles, or fifths, of the income distribution contain equal numbers of people.
a. Payroll taxes financing Social Security, Medicare, and federal unemployment insurance.
o Although revenues from individual income taxes are nearly 50 percent greater than revenues from social insurance taxes, households in the bottom 80 percent of the income distribution on average pay nearly twice as much in payroll tax as in income tax. In 1997, 9.6 percent of that group's income went to payroll taxes, compared with 5.2 percent going to income taxes (see Summary Figure 3).
o Average real household income before taxes rose by nearly 30 percent over the 1979-1997 period, but that growth was highly unequal among quintiles (see Summary Figure 4). The average income of households in the highest quintile was more than 50 percent higher in 1997 than in 1979, while that of the bottom fifth of households was nearly 4 percent lower. Because of substantial movement of households among quintiles, however, those changes do not indicate whether particular households became better or worse off over the period.
o The rapid growth of income at the top of the distribution sharply increased the highest quintile's shares of pretax and after-tax income as well as federal tax liabilities for that group (the taxes people in the quintile owe). In 1997, the fifth of households with the highest income earned 53 percent of total pretax income and paid 65 percent of federal taxes, up from 46 percent and 57 percent, respectively, in 1979 (see Summary Figure 5). Again, however, households in the highest quintile in 1997 were not the same households in that quintile in 1979.

This study examines in detail the effective federal tax rates faced by households in different parts of the income distribution from 1979 through 1997. The analysis considers the four largest sources of federal revenues: individual income taxes, social insurance taxes, corporate income taxes, and excise taxes. It does not examine other federal taxes or state and local taxes. In particular, it omits estate and gift taxes, in part because of limitations in the data used

## Summary Figure 3.

Effective Federal Individual Income and Social Insurance Tax Rates, by Income Quintile, 1997


SOURCE: Congressional Budget Office.
NOTES: The effective tax rate equals tax liabilities as a percentage of total income.
Quintiles, or fifths, of the income distribution contain equal numbers of people.
a. Payroll taxes financing Social Security, Medicare, and federal unemployment insurance.
in the study that make it hard to allocate taxes among households and in part because of uncertainty about whether decedents or heirs bear the burden of those taxes. The analysis uses specific assumptions about the incidence of each tax-who actually bears its cost, which may differ from who nominally pays the tax to the government. Alternative assumptions about incidence would generate different findings.

The Congressional Budget Office's (CBO's) work on effective tax rates parallels similar analyses by the Office of Tax Analysis at the Department of the Treasury and by the Joint Committee on Taxation. Although each office uses its own assumptions about the components of income, the incidence of various federal taxes, and the appropriate unit of analysis, the results of the different analyses are
roughly comparable (see Appendix C). Nevertheless, differences among the three methods can reveal information about federal taxes that cannot be seen in any single study.

## Trends in Effective Federal Tax Rates

Rising real incomes have driven federal tax revenues upward since 1979. Over the same period, changes in tax laws first lowered and then raised effective tax rates. For households as a group, federal taxes claimed 22.3 percent of income in 1979; that rate fell

Summary Figure 4.
Percentage Change in Real Pretax Comprehensive Household Income, by Income Quintile, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: Households are people who share a single housing unit, regardless of the relationships among them. Real pretax comprehensive household income (which is measured in 1997 dollars) equals cash income plus income from other sources. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Other sources of income include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes as well as all in-kind benefits (Medicare, Medicaid, employerpaid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Corporate income taxes are distributed to households according to their share of capital income.

Quintiles, or fifths, of the income distribution contain equal numbers of people.
to 20.2 percent in 1983 and then drifted upward to nearly 23 percent in 1997 (see the far right bars in Summary Figure 6). If 2000 tax law had applied in 1997, the effective tax rate in that year would have matched the rate in 1979.

The total effective federal tax rate differs from taxes calculated as a share of gross domestic product (GDP) because household income and GDP are not the same. Each measure includes income from sources that are not counted by the other.

## Summary Figure 5.

Shares of Real Pretax Comprehensive Household Income and Total Federal Tax Liabilities, by Income Quintile, 1979 and 1997

## Shares of Real Pretax Comprehensive Household Income



Shares of Total Federal Tax Liabilities


SOURCE: Congressional Budget Office.
NOTES: Households are people who share a single housing unit, regardless of the relationships among them. Real pretax comprehensive household income (which is measured in 1997 dollars) equals cash income plus income from other sources. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Other sources of income include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes as well as all in-kind benefits (Medicare, Medicaid, employerpaid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals. Federal tax liabilities include individual income, corporate income, payroll, and excise taxes.

Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Corporate income taxes are distributed to households according to their share of capital income.

Quintiles, or fifths, of the income distribution contain equal numbers of people.

The small rise in the total effective tax rate, however, masks significant variation in effective rates for households at different points in the income distribution. As noted earlier, every quintile faced an average rate that was lower in 1997 than in 1979 (see Summary Figure 6). Households in the lowest quintile experienced the greatest percentage drop, mainly because the Congress expanded the earned income tax credit. Nonetheless, households in the top 1 percent of the distribution had the largest percentagepoint fall in effective tax rates-a drop of 4 points, from 37 percent to 33 percent.

A range of factors has affected tax rates over the past two decades. The Congress enacted six major tax bills and many smaller ones, changing both the rates of particular taxes and the bases subject to those rates. Income grew strongly but unevenly, with some
income types growing faster than others and a greater share of total income going to households at the top of the income distribution than to those at the bottom. Demographic changes led to more childless households, many of them with elderly members. Because tax laws treat different kinds of households differently, those changes would have shifted effective tax rates even if laws and income had stayed the same.

## Differences Among Sources of Revenue

Changes in effective tax rates varied among the four revenue sources examined in this study (see Summary Figure 7). Overall, the effective rate for the individual income tax first declined and then rose, returning to the same level in 1997 as it was in 1979. Households with the lowest income saw their rate

## Summary Figure 6.

Total Effective Federal Tax Rates, by Income Quintile, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: The effective tax rate equals total tax liabilities (individual income, corporate income, payroll, and excise) as a percentage of total income.

Quintiles, or fifths, of the income distribution contain equal numbers of people.
The bars in the figure represent odd-numbered years from 1979 to 1997.
drop the most-by more than 4 percentage points. Other quintiles also faced lower rates at the end of the period, except for the top quintile, for which rapidly rising income led to a slightly higher effective income tax rate. In contrast, the effective rate for social insurance taxes rose throughout the period, from just under 7 percent in 1979 to just over 8 percent in 1997. That increase was similar for all quintiles, although it was slightly smaller for the highestincome households.

Although CBO's database on taxes and income ends in 1997, information from tax returns suggests that the share of income going to the top of the distribution and the share of individual income taxes those households pay both continued to rise rapidly in 1998 and 1999. The data also show that the total effective rate for the individual income tax fell in 1998, as a result of the Taxpayer Relief Act of 1997, but resumed its upward trend in 1999.

Higher effective rates for social insurance taxes and lower effective rates for the individual income tax meant that payroll taxes exceeded income taxes for many more households in 1997 than in 1979, even though income tax revenues were much larger than payroll tax revenues in both years. In 1979, 56 percent of households with earnings paid more payroll tax than income tax. By 1997, that percentage had climbed to 79 percent. Because high-income households paid more than twice as much income tax as payroll tax, however, total income taxes exceeded payroll taxes-by about 60 percent in 1979 and by more than a third in 1997.

The effective rate for the corporate income tax dropped sharply after 1979 and then climbed gradually to a level in 1997 that was about half a percentage point below the 1979 rate. Because high-income households bear a disproportionately large share of the burden of corporate taxes, the decline over the

## Summary Figure 7.

Effective Federal Tax Rates, by Revenue Source, 1979-1997


NOTE: The effective tax rate equals tax liabilities as a percentage of total income.
a. Payroll taxes financing Social Security, Medicare, and federal unemployment insurance.
whole period affected them more than it did other households. (CBO allocates corporate taxes and the employer's share of social insurance taxes to individuals using generally accepted assumptions about the incidence of taxes. For further discussion, see Chapter 2.) In contrast, the greatest impact from excise taxes fell on households in the lowest quintile. Although the effective rate for federal excise taxes was virtually the same in 1997 as in 1979, it rose for lowincome households and fell for those with higher incomes.

## Shares of Income and Taxes

The distribution of income among households grew substantially more unequal during the 1979-1997 period. The share of pretax income going to the highest quintile of households climbed from 46 percent in 1979 to 53 percent in 1997, while the share going to the lowest three quintiles dropped from 32 percent to 27 percent. At the very top of the distribution, the highest 1 percent of households took home 16 percent of total pretax income in 1997, up from 9 percent in 1979. It is important to note, however, that substantial movement of households among quintiles occurred over the period, so the households in a given quintile in 1997 were not the same households that had been in that quintile in 1979. (One study, for example, showed that nearly one-third of individuals moved into a higher quintile over a 10 -year period while a similar number moved to a lower one; see Box 1-1 on page 3.) Furthermore, the increasing inequality shown in the declining share of income going to the lowest quintiles does not imply greater poverty. Average income can grow throughout the distribution even if relatively greater gains at the top lead to increased inequality.

The increasing inequality within the income distribution led to similar shifts in the distribution of tax liabilities. Households in the highest income quintile paid 65 percent of the four largest federal taxes in 1997, up from 57 percent 18 years earlier. In contrast, households in the bottom three quintiles paid roughly 17 percent of those taxes. The shares paid by the different quintiles varied widely among revenue sources. In 1997, households in the highest quintile bore 78 percent of individual income taxes, 82 percent of corporate income taxes, 44 percent of
social insurance taxes, and 32 percent of federal excise taxes. In the same year, households in the lowest three quintiles paid 7 percent, 9 percent, 31 percent, and 47 percent of those taxes, respectively.

## The Nature of the Analysis

The primary focus of this study is effective tax rates. Those rates vary, depending on the measure of income used to calculate them. (See the comparison of alternative measures of income in Chapter 3.) The primary results reported in Chapter 1 are based on adjusted pretax comprehensive household income. That measure includes all cash income (both taxable and tax-exempt), taxes paid by businesses (which are imputed to individuals on the basis of assumptions about incidence), employee contributions to $401(\mathrm{k})$ retirement plans, and the value of income received in kind from various sources (including employer-paid health insurance premiums, Medicare, Medicaid, and food stamps, among others); CBO then adjusts income for differences in household size. Because that income measure comprises income from more sources than are included in alternative measures, calculations using it yield lower estimates of effective tax rates. Effective tax rates based on other measures of income follow trends similar to those derived using adjusted comprehensive household income (see Chapter 3).

The choice of income measure also affects how households are ranked within the income distribution. Counting income from more sources moves households with income from those sources up the distribution relative to those not receiving such income. Households are defined as people who share a single housing unit, regardless of the relationships among them. Using households rather than families as the unit of analysis lifts people in multifamily households up the distribution ahead of some people in single-family households. And adjusting income to account for the greater needs of larger households drops those larger households down the income distribution and consequently pushes smaller households up. The net effect of those differences can be determined only by comparing the resulting distributions (as Chapter 3 does).

CBO reports most of the results of its analysis for both the entire population and parts of the income distribution. Quintiles form the basic groups of interest. However, many tables also include information on households in the top 10 percent, top 5 percent, and top 1 percent of the distribution. That breakdown reveals the effects of the disproportionately rapid growth of income-and hence of tax liabilities -that has occurred over the past two decades at the distribution's top. The analysis does not show a comparable subdivision of the lowest quintile because effective tax rates and income moved in similar ways for households in different parts of that income group.

Quintiles contain equal numbers of people. Because households vary in size, quintiles generally contain unequal numbers of households. Some statistics are broken down further by type of household: those with any members under age 18 (households with children), those headed by a person age 65 or older and with no member under age 18 (elderly childless households), and all others (nonelderly childless households). The income and size of households vary more widely across those three groups than across all households; that means that the distributions of specific types of households among quintiles are more unequal than the distribution of all households.

## Cautionary Notes

Interpreting trends in tax rates and income based on the results reported in this study demands caution, for a number of reasons. First, the study compares income groups over time, showing how effective tax rates and income have changed for each quintile. The composition of each quintile changes, however, from year to year. Over time, people join and leave households, enter and leave the labor force, and experience other changes that can alter their position in the income distribution. Trends in tax rates and income that are discussed in this study reflect what has happened to people in the same parts of the distribution over time, not what has happened to the same people.

Second, expanding the income measure for calculating effective tax rates to include taxes paid by
businesses, employee contributions to $401(\mathrm{k})$ plans, and in-kind benefits makes that measure larger than what many people think of when they consider their own income. As a result, it may be difficult for readers to determine their own placement within the reported distributions. Third, adjusting income for the size of households in order to rank them substantially reorders those units throughout the income distribution. Consequently, total household income can vary markedly among households of differing size, even though they are closely ranked in the distribution. Statistics based on household cash income that is unadjusted for household size and omits in-kind income may provide information that is more consistent with how most people think about their own tax and income situations (see the last section of Chapter 1 and Appendix H).

A fourth issue involves drawing conclusions based on overall statistics that mask or even misrepresent information about subgroups or specific taxes. For example, the total effective federal tax rate can rise between any two years, even if effective rates for households in every income quintile fall. If income grows more rapidly for higher-income households facing higher tax rates, the total effective rate rises, even if tax rates do not change for income subgroups. Fifth, consistent but different statistics may seem to yield contradictory conclusions if other factors are not considered. An increase in the share of federal taxes paid by a given quintile, for example, need not mean that the quintile's effective tax rate rose or that the distribution of after-tax income changed in either direction. Different rates of income growth among quintiles can drive results in directions that are not apparent in particular statistics, such as shares of taxes paid.

Finally, any choice of a period over which to assess changes in effective tax rates or incomes is arbitrary. This study frequently reports the changes that occurred between 1979 and 1997, the first and last years for which the data needed for the analysis are available. Changes over other periods may show markedly different patterns. For example, between 1979 and 1997, average real pretax comprehensive income for households in the lowest quintile fell slightly. In contrast, between 1983 and 1997, that measure rose by 12 percent. In fact, however, comparing values for 1979 and 1997 may provide a more
valid comparison, since those years were both high points in the business cycle whereas 1983 was the low point of a deep recession. The tables in Appendix G give estimates of tax rates and income for every odd year of the 1979-1997 period and thus allow an evaluation of changes between any pair of years.

## Limitations

The analysis reported in this study focuses on the effective rates of the four largest federal revenue sources between 1979 and 1997. Integral to examining those rates is the changing distribution of income among households over the period. Complementing the analysis are data showing how the shares of income and tax liabilities for segments of the income distribution have changed during the past two decades. Values for income, tax liabilities, and shares appear in Appendixes G, H, and I.

The study's focus on effective tax rates means that it is not a comprehensive analysis of the federal tax system. In particular, it does not examine how various taxes affect people's behavior and therefore
does not report the tax rates people face on their last dollar subject to tax (the marginal rate). Nor does the study look at the benefits households receive-in the form of goods, services, and transfer payments-that are funded by the taxes they pay. For example, the analysis considers the burden of the Social Security payroll tax but does not take into account the benefits that workers who are currently paying the tax will receive during retirement. The measures of income that the study uses include government transfers, both in cash and in kind, but those benefits are not balanced against tax liabilities. The data thus do not directly reveal any ties between the taxes people pay and the benefits they receive, even if a direct connection exists. Finally, the study looks only at annual income and taxes. A better indication of the burden of taxes on households at different points in the income distribution would cover a longer periodideally, each person's lifetime. That kind of time frame would remove the effects of year-to-year variations and avoid the problem that information about a single year might differ markedly from average values for longer periods. The lack of good longitudinal data, however, precludes such an analysis.

# The Distribution of Effective Tax Rates and Income 

Over the past two decades, rising real incomes -incomes adjusted for the effects of infla-tion-have driven federal tax revenues upward while a series of changes in tax laws has first lowered and then raised effective tax rates (tax liabilities as a percentage of income). Federal taxes claimed 22.3 percent of household income in 1979; that rate fell to 20.2 percent in 1983 before climbing to nearly 23 percent in 1997 (see Figure 1-1).

The small change in the total effective tax rate over the period masks significant variation among households at different points in the income distribution. ${ }^{1}$ (Households are people who share a single housing unit, regardless of the relationships among them.) The average tax rate declined for households in every income quintile, or fifth, of the distribution, but the drop was greater for households in the lowest quintile than for those in the higher quintiles (see Figure 1-2). Breaking down the top quintile further, however, reveals that the top 1 percent of households had the largest percentage-point fall in effective tax rates, a drop of 4 points (from 37.3 percent to 33.3 percent).

Federal taxes overall and federal income taxes in particular are progressive: the effective rate rises with income. Households in the top quintile face an effective tax rate that is more than five times that of households in the lowest quintile. Furthermore,

[^0]Figure 1-1.
Total Effective Federal Tax Rates, 1979-1997


SOURCE: Congressional Budget Office.
NOTE: The effective tax rate equals total tax liabilities (individual income, corporate income, payroll, and excise) as a percentage of total income.
progressivity has increased over the past two decades, primarily because the rate faced by households with the lowest incomes fell by nearly a third with the expansion in the 1990s of the earned income tax credit (EITC). ${ }^{2}$ Federal taxes help narrow the gap be-

[^1]Figure 1-2.
Total Effective Federal Tax Rates, by Income Quintile, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: The effective tax rate equals total tax liabilities (individual income, corporate income, payroll, and excise) as a percentage of total income.

Quintiles, or fifths, of the income distribution contain equal numbers of people.
tween the incomes of high- and low-income households. The increased progressivity of those taxes, however, has not offset the rising share of after-tax income going to the top quintile of households. In addition, federal payroll and excise taxes are regressive (their effective rate does not increase with income), which offsets some of the progressivity of income taxes.

Effective tax rates provide information that can be used to evaluate the vertical equity of the federal tax system (how rates vary as income rises), but they indicate nothing about horizontal equity (the similarity of rates faced by households with similar incomes). Effective rates for quintiles average the
bottom and top of the distribution. Although the meanings are equivalent for taxes and income at a specific time, they may lead to different conclusions about whether a change in taxes or income is progressive.
shares of income going to pay taxes for disparate taxpayers whose tax liabilities (what they owe) may vary widely. Measuring that variation in rates paid by households with similar incomes is the only way to examine the horizontal fairness of federal taxes, an assessment that is not part of this study.

It is important to keep in mind that people and households move among income quintiles over time as both the composition of households and their incomes change (see Box 1-1). Comparing effective tax rates across years thus says nothing about how rates have changed for individuals. Rather, the rates shown over time for a given quintile compare the tax liabilities of households in that quintile in one year with those of the different group of households that make up the quintile in another year. Substantial income mobility, observed in every examination of longitudinal data tracking individuals over time, means that the composition of quintiles changes from year to year. It also limits the conclusions that can be drawn from the analysis reported in this study.

## Factors Contributing to Changes in Effective Tax Rates

The fall and subsequent rise in the effective rates of federal taxes over the past 20 years stem from a number of factors. The Congress has enacted multiple laws that have changed both the bases of the various federal taxes and the rates applied to them, raising or lowering revenues and shifting the relative importance of different tax sources. The composition of income-the percentages ascribable to wages, nonwage income, and capital gains-has changed, as has the distribution of income among households facing different tax rates. And demographic shifts have increased the number of elderly, single-parent, and childless households, all of which face effective tax rates that differ from those for the shrinking population of married couples with children.

## Box 1-1. Income Mobility

This study presents a series of biennial snapshots of household income and taxes from 1979 through 1997 for each fifth-or quintile-of each year's income distribution. Because people move among households and households move among quintiles, data for each quintile represent the experience of different people in each year. The Congressional Budget Office's analysis thus offers no information about changes in the income or taxes of particular people or groups of people over the 18-year period. In fact, various economic events cause substantial income mobility: people move up and down the distribution each year because of career advancement, unemployment, movement into and out of the labor force, and better or worse returns on their investments. Understanding that mobility requires longitudinal data that follow the same people over time. Such data were unavailable for the analysis reported in this study.

Previous analyses of income mobility confirm the movement of individuals and families over long periods. For example, the Department of the Treasury studied a sample of people filing tax returns every year from 1979 through 1988 and found that only 14 percent of taxpayers in the lowest quintile in 1979 were still in that quintile in 1988, while 65 percent of taxpayers in the highest quintile were in it both years. ${ }^{1}$ A study by the Federal Reserve Bank of Dallas that considered data from the University of Michigan's Panel Study of Income Dynamics-a longitudinal database extending back to the late 1960s-reached similar conclusions by examining

[^2]people who were in the labor force every year from 1975 through 1991. ${ }^{2}$ Both of those studies, however, looked at only part of the population, omitting significant groups that probably had the most volatile incomes, because of either periods out of the labor force or events that lowered their incomes below levels that required them to file tax returns. More representative is an Urban Institute study of all people appearing in the Michigan data over two different 10-year periods. ${ }^{3}$ That analysis found that in both the 1970s and 1980s, about half of the people in either the lowest or highest quintile at the beginning of the period were in the same quintile 10 years later.

Income mobility has many causes, perhaps the most important of which relate to life-cycle movements. Most workers advance over their careers and see their earnings rise until they near retirement. That natural progression alone generates upward movement through the income distribution. At the same time, other events such as spells of unemployment, leaving the labor force temporarily to rear children, and retirement can move people down the distribution. Changes in living arrangements can also have different effects. Marriage can move people up the distribution whereas divorce can move them down; a child who leaves her parents' home may drop into a lower quintile while her parents move up. Only careful analysis that disentangles the multiple factors driving income mobility can determine the significance of people's observed movement among quintiles.

[^3]
## Changes in Tax Law

The Congress has enacted 15 tax bills since 1979, 11 of which boosted revenues. ${ }^{3}$ Those laws shifted the relative amounts of revenue raised by different taxes as well as the distribution of each tax among households. Some of the legislation focused on corporate and excise taxes; six of the laws made major changes in individual income and social insurance taxes, which together account for about five-sixths of all federal revenues. ${ }^{4}$ Those six laws and their important features include the following:
o The Economic Recovery Tax Act of 1981 (ERTA) cut individual income tax rates by a cumulative 25 percent over three years, dropping the top rate from 70 percent to 50 percent. ${ }^{5}$ ERTA also indexed tax brackets for inflation, reducing the bracket "creep" that subjected taxpayers to ever higher rates as their income rose to keep pace with higher prices. Firms benefited from increases in accelerated depreciation and provisions for so-called safe-harbor leasing, which allow corporations with tax deductions they cannot use to transfer those deductions to other corporations that can. ${ }^{6}$
o The Social Security Amendments of 1983 sped up scheduled social insurance tax increases, thus raising revenues in 1984, 1988, and 1989. The amendments also set those tax rates for self-employed people equal to the combined employer-employee taxes for other workers. The law made some Social Security benefits subject to income tax for the first time, assigning all revenues from that tax to the Social Security trust funds.
3. See U.S. Treasury, Revenue Effects of Major Tax Bills, Working Paper 81 (December 1998).
4. Social insurance taxes-also referred to as payroll taxes-are those revenues that finance Social Security, Medicare, and federal unemployment insurance.
5. A maximum rate of 50 percent already applied to earnings; ERTA extended it to other sources of income.
6. The Tax Equity and Fiscal Responsibility Act of 1982 in part reversed both of those provisions. It also raised individual income taxes with provisions affecting itemized deductions. major changes in the tax base and tax rates for the individual income tax. Under the law, many deductions and exclusions were limited or eliminated. In addition, the number of rate brackets was collapsed from 14 to two, and prior statutory rates that had ranged as high as 50 percent were cut to 15 percent and 28 percent. (Some taxpayers were subject to a marginal rate of 33 percent as the benefits of the 15 percent rate and exemptions were phased out.) TRA-86 also increased the levels of the personal exemption and the standard deduction. The act further changed the taxation of capital gains: it removed the 60 percent deduction and made all gains subject to ordinary tax rates, thus making the maximum rate on long-term gains for top income earners 28 percent. The law increased the amount of the EITC and indexed the credit for inflation. Finally, the structure of the current law's alternative minimum tax (AMT) was established by TRA-86. (However, subsequent legislation changed the AMT's rates.)
o The Omnibus Budget Reconciliation Act of 1990 expanded the EITC and raised the top individual income tax rate to 31 percent. The maximum statutory rate on long-term capital gains remained at 28 percent. The law also instituted a phaseout of exemptions and limited itemized deductions for upper-income taxpayers. A further provision removed the cap on earnings subject to taxation for Medicare.
o The Omnibus Budget Reconciliation Act of 1993 added two new tax brackets- 36 percent and 39.6 percent-for high-income taxpayers. In addition, it raised the EITC further for families with children and extended the credit to childless taxpayers. The cap on wage income subject to the health insurance payroll tax was removed, thus increasing payroll taxes on high-income workers. The law also increased to 85 percent the percentage of Social Security benefits subject to income taxes for high-income taxpayers.
o The Taxpayer Relief Act of 1997 (TRA-97) established a tax credit of $\$ 500$ for each dependent child under age 17 , created education tax credits for postsecondary school costs, made
interest on student loans deductible, and reduced the tax rate on long-term capital gains.

These and other changes in tax law during the 20year period also affected the level of corporate taxes as well as the level and mix of excise taxes and are thus reflected in the effective tax rates for those two sources of revenue as well.

Changes in tax law influence the effective rate in two ways. Most directly and most obviously, they affect the taxes people pay. But they also affect the behavior of households and corporations, influencing both how much income taxpayers receive and the form in which they receive it. For example, a reduction in the tax on capital gains may induce people to realize more gains and, consequently, have more reported income. The effective tax rates shown in this study derive from income reported and taxes paid in each year and therefore reflect both current tax laws and transitory effects caused by anticipated changes in the tax code.

In combination, changes in tax law since 1979 have first lowered effective individual income tax rates and then, for high-income taxpayers, moved them back up. Expansions of the EITC sharply lowered income tax rates for low-income working households, but higher social insurance taxes offset some of those gains. In addition, removing the cap on wages subject to health insurance taxes increased payroll taxes for high-income taxpayers.

## The Changing Composition of Income

The federal government imposes different taxes on the various forms of income that taxpayers receive. Wage and salary and self-employment income face both income and social insurance taxes; in contrast, investment income is not subject to social insurance levies. Through most of the period of this analysis, realizations of capital gains received favored tax treatment, with maximum rates below those on ordinary income.

How the composition of income influences effective tax rates can be seen by considering changes in that composition for the lowest quintile of the income distribution. For those households, the effec-
tive social insurance tax rate fell from 7.2 percent in 1989 to 6.8 percent in 1993 before rising to 7.2 percent in 1995 and 7.4 percent in 1997. That pattern resulted directly from the fall and subsequent rise over that period in the share of income that came from earnings and was thus subject to the payroll tax (see Figure 1-3).

In general, the composition of income does not affect the individual income tax since most forms of income receive the same tax treatment. For most of the 1979-1997 period, however, the tax rate on realizations of long-term capital gains differed from the rate on income from other sources. Before 1987,

Figure 1-3.
Earnings as a Share of Income for Households in the Lowest Quintile of the Income Distribution, 1979-1997


NOTES: Quintiles, or fifths, of the income distribution contain equal numbers of people.

Households are people who share a single housing unit, regardless of the relationships among them. Household income (which is measured in 1997 dollars) is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Income also includes the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes as well as all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance).

Figure 1-4.
Capital Gains as a Share of Income for Households in the Top 1 Percent of the Income Distribution, 1979-1997


SOURCE: Congressional Budget Office.
NOTE: Households are people who share a single housing unit, regardless of the relationships among them. Household income (which is measured in 1997 dollars) is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Income also includes the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes as well as all inkind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance).
those gains faced the same rate as did other income, but the tax applied to only 40 percent of them. Between 1987 and 1990, the same tax rate applied to both gains and income from other sources. Since 1990, the maximum tax rate for long-term gains has been below the highest rates on other income. That maximum was 28 percent through 1996 and 20 percent since 1997. ${ }^{7}$

The difference between the tax rate on gains and the rate on other income has the greatest impact on the effective tax rate for households at the top of the

[^4]income distribution. For those households, realized capital gains are a relatively large share of income, and the tax rate on the last dollar of income from sources other than capital gains is highest, at 39.6 percent. Furthermore, because taxpayers can decide when to sell assets and realize gains, they have considerable control over the amount of gains they realize and therefore over the share of their income coming from those gains. Any change in that share affects the effective tax rate those households face.

Capital gains make up a large and highly variable share of income for households in the top 1 percent of the income distribution (see Figure 1-4). ${ }^{8}$ For example, between 1995 and 1997, income from capital gains and income from other sources both grew rapidly for that income group. The growth in gains far outpaced its counterpart, however, pushing up the gains share of total income from 21 percent to 28 percent. Meanwhile, TRA-97 cut the maximum tax rate on gains from 28 percent in 1995 to 20 percent in 1997. The higher share of income from capital gains and the reduced tax rate applicable to them offset a higher effective tax rate on income from other sources, causing most of the decline-from 23.4 percent in 1995 to 23.0 percent in 1997-in the effective individual income tax rate for the top 1 percent of households. Of course, some of the rise in realized gains stemmed from the lower rate.

## The Changing Distribution of Pretax Income

Average household income before taxes grew in real terms by nearly one-third between 1979 and 1997, but that growth was shared unevenly across the income distribution (see Figure 1-5). The average income for households in the top fifth of the distribution rose by more than half. In contrast, average income for the middle quintile climbed 10 percent and that for the lowest fifth dropped slightly. Furthermore, income growth at the very top of the distribution was greater yet: average income in 1997 dollars

[^5]Figure 1-5.
Percentage Change from 1979 in Real Pretax Household Income, by Income Group


SOURCE: Congressional Budget Office.
NOTES: Quintiles, or fifths, of the income distribution contain equal numbers of people.

Households are people who share a single housing unit, regardless of the relationships among them. Real pretax household income (which is measured in 1997 dollars) is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Income also includes the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes as well as all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance).
a. Excludes households with negative incomes.
for the top 1 percent of households more than doubled, rising from \$420,000 in 1979 to more than \$1 million in 1997.

The uneven gains in income generated sharp changes in the shares of pretax income going to each fifth of the income distribution (see Figure 1-6). The share received by the highest quintile climbed from 46 percent in 1979 to 53 percent in 1997, while the share for the lowest quintile fell from 5 percent to 4 percent. Households in the top 1 percent saw their share of total income rise by more than two-thirds, growing from 9 percent to nearly 16 percent.

Because high-income taxpayers face effective tax rates that are much higher than the rates for other households, the rapid rise in their income has generated more than a proportional increase in federal tax revenues. In turn, that increase has driven up the total effective tax rate faster than the growth in income. The unequal income growth also helps explain the near-record share of gross domestic product (GDP) claimed by federal taxes despite virtually no increase in effective tax rates for any quintile. (Box 1-2 separates out the factors leading to changes in the share of GDP claimed by taxes.)

## Figure 1-6.

Shares of Pretax Household Income, by Income Group, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: Quintiles, or fifths, of the income distribution contain equal numbers of people.

Households are people who share a single housing unit, regardless of the relationships among them. Pretax household income is the sum of wages, salaries, selfemployment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Income also includes the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes as well as all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance).

## Box 1-2.

Individual Income Tax Receipts as a Percentage of GDP

Statistics on federal taxes often measure revenues not as a share of household income but rather as a percentage of gross domestic product, or GDP (see the figure below). Because of significant conceptual differences between GDP and household income, the effective tax rates discussed in this study can differ substantially from the percentage of GDP that goes toward taxes. Deviation of the two measures can therefore appear to indicate different trends.

Total Revenues as a Share of GDP,
Fiscal Years 1979-1997


SOURCE: Congressional Budget Office.

During the late 1990s, federal revenues grew faster than GDP, pushing up the share of GDP claimed by taxes from 18.1 percent in 1995 to 19.9 percent in 1998, a postWorld War II high. Two-thirds of that growth came from
rising individual income tax receipts, which climbed from 7.8 percent of GDP to 9.0 percent. ${ }^{1}$

Three factors explain the faster growth-relative to GDP—of individual income tax receipts over that period (see the table below). First, taxable personal income (TPI) in the national income and product accounts rose more rapidly than national income, accounting for one-fifth of the increased growth. Second, adjusted gross income (AGI) increased by more than TPI did. That rapid growth, mostly due to skyrocketing capital gains realizations, explains more than one-third of the excess. Third, the effective tax rate on AGI rose, in part because real (inflation-adjusted) income growth pushed taxpayers into higher tax brackets and in part because a greater share of AGI went to high-income taxpayers, who face the highest tax rates. (Box 1-3 on page 11 shows recent changes in effective tax rates measured as a percentage of AGI.) Nearly half of the growth in individual income tax liabilities in excess of growth in GDP resulted from the higher effective tax rate. Note that the measure of effective tax rates used to assess that effect-taxes as a percentage of AGI-differs from the broader measure used throughout this analysis. The two measures moved in similar ways over the period, however. ${ }^{2}$

1. Some of the increase has taken place since 1997 and is therefore not reflected in the effective tax rates discussed in this study. Note that taxes claimed an even larger share of GDP in 1999 and 2000, but data are not yet available for those years to conduct the kind of analysis reported here.
2. Table G-1c in Appendix G shows changes since 1979 in the shares of pretax income going to households in different quintiles of the income distribution.

Growth of Individual Income Tax Liabilities in Excess of Growth of GDP, by Source, 1995-1998 (In percent)

| Source of Growth of Tax Liabilities | 1995 | 1996 | 1997 | $1998{ }^{\text {a }}$ | Total, 1995-1998 ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Taxable Personal Income (TPI) Grew Faster than GDP | 21 | 12 | 14 | 33 | 20 |
| Adjusted Gross Income (AGI) Grew Faster than TPI |  |  |  |  |  |
| Capital gains taxes grew faster than TPI | 21 | 52 | 30 | 15 | 30 |
| Other AGI grew faster than TPI | 14 | 4 | 9 | 2 | 6 |
| Changes in the Effective Tax Rate on $\mathrm{AGI}^{\text {b }}$ | 44 | 32 | 47 | 50 | 44 |
| Total | 100 | 100 | 100 | 100 | 100 |
| Memorandum: |  |  |  |  |  |
| Growth of Individual Income Tax Liabilities in Excess of Growth of GDP (Billions of dollars) |  |  |  |  |  |
| Excess of Growth of GDP (Billions of dollars) | 27 | 39 | 35 | 40 | 141 |

SOURCE: Congressional Budget Office using data from the Internal Revenue Service's Statistics of Income for 1995 through 1998.
a. The estimates of 1998 tax liabilities do not include the child and education credits enacted in the Taxpayer Relief Act of 1997.
b. The effective tax rate on AGI differs from the broader measure of effective tax rates used in this study. AGI excludes significant amounts of income counted under the broader measure.

## Demographic Changes

In 1979, households with children (at least one member under age 18) and nonelderly childless households (headed by a person under age 65 and with no member younger than age 18) each represented twofifths of all households; elderly childless households (headed by a person age 65 or older and with no member younger than age 18) made up the remaining fifth. The elderly share changed little over the subsequent two decades, but the fraction composed of households with children dropped 10 percent to just over one-third of all households. Nonelderly childless households grew in number to make up the difference. Furthermore, within the declining share of households with children, the fraction headed by single parents climbed from one-fifth to more than onequarter.

Those demographic shifts have affected federal tax revenues in two ways. First, because nonelderly childless households have higher average incomes than other households, the relative growth of that group increased total household income more than would otherwise have been the case, driving revenues upward. Second, elderly taxpayers and those with children receive more favorable income tax treatment than nonelderly households without children. Social Security benefits, for example, are taxed only for recipients with incomes above $\$ 25,000$ ( $\$ 32,000$ for joint filers), and even then, part of the benefits are exempt. Moreover, because elderly taxpayers are less likely to have earnings, most of them owe no payroll taxes. Low-income working families with children are favored under the EITC: they qualify for a much more generous credit than do childless taxpayers. In addition, households with children can generally claim more dependent exemptions than other households can, and all but those with the highest income may claim tax credits of $\$ 500$ per child.

## Changing Sources of Federal Revenues

The distribution of federal taxes among taxpayers depends in part on the relative importance of the four major sources of federal revenues: individual and

Figure 1-7.
Shares of Total Federal Revenues, by Source, 1979-1997


$$
\begin{gathered}
\square \text { Individual Income Tax } \square \text { Corporate Income Tax } \\
\text { Social Insurance Taxes }{ }^{\text {a }} \square \text { Excise Taxes } \square \text { Other Taxes }
\end{gathered}
$$

SOURCE: Congressional Budget Office.
a. Payroll taxes financing Social Security, Medicare, and federal unemployment insurance.
corporate income taxes, social insurance taxes, and excise taxes. Corporate taxes fall more heavily on taxpayers at the top of the income distribution, social insurance taxes claim a larger share of middle-class income, and excise levies disproportionately affect low-income households. ${ }^{9}$ Over the past 20 years, the shares of federal revenues coming from those sources have varied widely (see Figure 1-7).

The share of revenues from individual income taxes trended downward during the late 1980s, partly as a result of the cuts in rates and indexation of brackets and other parameters enacted in the Economic Recovery Tax Act of 1981 and partly because of rising payroll tax rates. Only with the steep climb in incomes since 1995 and rate increases in 1990 and 1993 has the fraction of revenues from that source returned to the levels of the early 1980s. In fiscal

[^6]year 2001, individual income taxes will provide fully half of all federal revenues.

Corporate income taxes fell sharply as a share of federal revenues in the early 1980s as the economy dipped into a deep recession. Between 1983 and 1997, the trend reversed: corporate profits rebounded, and the corporate income tax share of revenues nearly doubled. Interrupted only by the short recession in 1990, the growth of revenues from those taxes reflects the rise in corporate profits, which climbed from 7 percent of GDP in 1983 to 10 percent in 1997. In fiscal year 2001, corporate taxes will make up about one-tenth of federal revenues.

Social insurance levies will provide roughly a third of all federal revenues in fiscal year 2001. The legislated increases in tax rates during the early 1980s raised the share of revenues from that source by more than a fifth, to nearly 38 percent in 1992. That share has drifted downward since then as a result of the extraordinary climb in income taxes.

The share of revenues coming from excise taxes declined steadily over the 18-year period, dropping from its high of nearly 7 percent in 1981 to less than half that level in fiscal year 2001. Much of the drop results from levies that are set not as a percentage of the price of a good but rather as a fixed dollar amount per unit sold.

## Effective Tax Rates

The slight rise in the total effective federal tax rate for all households between 1979 and 1997 hides the decline in that measure for each quintile of the income distribution. It also hides the substantially different changes in effective rates for the four sources of revenue. Changes in the total effective tax rate reflect both the shifting distribution of income among quintiles and legislation affecting specific taxes. To understand those changes thus requires an examination of each source of revenue.

## Individual Income Taxes

The effective rate of the individual income tax for all households dipped during the 1980s before returning
to essentially the same level in 1997 as it had reached in 1979 (see Figure 1-8). That lack of change over the period reflected a drop of nearly 5 percentage points (to -5.0 percent) for the lowest fifth of households, a decline of at least 1.5 percentage points for each of the middle three quintiles, and a slight rise for households with the highest incomes. Trends in effective rates during the 1990s that moved downward for low-income households and upward for those with high incomes stemmed in part from expansion of the EITC, in part from new tax brackets with higher rates, and in part from the rapid growth of income at the top of the distribution that pushed more income into the highest tax brackets. Although fully comparable data do not exist for the years since 1997, information from tax returns indicates that the diverging trends in rates have continued at least through 1999 (see Box 1-3).

The dramatic shift of pretax income toward the top quintile-its share increased from 46 percent to 53 percent over the period-joined with reductions in

Figure 1-8.
Effective Individual Income Tax Rates, by Income Group, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: The effective tax rate equals individual income tax liabilities as a percentage of total income.

Quintiles, or fifths, of the income distribution contain equal numbers of people.

## Box 1-3.

## Trends in the Individual Income Tax Since 1997

The Congressional Budget Office's database on effective tax rates currently ends in 1997. Preliminary data on individual income tax liabilities are available from tax returns through 1999. The statistics from tax returns differ in three ways from other data reported in this study. First, they cover only the tax-filing population and thus exclude people with very low taxable income. Second, the unit of analysis is the tax return, not the household, which means that the average income per unit is lower than that for the more aggregated household measure. Third, the income measure used is adjusted gross income (AGI) reported on tax returns, a less comprehensive yardstick than those used for the study's estimates of effective tax rates. Furthermore, small changes in the definition of AGI over the three-year period (such as the new deduction for interest on student loans effective in 1998) reduce the comparability of the data. Nonetheless, the taxreturn data offer indications about recent trends in effective tax rates and changes in the distribution of income and taxes.

Recent tax data show that the effective federal income tax rate on AGI fell from 14.2 percent in 1997 to 14.0 percent in 1998 (see the table below). Lower individual income tax rates resulting from the Taxpayer Relief Act of 1997 explain much of the drop. That law reduced capital gains tax rates and introduced credits for children and for the costs of higher education. Because the lower tax rate affected only some 1997 capital gains, most of the change be-

Effective Individual Income Tax Rates Based on Tax-Return Data, 1997-1999 (In percent)

| Adjusted Gross Income <br> (1999 dollars) | 1997 | 1998 | 1999 |
| :--- | ---: | ---: | ---: |
| Under $\$ 50,000$ | 6.3 | 5.7 | 5.7 |
| $\$ 50,000$ to $\$ 200,000$ | 14.3 | 13.9 | 14.0 |
| $\$ 200,000$ and Over | 27.0 | 26.2 | 27.0 |
| Overall Rate | 14.2 | 14.0 | 14.6 |

SOURCE: Congressional Budget Office based on the Internal Revenue Service's Statistics of Income (1997 and 1998) and its master file (1999).

NOTE: Individual income tax totals are net of the refundable earned income tax credit. Effective rates are calculated by dividing individual income taxes by AGI.
tween 1997 and 1998 came from the new child and education credits. Households throughout the income distribution shared in the tax savings as the effective tax rate fell for all three broad classes of AGI.

Preliminary data for 1999 show an increase in the overall effective individual income tax rate, to 14.6 percent. The lower two income groups shown in the table experienced little change in tax rates between 1998 and 1999, but taxpayers with income above $\$ 200,000$ saw their tax rate rise from 26.2 percent to 27.0 percent (because more of their income was taxed at higher rates).

## Tax-Return Data on Shares of Adjusted Gross Income and Taxes for High-Income Taxpayers

 (More Than \$200,000 of AGI), 1995-1999

SOURCE: Congressional Budget Office based on data from the Internal Revenue Service's Statistics of Income (1995 through 1998) and its master file (1999).

The tax data through 1999 also show continued growth in the shares of income and taxes reported on high-income returns (see the figure above). The share of AGI going to taxpayers with income above $\$ 200,000$ rose from 16 percent in 1995 to 24 percent in 1999. Over the same period, the fraction of individual income taxes paid by that group climbed from 34 percent to 45 percent. Note, however, that the share of taxpayers with AGI over $\$ 200,000$ rose sharply, increasing from 1.3 percent in 1995 to 1.9 percent in 1999. (Appendix J contains additional data from tax returns for 1995 through 1999.)

Figure 1-9.
Shares of Individual Income Taxes, by Income Group, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: Quintiles, or fifths, of the income distribution contain equal numbers of people.

The share of taxes paid by the lowest quintile is less than zero and is not shown.
rates to shift the burden of individual income taxes onto the highest-income households. The top quintile of households paid 78 percent of total individual income taxes in 1997, up from 66 percent 18 years earlier (see Figure 1-9). The top 1 percent of households bore the bulk of that change: their share rose from 19 percent to 33 percent over the interval.

## Social Insurance Taxes

The effective social insurance tax rate climbed steadily over most of the past two decades, rising from 6.8 percent in 1979 to 8.6 percent in 1995, as the Congress pushed up levies to improve the longrun stability of Social Security and Medicare (see Figure 1-10). The rate settled slightly lower in 1997 only because more income went to the highestincome households, for whom the cap on Social Security taxes limited their exposure. ${ }^{10}$ Over the entire

[^7]period, the effective tax rate rose for every quintile, with the largest rate of increase affecting households with the lowest incomes. ${ }^{11}$

## Corporate Income Taxes

Between 1979 and 1997, the effective rate for the corporate income tax first declined by nearly half and then rose to a level that was half a percentage point below its level in 1979. The principal cause of that trend was the fall and subsequent rise of corporate profits. ${ }^{12}$ Households at every income level experienced a drop in their effective corporate income tax rate, but the magnitude of the decline differed, depending on the share of their income coming from capital (interest, dividends, rent, and capital gains). Furthermore, because capital income goes disproportionately to the wealthiest households, the tax is highly progressive. At the same time, the effective tax rate dropped proportionately more for households at the top of the income distribution than for households with lower incomes, making the tax less progressive in 1997 than it was in 1979.

## Excise Taxes

Over the past two decades, despite legislated increases in statutory rates, excise taxes have claimed a nearly constant share of income-at or just under 1 percent. ${ }^{13}$ That virtual lack of change in effective rates, however, obscures markedly different effects within different income categories. The lowest quintile first saw excise taxes dip from 2.1 percent of their income in 1979 to 1.6 percent in 1981 and then climb to 2.8 percent in 1997. In contrast, the quintile with the highest incomes experienced a drop in the effective rate from 0.7 percent to 0.5 percent over the same period. The overall effect was to make a regressive tax even more regressive: excise taxes

[^8]Figure 1-10.
Effective Social Insurance Tax Rates, by Income Group, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: Social insurance, or payroll, taxes finance Social Security, Medicare, and federal unemployment insurance.

The effective tax rate equals social insurance tax liabilities as a percentage of total income.

Quintiles, or fifths, of the income distribution contain equal numbers of people.
claimed five times the share of income from the lowest-income households that they claimed from the highest-income households. However, to the extent that one intent of imposing excise taxes is to reduce the consumption of particular goods, that regressivity may be viewed as less onerous.

## Composition of Changes in Effective Tax Rates

The overall trends in effective federal tax rates derive from widely differing changes for the various income quintiles in the effective rates of the four major revenue sources (see Figure 1-11 on page 14). Rapid expansion of the EITC in the 1990s cut individual income tax rates sharply for households in the lowest quintile, more than offsetting significant increases in social insurance and excise tax rates. For the middle quintile, rising social insurance taxes roughly balanced the fall in individual income taxes, and the decline in corporate income taxes accounted for virtu-
ally all of the drop in households' overall effective tax rate. In contrast, the top quintile saw the combination of individual income and social insurance tax rates rise by about the same amount as corporate income and excise tax rates decreased, leaving the total effective federal tax rate for those households almost the same in 1997 as it had been in 1979.

## The Distribution of After-Tax Income

The overall progressivity of federal taxes yields a distribution of after-tax income that is more equal than that of pretax income (see Figure 1-12). The decline in effective tax rates for low-income households since 1979 would have narrowed the gap be-

Figure 1-12.
Shares of After-Tax Household Income, by Income Group, 1979-1997


SOURCE: Congressional Budget Office.
NOTE: Households are people who share a single housing unit, regardless of the relationships among them. After-tax household income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, retirement benefits, and in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance) minus individual income taxes, excise taxes, and the employee's share of payroll taxes.

Figure 1-11.
Effective Federal Tax Rates, by Income Quintile and Revenue Source, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: The effective tax rate equals tax liabilities as a percentage of total income.
Quintiles, or fifths, of the income distribution contain equal numbers of people.
a. For the lowest quintile, the effective individual income tax rate is negative in most years.
b. Social insurance, or payroll, taxes fund Social Security, Medicare, and federal unemployment insurance.
tween the incomes of high- and low-income households, had incomes themselves not grown disproportionately rapidly for those at the top of the income distribution. Income growth, however, dominated any changes in tax law in determining the rising inequality in the distribution of after-tax income.

In 1979, the share of total after-tax income going to the highest quintile was less than seven times the share going to the lowest quintile; by 1997, the multiple exceeded 10. In both years, that multiple was about one-fourth larger before taxes than after, indicating little change in the effect of federal taxes in leveling the income distribution. Nonetheless, that reduction itself shows the amount of redistribution brought about by taxes.

## Effective Federal Tax Rates for Different Types of Households

Overall effective federal tax rates faced by various types of households changed differentially between 1979 and 1997. Households with children saw taxes take a larger bite out of their pretax income at the end of the period compared with the early years. ${ }^{14}$ The reverse held true for households with elderly members. Nonelderly childless households experienced virtually no change in their federal tax rate over the two decades. Those overall trends, however, conceal significant differences in the rates of the four major taxes, the growth of income for the three types of households, and the effective tax rates faced by households in different parts of the income distribution.

## Households with Children

As a group, households with children experienced a rise in their effective federal tax rate between 1979

[^9]Figure 1-13.
Effective Tax Rates for Households with Children, by Revenue Source, 1979-1997

$\square$ Individual Income Tax $\square$ Social Insurance Taxes ${ }^{\text {a }}$
Corporate Income Tax $\square$ Excise Taxes

SOURCE: Congressional Budget Office.
NOTES: The effective tax rate equals tax liabilities as a percentage of total income.

A household consists of the people who share a housing unit, regardless of their relationships. A household with children has at least one member under age 18.
a. Payroll taxes financing Social Security, Medicare, and federal unemployment insurance.
and 1997 of 1.4 percentage points, almost entirely the result of a larger share of their income going for social insurance taxes (see Figure 1-13). Their effective individual income tax rate dropped during the 1980s but rose in the 1990s to a 1997 level identical with that in 1979. Corporate income and excise tax rates moved down slightly over the period.

The rise in effective social insurance tax rates over the two decades occurred for households with children throughout the income distribution. ${ }^{15}$ There were sharp differences, however, in changes in the individual tax rate for households with children at different points in the income distribution. Expan-

[^10]sion of the EITC drove that rate down-from -1 percent in 1979 to -9 percent in 1997-for the quintile with the lowest income; the negative rates indicate payments to taxpayers whose credits exceeded their positive tax liability. ${ }^{16}$ At the other end of the income distribution, households with children in the top quintile faced higher individual income tax rates in 1997 than in 1979, in part because substantial growth in their income made more of it subject to higher tax rates and in part because of the legislated increases in rates in 1990 and 1993. Effective income tax rates dropped for households with children in the middle three quintiles but by much less than for the lowest-quintile households. In future years, the child credit-established by TRA-97 and set at $\$ 500$ per child per year-will reduce effective individual income tax rates for households with children throughout the income distribution.

## Elderly Childless Households

Between 1979 and 1997, a large drop in the effective corporate income tax rate offset a smaller rise in the individual income tax rate for elderly childless households as a group, yielding a decline of 1 percentage point in their overall effective federal tax rate (see Figure 1-14). Elderly households saw virtually no change in either social insurance or excise tax rates over the period. Their overall effective tax rate would have dropped even more, had not substantial increases in pretax income moved many elderly childless households up the income distribution and into higher income tax brackets. For example, the number of such households in the lowest income quintile dropped by 15 percent between 1979 and 1997 while the number in the top quintile increased by nearly 60 percent.

That upward movement of elderly childless households in the income distribution during the 1980s and 1990s obscured differences in the changes in effective tax rates across income quintiles. ${ }^{17}$ For

[^11]example, the effective individual income tax rate for all such households rose by 1.2 percentage points between 1979 and 1997, even though the rate for no quintile changed by more than half a percentage point over the period and the rate for the top quintile fell. That apparent anomaly resulted from income gains that shifted substantially more income of elderly childless households into higher tax brackets, pulling up the average rate for the entire group. For elderly childless households in the lowest quintile who pay no individual income tax, small declines in other taxes just offset higher excise tax rates, leaving the lowest-income childless elderly the only quintile whose effective federal tax rate did not fall over the two decades.

Figure 1-14.
Effective Tax Rates for Elderly Childless Households, by Revenue Source, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: The effective tax rate equals tax liabilities as a percentage of total income.

A household consists of the people who share a housing unit, regardless of the relationships among them. An elderly childless household is one headed by a person age 65 or older and with no member under age 18.
a. Payroll taxes financing Social Security, Medicare, and federal unemployment insurance.

## Nonelderly Childless Households

The near constancy of the total effective federal tax rate between 1979 and 1997 for nonelderly childless households obscures increases in rates at the bottom of the income distribution and slight decreases at the top. ${ }^{18}$ Higher social insurance and excise tax rates more than offset falling individual and corporate income tax rates for the bottom two quintiles, yielding a rise of 1 percentage point in their effective rates. At the top of the distribution, individual income tax rates changed little over the two decades. Rising social insurance taxes balanced declining corporate income and excise taxes, leaving the highest-income households with roughly the same total effective federal tax rate at the end of the period as at the beginning. Changes in tax law from TRA-97 had little effect on federal taxes for nonelderly childless households throughout the income distribution.

## Effective Federal Tax Rates by Cash Income Category

The foregoing discussion of federal tax rates relies on a measure of income that includes more than just cash receipts and that adjusts for differences in household size. Using that broader measure affects the analysis in various ways. First, it increases measured income for some households but not for others, depending on the distribution of noncash income. Second, that higher income reduces calculated effective tax rates: the same tax liability divided by a larger income yields a lower tax rate. Third, adjusting income for differences in the size of households moves larger households down the income distribution and smaller households up it. As described in greater detail in Chapter 3, the net effect is to shift households with children into lower quintiles and elderly and nonelderly childless households into higher quintiles.

As a result of those effects, this analysis may not fit well with people's perceptions of their own tax situations. A more familiar measure of effective fed-

[^12]eral tax rates that is easier to understand classifies households by cash income. Nevertheless, analyzing tax rates using cash income categories presents several limitations. Most important, even though categories in different years are defined in terms of constant 1997 dollars-that is, categories with unchanging purchasing power-they represent different fractions of the population over time. For example, the top income category used in the following analysis ( $\$ 200,000$ and above) includes three times as many households in 1997 as in 1979, a period that saw only a 25 percent increase in total households.

In addition, it is important to keep in mind that cash measures of income are poor indicators of household well-being. ${ }^{19}$ Noncash income omitted from the measure can make households significantly better off. A given amount of cash income goes a lot further for a smaller household than for a larger one. Despite those limitations, however, analyzing effective tax rates for households in different cash income categories provides useful information about the nature of the federal tax system.

Between 1979 and 1997, the effective federal tax rate:
o Fell for households with income below $\$ 50,000$ (in 1997 dollars);
o Was virtually unchanged for those with income between $\$ 50,000$ and $\$ 75,000$;
o Rose slightly for households with income between \$75,000 and \$100,000; and
o Declined for households with income above $\$ 100,000$ (see Figure 1-15). ${ }^{20}$

Patterns of change across the two decades varied widely, depending on the impact of changes in different taxes. For example, households with the highest income saw their effective tax rate drop sharply between 1979 and 1985 before rising over the next
19. Chapter 2 discusses alternative measures of income that may give a more accurate picture of household well-being.
20. Table H-1a provides effective tax rates for all cash income categories for each of the four major sources of federal taxes and the total of all four taxes over the 1979-1997 period.

Figure 1-15.
Total Effective Federal Tax Rates, by Income Category, 1979-1997


SOURCE: Congressional Budget Office.
NOTE: The effective tax rate equals total tax liabilities (individual income, corporate income, payroll, and excise) as a percentage of total income.
decade and then dropping again between 1995 and 1997. In contrast, households at the bottom of the income distribution saw their tax rates rise during most of the 1980s before declining in the 1990s.

At every level of household income, the effective individual income tax rate declined between 1979 and 1997. The decline was most pronounced for households with income below $\$ 10,000$, for whom the expansion of the EITC pushed down their income tax rate to -4.3 percent-a payment from the government rather than a tax liability. The lower tax rates for each income category were not reflected in the effective tax rate for all households, however. The growth of real income over the period moved households into higher income categories and consequently into tax brackets subject to higher rates: the fraction of households with income above \$75,000 (in 1997 dollars) climbed from 14.4 percent in 1979 to 19.8 percent in 1997. That "real bracket creep" caused the effective individual income tax rate for households as a group to rise slightly.

The effective social insurance tax rate for all households rose between 1979 and 1997. Moreover, every income category experienced a rising tax rate. Increases were greatest for households with income between $\$ 100,000$ and $\$ 200,000$ (the rate climbed from 5.9 percent to 9.6 percent), largely because all earnings became subject to Medicare taxes.

## Chapter Two

## Methodological Issues

Analyzing the distribution of taxes among categories of income requires many decisions. What units should be used to measure income? What counts as income? What adjustments to income are needed to account for different circumstances faced by households and families? Who bears the incidence of various taxes? What time period is appropriate for the study? The answers to those questions all affect any distributional analysis. Knowing the trade-offs involved in choosing among alternatives is essential to a complete understanding of the implications of distributional data.

Decisions affecting the analysis discussed in this study are driven by several considerations. The study's principal goal is to understand the distribution of federal taxes, not to examine the distribution of income either for a single year or over time. To the extent possible, given the limitations of the available data, the study examines the distribution of federal taxes using measures of income that reflect the relative economic positions of households. Compromises result from missing information about specific sources of income as well as the lack of longitudinal data. Choices made from among competing methods often depend on the nature of the taxes being considered. Finally, many decisions reflect explicit tradeoffs and a recognition of the pluses and minuses of each choice. Chapter 3 discusses alternative measures to provide some understanding of the effects of the choices made. Those alternatives, however, do not encompass all of the possible choices. Moreover, the limited period that the study covers means that any comparison applies only to the two decades under consideration and may not hold over other periods.

## The Unit of Analysis

Ranking people by income requires choosing the unit over which to measure income. Because income matters not for its own sake but rather for the consumption and saving that it makes possible, the appropriate groupings of people are so-called consumer unitsgroups that combine their resources to purchase goods and services. Yet even that simplification encounters problems because groupings may differ for choices about different goods. For example, students sharing an apartment compose a single group in their housing decision but are likely to divide into smaller subgroups for choices about food and clothing. Furthermore, available data generally include no information about consumer units. More commonly, they report household and family relationships; analysts must infer how individuals combine to make decisions about consumption.

Analysts of the distribution of taxes confront four principal kinds of units: individuals, tax units, families, and households. The first possibility-individuals-is readily dismissed with the observation that many people, particularly children and the elderly, rely on others to provide for their needs. Assessing their economic position solely on the basis of their own resources would inaccurately consign them to the bottom of the income distribution, regardless of their actual consumption. Similarly, because they often exclude people who share consumption, tax units-individuals or couples filing tax returns plus their tax dependents-fail to encompass larger units that are more meaningful in terms of economic posi-
tion. For example, grown children residing with their parents are separate tax units, even though they may share resources with their parents. Tax units, of course, are appropriate for analyses that focus more narrowly on taxes.

Choosing between families and households is harder. Families-people living together who are related by blood, marriage, or adoption-frequently constitute single units for most decisions about consumption. The prototypical case of a married couple with children fits that description most completely. Such families combine the incomes of the two parents to provide for the entire unit. At the same time, extended families combine subfamilies that may share only housing expenses and make other decisions about consumption as subfamily units.

A household-all of the people living in a single housing unit-is usually also a family; nevertheless, a small but growing fraction of arrangements involve unrelated people sharing a house or apartment. Such nonfamily households form a single unit for their consumption of housing, but, like extended families, they may divide into smaller groups for other consumption choices. Many nonfamily households consist of unmarried couples, with or without children, whose consumption decisions differ little from those of married couples. To separate such households into smaller consumer units to assess their income would misrepresent their relative economic positions.

Focusing on families thus incurs two kinds of mistakes: it combines subfamilies that act independently in their decisions about what to consume, and it separates nonfamily groups that act together. In contrast, the use of households inaccurately combines groups that act independently (both subfamilies and unrelated subgroups) but correctly counts as a single unit households composed of unrelated groups that combine resources to finance consumption. Over 90 percent of all households consist of a single family; because the household and the family are identical, the choice of unit does not matter. Using either alternative corrects mistakes that the other makes but introduces new errors. Data limitations preclude knowing which approach misclassifies fewer units, so either choice is to some degree arbitrary. Because all members of every household make a combined deci-
sion about the housing they "consume," households are the unit used in the principal analysis of this study. ${ }^{1}$

## The Definition of Income

People typically think of their income as the cash they receive either as pay for working, as returns on their investments (in the form of interest, dividends, rents, and capital gains), or as payments from the government or retirement accounts. Economists think of income in broader terms, adding in the value of in-kind benefits such as health insurance, food stamps, and housing assistance; income and payroll tax payments made by others that effectively reduce a person's earnings or return on investment; and the value of services provided by durable goods such as owner-occupied housing. In its most broadly construed but most difficult to measure form, income equals the sum of consumption of all kinds, including leisure, plus the change in wealth over the measurement period. ${ }^{2}$

## Tax-Based Measures of Income

The federal individual income tax defines at least three different measures of income. Cash income before adjustments consists roughly of all cash income potentially subject to tax. Subtracting various exclusions from that value yields adjusted gross income, or AGI. Taxable income equals AGI minus any applicable personal exemptions and deductions.

1. In contrast to the approach used by the Congressional Budget Office, the Office of Tax Analysis in the Department of the Treasury uses families as its unit of analysis, and the Joint Committee on Taxation focuses on tax units. The Bureau of the Census uses households as its primary unit but produces tables for both families and households. As Chapter 3 demonstrates, however, the choice of unit has little effect on observed trends in effective tax rates or income.
2. The Treasury's Office of Tax Analysis and the Joint Committee on Taxation use measures of income that differ from those used in this analysis. Differences among the methods used by the three offices cause little qualitative variation in the measured distribution of taxes (see Appendix C).

Even cash income, the most expansive of those measures, excludes cash income from many sources, including most Social Security benefits, all meanstested cash payments from the government, and taxexempt interest. At the same time, however, the narrowest measure-taxable income-is the basis for determining how much taxpayers must pay in income taxes. None of the three measures provide a full assessment of a household's economic status.

## Cash Income Not Subject to Tax

Expanding the tax-based measures to include all cash income gives a more complete picture of a household's resources. That expansion includes adding all cash transfers such as Social Security benefits, Supplemental Security Income payments, and grants from the Temporary Assistance for Needy Families program. Information on the receipt of such taxexempt payments does not appear on tax returns and must therefore come either from administrative data for individual programs, which often lack demographic detail, or from survey instruments such as the Current Population Survey, which are almost certainly less accurate than tax returns. As a result, broadening the income measure risks misstating household income, in terms of which households receive payments and the size of those payments. Nonetheless, the various transfer payments can substantially affect household resources, particularly at the lower end of the income distribution, and their omission threatens the validity of any distributional analysis.

## Retirement Funds

Contributions to and withdrawals from retirement funds pose a particularly difficult problem. On the one hand, if workers voluntarily choose to put part of their pretax earnings into accounts held for retirement, the contributions represent income when they are earned. Workers could use the funds to finance current consumption but instead elect to put them away for their later years. On the other hand, money withdrawn from the funds during retirement provides a significant share of resources for older taxpayers. Ignoring those withdrawals in assessing income could vastly understate the resources available to senior
citizens and yield an inaccurate measure of effective tax rates. ${ }^{3}$

In the face of conflicting arguments about when to count retirement funds as income, the Congressional Budget Office (CBO) includes in its income measure both voluntary contributions to individual retirement accounts and $401(\mathrm{k})$ accounts and withdrawals from those and other accounts during retirement. ${ }^{4}$ Although that approach clearly double-counts contributions over a lifetime, omitting either of the measures would understate the resources available to workers or retirees. ${ }^{5}$

If data were available to analyze tax liabilities and income on a lifetime rather than an annual basis, the resources would be counted only once and the question of when to include them as income would not arise. (Annual versus lifetime accounting is discussed further in a later section.) In the absence of the data required for lifetime analysis, however, including both contributions to and withdrawals from retirement accounts recognizes the effect of both factors on a household's income.

## Taxes Paid by Businesses

Another component of household income consists of taxes paid by businesses, both corporate income taxes and payroll taxes. A firm's income tax liability ultimately falls not on the firm but on individuals-on stockholders in the form of lower dividend payments or smaller capital gains, on workers in the form of lower compensation, or on customers in the form of higher prices. Although economists disagree about the actual incidence of corporate income taxes, the general consensus holds that the entire burden falls
3. Ignoring assets also understates available resources. The lack of appropriate data, however, precludes taking assets into account.
4. Note that only employees' contributions to retirement plans count as income for workers; employers' contributions to both defined benefit and defined contribution plans are excluded. The Treasury's Office of Tax Analysis follows a similar approach.
5. Only the contributions are counted twice; any accrued earnings in the account are treated as income and are taxed only when withdrawn. The earnings are not available to account owners during the accrual period.
on the owners of capital as a group. ${ }^{6}$ Following that consensus requires assigning corporate taxes-as both a tax liability and income-to the owners of capital in proportion to their capital income.

Economists are in greater agreement that workers bear the full incidence of payroll taxes, the taxes that pay for Social Security, Medicare, and unemployment insurance. ${ }^{7}$ Employers pass on their share of those taxes to workers in the form of wages or benefits that are lower than those employers would pay in the absence of the tax. Accurate measures of income and taxes should consequently include payroll tax payments made by employers, allotted to workers in proportion to the payroll taxes they pay themselves. ${ }^{8}$

## Income Received in Kind

Many transfer payments and a significant share of the compensation paid to workers come not in cash but in kind. The government gives food stamps, housing and energy assistance, Medicare and Medicaid benefits, and school breakfasts and lunches in the form of goods or services. ${ }^{9}$ Although economists agree that recipients would prefer to receive cash equal to the cost of in-kind benefits, the government provides benefits in kind to help ensure that beneficiaries consume the intended goods or services. In the workplace, some employers pay health and life insurance premiums for their workers and provide educational

[^13]assistance, cars, housing, meals, and free or subsidized child care. Such in-kind compensation may be designed to take advantage of the beneficial way that the tax code treats particular forms of noncash payments, to attract workers who place especially high value on such benefits, or to enable workers to perform better in their jobs.

Regardless of the motivation behind them, transfers and compensation provided in kind constitute income for recipients and enhance their economic position. But valuing those benefits is difficult. Recipients place a higher value on a cash payment equal to the cost of an in-kind benefit than on the benefit itself simply because the cash allows them the choice of obtaining the in-kind benefit on their own or consuming a preferred alternative that costs no more. The cost of the in-kind payment is thus an upper bound on the value of the benefit. That value, however, could be much lower, particularly for lowincome recipients whose consumption is tightly constrained by their lack of resources. In the extreme, the recipient's value for an in-kind benefit is zero; that situation occurs when he or she would not purchase the benefit at any price after getting its cost in cash. In general, however, recipients value in-kind benefits somewhere between the two extremes.

The Bureau of the Census has developed measures to estimate the value to recipients of benefits received in kind. ${ }^{10}$ Some benefits are assessed at market value-the costs recipients would incur if they bought the goods themselves. The value assigned to food stamps, for example, equals their face value, and school meals are counted at the subsidy cost borne by the government.

That approach poses problems in the case of health benefits provided through the Medicare and Medicaid programs. For many recipients, the average cost, or insurance value, of benefits is high relative to income. Given a choice between health services and other consumption, those beneficiaries would probably not spend the full insurance value on health but instead split their consumption among a

[^14]range of goods and services. That observation implies that the value of health benefits to recipients is less than the insurance value-that is, the average cost to the government of providing the benefits. It is impossible to determine how much less, however, without knowing the preferences of individual recipients.

The solution provided by the Bureau of the Census and used in this study is to count the fungible value of the benefits. That value equals the amount of resources freed up for other uses by the health care services provided, up to the insurance value of those services. ${ }^{11}$ For example, suppose a household that is not receiving food stamps spends $\$ 400$ a month on food. If the household started getting $\$ 500$ a month in food stamps, the $\$ 400$ previously spent on food would be available for other uses. The Census Bureau's fungible value for the food stamps would equal $\$ 400, \$ 100$ less than the value of the food stamps received. If the household instead received only $\$ 300$ in food stamps, the fungible value would be $\$ 300$, because the household could use food stamps and cash to buy the same $\$ 400$ worth of food and use the freed-up $\$ 300$ to purchase other goods or services.

The fungible value of a benefit received in kind thus depends not only on the market or insurance value of the benefit but also on the income of the recipient's household. Low-income households that would spend nothing on health care in the absence of subsidized programs, for example, would have a fungible value for health care benefits equal to zero. At the other end of the scale, the value to high-income households would equal the full insurance value.

CBO counts the health insurance premiums paid by employers as income. Firms offer health plans to their workers in place of cash wages presumably because they feel workers value health benefits more than the forgone earnings. ${ }^{12}$ In turn, because they could work elsewhere, employees of firms with health plans demonstrate that they do, in fact, con-

[^15]sider the health benefits to be worth at least as much as the additional wages they could get for comparable jobs at companies not offering health plans. Excluding the value of those benefits would understate household income and misrepresent significant differences in income between workers with and without employer-sponsored health plans.

## Imputed Income from Services

Many households consume services for which they are not charged directly and which therefore constitute income. Durable goods such as owner-occupied housing, motor vehicles, and household appliances provide specific services over their useful lifetime. Financial institutions offer a wide range of "free" services such as checking accounts that users pay for by getting lower returns on their invested assets than they would get if firms charged for all services. From an economic standpoint, all such services constitute income, although part or all of that income could be offset by other costs associated with the services. ${ }^{13}$ Because information on both the consumption of the services and their value cannot be readily obtained, CBO omits imputed income from services in the income measure used in this analysis.

## Unrealized Capital Gains

An increase in the value of an asset represents income to the owner of the asset. The federal tax system taxes such capital gains only when the owner sells the asset and realizes the gain, in part because valuing unrealized gains is difficult and in part because taxpayers may lack funds to pay taxes on the higher value of assets they have not sold. The lack of information about the value of assets precludes making unrealized gains part of measured income, and the income measure used in this study excludes them. CBO does, however, include in its measure of household income realized capital gains reported on indi-

[^16]vidual income tax returns, but it does not adjust those gains for inflation because of limitations in the data. ${ }^{14}$

## Adjusting Income for Differences Among Households

Households with identical incomes may differ in other ways that bear on their economic status. Ranking households by levels of equivalent resources requires adjusting income to account for differences such as household size.

## Household Size

Two cannot live as cheaply as one. Put less succinctly, larger households need more income to finance consumption and savings than smaller households do. At the same time, economies of scale in at least some consumption-housing, in particularmean that two people do not need twice the income to live as well as an individual living alone. In other words, per capita income (total household income divided by household size) ignores the benefits of shared consumption. An adjusted income falling somewhere between household and per capita incomes is likely to offer a better means of ranking households.

CBO has previously used the equivalence scales implicit in the poverty thresholds with which the Bureau of the Census determines the poverty status of families and individuals. Those thresholds exhibit significant irregularities as the size of families increases, suggesting that a second person adds 28 percent to the needs of a single person and a third person adds a similar amount, but a fourth person raises

[^17]costs by 44 percent of the cost of an individual. Furthermore, the poverty thresholds do not change at all once a family's size exceeds nine people. An alternative and more regular adjustment suggested in previous studies increases the needs of a household in proportion to the square root of the household's size. ${ }^{15}$ That adjustment implies that each additional person increases a household's needs but at a decreasing rate. Analysis covering the 1980-1995 period shows that the choice among a range of adjustments for the size of families affects the measured levels of income and effective tax rates but has little effect on observed trends. ${ }^{16}$ The main results reported in this study use the square root of household size to adjust for the different needs of households.

The household-size adjustment that CBO used to construct the tables in this analysis is employed for ranking purposes only-that is, it is used only to assign households to percentile groupings and not for other calculations. The incomes reported in the tables represent total household income; they are not adjusted in any way to reflect a household's size. As a result, two households with very different incomes may be grouped together because the higher-earning household is larger. All of the income averages calculated for the study derive from unadjusted measures of reported income with equal weights for all households (or families, where those units are used), regardless of size.

## Other Adjustments

It may also be desirable to adjust the incomes of households for other differences in their circumstances that affect their economic positions. For example, the prices of goods and services vary among locations, and households can incur quite different costs associated with working, depending on how many members are employed, the costs of commuting, child care expenses, and other costs. However,

[^18]data that would allow analysts to adjust incomes for differences in prices and in the costs of working are unavailable.

## Assumptions About the Incidence of Federal Taxes

Essential to measuring the distribution of federal taxes are assumptions about the incidence of those levies. ${ }^{17}$ The people or businesses that remit tax payments to the government may not bear the actual burden of the taxes they pay but instead pass that burden on to others. Although economists do not universally agree on the ultimate incidence of specific taxes, CBO follows consensus views in allocating taxes among households. Furthermore, to the extent that taxes paid by businesses result in lower incomes for households, imputing those taxes to the households that bear their burden requires adding those tax liabilities not only to the taxes of households but also to the incomes those families receive.

## Individual Income Taxes and Payroll Taxes

Workers bear the full cost of taxes imposed on their income deriving from wages and salaries. Firms trying to maximize their profits pay workers only as much as necessary to attract those with required skills, up to the point where additional workers cost more than their value to the firm. The fact that workers incur taxes on that pay does not affect the total compensation firms will offer. ${ }^{18}$ Thus, employees bear the full individual income tax on their earnings as well as their and their employers' share of payroll taxes. That assumption, which is accepted by virtually all economists, implies that in the absence of

[^19]payroll taxes, compensation to workers would increase by the full amount of the payroll taxes paid by employers.

## Corporate Income Taxes

Less agreement exists on the incidence of corporate income taxes. Firms pay the tax on their net profits according to a schedule of four rates that reaches 35 percent for annual taxable income over $\$ 10$ million. Ultimately, however, that tax is borne by households, either as higher prices for the goods they buy or lower income from work or investments. Economists disagree on whether people bear the tax as shareholders in corporations, owners of all capital assets, employees, or consumers. Nonetheless, a survey of the economics literature on the issue indicates a dominant view that the corporate income tax reduces the return to all capital, and thus the burden of the tax falls on all owners of capital assets. Accordingly, CBO allocates corporate income taxes as both income and tax liabilities to households in proportion to their income from interest, dividends, rents, and capital gains.

## Excise Taxes

The government collects excise taxes on a narrow range of goods and services, some of which are inputs to the production of final products and some of which are purchased directly by consumers. CBO assumes that excise taxes on goods and services sold directly to consumers are borne by those consumers in proportion to their purchases of the taxed items. Excise taxes on intermediate products and services are allocated among all consumers in proportion to their total consumption.

## The Time Period

Over the course of their lives, people experience wide variations in the annual income they receive and consequently in the taxes they pay. Part of the variation in income comes from changes in earnings over the life cycle: low earnings during early years in the job market, rising earnings through middle age, and
the shift from labor earnings to pensions and investment earnings in retirement. Another part of the variation comes from periods of unemployment that temporarily depress income. And part of it results from irregular receipt of income, particularly capital gains or losses from the sale of investment assets.

The individual income tax takes little account of variations in income over the years and may therefore impose a tax burden across a person's life that correlates poorly with a lifetime concept of economic resources. Many economists view lifetime measures of income and taxes as the best approach to assessing the distributional effects of the federal tax system. Furthermore, using a lifetime accounting period eliminates the problem of when to count particular forms of income. For example, funds in retirement accounts could be counted as compensation during the year they are contributed by workers or employers; alternatively, those funds could be included in income when they are withdrawn during retirement.

Data on taxpayers collected through panel surveys (which interview the same respondents repeatedly over a number of years) show the importance of considering income over periods longer than one year. The Department of the Treasury has constructed longitudinal files for a random sample of taxpayers over periods as long as 10 years, which have been used to examine the year-to-year variation in income for individuals. Those data indicate that there is significant movement of taxpayers within the income distribution but that year-to-year shifts tend to be small. For example, over the 1979-1988 period, roughly half of all taxpayers who were ever in the top 1 percent of all families were in that percentile for only one year. At the same time, virtually none of those who ever appeared in the top 1 percent were ever below the top 10 percent of taxpayers ranked by annual income.

Available 10-year longitudinal files provide only limited information about taxpayers' income and tax liabilities over time. The data required for complete lifetime assessments of the incidence of taxes simply do not exist. As more longitudinal data
covering longer periods become available, economists will be better able to analyze lifetime income and taxes. In the absence of those data, distributional analyses must focus on shorter periods.

Because federal income taxes use a one-year accounting period-and because lifetime data do not exist-CBO's analyses of effective tax rates focus on annual income and tax liabilities. That approach has two significant limitations. First, the year-to-year variation in income means that a household's distributional rank may not accurately represent its command of economic resources. A household's patterns of consumption derive less from current income than from the normal, or permanent, income the household expects to have over time. People rely on savings or borrowing to tide themselves over periods of unemployment, for example.

A second, and related, limitation is that some forms of income come irregularly, particularly capital gains from the sale of a business, of shares of stock, or of another asset. A business owner who sells his firm, for example, will appear wealthy in the year of the sale because of the large capital gain realized at that time, even though the increase in the firm's value accrued over a much longer period. Placing that person near the top of the income distribution in the year of the sale and at a much lower rank in other years misstates his economic status in all years, overstating it in one and understating it in all others. Yet in the absence of lifetime income data, it is impossible to apportion the capital gains realized in a single year over multiple years. Analysts must choose between counting the gain as income when realized or allotting only part or none of it to current income. Extensive examination of tax data on the sales of capital assets indicates that apportioning gains across years based on a single year's realizations would lead to significant error. ${ }^{19}$ CBO thus counts all capital gains as income when realized.

[^20]
## The Effects of Applying Alternative Distributional Methods

The choices that are made among the methodological alternatives discussed in Chapter 2 affect the distribution of households by income. Including more sources of income moves households with income from those sources up the distribution. Adjusting income for the size of households puts smaller ones higher in the distribution and larger ones lower. In that reranking process, households carry with them the dollar values of both their income and the taxes they pay. As a result, distributional rankings affect the average values of those variables calculated for each quintile. Understanding the impact of alternative methodological choices is therefore essential to assessing the implications of tax and income measures.

## Alternative Income Rankings

The alternative rankings that the Congressional Budget Office examines in this chapter reflect choices along three of the five dimensions discussed in Chapter 2:

[^21]The analysis does not examine alternatives using different time periods or different assumptions about the incidence of taxes. ${ }^{1}$

Choosing households rather than families as the unit of analysis has a relatively small effect on income rankings because in most cases, households and families are identical. Only when people not related by blood, marriage, or adoption live together in a single housing unit do households comprise more than one family. In 1979, households on average contained 1.06 families, indicating that nearly all households had only one family; no more than 6 percent were multifamily households (see Table 3-1). ${ }^{2}$ Virtually all of those multifamily households contained no children or elderly members. By 1997, the average number of families per household had risen to 1.10, and again, multifamily households were most likely to be childless and nonelderly. Using households rather than families as the unit of analysis thus tends to join nonelderly childless individuals and couples, combining their incomes and moving them up the income distribution. By averaging the same total income over fewer units, the combining of families into

[^22]Table 3-1.
Household Characteristics by Household Type, 1979-1997

|  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Households |  |  |  |  |  |  |  |  |  |  |
| Millions of People | 222.3 | 226.8 | 229.9 | 236.1 | 241.0 | 245.6 | 250.0 | 255.9 | 257.5 | 264.3 |
| Millions of Families | 86.1 | 89.3 | 91.8 | 95.7 | 98.7 | 102.1 | 104.7 | 107.2 | 109.1 | 112.9 |
| Millions of Households | 81.4 | 84.2 | 86.2 | 89.5 | 92.0 | 94.6 | 96.7 | 98.2 | 99.7 | 102.9 |
| Average Family Size | 2.6 | 2.5 | 2.5 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 |
| Average Household Size | 2.7 | 2.7 | 2.7 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| Ratio of Families to Households | 1.06 | 1.06 | 1.06 | 1.07 | 1.07 | 1.08 | 1.08 | 1.09 | 1.09 | 1.10 |
| Households with Children |  |  |  |  |  |  |  |  |  |  |
| Millions of People | 136.2 | 135.6 | 134.6 | 137.5 | 138.9 | 140.4 | 142.7 | 149.3 | 149.0 | 151.9 |
| Millions of Families | 32.7 | 33.0 | 33.2 | 34.1 | 34.5 | 34.8 | 35.5 | 37.1 | 37.0 | 37.9 |
| Millions of Households | 32.4 | 32.6 | 32.7 | 33.6 | 34.0 | 34.2 | 34.8 | 36.3 | 36.2 | 36.9 |
| Average Family Size | 4.2 | 4.1 | 4.1 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Average Household Size | 4.2 | 4.2 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| Ratio of Families to Households | 1.01 | 1.01 | 1.02 | 1.01 | 1.01 | 1.02 | 1.02 | 1.02 | 1.02 | 1.03 |
| Elderly Childless Households |  |  |  |  |  |  |  |  |  |  |
| Millions of People | 27.2 | 28.4 | 29.6 | 30.8 | 32.2 | 33.1 | 34.2 | 34.1 | 34.7 | 35.2 |
| Millions of Families | 16.7 | 17.5 | 18.2 | 18.9 | 19.8 | 20.5 | 21.2 | 21.0 | 21.8 | 21.9 |
| Millions of Households | 16.3 | 17.0 | 17.6 | 18.4 | 19.2 | 19.8 | 20.5 | 20.2 | 20.9 | 21.0 |
| Average Family Size | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| Average Household Size | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| Ratio of Families to Households | 1.02 | 1.03 | 1.03 | 1.03 | 1.03 | 1.04 | 1.03 | 1.04 | 1.04 | 1.04 |
| Nonelderly Childless Households |  |  |  |  |  |  |  |  |  |  |
| Millions of People | 58.9 | 62.7 | 65.7 | 67.8 | 69.9 | 72.1 | 73.1 | 72.5 | 73.8 | 77.2 |
| Millions of Families | 36.7 | 38.8 | 40.5 | 42.7 | 44.5 | 46.8 | 48.0 | 49.1 | 50.3 | 53.1 |
| Millions of Households | 32.7 | 34.7 | 35.9 | 37.5 | 38.9 | 40.6 | 41.3 | 41.6 | 42.7 | 45.0 |
| Average Family Size | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Average Household Size | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 | 1.7 |
| Ratio of Families to Households | 1.12 | 1.12 | 1.13 | 1.14 | 1.14 | 1.15 | 1.16 | 1.18 | 1.18 | 1.18 |

SOURCE: Congressional Budget Office.
NOTE: Families are people related by blood, marriage, or adoption who live together. A household consists of the people who share a housing unit, regardless of the relationships among them. A household with children has at least one member under age 18. An elderly childless household is one headed by a person age 65 or older and with no member under age 18. A nonelderly childless household is one headed by a person under age 65 and with no member under age 18.
households yields measures of average household income that are slightly greater than measures of average family income.

The measure of income used for ranking families or households has a bigger effect on their positions in the distribution. (Box 3-1 describes the eight measures of income CBO used in this analysis.) Broader income measures reorder the income distribution on the basis of which households receive income from the sources that have been included. Relative to cash income (the narrowest measure), adding taxes paid by businesses-corporate income taxes and the employer's share of payroll taxes-
raises total income by between 6.1 percent and 9.7 percent over the 1979-1997 period (see Table 3-2). Including nonhealth benefits received in kind has a smaller effect since those benefits make up less than 1 percent of cash income in any single year. Most nonhealth in-kind benefits are means-tested, going only to households at the bottom of the income distribution. Including them as income is likely to have the greatest effect on low-income households.

In comparison, health benefits-principally Medicare, Medicaid, and employer-paid health insurance premiums-represent a larger fraction of cash income, rising from 4.7 percent in 1979 to 6.6 per-

## Box 3-1. Measures of Income

This analysis compares the effects of using eight different measures of income to rank households. The measures range from unadjusted family cash income to the broader measure of household income adjusted for household size. In addition, to allow comparison with previous work by the Congressional Budget Office, the list includes the adjusted measure of family income that CBO has employed over the past 13 years. The eight alternatives follow.

1. Family cash income includes only cash receiptswages and salaries, self-employment income, rental income, interest and dividends, realized capital gains, cash transfer payments, and retirement benefits. The family is the primary unit of analysis, and no adjustment is made for a family's size.
2. Household cash income is the same as family cash income except that the unit of analysis is the household (people who share a single housing unit, regardless of the relationships among them), not the family (people related by blood, marriage, or adoption who live together).
3. Household cash income plus taxes paid by businesses and employee contributions to 401(k) retirement plans expands household cash income by adding each household's imputed share of corporate income taxes and the employer's share of payroll taxes as well as imputed contributions to $401(\mathrm{k})$ retirement plans.
4. Household cash income plus nonhealth in-kind benefits further expands cash income plus taxes paid by businesses to include the value of food stamps, school lunches and breakfasts, housing assistance, and energy assistance.
5. Comprehensive household income adds health-related in-kind benefits (the value of employer-paid health insurance premiums and Medicare and Medicaid health insurance) to the previous measure of income.
6. Comprehensive household income adjusted on the basis of federal poverty thresholds divides comprehensive household income by the federal poverty threshold appropriate for a household's size.
7. Comprehensive household income adjusted on the basis of household size adjusts the comprehensive measure to account for differences in a household's size, dividing by the square root of the number of household members. This measure provides the foundation for the analysis presented in Chapter 1 and, in CBO's view, is the best measure of income available, given the limitations of current data.
8. CBO's historical income measure equals family cash income plus business taxes divided by the federal poverty threshold appropriate for a family's size. Imputed contributions to $401(\mathrm{k})$ retirement plans are not included.

Table 3-2.
Income Totals, 1979-1997

|  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash Income ${ }^{\text {a }}$ <br> (Billions of 1997 dollars) | 3,498 | 3,540 | 3,669 | 4,066 | 4,298 | 4,597 | 4,529 | 4,613 | 4,843 | 5,521 |
| Taxes Paid by Businesses ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |
| In billions of 1997 dollars | 268 | 233 | 222 | 280 | 333 | 365 | 353 | 406 | 467 | 511 |
| As a percentage of cash income | 7.7 | 6.6 | 6.1 | 6.9 | 7.7 | 7.9 | 7.8 | 8.8 | 9.7 | 9.3 |
| Nonhealth In-Kind Benefits ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |
| In billions of 1997 dollars | 21 | 22 | 23 | 24 | 26 | 25 | 31 | 34 | 32 | 28 |
| As a percentage of cash income | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.7 | 0.7 | 0.7 | 0.5 |
| Health-Related In-Kind Benefits ${ }^{\text {d }}$ |  |  |  |  |  |  |  |  |  |  |
| In billions of 1997 dollars | 163 | 159 | 179 | 196 | 232 | 258 | 270 | 329 | 368 | 362 |
| As a percentage of cash income | 4.7 | 4.5 | 4.9 | 4.8 | 5.4 | 5.6 | 6.0 | 7.1 | 7.6 | 6.6 |
| Comprehensive Household Income ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |
| In billions of 1997 dollars | 3,951 | 3,953 | 4,094 | 4,566 | 4,889 | 5,245 | 5,183 | 5,381 | 5,711 | 6,423 |
| As a percentage of cash income | 112.9 | 111.7 | 111.6 | 112.3 | 113.7 | 114.1 | 114.4 | 116.7 | 117.9 | 116.3 |

SOURCE: Congressional Budget Office.
a. Box 3-1 describes income measures used in CBO's analysis.
b. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes.
c. Nonhealth in-kind benefits include food stamps, school lunches and breakfasts, housing assistance, and energy assistance.
d. Health-related in-kind benefits include Medicare, Medicaid, and employer-paid health insurance premiums.
cent in 1997. Households throughout the income distribution receive health benefits, and the impact of including them in income is difficult to predict. Regardless of which particular households receive income from the additional sources, including it increases average household or family income above the comparable measure that uses cash income only.

Adjusting income to account for differences in the size of households shifts larger households down the income distribution and smaller households up it. As noted in Chapter 2, adjusted household income is used only to assign households to income percentiles; the values reported for average household income are not adjusted. Because households thus carry their unadjusted incomes with them when they are assigned to quintiles, larger households will have larger
incomes than smaller households in the same quintile. Measures of income for each quintile thus depend on the numbers of households of different sizes. Furthermore, demographic changes over time that affect the distribution of household sizes will influence the levels of income in each quintile.

## The Effects of Using Different Income Measures

The choice of an income measure affects the ordering of households or families in the income distribution and consequently affects estimates of effective tax rates and pretax and after-tax income for different
percentiles of that distribution. In addition, broader measures of income yield larger estimates of income, simply because they incorporate income from more sources. Broader measures also lead to lower estimates of effective tax rates because those rates equal tax liabilities that are unchanged but that are divided by higher incomes. Understanding the effects of using a particular measure of income requires examining both the degree of movement of families among income percentiles and differences in estimated effective tax rates and income under alternative measures.

## The Movement of Families Among Income Quintiles

Changing from one measure of income to another moves families up or down the income distribution. Examining the movement of families among income quintiles shows how big an effect changing measures has on the composition of each quintile. In general, using households rather than families as the unit of analysis and adjusting income for differences in the size of the unit shifts more families into different quintiles than does broadening measures of income to include more sources.

Changing from the family to the household as the unit of analysis combines family incomes in multifamily households, which moves families in those units up the distribution and consequently moves other families down. That change shifted about onequarter of families into different income quintiles in 1997, with slightly more moving down than moving up (see Table 3-3). The effect is greatest for nonelderly childless families-nearly 30 percent shifted quintiles in 1997-because those families are more likely to live in multifamily households. Slightly more than half of nonelderly childless families shifting quintiles moved upward. Conversely, more than two-thirds of the roughly 20 percent of elderly childless families moving across quintile lines were pushed downward as other families moved ahead of them. About one-fourth of families with children would have been located in different quintiles under household rather than family ranking, with roughly 60 percent moving downward.

Expanding the definition of income to include taxes paid by businesses, contributions to $401(\mathrm{k})$ retirement plans, and the value of benefits received in kind moved less than 10 percent of families into different quintiles in 1997 (see Table 3-3). The impact of counting more income was greatest for elderly childless families, for whom health benefits-principally from Medicare-raised income enough to move nearly one-tenth of such families into higher quintiles.

Adjusting household income to account for differences in the size of households moved nearly 40 percent of families into different income quintiles in 1997, with nearly three-fourths of those shifting up the distribution (see Table 3-3). ${ }^{3}$ As expected, the adjustment tended to move families with children into lower quintiles: nearly 90 percent of those that shifted quintiles moved down. Families with children are generally larger than childless families, so adjusting for family size drops their incomes more than the incomes of smaller families. In contrast, virtually all of the nearly half of families without children who shifted quintiles ended up in higher quintiles as defined by adjusted income.

Examining the effects of CBO's change from its historical measure of adjusted family income to the measure of adjusted household income used in the current study provides a basis for comparing effective tax rates and income presented in CBO's earlier publications with the new statistical series discussed in Chapter 1. Changing the measure of income shifted about one-quarter of families into different quintiles in 1997, with slightly fewer families moving up the distribution than the number moving down (see Tables 3-3 and 3-4). Elderly childless families were least affected by the change in methods: 14 percent moved into new quintiles, with two-thirds of them moving into higher quintiles. Nonelderly childless families were most likely to move, and about three families went into lower quintiles for every two that rose to higher groups. Nearly all movement took place between adjacent categories: just 4 percent of

[^23]Table 3-3.
Percentages of Families Moving Among Quintiles, by Income Measure, 1997

| Comparison ${ }^{\text {a }}$ | No Quintile Change | Moving Up at Least One Quintile | Moving Down at Least One Quintile |
| :---: | :---: | :---: | :---: |
| All Families |  |  |  |
| Family Cash Income Versus Household Cash Income | 75 | 12 | 14 |
| Household Cash Income Versus |  |  |  |
| Cash plus taxes paid by businesses | 97 | 2 | 2 |
| Cash plus taxes paid by businesses and nonhealth in-kind benefits | 95 | 2 | 3 |
| Cash plus taxes paid by businesses and all in-kind benefits | 91 | 4 | 5 |
| Comprehensive Household Income Versus |  |  |  |
| Comprehensive household income adjusted using federal poverty thresholds | 53 | 35 | 13 |
| Comprehensive household income adjusted for household size | 61 | 29 | 10 |
| CBO's historical income measure | 77 | 10 | 13 |
| Families with Children |  |  |  |
| Family Cash Income Versus Household Cash Income | 76 | 9 | 15 |
| Household Cash Income Versus |  |  |  |
| Cash plus taxes paid by businesses | 97 | 1 | 1 |
| Cash plus taxes paid by businesses and nonhealth in-kind benefits | 95 | 3 | 2 |
| Cash plus taxes paid by businesses and all in-kind benefits | 91 | 4 | 5 |
| Comprehensive Household Income Versus |  |  |  |
| Comprehensive household income adjusted using federal poverty thresholds | 64 | 8 | 29 |
| Comprehensive household income adjusted for household size | 73 | 3 | 24 |
| CBO's historical income measure | 78 | 9 | 13 |
| Elderly Childless Families |  |  |  |
| Family Cash Income Versus Household Cash Income | 79 | 6 | 15 |
| Household Cash Income Versus |  |  |  |
| Cash plus taxes paid by businesses | 95 | 2 | 3 |
| Cash plus taxes paid by businesses and nonhealth in-kind benefits | 94 | 2 | 4 |
| Cash plus taxes paid by businesses and all in-kind benefits | 89 | 10 | 1 |
| Comprehensive Household Income Versus |  |  |  |
| Comprehensive household income adjusted using federal poverty thresholds | 45 | 53 | 2 |
| Comprehensive household income adjusted for household size | 53 | 45 | 1 |
| CBO's historical income measure | 86 | 9 | 5 |

Table 3-3. Continued

| Comparison ${ }^{\text {a }}$ | No Quintile Change | Moving Up at Least One Quintile | Moving Down at Least One Quintile |
| :---: | :---: | :---: | :---: |
| Nonelderly Childless Families |  |  |  |
| Family Cash Income Versus Household Cash Income | 72 | 16 | 13 |
| Household Cash Income Versus |  |  |  |
| Cash plus taxes paid by businesses | 97 | 2 | 1 |
| Cash plus taxes paid by businesses and nonhealth in-kind benefits | 95 | 2 | 3 |
| Cash plus taxes paid by businesses and all in-kind benefits | 92 | 2 | 6 |
| Comprehensive Household Income Versus |  |  |  |
| Comprehensive household income adjusted using federal poverty thresholds | 48 | 47 | 6 |
| Comprehensive household income adjusted for household size | 56 | 40 | 4 |
| CBO's historical income measure | 73 | 11 | 16 |

SOURCE: Congressional Budget Office.
NOTES: Quintiles, or fifths, of the income distribution contain equal numbers of people.
Families are people related by blood, marriage, or adoption who live together. A household consists of the people who share a housing unit, regardless of the relationships among them. A family with children has at least one member under age 18. An elderly childless family is one headed by a person age 65 or older and with no member under age 18. A nonelderly childless family is one headed by a person under age 65 and with no member under age 18.

In cases in which two or more families are combined into one household, each family's original quintile is compared with the combined household quintile. For example, if a second-quintile family joined with a fourth-quintile family to create a middle-quintile household, the first family would be counted as moving up one quintile and the second family as moving down one quintile.
a. Box 3-1 on page 29 describes income measures used in CBO's analysis.
all families shifted up two or more quintiles, and none fell more than one quintile.

## The Distribution of People, Families, and Households

As noted earlier, quintiles of the income distribution contain equal numbers of people, ranked by a specific measure of income. For the basic tabulations presented in Chapter 1, that measure is adjusted comprehensive household income. Equal numbers of people per quintile does not mean equal numbers of families or households, however, nor does it mean an even distribution of people among quintiles for different types of households. Two offsetting factors affect the distribution of people, families, and households into quintiles. On the one hand, combining individ-
ual incomes into household incomes tends to move people in larger households up the distribution, all else being the same. On the other hand, adjusting incomes to account for differences in the size of households shifts larger ones-and the people in them-into lower quintiles. Only the actual distributions can reveal which effect predominates.

When ranked by comprehensive adjusted household income, people in households with children are overrepresented in the lower quintiles, in large part because of the adjustment for household size (see Table 3-5). In contrast, more households headed by an elderly person end up in lower quintiles even though the adjustment tends to move them up the distribution; on average, elderly childless households simply have lower unadjusted incomes than other households. People in nonelderly childless households are more likely to appear at the top end of the

Table 3-4.
Distribution of Families Under CBO's Historical Income Measure and the Adjusted Comprehensive Household Income Measure, by Income Quintile, 1997 (In percent)

Quintile Based on CBO's Historical Income Measure ${ }^{2}$

|  | Quintile Based on Adjusted Comprehensive Household Income ${ }^{\text {a }}$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :--- |
| Lowest | Second | Middle | Fourth | Highest | Qll Quintiles <br> Quintile |
|  | Quintile | Quintile | Quintile | Quintile |  |
|  |  |  |  |  |  |


| All Families |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 18 | 2 | 1 | * | * | 22 |
| Second Quintile | 3 | 14 | 2 | 1 | * | 20 |
| Middle Quintile | * | 4 | 13 | 2 | 1 | 19 |
| Fourth Quintile | * | * | 4 | 14 | 1 | 19 |
| Highest Quintile | 0 | * | * | 2 | 18 | 20 |
| All Quintiles | 21 | 19 | 19 | 20 | 21 | 100 |
| Families with Children |  |  |  |  |  |  |
| Lowest Quintile | 20 | 2 | 1 | * | * | 23 |
| Second Quintile | 4 | 16 | 2 | 1 | * | 22 |
| Middle Quintile | 0 | 4 | 15 | 2 | * | 21 |
| Fourth Quintile | * | * | 3 | 15 | 1 | 19 |
| Highest Quintile | 0 | 0 | 0 | 2 | 13 | 14 |
| All Quintiles | 24 | 22 | 21 | 19 | 15 | 100 |
| Elderly Childless Families |  |  |  |  |  |  |
| Lowest Quintile | 20 | 2 | * | * | * | 22 |
| Second Quintile | 1 | 19 | 3 | * | * | 24 |
| Middle Quintile | 0 | 1 | 16 | 2 | * | 19 |
| Fourth Quintile | 0 | * | 1 | 14 | 1 | 16 |
| Highest Quintile | 0 | 0 | * | 1 | 17 | 18 |
| All Quintiles | 21 | 22 | 21 | 18 | 19 | 100 |
| Nonelderly Childless Families |  |  |  |  |  |  |
| Lowest Quintile | 16 | 2 | 1 | 1 | 1 | 20 |
| Second Quintile | 3 | 10 | 1 | 1 | 1 | 16 |
| Middle Quintile | * | 5 | 11 | 2 | 1 | 18 |
| Fourth Quintile | * | * | 4 | 14 | 2 | 20 |
| Highest Quintile | 0 | * | * | 4 | 22 | 25 |
| All Quintiles | 19 | 17 | 18 | 21 | 26 | 100 |

SOURCE: Congressional Budget Office.
NOTES: * $=$ less than 0.5 percent.
Families are people related by blood, marriage, or adoption who live together. A household consists of the people who share a housing unit, regardless of the relationships among them. A family with children has at least one member under age 18. An elderly childless family is one headed by a person age 65 or older and with no member under age 18. A nonelderly childless family is one headed by a person under age 65 and with no member under age 18.

Quintiles, or fifths, of the income distribution contain equal numbers of people.
Bold numbers indicate percentages of families who are in the same quintile under both CBO's historical measure and the comprehensive measure.
a. Box 3-1 on page 29 describes income measures used in CBO's analysis.

Table 3-5.
Distribution of People, Families, and Households Under the Adjusted Comprehensive Household Income Measure, by Income Quintile and Household Type, 1997 (In percent)

| Income Quintile ${ }^{\text {a }}$ | All Households | Households with Children | Elderly Childless Households | Nonelderly Childless Households |
| :---: | :---: | :---: | :---: | :---: |
| People |  |  |  |  |
| Lowest | 20 | 23 | 17 | 16 |
| Second | 20 | 22 | 21 | 15 |
| Middle | 20 | 21 | 22 | 17 |
| Fourth | 20 | 19 | 20 | 23 |
| Highest | 20 | 15 | 21 | 29 |
| Total | 100 | 100 | 100 | 100 |
| Families |  |  |  |  |
| Lowest | 21 | 24 | 21 | 19 |
| Second | 19 | 22 | 22 | 17 |
| Middle | 19 | 21 | 21 | 18 |
| Fourth | 20 | 19 | 18 | 21 |
| Highest | 21 | 15 | 19 | 26 |
| Total | 100 | 100 | 100 | 100 |
| Households |  |  |  |  |
| Lowest | 22 | 24 | 21 | 21 |
| Second | 20 | 22 | 22 | 17 |
| Middle | 19 | 21 | 21 | 17 |
| Fourth | 19 | 19 | 18 | 20 |
| Highest | 20 | 15 | 18 | 24 |
| Total | 100 | 100 | 100 | 100 |

SOURCE: Congressional Budget Office.
NOTES: Families are people related by blood, marriage, or adoption who live together. A household consists of the people who share a housing unit, regardless of the relationships among them. A household with children has at least one member under age 18. An elderly childless household is one headed by a person age 65 or older and with no member under age 18. A nonelderly childless household is one headed by a person under age 65 and with no member under age 18.

Box 3-1 on page 29 describes the income measures used in CBO's analysis.
a. Quintiles, or fifths, of the income distribution contain equal numbers of people.
distribution, in part because they have higher incomes than other households and in part because their households are generally smaller than households with children.

The distributions among quintiles of people, families, and households living with children differ little, in part because families and households with children are almost always the same and in part because the average size of families with children var-
ies little among quintiles. In contrast, people in elderly childless households and elderly childless families are distributed nearly equally among quintiles, but elderly childless households are more heavily represented in the lower quintiles. That difference arises primarily because combining families into households moves nonelderly childless units up the distribution, displacing elderly households downward. Among units that have no children and that are not headed by an elderly person, families in the upper
quintiles are larger than those in lower quintiles, yielding a more uneven distribution of people among quintiles than of either families or households.

## Effective Tax Rates and Income Under Alternative Income Measures

The measure of income used to rank households affects estimates of both effective tax rates and income. Nevertheless, general trends in those estimates differ little under the alternative measures CBO examined.

## Effective Tax Rates

The choice of income measure affects estimates of effective tax rates in two ways. First, measures that include income from relatively more sources raise incomes and thus reduce effective tax rates-that is, taxes as a percentage of pretax income. Second, alternative measures of income distribute households differently among quintiles, leading to different estimates for a given quintile of both effective tax rates and income. Over the 1979-1997 period, choosing from among the eight alternative measures of income yields different estimates of tax rates and income but has little effect on observed trends in those variables.

The choice of income measure has little effect on the observed trend in the total effective federal tax rate between 1979 and 1997 (see Figure 3-1 on page 38). ${ }^{4}$ Under each measure that the figure shows, the rate falls in the early 1980s following the Economic Recovery Tax Act of 1981, rises irregularly until 1995, and dips slightly in 1997. The effective rate was slightly higher in 1997 than it was in 1979, regardless of the measure of income used to rank households.

The similarity of trends in effective tax rates extends across income quintiles for all measures of income except the ones that adjust for differences in

[^24]a household's size (see Figure 3-2). That adjustment moves households with children down the distribution and therefore concentrates taxpayers claiming the earned income tax credit in the lowest quintile. The effect of that concentration is to make the downward trend since 1985 in the effective tax rate for households in that quintile sharper than the trends observed for other measures of income. That difference in trends does not occur for households in other quintiles.

The measure of income used to rank households has differential effects on estimated effective tax rates among quintiles. For households in the middle quintile, for example, the effective rate is substantially lower if households are ranked by adjusted comprehensive income rather than by unadjusted income. In contrast, for households in the highest quintile, adjusting income for the size of households has virtually no effect on effective tax rates during the past two decades.

Each of the four federal taxes that CBO examined shows the same trend in its overall effective rate between 1979 and 1997, regardless of the measure of income used (see Figure 3-3). ${ }^{5}$ That similarity of trends does not hold, however, for individual income quintiles, particularly the lowest one.

For households in the lowest income quintile, the effective individual income tax rate drops much more sharply after 1985 under the adjusted household income measure than under the unadjusted alternatives (see Figure 3-4). That difference is the result of the adjustment to income for differences in the size of households, which moves households with children into lower quintiles and, as noted above, concentrates the benefits of the EITC in the lowest quintile. In contrast, effective individual income tax rates using alternative income measures move in parallel for the middle and highest quintiles. In fact, for the top quintile, using households rather than families as the unit of observation has essentially no effect on the change in measured tax rates, nor does adjusting incomes for differences in households' sizes. That

[^25]stability results because high-income households generally contain only one family and tend not to change quintiles under the adjustment for household size.

Effective rates for social insurance, corporate income, and excise taxes follow roughly parallel trends over the 1979-1997 period under all of the measures of income CBO examined (see Figures 3-5, $3-6$, and 3-7, respectively). Rates of change differ among the measures for specific years, most obviously in the case of corporate income taxes for the lowest quintile (see Figure 3-6). Under that tax, the effective rate is constant after 1983 under the adjusted household income measure, even though the rate moves up and down when other measures of income are used. Apparent variation in trends for other sources of revenues, particularly excise taxes, shows up only because rounding effective rates magnifies small changes.

## Levels of Income

Using measures of income that combine families into households or that include income from more sources leads tautologically to higher estimates of pretax income (see Figure 3-8). ${ }^{6}$ Obviously, counting more

[^26]income can only increase the estimates. Over the past two decades, more families per household and higher noncash incomes have resulted in slightly larger differences among estimates of pretax income under alternative income measures.

The same pattern of parallel trends in income under alternative measures holds for each income quintile (see Figure 3-9). As the adjustment for household size moves larger households into lower quintiles, those households carry with them unadjusted incomes that are higher than the incomes of the households they displace. If every household moving into a lower quintile pushed exactly one household into a higher quintile, that movement would increase average income for the lower quintiles. However, larger households moving down displace more than one smaller household, and average income for even the lowest quintile falls when incomes are adjusted for household size. Note that the multiple smaller households pushed into higher quintiles by larger households moving down doubly affect average income: first, by carrying with them their lower incomes and second, by more than one of them replacing the single larger household that moved down.

## Figure 3-1.

Total Effective Federal Tax Rates, by Income Measure, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing total tax liabilities (individual income, corporate income, payroll, and excise) by the applicable income measure.

Box 3-1 on page 29 describes income measures used in CBO's analysis.
a. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Adding nonhealth in-kind benefits (food stamps, school lunches and breakfasts, housing assistance, and energy assistance) to this income measure has only a small effect on effective tax rates.

Figure 3-2.
Total Effective Federal Tax Rates, by Income Measure and Quintile, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing total tax liabilities (individual income, corporate income, payroll, and excise) by the applicable income measure.

Quintiles, or fifths, of the income distribution contain equal numbers of people.
Box 3-1 on page 29 describes income measures used in CBO's analysis.

Figure 3-3.
Effective Federal Tax Rates, by Income Measure and Revenue Source, 1979-1997


NOTES: Effective tax rates are calculated by dividing tax liabilities by the applicable income measure.
Box 3-1 on page 29 describes income measures used in CBO's analysis.
a. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Adding nonhealth in-kind benefits (food stamps, school lunches and breakfasts, housing assistance, and energy assistance) to this income measure has only a small effect on effective tax rates.

Figure 3-4.
Effective Federal Individual Income Tax Rates, by Income Measure and Quintile, 1979-1997


NOTES: Effective tax rates are calculated by dividing individual income tax liabilities by the applicable income measure.
Quintiles, or fifths, of the income distribution contain equal numbers of people.
Box 3-1 on page 29 describes income measures used in CBO's analysis.

Figure 3-5.
Effective Federal Social Insurance Tax Rates, by Income Measure and Quintile, 1979-1997


NOTES: Effective tax rates are calculated by dividing social insurance tax liabilities by the applicable income measure.
Quintiles, or fifths, of the income distribution contain equal numbers of people.
Box 3-1 on page 29 describes income measures used in CBO's analysis.

Figure 3-6.
Effective Federal Corporate Income Tax Rates, by Income Measure and Quintile, 1979-1997



## Comprehensive Household Income Adjusted for Household Size

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing corporate tax liabilities by the applicable income measure.
Quintiles, or fifths, of the income distribution contain equal numbers of people.
Box 3-1 on page 29 describes income measures used in CBO's analysis.

Figure 3-7.
Effective Federal Excise Tax Rates, by Income Measure and Quintile, 1979-1997



Comprehensive Household Income
Adjusted for Household Size
SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing excise tax liabilities by the applicable income measure.
Quintiles, or fifths, of the income distribution contain equal numbers of people.
Box 3-1 on page 29 describes income measures used in CBO's analysis.

Figure 3-8.
Average Real Pretax Income by Income Measure, 1979-1997


SOURCE: Congressional Budget Office.
NOTE: Box 3-1 on page 29 describes income measures used in CBO's analysis.
a. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Adding nonhealth in-kind benefits (food stamps, school lunches and breakfasts, housing assistance, and energy assistance) to this income measure has only a small effect on average real pretax income.

Figure 3-9.
Average Real Pretax Income by Income Measure and Quintile, 1979-1997


SOURCE: Congressional Budget Office.
NOTES: Quintiles, or fifths, of the income distribution contain equal numbers of people.
Box 3-1 on page 29 describes income measures used in CBO's analysis.

## Appendixes

# A Chronology of CBO's Work on the Distribution of Federal Taxes 

The Congressional Budget Office's (CBO's) analyses of the distribution of federal taxes stretch back more than a decade. Over the period, the methodology has evolved to take advantage
of improvements in modeling capabilities and the availability of more and better data. This study continues that evolution.

Table A-1. Previous Congressional Budget Office Work on the Distribution of Federal Taxes

| Date | Report/Event |
| :--- | :--- |
| $1985-1986$ | Rick Kasten and Frank Sammartino develop CBO's microsimulation model for estimating federal individ- <br> ual income tax liabilities |
| The Changing Distribution of Federal Taxes: 1975-1990 (CBO Study) |  |
| 1987 | The Changing Distribution of Federal Taxes: A Closer Look at 1980 (CBO Paper) <br> CBO's data on effective federal tax rates first appear in the House Committee <br> on Ways and Means's Green Book |
| 1989 | Richard Kasten, Frank Sammartino, and Eric Toder, Trends in Federal Tax Progressivity, 1980-1993 <br> (paper prepared for the Conference on Tax Progressivity, Office of Tax Policy Research, School of <br> Business Administration, University of Michigan, Ann Arbor, September 11-12, 1992) |
| 1992 | CBO hosts a half-day conference to discuss its methods of distributional analysis. Topics include basic <br> data issues (sources and the differences between them, adjustments, and weights); CBO's method for <br> simulating the distribution of combined federal taxes using census, tax-return, and expenditure <br> microdata; and the effects of moving from the income measure of the Bureau of the Census to that of <br> CBO |
| Comparing CBO and Census Income Statistics (CBO Paper) |  |

## CBO's Conference on

 Distributional MeasurementOn March 31, 2000, the Tax Analysis Division of the Congressional Budget Office (CBO) brought together 15 experts on distributional issues in a one-day conference on conducting distributional analyses. The wide-ranging discussion reached substantial agreement on how best to classify people within the income distribution and assess their effective tax rates. Rather than concentrate on the ideal way to carry out distributional analysis, many of the participants focused instead on how to do so in the face of limitations on the available data that preclude that ideal. All attendees agreed that compromise was required to produce meaningful results. Those compromises demand that findings be qualified but do not render them invalid.

Three major messages came out of the conference. First, the distributional statistics that CBO produces are both important and useful, and CBO should continue to produce them regularly. Second, CBO should investigate changes in and extensions of its current measures to determine the impact of altering its basic methodology. Third, rather than replace the measures it currently uses with a single alternative, CBO should produce statistics using a variety of measures so that users can choose the measures they feel are most appropriate.

The conference posed four specific questions:
o What is the appropriate unit of analysis for distributional studies-the family, the household, the tax unit, or some other group?
o What should count as income? Should it be cash only or a broader measure?
o What is the appropriate period over which to measure tax burdens? Should it be one year or a longer period?
o Who bears the burden of various federal taxes?
Decisions made in carrying out the analysis reported in this study reflect the discussion of those four questions at the conference. Much of CBO's analysis compares the effects of different answers to the questions to evaluate the importance of particular decisions.

## Unit of Analysis

Participants agreed that which unit was chosen for analysis was probably less important than making the unit consistent throughout a study. Participants expressed a preference for using households-groups of people, not necessarily related to each other, living together in a single housing unit-on the grounds that households probably better represent consumption units than do tax filers (generally a single taxpayer or a couple plus dependents) or families (related people living together).

## Definition of Income

There was general agreement that CBO should investigate the effects of using a broader measure of income than one comprising only cash earnings in
order to rank people in the income distribution. Participants nearly unanimously approved including noncash items such as food stamps, school meals, and housing and energy assistance, all measured at their market value. No consensus was reached about counting the value of health insurance and health programs such as Medicare and Medicaid. The major objection was that the market value of such benefits almost certainly overstates their worth to low-income households. One proposed solution called for a dichotomous classification of households based on whether they had any health coverage, either through employment, through a government program, or through privately purchased insurance. The obvious difficulty with that approach is that it creates two distributions that cannot be readily combined. Conference attendees expressed no interest in including imputed income from durable property, such as owner-occupied housing.

There was little discussion of how to adjust incomes to account for differences among households. Participants seemed to agree that CBO's adjustment for differences in family size improved distributional rankings. No strong feelings surfaced about the different work-related prices or costs that households face.

Two complaints were raised about CBO's distributional rankings. First, some participants noted that Members of Congress and other users of the analyses have difficulty thinking about quintile rankings and incomes adjusted for differences in family size. Those kinds of users apparently prefer stories about individual families rather than statistical averages for amorphous groups of people. A second and related issue was that people seeing CBO's tables cannot easily find their place in the income distribution. Their desire to do so argues for CBO's providing tables not only for adjusted income rankings but also for distributions based on dollar income. At the same time, participants cautioned, any analysis including such tables should clearly explain the important differences between rankings based on cash income and rankings based on adjusted income.

## Measurement Period

Attendees generally favored measuring the incidence, or burden, of taxes over a person's lifetime rather than annually because year-to-year variations in income-both taxable and tax-exempt-can result in misleading statistics about effective tax rates across the income distribution. Participants agreed, however, that limitations in the available data preclude a lifetime analysis and that analyzing shorter periods is the only current option. Furthermore, because people think of their tax liabilities in annual terms, CBO's focusing on yearly data makes it simpler both to compute incidence and to explain it to readers.

## Tax Incidence

The assumptions about incidence underlying CBO's previous tax analyses evoked no serious complaints from participants. Their major suggestion was that CBO include more sources of revenue-particularly estate and gift taxes and customs duties-in its analyses. Attendees acknowledged, however, that limitations in the data make including more sources difficult.

## Conference Participants

Individuals from a variety of organizations and government agencies attended CBO's distributional conference, including:

Tom Barthold, Joint Committee on Taxation Julie-Anne Cronin, Office of Tax Analysis, Department of the Treasury
Al Davis, House Committee on Ways and Means Jim Horney, Senate Committee on the Budget (at the time of the conference, Center for Budget and Policy Priorities)

Rick Kasten, CBO analyst, now retired
Arthur Kenneckell, Federal Reserve Board
Tom Koerner, Joint Committee on Taxation Marvin Kosters, American Enterprise Institute
Jim Nunns, Office of Tax Analysis, Department of the Treasury
Lindy Paull, Joint Committee on Taxation
Wendell Primus, Center for Budget and Policy
Priorities
Ralph Rector, Heritage Foundation
Frank Sammartino, Joint Economic Committee
(at the time of the conference, Urban Institute)
Bernie Schmitt, Joint Committee on Taxation
Joyce Zickler, Federal Reserve Board

Participants from the Congressional Budget Office included:

Dan Crippen, Director
Barry Anderson, Deputy Director
Steve Lieberman, Executive Associate Director
Tom Woodward, Assistant Director, Tax Analysis Division
Roberton Williams, Deputy Assistant Director, Tax Analysis Division
Mark Booth, Senior Analyst—Revenue Estimation, Tax Analysis Division
David Weiner, Senior Analyst-Modeling, Tax Analysis Division

# Comparing the Distributional Methodologies of CBO, the Treasury Department, and the Joint Committee on Taxation 

Like the Congressional Budget Office (CBO), the Department of the Treasury's Office of Tax Analysis (OTA) and the Joint Committee on Taxation (JCT) produce tables showing the distribution of federal taxes. ${ }^{1}$ The three groups agree on many of the methodological points that have the greatest influence on distributional results (see Table $\mathrm{C}-1$ ). For example, in their definitions of income, they all count labor income-which accounts for over 70 percent of income-the same way. Similarly, all three use the same assumptions about the incidence, or burden, of individual income taxes and payroll taxes, which together account for over 80 percent of

[^27]federal taxes. The groups' methodologies differ, however, along many important dimensions including the unit of analysis, the way income is defined (what "income" comprises, or the income measure), the taxes included in the analysis, and assumptions about incidence that are used to allocate federal tax liabilities.

Despite methodological differences, the three agencies' distributional analyses are qualitatively similar. Patterns of effective tax rates among income groups are comparable as are the estimates themselves (see Figures C-1 and C-2). That qualitative similarity occurs in part because CBO's, OTA's, and JCT's methodologies are basically alike and in part because some of their methodological differences offset each other. For example, OTA's broader definition of income, which yields lower estimated tax rates, is offset by inclusion of estate and gift taxes and customs duties, both of which are omitted from CBO's analysis.

Table C-1.
Summary of Distributional Methodologies

| Methodology | Congressional Budget Office | Department of the Treasury | Joint Committee on Taxation |
| :---: | :---: | :---: | :---: |
| Unit of Analysis ${ }^{\text {a }}$ | Household | Family | Tax unit |
| Income Definition | Wages and salaries <br> Self-employment income <br> Rental income <br> Interest and dividends <br> Realized capital gains <br> Cash transfer payments <br> Retirement benefits <br> In-kind benefits ${ }^{\text {b }}$ <br> Taxes paid by businesses (employer's share of social insurance taxes and corporate income taxes) ${ }^{\text {c }}$ <br> Employee contributions to 401(k) retirement plans | Wages and salaries <br> Self-employment income <br> Employer-provided fringe benefits <br> Employer's share of social insurance taxes ${ }^{\text {c }}$ <br> Net interest income <br> Pretax corporate profits <br> Real accruals of nonstock capital gains <br> Pension and benefits from individual retirement accounts <br> Real earnings on retirement and life insurance assets Imputed rent from owneroccupied housing <br> Cash transfer payments | Adjusted gross income <br> Tax-exempt interest <br> Employer's contributions to health and life insurance <br> Employer's share of social insurance taxes ${ }^{\text {c }}$ <br> Workers' compensation <br> Nontaxable Social Security benefits <br> Medicare (Insurance value) <br> Alternative minimum tax preference items <br> Excluded income of U.S. citizens living abroad |
| Taxes Included and Assumptions About Their Incidence | Individual income tax, borne by payers <br> Corporate income tax, borne by capital income <br> Social insurance taxes, borne by employees ${ }^{\text {c }}$ <br> Excise taxes, borne by consumers | Individual income tax, borne by payers <br> Corporate income tax, borne by capital income <br> Social insurance taxes, borne by employees ${ }^{\text {c }}$ <br> Excise taxes, borne by consumers and by labor and capital income <br> Customs duties, borne by labor and capital income Estate and gift taxes, borne by decedents | Individual income tax, borne by payers <br> Social insurance taxes, borne by employees ${ }^{\text {c }}$ <br> Excise taxes, borne by consumers |
| Adjustments to Income | Incomes adjusted by household size for ranking purposes ${ }^{d}$ | No adjustments | No adjustments |
| Presentation of Results | By income quintile and dollar income category | By income quintile and dollar income category | By dollar income category |

## SOURCE: Congressional Budget Office.

a. Households are people who share a single housing unit, regardless of the relationships among them. Families are people related by blood, marriage, or adoption who live together. Taxpayers filing dependent returns are considered part of the primary taxpaying unit and are not counted separately.
b. Includes Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance.
c. Social insurance taxes finance Social Security, Medicare, and federal unemployment insurance.
d. Adjusted by dividing by the square root of the household's size.

Figure C-1.
Comparing Total Effective Federal Tax Rates as Calculated by the Department of the Treasury and CBO, by Income Quintile, 1997


SOURCE: Congressional Budget Office.
NOTES: CBO's calculations used the methodology described in Table C-1-with the exception that CBO did not adjust income for household size-and applied calendar year 2000 tax law to the 1997 data. The Treasury's calculations used the methodology described in Table C-1 and also applied calendar year 2000 tax law to the data.

Quintiles, or fifths, of the income distribution contain equal numbers of people.

Figure C-2.
Comparing Total Effective Federal Tax Rates as Calculated by the Joint Committee on Taxation and CBO, by Dollar Income Category, 1997


SOURCES: Congressional Budget Office; Joint Committee on Taxation.
NOTE: CBO's calculations used the methodology described in Table C-1-with the exception that CBO did not adjust income for household size-and applied calendar year 2000 tax law to the 1997 data. JCT's calculations used the methodology described in Table C-1 and also applied calendar year 2000 tax law to the data.

## Appendix D

## CBO's Distributional Methodology

The Congressional Budget Office (CBO) uses a multistep methodology to produce its estimates of the distribution of incomes and taxes. The Current Population Survey (CPS) is the primary source of data for CBO's distributional analyses, providing initial estimates of population and incomes. CBO adjusts the incomes reported in the survey to bring them in line with the totals reported by the Internal Revenue Service in its Statistics of Income file. Next, CBO estimates federal taxes for each family in the CPS on the basis of family income, demographic characteristics, and existing laws in the relevant year. CBO then groups the families in the CPS into quintiles, or fifths, on the basis of their incomes and tabulates the incomes and taxes for each quintile.

## The Current Population Survey

Conducted by the Bureau of the Census, the CPS is a monthly survey of approximately 47,000 households, containing roughly 122,000 individuals. The sample used for the survey is statistically designed to represent the entire U.S. population and many demographic subpopulations. Every March, the CPS adds questions about family income during the previous calendar year, which form the basis for CBO's income estimates for that year. (For example, CBO's 1997 estimates are based on the CPS conducted in March 1998.) ${ }^{1}$

[^28]The CPS data have three problems that must be corrected before they can be used to estimate the distribution of taxes and incomes. First, the CPS does not collect enough information about individual income taxes to allow CBO to estimate tax liabilities accurately; in particular, the CPS lacks data on itemized deductions and capital gains. Second, high incomes in the CPS are top-coded (that is, capped at given levels) to maintain confidentiality for the families included in the sample. Third, incomes in the survey differ substantially from the amounts reported on tax returns. Tax-return data are generally believed to be more accurate than the incomes reported on surveys.

CBO's adjustments to the CPS income data are based on data in the Statistics of Income (SOI) file created annually by the Internal Revenue Service (IRS). The file is based on a nationally representative sample of more than 100,000 individual income tax returns; it contains detailed information on incomes and taxes. High-income tax returns are oversampled in the SOI file (that is, the proportion of high-income people surveyed is greater than their share of the population), enhancing the richness of the data at the top of the income distribution. CBO adjusts incomes for each year using the relevant SOI file; for example, the adjustments for 1997 come from the SOI file for the 1997 tax year. ${ }^{2}$

CBO imputes information missing from the CPS data, such as deductions and capital gains, by using the SOI. For example, to impute deductions, CBO first splits families from the CPS into tax-filing units

[^29]comparable with those in the SOI. Data from the SOI file are then used to determine the probability that a tax unit with particular income and demographic characteristics claims deductions and the ratio of those deductions to income. The tax units developed from the CPS data are then assigned deductions on the basis of those probabilities. A similar procedure is used to impute other missing information.

To adjust for top-coding, CBO uses the SOI to construct a distribution of each type of income among high-income families. It then replaces topcoded incomes from the CPS with a randomly selected amount from the appropriate SOI highincome distribution.

A more complex procedure is necessary to adjust incomes that have been incorrectly reported on the CPS to match incomes in the SOI. Because lowincome families are not required to file tax returns, the CPS includes many more tax units than the SOI does. Therefore, CBO compares only incomes from CPS units that are estimated to owe taxes with incomes from the SOI. In addition, for each source of income, it compares data from the CPS with data from the SOI and adjusts the CPS data until the level and distribution of income on the two files are approximately the same. For example, interest and dividends are generally increased for families reporting such income, and new recipients are created; rental income and income from sole proprietorships are generally adjusted downward. As a final step, CBO revises the weights and incomes of taxpaying families in the top 1 percent of the income distribution so that the number of such families and their average income are identical in the two files.

## Estimating Federal Taxes

Once incomes in the CPS have been adjusted to match the SOI's totals, CBO estimates individual income taxes for each CPS tax-filing unit, using the income tax law for the relevant year. However, for high-income taxpayers, CBO uses data from the SOI to impute taxes to those filing units in the CPS.

CBO estimates payroll taxes-covering Social Security, Medicare, and federal unemployment in-
surance-for each unit on the basis of two sets of factors: earnings and self-employment income in the income-adjusted CPS, and the relevant tax rates and maximum amounts of income subject to tax for each year. It assumes that both the employee's and employer's shares of payroll taxes are borne by the employee.

Corporate taxes are apportioned to each family in proportion to their adjusted capital income (interest, dividend, capital gains, and rental income), under the assumption that the burden of corporate taxes falls on capital income. For example, a family with 0.001 percent of total capital income is assigned 0.001 percent of overall corporate tax liability.

CBO estimates excise taxes on the basis of a family's spending on the goods subject to those taxes, using data from the Consumer Expenditure Survey (CEX). The CEX, which is a quarterly survey of family income and expenditures conducted by the Bureau of Labor Statistics, divides families into categories on the basis of their income and demographic characteristics. ${ }^{3}$ For four consecutive quarters, the survey asks families detailed questions about their expenditures on particular items over the previous three months. Those data are then used to compute average spending by each category of family on the goods subject to excise taxes. CBO assumes that each family in the CPS has the same average spending as do similar families with comparable levels of income in the CEX.

CBO further assumes that excise taxes have two distinct effects on consumers: they raise the prices of the commodities subject to tax, and they cause prices in general to increase. Consequently, for each good on which an excise tax is levied, CBO apportions to families (in proportion to their spending on the taxed commodity) the part of excise tax revenues collected in each year that reflects a rise in the price of that good. The remaining revenue-the part that shows up in higher prices overall-is distributed among families in proportion to their total spending.

[^30]
## Summarizing the Results

In a series of steps, CBO combines the incomes and taxes of families for each year to create tables showing distributions of incomes and taxes among income groups and types of households. First, it combines families that share a residence into one household record. Second, it groups households by one of several measures of income. For example, cash income is defined on a cash-receipts basis and comprises wages and salaries, net income from a business or farm, taxable and nontaxable interest, dividends, rental income, realized capital gains, cash transfers from the government, and retirement benefits. Some definitions of income also include the imputed values of taxes paid by businesses-the employer's contribution to payroll taxes and federal corporate income taxes-as well as contributions to 401 (k) plans. For some analyses, CBO adds the estimated cash value of in-kind benefits, as reported in the CPS, to the income definition. (Those in-kind benefits are food stamps, school lunches and breakfasts, Medicare and Medicaid health insurance, housing assistance, energy assistance, and employer-provided health insurance.) Some definitions of income exclude healthrelated in-kind benefits (Medicare, Medicaid, and employer-provided health insurance).

To take account of the differing needs of larger and smaller households, CBO adjusts some of the income measures it uses to group households. Many of the tables CBO constructs to display its distributional analyses use a measure of household income that is adjusted for household size; the principal measure divides household income by the square root of family size. Another measure adjusts income according to the equivalence scale implied by the federal poverty thresholds (adjusted income equals household income divided by the relevant threshold).

In the third step, CBO ranks households by the (adjusted) incomes and groups them in quintiles (fifths of the distribution) containing equal numbers of people. CBO then tabulates overall income and taxes for each quintile as well as for smaller groupings at the top of the distribution.

## Specific Changes from Earlier Estimates

Changes in methodology and databases mean that the estimates presented in this study cannot be directly compared with estimates from CBO's previous analyses of tax rates and incomes. Five differences are most important:
o Income measures now include in-kind income from government transfer programs, such as Food Stamps, rent subsidies, Medicare, and Medicaid, as well as health insurance premiums paid by employers.
o Both cash income and the payroll tax base include imputed pretax contributions made by families to 401(k)-type retirement funds.
o Households, rather than families, are the primary unit of analysis.
o The methodology for estimating excise taxes has changed.
o Dollar amounts are adjusted for inflation using the Research Series Consumer Price Index, a consistent-methodology index developed by the Bureau of Labor Statistics.

# Comparing Measures of Personal Income: CBO and the Bureau of Economic Analysis 

The total amount of income implicit in the Congressional Budget Office's (CBO's) distributional tables differs from the measure of personal income reported by the Bureau of Economic Analysis as part of the national income and product accounts both on a conceptual basis and in the specific components it includes. Nevertheless, for components that are similar in the two measures, the total dollar amounts are roughly comparable.

The basic difference between the two measures is that personal income in the national income and product accounts, or NIPAs, covers income earned in current production, whereas CBO's income measure is based on cash receipts. Certain components of income are common to both measures (for example, wages and salaries), but others are included only in the NIPA measure (for example, investment income from pension plans), and others show up only in CBO's measure (for example, capital gains). In general, the NIPA measure is more comprehensive, containing many types of income that CBO's does not include.

The Bureau of Economic Analysis (BEA) performs a detailed reconciliation of the NIPA measure of personal income and the Internal Revenue Service's adjusted gross income (AGI) measure. ${ }^{1}$ The reconciliation is similar to the kind of procedure that would be necessary to reconcile the NIPA measure and CBO's, although CBO's measure includes sev-

[^31]eral items that are not part of AGI. For 1997, BEA estimates an "AGI gap"-the difference between AGI reported to the Internal Revenue Service and BEA's estimates of the equivalent income sourcesof $\$ 630$ billion. Almost half of that amount comprises explicit adjustments for misreporting that BEA makes to its estimates of personal income. CBO's reconciliation is less detailed than BEA's; it adjusts only for the larger and most easily measured differences.

Personal income in the NIPAs and CBO's income measure most closely overlap in the case of taxable personal income (TPI). TPI in the NIPAs consists of wage and salary income, personal interest income, personal dividend income, proprietors' income, and rental income; over the past 20 years, those components have accounted for 80 percent to 85 percent of personal income. The components of personal income that are excluded from TPI in the NIPAs are "other labor income" (mostly employers' contributions for pensions and life and health insurance) and "transfer income" (primarily government benefits such as Social Security and Medicare). ${ }^{2}$

In 1997, taxable personal income as estimated by BEA in the NIPAs was $\$ 5.8$ trillion, almost $\$ 1.4$ trillion more than CBO's estimate (see Table E-1). However, $\$ 1.2$ trillion of that difference can be rec-

[^32]onciled with relative ease: $\$ 895$ billion comes from income components in the NIPAs that CBO's measure excludes, and $\$ 312$ billion derives from BEA's adjustments for misreporting. The remaining "unexplained difference" is only $\$ 157$ billion, or about 3.5 percent of the CBO total.

Over the past two decades, taxable personal income in the NIPAs has consistently exceeded CBO's equivalent measure (see Figure E-1). After the basic adjustments noted above, however, the measures track each other closely.

Table E-1.
Differences Between Taxable Personal Income in the NIPAs and CBO's Equivalent Measure, 1997 (In billions of dollars)

|  | Wages <br> and <br> Salaries | Self- <br> Employment <br> Income | Interest <br> and <br> Dividends | Rental <br> Income | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Taxable Personal Income in the NIPAs | 3,889 | 581 | 1,199 | 128 | 5,797 |
| Minus Misreporting Adjustments | 90 | 232 | -11 | 1 | 312 |
| Minus Items Not Included on a Cash Basis | 11 | 7 | 807 | 70 | 895 |
| Adjusted Taxable Personal Income in the NIPAs | 3,788 | 342 | 403 | 57 | 4,591 |
| CBO's Equivalent Measure of Taxable Personal Income | 3,694 | 356 | 359 | 24 | 4,434 |
| Unexplained Difference | 94 | -14 | 44 | 33 | 157 |

SOURCE: Congressional Budget Office.
NOTE: NIPAs = national income and product accounts.

Figure E-1.
Total Income in the NIPAs and in CBO's Equivalent Measure, 1979-1997


NOTE: NIPAs = national income and product accounts.

## Comparing Income Statistics from CBO and the Bureau of the Census

TThe Bureau of the Census and the Congressional Budget Office (CBO) both produce statistics on the distribution of income. The Census Bureau's statistics are a product of its annual March Current Population Survey (CPS); CBO's are a byproduct of its analyses of the distribution of tax liabilities. Although both offices base their distributional studies on the CPS, they differ in the sources of income they consider, how they adjust data on incomes for underreporting and concerns about confidentiality, and the measure of income they use to rank households. The alternative methodologies result in different estimates of the distribution of income among quintiles (fifths of the distribution), but the trends in the distribution over time are similar under both approaches. ${ }^{1}$

## Defining Income

CBO and the Census Bureau use different definitions, or measures, of income. The Census Bureau reports income distributions using what it terms "money income"-its official measure; it also reports them using 14 alternative definitions. ${ }^{2}$ None of the eight measures of income used by CBO in this study match the Census Bureau's definitions. Both agencies in-

[^33]clude some in-kind benefits (such as Medicare and energy assistance) in some of their definitions and not in others. Most of CBO's definitions include taxes paid by businesses (for example, the employer's share of Social Security), whereas none of the Census Bureau's measures do. As a further point of difference, the Census Bureau takes into account both federal and state income taxes in measuring after-tax income, whereas CBO considers only federal taxes.

The choice of what "income" comprises obviously affects the income distribution that is observed. Including income from sources that disproportionately go to upper-income households-for example, capital gains and employer-paid health insurance premiums-makes the share of income going to higher-income quintiles appear larger. Including components that disproportionately go to lowerincome households-such as food stamps and Medic-aid-increases the share of income going to lowerincome quintiles.

## Adjusting Income

The Census Bureau's distributional estimates derive from income reported on the annual March CPS; CBO, however, adjusts those estimates to bring them into line with the income reported to the Internal Revenue Service on tax returns. CBO's adjustments have the biggest impact on high-income households, substantially increasing the income of that group above the levels reported by the Census Bureau.

Those adjustments result in part from respondents to the CPS underreporting their income relative to amounts appearing on tax returns and in part from "top-coding" (the Census Bureau's practice of capping incomes in CPS public-use files at specific levels).

In terms of component incomes, CBO's unadjusted measure of household cash income minus capital gains most closely matches the Census Bureau's money income measure (see the first and second panels of Table F-1). CBO's measure, however, adds substantial amounts of income from sources that the Census Bureau's measure does not include, particularly at the top of the distribution. The effect is to increase the share of income going to the top quintile and reduce shares for the other four. Under both methods, the share of income going to the top quintile has steadily increased over the 1979-1997 period, while the share going to all other quintiles has declined.

## Defining Income Quintiles

CBO defines income quintiles as having equal numbers of people, but it allows the number of households to vary. In contrast, the Census Bureau defines quintiles as containing equal numbers of households and differing numbers of people. Person-based quintiles give equal weight to all people; household-based quintiles give less weight to people in large households than to people in smaller households.

As discussed in Chapter 3, smaller households have lower average income, so CBO tabulations that do not adjust for household size show more house-
holds in the lower-income than in the higher-income quintiles. Basing quintiles on people results in more households in the lower quintiles; the share of income in the lower quintiles is thus greater, relative to household-based quintiles, at the expense of the upper quintiles. Moving from household-based to person-based quintiles increases the income shares of the lower and second quintiles and lowers the shares of the upper three quintiles (compare the second and third panels of Table F-1). However, the distribution of income shares does not differ significantly for the two definitions of income quintiles.

## Adjusting for Household Size

Some of CBO's income measures-including the measure used for the principal analysis of this study -rank households on the basis of income that has been adjusted for differences in household size. Those adjustments divide family or household income by a factor that increases with the number of people in the unit. As a result, larger families move down the income distribution, displacing smaller families and, hence, moving them up. Under adjusted income measures, the distribution of households among quintiles is more even than it is under unadjusted measures.

Moving from an unadjusted measure to an adjusted measure decreases the shares of income going to the lower quintiles, because they contain fewer households than they do under the unadjusted measures (compare the third and fourth panels of Table F-1). Once again, the choice of adjustment does not affect the observed distribution of income shares.

Table F-1.
Shares of Income for All Households, by Income Quintile, Using Alternative Income Definitions, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Using the Census Bureau's Definition of Money Income and Equal Households per Quintile ${ }^{\text {b }}$

|  | 4.2 | 4.1 | 4.0 | 3.9 | 3.8 | 3.9 | 3.8 | 3.5 | 3.7 | 3.6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Lowest Quintile | 10.2 | 10.3 | 10.0 | 9.9 | 9.8 | 9.4 | 9.5 | 9.1 | 9.1 | 8.9 |
| Second Quintile | 17.2 | 16.5 | 16.6 | 16.1 | 15.7 | 16.1 | 16.0 | 15.1 | 15.2 | 15.1 |
| Middle Quintile | 24.3 | 24.9 | 24.4 | 24.5 | 24.6 | 23.7 | 24.2 | 23.7 | 23.4 | 23.0 |
| Fourth Quintile | $\underline{44.1}$ | $\underline{44.3}$ | $\underline{45.1}$ | $\underline{45.6}$ | $\underline{46.1}$ | $\underline{46.8}$ | $\underline{46.5}$ | $\underline{48.6}$ | $\underline{48.6}$ | $\underline{49.3}$ |
| Highest Quintile | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Using Household Cash Income (Excluding Capital Gains) and Equal Households per Quintile

|  | 3.7 | 3.5 | 3.3 | 3.4 | 3.2 | 3.3 | 3.2 | 3.0 | 3.0 | 2.8 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Lowest Quintile | 9.6 | 9.4 | 9.0 | 9.1 | 8.8 | 8.6 | 8.6 | 8.3 | 8.2 | 7.8 |
| Second Quintile | 16.1 | 15.8 | 15.4 | 15.2 | 14.8 | 14.5 | 14.5 | 14.2 | 14.1 | 13.6 |
| Middle Quintile | 24.0 | 24.0 | 23.8 | 23.6 | 23.0 | 22.6 | 22.6 | 22.5 | 22.4 | 21.7 |
| Fourth Quintile | $\underline{47.0}$ | $\underline{47.9}$ | $\underline{49.0}$ | $\underline{49.4}$ | $\underline{50.7}$ | $\underline{51.7}$ | $\underline{51.4}$ | $\underline{52.5}$ | $\underline{52.6}$ | $\underline{54.4}$ |
| Highest Quintile |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |


| Lowest Quintile | 6.8 | 6.3 | 5.5 | 5.8 | 5.6 | 5.7 | 5.5 | 5.2 | 5.4 | 5.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Second Quintile | 13.8 | 13.3 | 12.5 | 12.6 | 12.4 | 12.1 | 12.1 | 12.0 | 11.9 | 11.4 |
| Middle Quintile | 17.9 | 17.8 | 17.4 | 17.4 | 17.0 | 16.7 | 16.7 | 16.5 | 16.2 | 15.7 |
| Fourth Quintile | 22.8 | 22.7 | 23.3 | 22.7 | 22.6 | 21.8 | 22.0 | 22.2 | 21.5 | 20.8 |
| Highest Quintile | 38.9 | 40.5 | 41.7 | 42.2 | 43.1 | 44.4 | 44.0 | 44.7 | 45.4 | 47.3 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Using Household Cash Income (Excluding Capital Gains) Adjusted
for Household Size and Equal People per Quintile ${ }^{\text {c }}$

|  | 5.0 | 4.7 | 4.0 | 4.3 | 4.2 | 4.2 | 4.1 | 3.9 | 4.0 | 3.8 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Lowest Quintile | 11.3 | 10.7 | 10.1 | 10.2 | 10.1 | 9.9 | 9.7 | 9.6 | 9.5 | 9.1 |
| Second Quintile | 16.3 | 16.0 | 15.8 | 15.7 | 15.4 | 15.2 | 15.3 | 15.0 | 14.9 | 14.3 |
| Middle Quintile | 22.9 | 23.0 | 22.9 | 22.8 | 22.4 | 21.9 | 22.0 | 22.3 | 21.7 | 21.0 |
| Fourth Quintile | $\underline{44.7}$ | $\underline{46.2}$ | $\underline{47.5}$ | $\underline{47.5}$ | $\underline{48.5}$ | $\underline{49.6}$ | $\underline{49.2}$ | $\underline{49.8}$ | $\underline{50.3}$ | $\underline{52.1}$ |
| Highest Quintile | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 100 |  |  |  |  |  |  |  |  |  |  |

SOURCES: Congressional Budget Office; Bureau of the Census.
NOTES: A household consists of all people who share a housing unit, regardless of the relationships among them.
Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, cash transfer payments, and retirement benefits.

Households with negative income are excluded from the lowest income category but are included in totals.
a. A quintile is a fifth of the income distribution.
b. See Bureau of the Census, Money Income in the United States: 1999 (September 2000), Appendix A, for a discussion of the Census Bureau's definition of money income.
c. For purposes of ranking by adjusted household income, the income for each household is divided by the square root of the household's size.

# Appendix G <br> Distributional Estimates Using Adjusted Comprehensive Household Income, by Quintile, 1979-1997 

Table G-1a.
Effective Federal Tax Rates for All Households, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | Under 2000 Law |
| Total Effective Federal Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 8.1 | 8.3 | 8.1 | 9.7 | 8.9 | 8.5 | 7.9 | 7.6 | 6.0 | 5.6 | 5.3 |
| Second Quintile | 14.0 | 14.2 | 13.0 | 14.5 | 14.3 | 14.3 | 14.2 | 13.5 | 13.6 | 13.9 | 12.8 |
| Middle Quintile | 18.2 | 18.7 | 17.1 | 17.7 | 17.3 | 17.6 | 17.3 | 17.3 | 17.6 | 17.5 | 16.7 |
| Fourth Quintile | 21.2 | 21.9 | 19.9 | 20.2 | 20.0 | 20.3 | 20.2 | 20.4 | 20.8 | 20.5 | 20.0 |
| Highest Quintile | 27.8 | 27.1 | 23.7 | 23.7 | 25.4 | 25.1 | 25.2 | 26.8 | 28.3 | 27.7 | 27.4 |
| All Quintiles | 22.3 | 22.4 | 20.2 | 20.6 | 21.3 | 21.3 | 21.1 | 22.0 | 22.9 | 22.8 | 22.3 |
| Top 10 Percent | 30.0 | 28.4 | 24.7 | 24.4 | 26.8 | 26.2 | 26.3 | 28.5 | 30.4 | 29.4 | 29.1 |
| Top 5 Percent | 32.2 | 29.6 | 25.3 | 24.9 | 27.9 | 27.0 | 27.3 | 30.1 | 32.3 | 30.9 | 30.5 |
| Top 1 Percent | 37.3 | 31.8 | 26.8 | 26.0 | 29.9 | 28.2 | 28.9 | 33.3 | 36.4 | 33.3 | 32.7 |
| Effective Individual Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | -0.4 | 0.3 | -0.1 | 0.3 | -0.7 | -1.1 | -1.9 | -2.3 | -4.5 | -5.0 | -5.3 |
| Second Quintile | 3.9 | 4.5 | 3.5 | 3.9 | 3.4 | 3.5 | 3.1 | 2.4 | 2.2 | 2.4 | 1.3 |
| Middle Quintile | 7.3 | 8.0 | 6.6 | 6.5 | 5.8 | 6.1 | 5.9 | 5.5 | 5.5 | 5.6 | 4.8 |
| Fourth Quintile | 10.1 | 11.0 | 9.1 | 8.9 | 8.2 | 8.4 | 8.2 | 8.0 | 8.0 | 8.1 | 7.5 |
| Highest Quintile | 15.9 | 16.7 | 14.1 | 13.8 | 14.6 | 14.4 | 14.1 | 14.7 | 15.5 | 16.1 | 15.8 |
| All Quintiles | 11.1 | 12.0 | 10.2 | 10.1 | 10.2 | 10.2 | 9.8 | 10.0 | 10.4 | 11.0 | 10.5 |
| Top 10 Percent | 17.7 | 18.3 | 15.5 | 15.2 | 16.4 | 16.0 | 15.7 | 16.7 | 17.6 | 18.1 | 17.8 |
| Top 5 Percent | 19.4 | 19.7 | 16.8 | 16.4 | 18.1 | 17.4 | 17.1 | 18.6 | 19.6 | 20.0 | 19.5 |
| Top 1 Percent | 22.4 | 22.0 | 19.1 | 18.5 | 20.7 | 19.5 | 19.7 | 22.5 | 23.4 | 23.0 | 22.3 |
| Effective Social Insurance Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.3 | 5.8 | 5.8 | 6.5 | 6.6 | 7.2 | 7.0 | 6.8 | 7.2 | 7.4 | 7.4 |
| Second Quintile | 7.3 | 7.8 | 7.6 | 8.4 | 8.6 | 8.7 | 9.0 | 8.8 | 8.8 | 9.2 | 9.2 |
| Middle Quintile | 8.3 | 8.9 | 8.7 | 9.2 | 9.1 | 9.4 | 9.3 | 9.5 | 9.6 | 9.7 | 9.7 |
| Fourth Quintile | 8.4 | 9.0 | 8.9 | 9.4 | 9.5 | 9.7 | 9.9 | 10.2 | 10.3 | 10.2 | 10.2 |
| Highest Quintile | 5.6 | 6.2 | 6.3 | 6.5 | 6.6 | 6.7 | 7.4 | 7.5 | 7.5 | 6.7 | 6.7 |
| All Quintiles | 6.8 | 7.5 | 7.4 | 7.8 | 7.9 | 8.0 | 8.4 | 8.5 | 8.6 | 8.1 | 8.1 |
| Top 10 Percent | 4.5 | 5.1 | 5.2 | 5.2 | 5.4 | 5.4 | 6.3 | 6.2 | 6.4 | 5.4 | 5.4 |
| Top 5 Percent | 3.2 | 3.8 | 3.8 | 3.8 | 4.1 | 3.9 | 5.0 | 4.8 | 5.1 | 4.2 | 4.2 |
| Top 1 Percent | 1.4 | 1.6 | 1.6 | 1.5 | 1.7 | 1.5 | 2.2 | 2.0 | 2.7 | 2.1 | 2.1 |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by adjusted comprehensive household income.
A household consists of the people who share a housing unit, regardless of the relationships among them.

Table G-1a. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Under } \\ & 1997 \\ & \text { Law } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.0 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 |
| Second Quintile | 1.4 | 0.8 | 0.6 | 0.6 | 0.9 | 0.8 | 0.6 | 0.8 | 0.8 | 0.7 | 0.7 |
| Middle Quintile | 1.6 | 1.0 | 0.9 | 0.9 | 1.2 | 1.1 | 1.0 | 1.1 | 1.2 | 1.1 | 1.1 |
| Fourth Quintile | 1.8 | 1.2 | 1.1 | 1.1 | 1.4 | 1.3 | 1.2 | 1.3 | 1.4 | 1.4 | 1.4 |
| Highest Quintile | 5.6 | 3.6 | 2.7 | 2.8 | 3.6 | 3.5 | 3.1 | 3.9 | 4.7 | 4.4 | 4.4 |
| All Quintiles | 3.4 | 2.2 | 1.8 | 1.8 | 2.4 | 2.3 | 2.0 | 2.5 | 2.9 | 2.9 | 2.9 |
| Top 10 Percent | 7.1 | 4.6 | 3.4 | 3.5 | 4.4 | 4.3 | 3.8 | 4.9 | 5.9 | 5.4 | 5.4 |
| Top 5 Percent | 9.0 | 5.6 | 4.2 | 4.3 | 5.4 | 5.3 | 4.7 | 6.0 | 7.2 | 6.3 | 6.3 |
| Top 1 Percent | 13.0 | 7.9 | 5.7 | 5.6 | 7.2 | 6.9 | 6.6 | 8.2 | 10.0 | 8.0 | 8.0 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.1 | 1.6 | 1.9 | 2.5 | 2.5 | 1.9 | 2.3 | 2.5 | 2.7 | 2.8 | 2.8 |
| Second Quintile | 1.3 | 1.1 | 1.2 | 1.5 | 1.5 | 1.3 | 1.5 | 1.6 | 1.8 | 1.6 | 1.6 |
| Middle Quintile | 1.1 | 0.8 | 0.9 | 1.1 | 1.1 | 1.0 | 1.1 | 1.2 | 1.3 | 1.1 | 1.1 |
| Fourth Quintile | 0.9 | 0.7 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 0.9 | 1.1 | 0.9 | 0.9 |
| Highest Quintile | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.7 | 0.5 | 0.5 |
| All Quintiles | 1.0 | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 1.0 | 1.0 | 0.9 | 0.9 |
| Top 10 Percent | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.4 | 0.4 |
| Top 5 Percent | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| Top 1 Percent | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 |

NOTES: (Continued)
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-1b.
Shares of Federal Tax Liabilities for All Households, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Table G-1b. Continued

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them.
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to 401 (k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-1c.
Number of Households, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for All Households, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under <br> 1997 <br> Law | $\begin{aligned} & \hline \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Number of Households (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 17.8 | 17.8 | 17.3 | 18.4 | 19.3 | 19.7 | 20.3 | 20.8 | 21.7 | 22.4 | 22.4 |
| Second Quintile | 16.1 | 16.6 | 17.3 | 17.9 | 18.6 | 19.1 | 19.1 | 19.5 | 19.6 | 20.3 | 20.3 |
| Middle Quintile | 15.1 | 15.8 | 16.6 | 17.2 | 17.7 | 18.3 | 18.9 | 19.2 | 19.4 | 19.8 | 19.8 |
| Fourth Quintile | 15.4 | 16.1 | 16.5 | 17.2 | 17.7 | 18.0 | 18.6 | 19.0 | 19.0 | 19.7 | 19.7 |
| Highest Quintile | 16.6 | 17.3 | 17.8 | 18.1 | 18.4 | 19.1 | 19.2 | 19.3 | 19.8 | 20.4 | 20.4 |
| All Quintiles | 81.4 | 84.2 | 86.2 | 89.5 | 92.0 | 94.6 | 96.7 | 98.2 | 99.7 | 102.9 | 102.9 |
| Top 10 Percent | 8.4 | 8.9 | 9.2 | 9.2 | 9.4 | 9.7 | 9.7 | 9.7 | 10.1 | 10.3 | 10.3 |
| Top 5 Percent | 4.2 | 4.6 | 4.6 | 4.6 | 4.7 | 4.9 | 4.9 | 4.9 | 5.0 | 5.2 | 5.2 |
| Top 1 Percent | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 |
| Average Income (1997 dollars) <br> Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 11,800 | 11,100 | 10,200 | 11,100 | 11,300 | 11,700 | 11,300 | 11,000 | 11,400 | 11,400 | 11,400 |
| Second Quintile | 27,100 | 25,500 | 23,900 | 25,600 | 26,600 | 27,300 | 26,900 | 26,800 | 28,200 | 28,600 | 28,600 |
| Middle Quintile | 41,400 | 39,300 | 37,900 | 40,100 | 41,700 | 42,700 | 41,700 | 42,000 | 43,500 | 45,100 | 45,100 |
| Fourth Quintile | 56,800 | 54,900 | 55,000 | 57,800 | 60,300 | 61,900 | 60,400 | 61,700 | 63,500 | 65,600 | 65,600 |
| Highest Quintile | 109,500 | 107,000 | 111,400 | 123,800 | 130,000 | 138,000 | 131,700 | 138,800 | 145,700 | 167,500 | 167,500 |
| All Quintiles | 48,500 | 47,000 | 47,500 | 51,000 | 53,100 | 55,400 | 53,600 | 54,800 | 57,300 | 62,400 | 62,400 |
| Top 10 Percent | 144,500 | 139,100 | 146,800 | 167,800 | 175,700 | 190,400 | 179,200 | 191,100 | 201,100 | 240,700 | 240,700 |
| Top 5 Percent | 195,700 | 183,700 | 200,200 | 232,800 | 244,200 | 267,100 | 249,300 | 266,100 | 288,200 | 355,800 | 355,800 |
| Top 1 Percent | 420,200 | 389,600 | 463,800 | 581,600 | 598,000 | 694,000 | 616,700 | 672,900 | 761,200 | 1,016,900 | 1,016,900 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 10,900 | 10,200 | 9,400 | 10,000 | 10,300 | 10,800 | 10,400 | 10,200 | 10,700 | 10,800 | 10,800 |
| Second Quintile | 23,300 | 21,800 | 20,800 | 21,900 | 22,800 | 23,400 | 23,100 | 23,200 | 24,300 | 24,700 | 25,000 |
| Middle Quintile | 33,800 | 32,000 | 31,500 | 33,000 | 34,500 | 35,200 | 34,500 | 34,700 | 35,800 | 37,200 | 37,500 |
| Fourth Quintile | 44,700 | 42,900 | 44,100 | 46,100 | 48,300 | 49,300 | 48,200 | 49,100 | 50,300 | 52,200 | 52,500 |
| Highest Quintile | 79,100 | 78,000 | 85,000 | 94,500 | 96,900 | 103,300 | 98,500 | 101,700 | 104,400 | 121,000 | 121,600 |
| All Quintiles | 37,700 | 36,400 | 37,900 | 40,500 | 41,800 | 43,600 | 42,300 | 42,700 | 44,200 | 48,200 | 48,500 |
| Top 10 Percent | 101,200 | 99,500 | 110,600 | 126,800 | 128,600 | 140,600 | 132,000 | 136,700 | 140,100 | 169,900 | 170,800 |
| Top 5 Percent | 132,600 | 129,400 | 149,500 | 174,700 | 176,000 | 195,000 | 181,400 | 186,100 | 195,100 | 245,900 | 247,400 |
| Top 1 Percent | 263,700 | 265,700 | 339,400 | 430,100 | 419,300 | 498,300 | 438,800 | 449,200 | 483,800 | 677,900 | 684,500 |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them.
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Table G-1c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Under } \\ & 1997 \\ & \text { Law } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.3 | 5.0 | 4.3 | 4.5 | 4.5 | 4.4 | 4.4 | 4.2 | 4.3 | 4.0 | 4.0 |
| Second Quintile | 11.1 | 10.7 | 10.1 | 10.0 | 10.1 | 9.9 | 9.9 | 9.7 | 9.6 | 9.0 | 9.0 |
| Middle Quintile | 15.8 | 15.7 | 15.4 | 15.1 | 15.1 | 14.9 | 15.3 | 15.0 | 14.8 | 13.9 | 13.9 |
| Fourth Quintile | 22.1 | 22.3 | 22.1 | 21.8 | 21.9 | 21.3 | 21.7 | 21.8 | 21.1 | 20.2 | 20.2 |
| Highest Quintile | 45.9 | 46.7 | 48.4 | 49.1 | 49.0 | 50.1 | 48.9 | 49.7 | 50.5 | 53.2 | 53.2 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 30.6 | 31.3 | 32.9 | 33.7 | 33.6 | 35.1 | 33.7 | 34.4 | 35.5 | 38.7 | 38.7 |
| Top 5 Percent | 20.8 | 21.2 | 22.6 | 23.6 | 23.6 | 25.1 | 23.6 | 24.4 | 25.3 | 28.9 | 28.9 |
| Top 1 Percent | 9.3 | 9.3 | 10.4 | 11.3 | 11.3 | 12.5 | 11.1 | 11.8 | 12.5 | 15.8 | 15.8 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 6.3 | 5.9 | 5.0 | 5.1 | 5.2 | 5.1 | 5.2 | 5.0 | 5.3 | 4.9 | 4.8 |
| Second Quintile | 12.2 | 11.8 | 11.0 | 10.8 | 11.0 | 10.8 | 10.8 | 10.8 | 10.8 | 10.1 | 10.1 |
| Middle Quintile | 16.6 | 16.4 | 16.0 | 15.7 | 15.8 | 15.6 | 16.0 | 15.9 | 15.8 | 14.8 | 14.9 |
| Fourth Quintile | 22.4 | 22.5 | 22.2 | 21.9 | 22.2 | 21.6 | 22.0 | 22.2 | 21.7 | 20.8 | 20.8 |
| Highest Quintile | 42.7 | 43.9 | 46.3 | 47.2 | 46.4 | 47.7 | 46.4 | 46.7 | 46.9 | 49.8 | 49.7 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 27.5 | 28.8 | 31.0 | 32.1 | 31.3 | 32.9 | 31.5 | 31.5 | 32.1 | 35.4 | 35.3 |
| Top 5 Percent | 18.1 | 19.2 | 21.1 | 22.3 | 21.6 | 23.3 | 21.7 | 21.9 | 22.3 | 25.8 | 25.8 |
| Top 1 Percent | 7.5 | 8.1 | 9.6 | 10.5 | 10.1 | 11.4 | 10.0 | 10.1 | 10.3 | 13.6 | 13.7 |
| Minimum Adjusted Income (1997 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 13,000 | 12,200 | 11,300 | 12,300 | 12,700 | 13,200 | 12,900 | 12,800 | 13,400 | 13,700 | 13,700 |
| Middle Quintile | 21,100 | 20,100 | 19,400 | 20,700 | 21,700 | 22,300 | 22,000 | 22,000 | 23,000 | 23,600 | 23,600 |
| Fourth Quintile | 29,200 | 28,300 | 28,300 | 30,000 | 31,300 | 32,200 | 31,800 | 31,900 | 33,100 | 34,400 | 34,400 |
| Highest Quintile | 41,200 | 40,600 | 41,300 | 43,800 | 46,200 | 47,200 | 46,300 | 47,800 | 48,600 | 50,800 | 50,800 |
| Top 10 Percent | 53,000 | 52,800 | 53,700 | 58,200 | 60,700 | 62,400 | 61,800 | 63,500 | 65,500 | 69,900 | 69,900 |
| Top 5 Percent | 67,200 | 67,200 | 69,200 | 76,100 | 78,500 | 81,600 | 80,500 | 81,900 | 86,800 | 93,300 | 93,300 |
| Top 1 Percent | 130,800 | 126,500 | 133,800 | 154,900 | 162,600 | 181,000 | 173,700 | 182,000 | 199,000 | 245,700 | 245,700 |

NOTES: (Continued)
Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-2a.
Effective Federal Tax Rates for Households with Children, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by adjusted comprehensive household income.
A household consists of the people who share a housing unit, regardless of the relationships among them. A household with children has at least one member under age 18.

Table G-2a. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 |  | 1991 |  | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |  |  |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 |  | 0.3 |  |  |  | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 |
| Second Quintile | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 |  | 0.3 |  | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 |
| Middle Quintile | 0.7 | 0.4 | 0.3 | 0.3 | 0.5 |  | 0.4 |  | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 |
| Fourth Quintile | 1.0 | 0.6 | 0.5 | 0.5 | 0.6 |  | 0.6 |  | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 |
| Highest Quintile | 4.3 | 2.4 | 1.8 | 2.0 | 2.3 |  | 2.5 |  | 2.0 | 3.0 | 4.3 | 3.5 | 3.5 |
| All Quintiles | 2.0 | 1.1 | 0.9 | 1.0 | 1.2 |  | 1.2 |  | 1.0 | 1.5 | 2.2 | 1.8 | 1.8 |
| Top 10 Percent | 6.0 | 3.5 | 2.6 | 2.7 | 2.9 |  | 3.3 |  | 2.6 | 4.0 | 5.8 | 4.4 | 4.4 |
| Top 5 Percent | 7.5 | 4.3 | 3.2 | 3.3 | 3.6 |  | 4.1 |  | 3.2 | 4.9 | 7.0 | 5.2 | 5.2 |
| Top 1 Percent | 11.0 | 6.2 | 4.4 | 4.4 | 4.8 |  | 4.7 |  | 4.4 | 6.4 | 9.6 | 6.7 | 6.7 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.5 | 1.2 | 1.6 | 1.9 | 1.7 |  | 1.6 |  | 1.8 | 1.9 | 2.1 | 2.0 | 2.0 |
| Second Quintile | 1.2 | 0.9 | 1.0 | 1.2 | 1.1 |  | 1.1 |  | 1.2 | 1.3 | 1.4 | 1.2 | 1.2 |
| Middle Quintile | 1.0 | 0.7 | 0.8 | 0.9 | 0.9 |  | 0.9 |  | 0.9 | 1.0 | 1.1 | 0.9 | 0.9 |
| Fourth Quintile | 0.8 | 0.6 | 0.7 | 0.8 | 0.7 |  | 0.7 |  | 0.8 | 0.8 | 0.9 | 0.7 | 0.7 |
| Highest Quintile | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 |  | 0.5 |  | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 |
| All Quintiles | 0.9 | 0.7 | 0.8 | 0.9 | 0.8 |  | 0.8 |  | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 |
| Top 10 Percent | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 |  | 0.4 |  | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 |
| Top 5 Percent | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 |  | 0.3 |  | 0.4 | 0.6 | 0.4 | 0.3 | 0.3 |
| Top 1 Percent | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 |  | 0.2 |  | 0.4 | 0.6 | 0.3 | 0.2 | 0.2 |

NOTES: (Continued)
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly, or indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-2b.
Shares of Federal Tax Liabilities for Households with Children, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \hline \text { Under } \\ 1997 \\ \text { Law } \end{gathered}$ | Under 2000 Law |
| Share of Total Federal Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.3 | 2.5 | 2.4 | 2.9 | 2.3 | 2.3 | 1.9 | 1.6 | 0.6 | 0.5 | 0.4 |
| Second Quintile | 9.9 | 10.4 | 9.7 | 10.2 | 9.6 | 9.7 | 9.7 | 8.1 | 7.6 | 7.5 | 6.8 |
| Middle Quintile | 18.5 | 19.2 | 18.1 | 17.4 | 16.6 | 17.2 | 16.9 | 15.0 | 14.2 | 14.1 | 13.5 |
| Fourth Quintile | 25.5 | 26.9 | 26.1 | 25.3 | 23.9 | 24.6 | 24.6 | 22.9 | 21.0 | 20.6 | 20.4 |
| Highest Quintile | 43.6 | 40.8 | 43.5 | 44.0 | 47.4 | 46.2 | 46.8 | 52.4 | 56.7 | 57.4 | 59.0 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 29.6 | 25.0 | 28.0 | 29.3 | 32.5 | 31.7 | 31.9 | 37.6 | 42.8 | 44.2 | 45.5 |
| Top 5 Percent | 21.7 | 16.9 | 20.1 | 20.6 | 24.0 | 23.5 | 22.7 | 27.9 | 34.3 | 35.5 | 36.4 |
| Top 1 Percent | 10.7 | 7.8 | 10.4 | 11.3 | 13.5 | 13.8 | 11.4 | 16.4 | 22.0 | 22.1 | 22.5 |
| Share of Individual Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | -0.6 | -0.1 | -0.4 | -0.1 | -1.2 | -1.8 | -2.7 | -2.6 | -4.5 | -4.5 | -5.2 |
| Second Quintile | 5.9 | 6.6 | 5.4 | 5.8 | 4.7 | 5.0 | 4.3 | 2.7 | 2.1 | 2.2 | 0.1 |
| Middle Quintile | 15.6 | 16.3 | 14.7 | 13.8 | 12.0 | 13.0 | 13.0 | 10.6 | 9.9 | 9.4 | 7.8 |
| Fourth Quintile | 25.4 | 26.7 | 24.8 | 23.7 | 21.1 | 22.2 | 22.5 | 19.8 | 18.1 | 17.0 | 16.3 |
| Highest Quintile | 53.6 | 50.5 | 55.6 | 56.8 | 63.3 | 61.5 | 62.9 | 69.5 | 74.4 | 75.8 | 81.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 38.0 | 32.9 | 39.0 | 41.1 | 47.5 | 46.3 | 47.0 | 54.3 | 60.3 | 62.7 | 67.4 |
| Top 5 Percent | 28.4 | 23.2 | 29.7 | 31.1 | 37.6 | 36.4 | 36.0 | 43.2 | 50.4 | 53.0 | 56.9 |
| Top 1 Percent | 13.9 | 11.1 | 16.7 | 18.6 | 22.9 | 23.2 | 19.9 | 27.7 | 33.5 | 34.7 | 36.9 |
| Share of Social Insurance Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.6 | 5.4 | 4.9 | 5.3 | 5.1 | 5.8 | 5.2 | 4.6 | 4.7 | 4.9 | 4.9 |
| Second Quintile | 15.9 | 15.4 | 14.5 | 14.8 | 14.8 | 14.6 | 14.4 | 13.3 | 13.4 | 13.6 | 13.6 |
| Middle Quintile | 24.8 | 24.1 | 22.9 | 22.1 | 22.2 | 22.5 | 21.2 | 20.6 | 20.3 | 20.5 | 20.5 |
| Fourth Quintile | 29.1 | 29.2 | 29.2 | 28.8 | 28.5 | 28.8 | 28.0 | 28.1 | 27.0 | 27.1 | 27.1 |
| Highest Quintile | 24.5 | 25.7 | 28.3 | 28.7 | 29.3 | 28.2 | 31.3 | 33.4 | 34.6 | 34.0 | 34.0 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 11.1 | 11.3 | 13.2 | 13.9 | 14.5 | 13.7 | 16.5 | 17.5 | 19.0 | 19.2 | 19.2 |
| Top 5 Percent | 5.3 | 5.3 | 6.6 | 6.7 | 7.3 | 6.7 | 8.6 | 8.9 | 11.1 | 11.3 | 11.3 |
| Top 1 Percent | 1.0 | 1.0 | 1.3 | 1.3 | 1.6 | 1.7 | 2.0 | 1.9 | 3.7 | 3.6 | 3.6 |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. A household with children has at least one member under age 18.

Table G-2b. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.6 | 1.8 | 1.8 | 1.4 | 1.4 | 1.3 | 1.4 | 1.4 | 0.7 | 0.6 | 0.6 |
| Second Quintile | 3.9 | 4.5 | 4.1 | 3.7 | 4.5 | 3.6 | 4.0 | 2.6 | 2.0 | 2.2 | 2.2 |
| Middle Quintile | 7.3 | 7.7 | 7.3 | 6.2 | 7.4 | 6.5 | 6.9 | 4.8 | 3.7 | 4.8 | 4.8 |
| Fourth Quintile | 12.8 | 13.5 | 12.8 | 11.7 | 12.2 | 12.2 | 12.3 | 9.1 | 7.2 | 7.7 | 7.7 |
| Highest Quintile | 74.2 | 72.2 | 73.6 | 76.7 | 73.8 | 79.6 | 75.6 | 82.3 | 86.4 | 86.1 | 86.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 64.8 | 60.5 | 62.9 | 67.7 | 62.7 | 69.2 | 64.7 | 74.2 | 80.3 | 78.6 | 78.6 |
| Top 5 Percent | 55.8 | 49.2 | 55.7 | 57.1 | 53.2 | 61.8 | 54.8 | 64.0 | 73.9 | 70.5 | 70.5 |
| Top 1 Percent | 35.5 | 30.3 | 35.9 | 38.6 | 36.8 | 40.3 | 35.8 | 43.9 | 58.2 | 52.7 | 52.7 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 10.8 | 11.2 | 12.5 | 13.5 | 13.2 | 12.5 | 13.2 | 12.5 | 12.4 | 13.9 | 13.9 |
| Second Quintile | 18.0 | 18.1 | 17.6 | 17.9 | 17.8 | 17.4 | 18.2 | 17.3 | 18.4 | 18.4 | 18.4 |
| Middle Quintile | 22.2 | 22.0 | 21.2 | 19.8 | 20.4 | 20.1 | 20.6 | 18.6 | 20.0 | 20.1 | 20.1 |
| Fourth Quintile | 24.2 | 23.8 | 23.2 | 22.5 | 22.0 | 22.6 | 22.0 | 21.1 | 22.1 | 20.7 | 20.7 |
| Highest Quintile | 24.2 | 23.8 | 24.4 | 24.4 | 25.0 | 23.9 | 25.1 | 29.0 | 25.9 | 26.0 | 26.0 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 13.3 | 12.2 | 13.1 | 13.8 | 13.7 | 12.9 | 14.7 | 18.3 | 14.6 | 15.4 | 15.4 |
| Top 5 Percent | 8.2 | 7.1 | 8.1 | 8.1 | 7.7 | 7.8 | 9.0 | 12.2 | 9.1 | 9.4 | 9.4 |
| Top 1 Percent | 2.9 | 2.6 | 2.9 | 3.5 | 2.7 | 3.2 | 3.7 | 6.8 | 3.6 | 3.1 | 3.1 |

NOTES: (Continued)
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly, or indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-2c.
Number of Households, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for Households with Children, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 | Under 2000 |
|  |  |  |  |  |  |  |  |  |  | Law | Law |


| Number of Households (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 6.9 | 7.2 | 7.5 | 7.8 | 8.1 | 8.3 | 8.5 | 8.8 | 8.4 | 8.7 | 8.7 |
| Second Quintile | 7.0 | 7.1 | 7.1 | 7.3 | 7.4 | 7.4 | 7.7 | 7.9 | 7.9 | 8.0 | 8.0 |
| Middle Quintile | 7.2 | 7.2 | 6.9 | 6.9 | 7.1 | 7.1 | 7.1 | 7.2 | 7.3 | 7.6 | 7.6 |
| Fourth Quintile | 6.5 | 6.4 | 6.3 | 6.5 | 6.4 | 6.6 | 6.5 | 6.7 | 6.8 | 6.9 | 6.9 |
| Highest Quintile | 4.5 | 4.4 | 4.5 | 4.8 | 4.9 | 4.7 | 4.9 | 5.5 | 5.6 | 5.5 | 5.5 |
| All Quintiles | 32.4 | 32.6 | 32.7 | 33.6 | 34.0 | 34.2 | 34.8 | 36.3 | 36.2 | 36.9 | 36.9 |
| Top 10 Percent | 2.0 | 1.9 | 2.0 | 2.2 | 2.2 | 2.1 | 2.3 | 2.6 | 2.6 | 2.7 | 2.7 |
| Top 5 Percent | 1.0 | 0.9 | 1.0 | 1.0 | 1.1 | 1.0 | 1.1 | 1.3 | 1.4 | 1.4 | 1.4 |
| Top 1 Percent | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 |
| Average Income (1997 dollars) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 16,200 | 15,000 | 13,700 | 14,800 | 15,100 | 15,800 | 15,300 | 14,800 | 15,800 | 15,900 | 15,900 |
| Second Quintile | 34,800 | 32,700 | 30,800 | 33,100 | 34,500 | 35,800 | 35,000 | 34,800 | 36,800 | 37,500 | 37,500 |
| Middle Quintile | 51,100 | 48,700 | 47,700 | 50,800 | 53,000 | 54,600 | 53,600 | 54,300 | 56,400 | 58,200 | 58,200 |
| Fourth Quintile | 69,600 | 68,000 | 68,300 | 72,100 | 76,000 | 77,900 | 76,800 | 78,500 | 80,400 | 83,100 | 83,100 |
| Highest Quintile | 137,900 | 129,000 | 138,500 | 153,300 | 161,700 | 174,100 | 161,800 | 173,900 | 194,800 | 217,900 | 217,900 |
| All Quintiles | 55,600 | 51,900 | 52,000 | 56,600 | 59,300 | 61,100 | 59,300 | 62,500 | 68,100 | 71,900 | 71,900 |
| Top 10 Percent | 192,100 | 178,900 | 197,100 | 219,300 | 229,900 | 254,300 | 228,300 | 247,200 | 289,100 | 320,900 | 320,900 |
| Top 5 Percent | 265,000 | 245,800 | 269,500 | 318,100 | 327,000 | 368,700 | 323,800 | 355,600 | 418,200 | 464,400 | 464,400 |
| Top 1 Percent | 601,100 | 540,100 | 585,900 | 762,000 | 745,900 | 836,900 | 716,300 | 785,300 | 1,036,600 | 1,183,900 | 1,183,900 |


| Lowest Quintile | 14,900 | 13,700 | 12,600 | 13,400 | 13,900 | 14,500 | 14,300 | 13,900 | 15,400 | 15,600 | 15,600 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second Quintile | 29,400 | 27,400 | 26,100 | 27,600 | 29,000 | 30,100 | 29,600 | 29,700 | 31,500 | 31,900 | 32,700 |
| Middle Quintile | 41,400 | 38,900 | 38,700 | 41,000 | 43,100 | 44,100 | 43,300 | 44,000 | 45,500 | 47,100 | 47,900 |
| Fourth Quintile | 54,800 | 52,600 | 54,100 | 56,800 | 60,200 | 61,500 | 60,500 | 61,600 | 63,100 | 65,400 | 6,300 |
| Highest Quintile | 101,300 | 95,300 | 105,500 | 117,300 | 120,500 | 131,000 | 120,900 | 126,600 | 137,700 | 156,000 | 157,000 |
| All Quintiles | 43,900 | 40,600 | 41,500 | 44,900 | 46,800 | 48,300 | 47,000 | 48,900 | 52,500 | 55,700 | 56,400 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Top 10 Percent | 136,600 | 129,900 | 148,300 | 166,100 | 167,900 | 188,600 | 167,600 | 175,200 | 197,500 | 223,500 | 224,900 |
| Top 5 Percent | 18,800 | 176,100 | 200,800 | 239,000 | 234,000 | 270,400 | 234,300 | 245,600 | 277,000 | 316,200 | 318,600 |
| Top 1 Percent | 389,600 | 375,400 | 423,400 | 558,700 | 513,200 | 606,700 | 508,800 | 516,200 | 648,800 | 776,000 | 785,100 |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. A household with children has at least one member under age 18.

Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Table G-2c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under Current Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 6.2 | 6.4 | 6.1 | 6.1 | 6.1 | 6.3 | 6.3 | 5.7 | 5.4 | 5.2 | 5.2 |
| Second Quintile | 13.6 | 13.7 | 12.8 | 12.8 | 12.7 | 12.7 | 13.1 | 12.1 | 11.9 | 11.4 | 11.4 |
| Middle Quintile | 20.5 | 20.7 | 19.4 | 18.4 | 18.7 | 18.6 | 18.3 | 17.3 | 16.8 | 16.6 | 16.6 |
| Fourth Quintile | 25.3 | 25.8 | 25.2 | 24.6 | 24.1 | 24.4 | 24.1 | 23.2 | 22.2 | 21.7 | 21.7 |
| Highest Quintile | 34.6 | 33.9 | 36.9 | 38.6 | 39.1 | 38.9 | 38.5 | 42.2 | 44.1 | 45.5 | 45.5 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 21.6 | 19.8 | 22.8 | 24.9 | 25.4 | 25.6 | 25.0 | 28.2 | 30.8 | 32.8 | 32.8 |
| Top 5 Percent | 14.7 | 12.9 | 15.9 | 17.1 | 17.7 | 18.4 | 17.0 | 19.7 | 23.2 | 25.0 | 25.0 |
| Top 1 Percent | 6.4 | 5.5 | 7.6 | 8.7 | 9.1 | 10.5 | 8.2 | 10.4 | 13.4 | 14.4 | 14.4 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 7.2 | 7.4 | 7.0 | 6.9 | 7.1 | 7.3 | 7.4 | 6.8 | 6.8 | 6.6 | 6.5 |
| Second Quintile | 14.6 | 14.7 | 13.6 | 13.4 | 13.5 | 13.5 | 13.9 | 13.2 | 13.1 | 12.5 | 12.6 |
| Middle Quintile | 21.0 | 21.1 | 19.8 | 18.7 | 19.2 | 19.0 | 18.7 | 17.9 | 17.6 | 17.3 | 17.4 |
| Fourth Quintile | 25.2 | 25.4 | 25.0 | 24.4 | 24.2 | 24.3 | 24.0 | 23.4 | 22.6 | 22.0 | 22.1 |
| Highest Quintile | 32.2 | 32.0 | 35.2 | 37.2 | 36.9 | 37.0 | 36.3 | 39.4 | 40.4 | 42.0 | 41.8 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 19.4 | 18.4 | 21.5 | 23.7 | 23.4 | 24.0 | 23.2 | 25.6 | 27.2 | 29.4 | 29.3 |
| Top 5 Percent | 12.8 | 11.8 | 14.9 | 16.1 | 16.1 | 17.1 | 15.6 | 17.4 | 19.9 | 22.0 | 21.9 |
| Top 1 Percent | 5.3 | 4.9 | 6.9 | 8.1 | 7.9 | 9.6 | 7.3 | 8.8 | 10.9 | 12.2 | 12.2 |
| Minimum Adjusted Income (1997 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 13,000 | 12,200 | 11,300 | 12,300 | 12,700 | 13,200 | 12,900 | 12,800 | 13,400 | 13,700 | 13,700 |
| Middle Quintile | 21,100 | 20,100 | 19,400 | 20,700 | 21,700 | 22,300 | 22,000 | 22,000 | 23,000 | 23,600 | 23,600 |
| Fourth Quintile | 29,200 | 28,300 | 28,300 | 30,000 | 31,300 | 32,200 | 31,800 | 31,900 | 33,100 | 34,400 | 34,400 |
| Highest Quintile | 41,200 | 40,600 | 41,300 | 43,800 | 46,200 | 47,200 | 46,300 | 47,800 | 48,600 | 50,800 | 50,800 |
| Top 10 Percent | 53,000 | 52,800 | 53,700 | 58,200 | 60,700 | 62,400 | 61,800 | 63,500 | 65,500 | 69,900 | 69,900 |
| Top 5 Percent | 67,200 | 67,200 | 69,200 | 76,100 | 78,500 | 81,600 | 80,500 | 81,900 | 86,800 | 93,300 | 93,300 |
| Top 1 Percent | 130,800 | 126,500 | 133,800 | 154,900 | 162,600 | 181,000 | 173,700 | 182,000 | 199,000 | 245,700 | 245,700 |

NOTES: (Continued)
Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly, or indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-3a.
Effective Federal Tax Rates for Elderly Childless Households, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Under } \\ 1997 \\ \text { Law } \end{gathered}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Total Effective Federal Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.1 | 3.5 | 3.1 | 4.4 | 4.6 | 3.1 | 4.7 | 5.0 | 4.1 | 5.1 | 5.1 |
| Second Quintile | 7.0 | 4.8 | 4.1 | 5.3 | 5.7 | 5.3 | 5.4 | 5.6 | 6.0 | 5.8 | 5.8 |
| Middle Quintile | 12.0 | 9.1 | 7.9 | 8.9 | 9.1 | 9.0 | 8.6 | 8.7 | 9.5 | 9.1 | 9.1 |
| Fourth Quintile | 17.0 | 14.5 | 12.4 | 12.8 | 13.5 | 13.5 | 12.9 | 13.5 | 14.5 | 14.3 | 14.4 |
| Highest Quintile | 29.8 | 26.4 | 22.2 | 22.7 | 24.8 | 24.4 | 22.9 | 24.6 | 26.9 | 25.8 | 25.5 |
| All Quintiles | 19.6 | 17.6 | 15.0 | 15.8 | 17.1 | 17.0 | 15.7 | 16.5 | 18.3 | 18.7 | 18.5 |
| Top 10 Percent | 32.7 | 28.8 | 24.3 | 24.6 | 27.0 | 26.3 | 24.8 | 27.1 | 29.2 | 27.5 | 27.1 |
| Top 5 Percent | 35.5 | 30.8 | 25.9 | 25.9 | 28.3 | 27.5 | 26.3 | 29.0 | 31.0 | 29.0 | 28.6 |
| Top 1 Percent | 42.3 | 34.5 | 28.4 | 27.6 | 30.7 | 29.1 | 28.4 | 32.2 | 34.4 | 30.4 | 29.9 |
| Effective Individual Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -0.1 | -0.1 | 0 |
| Second Quintile | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 |
| Middle Quintile | 2.2 | 2.4 | 2.1 | 2.3 | 1.9 | 2.3 | 2.3 | 1.8 | 2.0 | 2.1 | 2.1 |
| Fourth Quintile | 5.0 | 5.8 | 4.9 | 5.1 | 4.8 | 5.3 | 5.3 | 4.9 | 5.3 | 5.5 | 5.6 |
| Highest Quintile | 13.5 | 15.2 | 12.8 | 13.2 | 13.1 | 13.1 | 12.2 | 11.7 | 12.8 | 13.2 | 12.9 |
| All Quintiles | 7.3 | 8.9 | 7.6 | 7.8 | 7.8 | 8.1 | 7.3 | 6.8 | 7.6 | 8.5 | 8.4 |
| Top 10 Percent | 15.5 | 17.2 | 14.6 | 14.9 | 14.8 | 14.5 | 13.5 | 13.3 | 14.1 | 14.3 | 13.9 |
| Top 5 Percent | 17.5 | 18.9 | 16.0 | 16.1 | 16.0 | 15.4 | 14.3 | 14.5 | 15.1 | 15.2 | 14.8 |
| Top 1 Percent | 22.4 | 21.9 | 18.5 | 17.7 | 18.4 | 16.6 | 15.5 | 16.3 | 16.7 | 16.3 | 15.8 |
| Effective Social Insurance Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0.5 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 |
| Second Quintile | 1.3 | 1.2 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.1 | 1.2 | 1.1 | 1.1 |
| Middle Quintile | 2.3 | 2.2 | 2.0 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.6 | 1.8 | 1.8 |
| Fourth Quintile | 3.0 | 3.0 | 2.6 | 2.7 | 2.5 | 2.8 | 2.5 | 2.8 | 2.9 | 2.7 | 2.7 |
| Highest Quintile | 2.3 | 2.1 | 2.1 | 2.4 | 2.2 | 2.5 | 2.7 | 2.9 | 3.0 | 2.3 | 2.3 |
| All Quintiles | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.2 | 2.2 | 2.4 | 2.4 | 2.1 | 2.1 |
| Top 10 Percent | 1.9 | 1.8 | 1.8 | 2.0 | 1.9 | 2.2 | 2.5 | 2.6 | 2.7 | 2.1 | 2.1 |
| Top 5 Percent | 1.5 | 1.5 | 1.5 | 1.6 | 1.6 | 1.7 | 2.1 | 2.4 | 2.4 | 1.7 | 1.7 |
| Top 1 Percent | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 1.4 | 1.5 | 1.0 | 1.0 |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by adjusted comprehensive household income.
A household consists of the people who share a housing unit, regardless of the relationships among them. An elderly childless household is one headed by a person age 65 or older and with no member under age 18.

Table G-3a. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | $\begin{aligned} & \hline \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.7 | 0.9 | 0.8 | 0.8 | 1.0 | 1.0 | 0.9 | 1.2 | 1.1 | 1.0 | 1.0 |
| Second Quintile | 3.9 | 1.9 | 1.3 | 1.6 | 2.2 | 2.0 | 1.7 | 2.0 | 2.1 | 1.9 | 1.9 |
| Middle Quintile | 6.4 | 3.5 | 2.7 | 3.1 | 3.9 | 3.6 | 3.0 | 3.4 | 3.9 | 3.5 | 3.5 |
| Fourth Quintile | 7.9 | 4.9 | 3.8 | 3.9 | 5.1 | 4.4 | 3.9 | 4.5 | 4.9 | 4.8 | 4.8 |
| Highest Quintile | 13.2 | 8.5 | 6.7 | 6.5 | 8.8 | 8.2 | 7.3 | 9.1 | 10.1 | 9.5 | 9.5 |
| All Quintiles | 9.0 | 5.8 | 4.6 | 4.6 | 6.2 | 5.8 | 5.0 | 6.0 | 6.8 | 6.8 | 6.8 |
| Top 10 Percent | 14.6 | 9.3 | 7.3 | 7.0 | 9.6 | 9.0 | 8.2 | 10.4 | 11.5 | 10.5 | 10.5 |
| Top 5 Percent | 15.9 | 10.0 | 7.8 | 7.6 | 10.2 | 9.8 | 9.3 | 11.4 | 12.9 | 11.5 | 11.5 |
| Top 1 Percent | 18.6 | 11.4 | 8.7 | 8.5 | 11.0 | 11.1 | 11.5 | 14.0 | 15.5 | 12.7 | 12.7 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.9 | 2.2 | 1.8 | 3.1 | 3.1 | 1.7 | 3.3 | 3.4 | 2.6 | 3.8 | 3.8 |
| Second Quintile | 1.5 | 1.3 | 1.4 | 2.3 | 2.1 | 1.6 | 2.1 | 2.2 | 2.3 | 2.4 | 2.4 |
| Middle Quintile | 1.2 | 0.9 | 1.2 | 1.5 | 1.5 | 1.3 | 1.5 | 1.6 | 1.9 | 1.6 | 1.6 |
| Fourth Quintile | 1.1 | 0.8 | 1.0 | 1.2 | 1.1 | 1.1 | 1.2 | 1.3 | 1.5 | 1.3 | 1.3 |
| Highest Quintile | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.7 | 0.8 | 0.9 | 0.7 | 0.7 |
| All Quintiles | 1.2 | 0.9 | 0.9 | 1.2 | 1.1 | 1.0 | 1.2 | 1.3 | 1.4 | 1.2 | 1.2 |
| Top 10 Percent | 0.7 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.7 | 0.7 |
| Top 5 Percent | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.6 | 0.6 |
| Top 1 Percent | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.4 | 0.4 |

NOTES: (Continued)
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly, or indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-3b.
Shares of Federal Tax Liabilities for Elderly Childless Households, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | Under 2000 <br> Law |
| Share of Total Federal Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.3 | 1.3 | 0.9 | 1.4 | 1.2 | 0.8 | 1.4 | 1.3 | 1.0 | 1.0 | 1.0 |
| Second Quintile | 5.3 | 3.6 | 3.5 | 3.9 | 3.8 | 3.4 | 3.7 | 3.9 | 3.6 | 2.9 | 3.0 |
| Middle Quintile | 8.7 | 7.2 | 8.0 | 8.9 | 8.5 | 8.1 | 9.5 | 9.0 | 8.7 | 7.0 | 7.0 |
| Fourth Quintile | 13.9 | 14.0 | 15.0 | 15.3 | 14.5 | 14.4 | 16.4 | 16.9 | 15.3 | 13.8 | 14.0 |
| Highest Quintile | 69.6 | 73.7 | 72.5 | 70.5 | 72.0 | 73.2 | 69.0 | 68.9 | 71.4 | 75.3 | 75.0 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 57.0 | 61.7 | 59.0 | 57.2 | 58.6 | 61.2 | 55.0 | 53.6 | 57.4 | 61.7 | 61.3 |
| Top 5 Percent | 46.7 | 51.6 | 48.4 | 45.7 | 48.6 | 51.9 | 42.3 | 44.2 | 45.3 | 50.1 | 49.8 |
| Top 1 Percent | 28.8 | 30.5 | 27.7 | 23.2 | 28.7 | 30.1 | 23.7 | 25.1 | 25.7 | 32.1 | 31.8 |


| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Second Quintile | 0.7 | 0.8 | 0.7 | 0.6 | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 |
| Middle Quintile | 4.2 | 3.8 | 4.2 | 4.7 | 4.0 | 4.4 | 5.6 | 4.6 | 4.5 | 3.5 | 3.5 |
| Fourth Quintile | 10.9 | 11.2 | 12.0 | 12.2 | 11.3 | 11.8 | 14.7 | 14.9 | 13.3 | 11.7 | 12.1 |
| Highest Quintile | 84.2 | 84.2 | 83.1 | 82.5 | 84.2 | 83.0 | 79.0 | 79.9 | 81.6 | 84.4 | 83.9 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 72.3 | 73.1 | 70.5 | 69.6 | 71.2 | 71.2 | 64.5 | 64.0 | 66.7 | 70.2 | 69.6 |
| Top 5 Percent | 61.4 | 62.6 | 59.5 | 57.3 | 60.7 | 61.3 | 49.8 | 53.8 | 52.9 | 57.4 | 56.8 |
| Top 1 Percent | 40.7 | 38.4 | 35.8 | 30.0 | 38.0 | 36.2 | 27.8 | 30.9 | 30.1 | 37.8 | 37.2 |

## Share of Social Insurance Tax Liabilities

| Lowest Quintile | 2.2 | 1.3 | 1.2 | 0.9 | 1.0 | 0.8 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second Quintile | 9.0 | 7.6 | 6.6 | 5.4 | 6.3 | 5.8 | 5.6 | 5.1 | 5.2 | 4.9 | 4.9 |
| Middle Quintile | 15.4 | 15.1 | 15.1 | 14.6 | 14.9 | 12.4 | 14.2 | 13.4 | 11.3 | 12.3 | 12.3 |
| Fourth Quintile | 22.9 | 24.7 | 24.4 | 24.0 | 23.2 | 23.3 | 22.5 | 24.6 | 22.8 | 22.7 | 22.7 |
| Highest Quintile | 50.4 | 51.2 | 52.7 | 55.2 | 54.7 | 5.7 | 56.7 | 56.0 | 59.8 | 59.5 | 59.5 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Top 10 Percent | 31.7 | 34.0 | 34.5 | 35.6 | 35.2 | 39.5 | 38.5 | 36.4 | 40.1 | 40.3 | 40.3 |
| Top 5 Percent | 19.0 | 21.5 | 22.0 | 20.8 | 23.5 | 25.5 | 23.3 | 25.8 | 25.8 | 26.3 | 26.3 |
| Top 1 Percent | 5.2 | 6.4 | 7.0 | 5.6 | 7.2 | 7.9 | 6.1 | 7.4 | 8.7 | 9.3 | 9.3 |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. An elderly childless household is one headed by a person age 65 or older and with no member under age 18.

Table G-3b. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.7 | 1.0 | 0.8 | 0.9 | 0.7 | 0.7 | 0.8 | 0.9 | 0.7 | 0.5 | 0.5 |
| Second Quintile | 6.4 | 4.3 | 3.6 | 4.2 | 4.0 | 3.9 | 3.6 | 3.7 | 3.4 | 2.6 | 2.6 |
| Middle Quintile | 10.1 | 8.5 | 8.9 | 10.6 | 9.8 | 9.4 | 10.4 | 9.7 | 9.8 | 7.5 | 7.5 |
| Fourth Quintile | 14.2 | 14.2 | 15.3 | 15.8 | 15.1 | 13.8 | 15.5 | 15.5 | 13.9 | 12.7 | 12.7 |
| Highest Quintile | 67.5 | 71.9 | 71.4 | 68.5 | 70.4 | 72.0 | 69.6 | 70.1 | 72.3 | 76.6 | 76.6 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 55.5 | 60.0 | 58.2 | 56.0 | 57.6 | 61.8 | 57.5 | 56.5 | 61.0 | 64.9 | 64.9 |
| Top 5 Percent | 45.5 | 50.7 | 48.1 | 45.9 | 48.1 | 54.3 | 47.4 | 47.6 | 50.5 | 54.9 | 54.9 |
| Top 1 Percent | 27.6 | 30.4 | 27.7 | 24.6 | 28.3 | 33.8 | 30.2 | 30.0 | 31.2 | 37.1 | 37.1 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 22.1 | 17.2 | 8.9 | 12.8 | 12.0 | 7.5 | 12.5 | 11.0 | 8.0 | 11.4 | 11.4 |
| Second Quintile | 19.6 | 19.4 | 19.8 | 22.1 | 20.5 | 18.0 | 18.5 | 18.9 | 18.1 | 18.1 | 18.1 |
| Middle Quintile | 14.7 | 14.8 | 19.0 | 19.4 | 20.1 | 20.9 | 21.0 | 20.9 | 22.1 | 18.8 | 18.8 |
| Fourth Quintile | 14.7 | 16.1 | 19.5 | 17.8 | 18.1 | 20.0 | 19.7 | 19.8 | 19.7 | 18.9 | 18.9 |
| Highest Quintile | 28.9 | 32.4 | 32.7 | 27.7 | 29.3 | 33.6 | 28.2 | 29.2 | 32.0 | 32.7 | 32.7 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 19.2 | 22.4 | 21.0 | 19.1 | 19.3 | 23.4 | 17.9 | 18.4 | 21.0 | 22.1 | 22.1 |
| Top 5 Percent | 13.0 | 16.0 | 14.3 | 13.6 | 13.6 | 17.4 | 11.2 | 12.9 | 14.1 | 14.9 | 14.9 |
| Top 1 Percent | 5.7 | 6.8 | 5.6 | 5.1 | 5.5 | 7.2 | 4.4 | 5.2 | 5.5 | 5.7 | 5.7 |

NOTES: (Continued)
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly, or indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-3c.
Number of Households, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for Elderly Childless Households, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \hline \text { Under } \\ & 1997 \\ & \text { Law } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Number of Households (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.3 | 4.7 | 3.8 | 4.2 | 4.0 | 4.2 | 4.5 | 4.3 | 4.5 | 4.5 | 4.5 |
| Second Quintile | 4.1 | 4.3 | 4.6 | 4.5 | 4.7 | 4.8 | 4.5 | 4.7 | 4.8 | 4.6 | 4.6 |
| Middle Quintile | 2.5 | 2.8 | 3.3 | 3.7 | 4.0 | 4.1 | 4.5 | 4.4 | 4.6 | 4.4 | 4.4 |
| Fourth Quintile | 2.0 | 2.4 | 2.8 | 2.9 | 3.2 | 3.3 | 3.6 | 3.5 | 3.5 | 3.7 | 3.7 |
| Highest Quintile | 2.4 | 2.8 | 3.1 | 3.1 | 3.3 | 3.3 | 3.4 | 3.2 | 3.4 | 3.8 | 3.8 |
| All Quintiles | 16.3 | 17.0 | 17.6 | 18.4 | 19.2 | 19.8 | 20.5 | 20.2 | 20.9 | 21.0 | 21.0 |
| Top 10 Percent | 1.4 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.6 | 1.9 | 2.0 | 2.0 |
| Top 5 Percent | 0.8 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 |
| Top 1 Percent | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Average Income (1997 dollars) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 9,700 | 9,300 | 8,400 | 9,100 | 9,600 | 9,700 | 9,300 | 9,100 | 9,400 | 9,500 | 9,500 |
| Second Quintile | 21,000 | 19,900 | 18,900 | 20,100 | 21,200 | 21,800 | 21,400 | 21,500 | 22,300 | 22,900 | 22,900 |
| Middle Quintile | 32,900 | 31,600 | 31,000 | 32,800 | 34,100 | 34,900 | 34,900 | 34,900 | 35,700 | 37,200 | 37,200 |
| Fourth Quintile | 46,800 | 45,600 | 45,700 | 49,100 | 50,600 | 51,800 | 51,100 | 52,300 | 53,300 | 55,300 | 55,300 |
| Highest Quintile | 107,600 | 110,800 | 108,700 | 120,000 | 130,700 | 145,200 | 126,600 | 128,800 | 137,300 | 162,400 | 162,400 |
| All Quintiles | 35,200 | 37,700 | 39,000 | 41,700 | 45,100 | 47,800 | 44,200 | 44,300 | 46,700 | 54,000 | 54,000 |
| Top 10 Percent | 138,200 | 143,700 | 143,500 | 160,300 | 178,900 | 202,700 | 172,600 | 182,300 | 186,800 | 233,300 | 233,300 |
| Top 5 Percent | 180,600 | 180,200 | 188,400 | 210,700 | 240,900 | 265,700 | 243,400 | 245,400 | 263,600 | 354,400 | 354,400 |
| Top 1 Percent | 357,800 | 326,900 | 388,500 | 521,700 | 544,900 | 667,200 | 620,200 | 633,200 | 632,000 | 949,400 | 949,400 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 9,200 | 9,000 | 8,200 | 8,700 | 9,100 | 9,400 | 8,800 | 8,600 | 9,000 | 9,000 | 9,000 |
| Second Quintile | 19,500 | 18,900 | 18,100 | 19,100 | 20,000 | 20,700 | 20,300 | 20,300 | 21,000 | 21,500 | 21,500 |
| Middle Quintile | 29,000 | 28,800 | 28,500 | 29,900 | 31,000 | 31,800 | 31,900 | 31,900 | 32,300 | 33,800 | 33,800 |
| Fourth Quintile | 38,900 | 39,000 | 40,100 | 42,800 | 43,800 | 44,800 | 44,600 | 45,300 | 45,600 | 47,400 | 47,300 |
| Highest Quintile | 75,500 | 81,500 | 84,600 | 92,800 | 98,300 | 109,700 | 97,600 | 97,200 | 100,400 | 120,500 | 121,000 |
| All Quintiles | 28,300 | 31,000 | 33,100 | 35,200 | 37,400 | 39,600 | 37,300 | 36,900 | 38,200 | 43,900 | 44,000 |
| Top 10 Percent | 93,000 | 102,300 | 108,600 | 120,900 | 130,700 | 149,400 | 129,800 | 132,900 | 132,300 | 169,200 | 170,000 |
| Top 5 Percent | 116,500 | 124,600 | 139,700 | 156,200 | 172,800 | 192,700 | 179,400 | 174,300 | 181,800 | 251,700 | 253,000 |
| Top 1 Percent | 206,500 | 214,200 | 278,200 | 377,600 | 377,700 | 473,000 | 444,100 | 429,600 | 414,900 | 661,200 | 665,800 |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. An elderly childless household is one headed by a person age 65 or older and with no member under age 18.

Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Table G-3c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under <br> 1997 <br> Law | $\begin{aligned} & \hline \text { Under } \\ & 2000 \end{aligned}$ Law |
| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 9.0 | 6.8 | 4.6 | 5.0 | 4.5 | 4.3 | 4.6 | 4.4 | 4.3 | 3.7 | 3.7 |
| Second Quintile | 14.9 | 13.3 | 12.8 | 11.7 | 11.4 | 11.1 | 10.8 | 11.3 | 11.1 | 9.3 | 9.3 |
| Middle Quintile | 14.2 | 14.0 | 15.1 | 15.7 | 15.9 | 15.3 | 17.4 | 17.2 | 16.9 | 14.4 | 14.4 |
| Fourth Quintile | 16.1 | 17.0 | 18.3 | 18.8 | 18.4 | 18.2 | 20.1 | 20.7 | 19.3 | 18.0 | 18.0 |
| Highest Quintile | 45.8 | 49.0 | 49.2 | 48.9 | 49.8 | 51.0 | 47.2 | 46.4 | 48.5 | 54.5 | 54.5 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 34.2 | 37.7 | 36.5 | 36.6 | 37.2 | 39.7 | 34.8 | 32.7 | 36.0 | 41.9 | 41.9 |
| Top 5 Percent | 25.8 | 29.4 | 28.1 | 27.8 | 29.4 | 32.1 | 25.3 | 25.2 | 26.7 | 32.2 | 32.2 |
| Top 1 Percent | 13.4 | 15.5 | 14.7 | 13.2 | 16.0 | 17.6 | 13.1 | 12.9 | 13.7 | 19.8 | 19.8 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 10.6 | 7.9 | 5.3 | 5.6 | 5.1 | 5.0 | 5.2 | 5.0 | 5.1 | 4.4 | 4.4 |
| Second Quintile | 17.3 | 15.3 | 14.4 | 13.1 | 13.0 | 12.7 | 12.1 | 12.8 | 12.7 | 10.8 | 10.8 |
| Middle Quintile | 15.6 | 15.4 | 16.4 | 16.9 | 17.4 | 16.8 | 18.9 | 18.9 | 18.7 | 16.1 | 16.0 |
| Fourth Quintile | 16.6 | 17.7 | 18.9 | 19.5 | 19.3 | 19.0 | 20.7 | 21.5 | 20.1 | 19.0 | 18.9 |
| Highest Quintile | 40.0 | 43.8 | 45.0 | 44.9 | 45.2 | 46.5 | 43.2 | 41.9 | 43.4 | 49.8 | 49.9 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 28.6 | 32.5 | 32.5 | 32.8 | 32.8 | 35.2 | 31.0 | 28.5 | 31.2 | 37.3 | 37.5 |
| Top 5 Percent | 20.7 | 24.7 | 24.6 | 24.5 | 25.5 | 28.1 | 22.1 | 21.5 | 22.5 | 28.2 | 28.3 |
| Top 1 Percent | 9.6 | 12.4 | 12.4 | 11.4 | 13.4 | 15.1 | 11.1 | 10.5 | 11.0 | 16.9 | 17.0 |
| Minimum Adjusted Income (1997 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 13,000 | 12,200 | 11,300 | 12,300 | 12,700 | 13,200 | 12,900 | 12,800 | 13,400 | 13,700 | 13,700 |
| Middle Quintile | 21,100 | 20,100 | 19,400 | 20,700 | 21,700 | 22,300 | 22,000 | 22,000 | 23,000 | 23,600 | 23,600 |
| Fourth Quintile | 29,200 | 28,300 | 28,300 | 30,000 | 31,300 | 32,200 | 31,800 | 31,900 | 33,100 | 34,400 | 34,400 |
| Highest Quintile | 41,200 | 40,600 | 41,300 | 43,800 | 46,200 | 47,200 | 46,300 | 47,800 | 48,600 | 50,800 | 50,800 |
| Top 10 Percent | 53,000 | 52,800 | 53,700 | 58,200 | 60,700 | 62,400 | 61,800 | 63,500 | 65,500 | 69,900 | 69,900 |
| Top 5 Percent | 67,200 | 67,200 | 69,200 | 76,100 | 78,500 | 81,600 | 80,500 | 81,900 | 86,800 | 93,300 | 93,300 |
| Top 1 Percent | 130,800 | 126,500 | 133,800 | 154,900 | 162,600 | 181,000 | 173,700 | 182,000 | 199,000 | 245,700 | 245,700 |

NOTES: (Continued)
Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-4a.
Effective Federal Tax Rates for Nonelderly Childless Households, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by adjusted comprehensive household income.
A household consists of the people who share a housing unit, regardless of the relationships among them. A nonelderly childless household is one headed by a person under age 65 and with no member under age 18.

Table G-4a. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.5 | 0.9 | 0.8 | 0.7 | 0.8 | 0.9 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 |
| Second Quintile | 1.3 | 0.9 | 0.7 | 0.6 | 0.8 | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 | 0.7 |
| Middle Quintile | 1.1 | 0.8 | 0.8 | 0.7 | 0.9 | 0.7 | 0.7 | 0.9 | 0.7 | 0.7 | 0.7 |
| Fourth Quintile | 1.2 | 0.9 | 0.8 | 0.8 | 1.0 | 1.0 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 |
| Highest Quintile | 4.2 | 2.7 | 2.0 | 2.2 | 2.6 | 2.5 | 2.3 | 3.0 | 3.0 | 3.2 | 3.2 |
| All Quintiles | 3.0 | 1.9 | 1.5 | 1.6 | 1.9 | 1.8 | 1.7 | 2.1 | 2.1 | 2.2 | 2.2 |
| Top 10 Percent | 5.5 | 3.4 | 2.5 | 2.7 | 3.3 | 3.1 | 3.0 | 3.8 | 3.8 | 4.0 | 4.0 |
| Top 5 Percent | 7.4 | 4.4 | 3.3 | 3.5 | 4.3 | 3.9 | 3.8 | 4.9 | 5.0 | 5.0 | 5.0 |
| Top 1 Percent | 11.8 | 6.8 | 5.2 | 5.3 | 6.8 | 6.1 | 5.8 | 7.4 | 7.5 | 6.5 | 6.5 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.7 | 2.1 | 2.6 | 3.2 | 3.7 | 2.5 | 2.9 | 3.0 | 3.8 | 3.5 | 3.5 |
| Second Quintile | 1.6 | 1.3 | 1.4 | 1.6 | 1.6 | 1.5 | 1.6 | 1.7 | 2.0 | 1.8 | 1.8 |
| Middle Quintile | 1.3 | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.4 | 1.1 | 1.1 |
| Fourth Quintile | 1.0 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.1 | 0.9 | 0.9 |
| Highest Quintile | 0.8 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 |
| All Quintiles | 1.0 | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 0.9 | 1.0 | 0.8 | 0.8 |
| Top 10 Percent | 0.7 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| Top 5 Percent | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.3 | 0.3 |
| Top 1 Percent | 0.6 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 |

NOTES: (Continued)
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-4b.
Shares of Federal Tax Liabilities for Nonelderly Childless Households, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Total Federal Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.4 | 1.3 | 1.3 | 1.6 | 1.7 | 1.6 | 1.5 | 1.4 | 1.7 | 1.4 | 1.4 |
| Second Quintile | 4.5 | 4.4 | 4.4 | 5.0 | 5.1 | 5.1 | 5.0 | 4.6 | 4.6 | 4.5 | 4.5 |
| Middle Quintile | 8.7 | 9.1 | 9.7 | 10.2 | 9.5 | 9.6 | 9.8 | 9.5 | 9.4 | 8.8 | 8.7 |
| Fourth Quintile | 18.7 | 19.3 | 19.7 | 19.4 | 19.5 | 18.4 | 18.9 | 18.7 | 18.6 | 17.3 | 17.3 |
| Highest Quintile | 66.7 | 65.7 | 64.8 | 63.7 | 64.2 | 65.3 | 64.8 | 65.7 | 65.6 | 67.9 | 68.0 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 47.6 | 46.6 | 46.0 | 44.8 | 46.0 | 46.8 | 46.7 | 48.3 | 48.2 | 51.3 | 51.3 |
| Top 5 Percent | 33.3 | 31.4 | 30.3 | 30.8 | 31.5 | 32.6 | 33.6 | 35.3 | 34.2 | 38.8 | 38.7 |
| Top 1 Percent | 16.2 | 13.2 | 13.2 | 14.3 | 13.9 | 14.7 | 15.9 | 17.3 | 16.0 | 21.0 | 20.8 |
| Share of Individual Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.1 | 0 | -0.1 | -0.1 |
| Second Quintile | 2.7 | 2.7 | 2.6 | 3.0 | 3.0 | 3.0 | 2.9 | 2.4 | 2.4 | 2.2 | 2.1 |
| Middle Quintile | 6.9 | 7.2 | 7.5 | 7.9 | 7.2 | 7.2 | 7.3 | 7.0 | 6.9 | 6.2 | 6.1 |
| Fourth Quintile | 17.1 | 17.5 | 17.4 | 17.1 | 16.7 | 15.6 | 16.2 | 15.8 | 15.6 | 13.9 | 13.8 |
| Highest Quintile | 73.1 | 72.3 | 72.2 | 71.5 | 72.8 | 74.0 | 73.3 | 74.7 | 75.0 | 77.8 | 78.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 54.0 | 53.4 | 54.1 | 53.4 | 55.4 | 56.6 | 56.1 | 58.5 | 58.6 | 62.8 | 63.0 |
| Top 5 Percent | 38.6 | 37.4 | 37.9 | 39.0 | 40.1 | 42.2 | 42.8 | 45.4 | 44.3 | 50.4 | 50.4 |
| Top 1 Percent | 18.6 | 16.5 | 17.8 | 19.8 | 18.9 | 20.7 | 22.6 | 24.8 | 23.1 | 30.1 | 29.9 |
| Share of Social Insurance Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.6 | 2.5 | 2.1 | 2.3 | 2.5 | 2.6 | 2.5 | 2.4 | 2.9 | 2.7 | 2.7 |
| Second Quintile | 7.4 | 7.0 | 6.5 | 7.4 | 7.5 | 7.6 | 7.3 | 7.0 | 6.8 | 7.4 | 7.4 |
| Middle Quintile | 13.0 | 13.0 | 13.2 | 13.7 | 12.8 | 13.3 | 13.1 | 13.0 | 12.9 | 13.0 | 13.0 |
| Fourth Quintile | 25.1 | 24.8 | 24.4 | 23.9 | 24.8 | 23.3 | 23.6 | 24.2 | 23.9 | 24.1 | 24.1 |
| Highest Quintile | 51.8 | 52.6 | 53.7 | 52.5 | 52.3 | 53.2 | 53.5 | 53.3 | 53.4 | 52.8 | 52.8 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 29.1 | 31.0 | 32.2 | 30.8 | 31.1 | 31.5 | 32.6 | 32.3 | 32.9 | 31.7 | 31.7 |
| Top 5 Percent | 14.2 | 15.7 | 15.9 | 16.0 | 16.2 | 16.2 | 18.4 | 18.0 | 17.9 | 17.9 | 17.9 |
| Top 1 Percent | 2.6 | 2.6 | 2.6 | 2.9 | 2.7 | 2.5 | 3.6 | 3.3 | 3.8 | 4.3 | 4.3 |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. A nonelderly childless household is one headed by a person under age 65 and with no member under age 18.

Table G-4b. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.5 | 1.3 | 1.2 | 1.2 | 1.1 | 1.3 | 1.1 | 1.0 | 1.0 | 0.8 | 0.8 |
| Second Quintile | 2.9 | 3.0 | 2.9 | 2.4 | 2.9 | 2.8 | 2.3 | 2.4 | 2.5 | 2.0 | 2.0 |
| Middle Quintile | 4.1 | 4.7 | 5.7 | 4.9 | 5.3 | 4.4 | 4.9 | 4.7 | 4.1 | 3.6 | 3.6 |
| Fourth Quintile | 8.5 | 9.3 | 10.7 | 10.1 | 10.6 | 10.4 | 9.9 | 8.6 | 8.6 | 7.6 | 7.6 |
| Highest Quintile | 82.7 | 81.6 | 79.1 | 81.3 | 80.2 | 80.9 | 81.6 | 83.0 | 83.7 | 85.8 | 85.8 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 72.4 | 70.9 | 68.6 | 71.1 | 69.5 | 70.5 | 72.7 | 75.5 | 74.5 | 78.0 | 78.0 |
| Top 5 Percent | 63.3 | 60.1 | 58.8 | 62.5 | 59.3 | 61.2 | 65.0 | 67.2 | 65.0 | 69.2 | 69.2 |
| Top 1 Percent | 43.2 | 37.3 | 39.5 | 43.2 | 40.5 | 41.2 | 44.8 | 45.3 | 39.9 | 45.0 | 45.0 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 8.0 | 7.6 | 7.6 | 9.9 | 12.0 | 8.5 | 9.0 | 8.8 | 11.9 | 12.1 | 12.1 |
| Second Quintile | 10.7 | 10.8 | 10.6 | 12.4 | 12.9 | 12.3 | 12.1 | 12.6 | 13.0 | 14.2 | 14.2 |
| Middle Quintile | 13.7 | 14.4 | 13.8 | 15.3 | 14.1 | 14.8 | 15.4 | 15.9 | 15.4 | 14.7 | 14.7 |
| Fourth Quintile | 20.8 | 20.8 | 20.3 | 20.4 | 21.7 | 21.5 | 22.1 | 21.3 | 21.7 | 21.0 | 21.0 |
| Highest Quintile | 46.0 | 45.1 | 46.6 | 39.6 | 37.6 | 41.4 | 40.2 | 39.9 | 36.4 | 36.8 | 36.8 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 28.3 | 28.5 | 28.4 | 24.1 | 22.7 | 24.6 | 24.5 | 24.9 | 21.8 | 21.9 | 21.9 |
| Top 5 Percent | 17.1 | 17.1 | 17.3 | 14.3 | 12.5 | 14.1 | 15.0 | 15.7 | 12.2 | 12.6 | 12.6 |
| Top 1 Percent | 6.2 | 5.6 | 6.3 | 4.4 | 3.3 | 4.0 | 4.7 | 5.6 | 3.2 | 3.7 | 3.7 |

NOTES: (Continued)
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table G-4c.
Number of Households, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for Nonelderly Childless Households, by Income Quintile, Using Comprehensive Household Income Adjusted for Household Size, 1979-1997

|  | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Under } \\ 1997 \end{gathered}$ | Under $2000$ |
|  |  |  |  |  |  |  |  |  |  | Law | Law |


| Number of Households (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 5.6 | 6.0 | 6.0 | 6.4 | 7.2 | 7.2 | 7.3 | 7.7 | 8.8 | 9.2 | 9.2 |
| Second Quintile | 5.0 | 5.3 | 5.6 | 6.1 | 6.5 | 6.9 | 6.8 | 6.9 | 6.8 | 7.6 | 7.6 |
| Middle Quintile | 5.4 | 5.8 | 6.3 | 6.7 | 6.5 | 7.1 | 7.3 | 7.5 | 7.4 | 7.8 | 7.8 |
| Fourth Quintile | 6.9 | 7.3 | 7.4 | 7.8 | 8.2 | 8.1 | 8.6 | 8.7 | 8.7 | 9.1 | 9.1 |
| Highest Quintile | 9.6 | 10.0 | 10.2 | 10.2 | 10.3 | 11.1 | 10.9 | 10.5 | 10.8 | 11.0 | 11.0 |
| All Quintiles | 32.7 | 34.7 | 35.9 | 37.5 | 38.9 | 40.6 | 41.3 | 41.6 | 42.7 | 45.0 | 45.0 |
| Top 10 Percent | 4.9 | 5.3 | 5.5 | 5.3 | 5.3 | 5.7 | 5.7 | 5.5 | 5.6 | 5.6 | 5.6 |
| Top 5 Percent | 2.4 | 2.6 | 2.6 | 2.6 | 2.6 | 2.7 | 2.9 | 2.8 | 2.7 | 2.7 | 2.7 |
| Top 1 Percent | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 |

## Average Income (1997 dollars)

Pretax Income

| Lowest Quintile | 8,300 | 7,800 | 6,900 | 7,800 | 7,900 | 8,300 | 8,000 | 7,800 | 8,200 | 8,100 | 8,100 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second Quintile | 21,200 | 20,200 | 19,200 | 20,500 | 21,400 | 21,900 | 21,500 | 21,200 | 22,300 | 22,800 | 22,800 |
| Middle Quintile | 32,200 | 31,400 | 30,900 | 33,100 | 34,200 | 35,200 | 34,500 | 34,200 | 35,700 | 36,800 | 36,800 |
| Fourth Quintile | 47,500 | 46,400 | 47,200 | 49,200 | 51,800 | 53,200 | 51,900 | 52,600 | 54,300 | 56,500 | 56,500 |
| Highest Quintile | 96,600 | 96,200 | 100,200 | 111,100 | 114,700 | 120,500 | 119,700 | 123,600 | 123,000 | 144,000 | 144,000 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| All Quintiles | 48,200 | 46,900 | 47,600 | 50,600 | 51,700 | 54,400 | 53,400 | 53,200 | 53,300 | 58,600 | 58,600 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Top 10 Percent | 126,700 | 123,600 | 129,700 | 149,200 | 152,100 | 162,800 | 161,600 | 167,100 | 164,700 | 204,500 | 204,500 |
| Top 5 Percent | 171,700 | 164,200 | 178,000 | 207,800 | 210,400 | 229,200 | 223,000 | 232,100 | 231,000 | 299,700 | 299,700 |
| Top 1 Percent | 373,900 | 374,400 | 447,100 | 522,900 | 544,200 | 623,500 | 568,700 | 615,200 | 613,600 | 929,900 | 929,900 |


| Lowest Quintile | 7,400 | 6,800 | 6,100 | 6,800 | 6,800 | 7,200 | 6,900 | 6,800 | 7,100 | 7,100 | 7,100 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second Quintile | 17,700 | 16,800 | 16,200 | 17,000 | 17,700 | 18,000 | 17,700 | 17,600 | 18,400 | 18,800 | 18,900 |
| Middle Quintile | 25,900 | 24,900 | 25,100 | 26,500 | 27,400 | 28,100 | 27,600 | 27,500 | 28,500 | 29,400 | 29,500 |
| Fourth Quintile | 36,900 | 35,600 | 37,100 | 38,500 | 40,600 | 41,400 | 40,400 | 41,000 | 42,200 | 44,000 | 44,100 |
| Highest Quintile | 69,500 | 69,400 | 76,000 | 84,300 | 85,300 | 89,600 | 88,800 | 90,000 | 88,500 | 103,700 | 104,000 |
| All Quintiles | 36,300 | 35,100 | 37,000 | 39,200 | 39,700 | 41,600 | 40,800 | 40,200 | 40,000 | 44,000 | 44,100 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Top 10 Percent | 89,000 | 88,000 | 97,700 | 112,700 | 111,600 | 120,000 | 118,500 | 119,600 | 115,800 | 144,200 | 144,800 |
| Top 5 Percent | 117,000 | 115,500 | 133,500 | 156,700 | 152,800 | 167,200 | 161,900 | 162,900 | 158,300 | 207,100 | 208,200 |
| Top 1 Percent | 237,800 | 258,500 | 333,400 | 392,300 | 389,800 | 447,800 | 404,000 | 413,100 | 391,000 | 614,200 | 620,100 |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. A nonelderly childless household is one headed by a person under age 65 and with no member under age 18.

Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Table G-4c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 3.0 | 2.9 | 2.5 | 2.6 | 2.8 | 2.7 | 2.7 | 2.7 | 3.2 | 2.8 | 2.8 |
| Second Quintile | 6.8 | 6.6 | 6.3 | 6.6 | 6.9 | 6.8 | 6.6 | 6.6 | 6.6 | 6.5 | 6.5 |
| Middle Quintile | 11.0 | 11.2 | 11.5 | 11.6 | 11.1 | 11.3 | 11.5 | 11.7 | 11.6 | 10.9 | 10.9 |
| Fourth Quintile | 20.7 | 20.8 | 20.6 | 20.1 | 21.1 | 19.6 | 20.2 | 20.7 | 20.8 | 19.5 | 19.5 |
| Highest Quintile | 58.9 | 59.2 | 59.6 | 59.7 | 58.5 | 60.3 | 59.3 | 58.8 | 58.2 | 60.4 | 60.4 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 39.5 | 40.6 | 41.4 | 41.4 | 40.4 | 42.1 | 41.4 | 41.4 | 40.5 | 43.3 | 43.3 |
| Top 5 Percent | 25.9 | 26.6 | 27.0 | 28.3 | 26.9 | 28.5 | 29.0 | 28.8 | 27.1 | 31.2 | 31.2 |
| Top 1 Percent | 11.0 | 10.7 | 11.5 | 13.0 | 11.4 | 12.3 | 13.0 | 12.8 | 11.0 | 15.4 | 15.4 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 3.5 | 3.4 | 2.8 | 3.0 | 3.2 | 3.1 | 3.0 | 3.1 | 3.6 | 3.3 | 3.3 |
| Second Quintile | 7.5 | 7.3 | 6.8 | 7.1 | 7.5 | 7.3 | 7.2 | 7.2 | 7.3 | 7.2 | 7.2 |
| Middle Quintile | 11.7 | 11.9 | 12.0 | 12.1 | 11.6 | 11.8 | 12.0 | 12.4 | 12.4 | 11.6 | 11.6 |
| Fourth Quintile | 21.4 | 21.3 | 20.8 | 20.3 | 21.5 | 20.0 | 20.6 | 21.3 | 21.5 | 20.3 | 20.3 |
| Highest Quintile | 56.3 | 57.0 | 58.2 | 58.5 | 56.8 | 58.7 | 57.6 | 56.6 | 55.8 | 57.9 | 57.9 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 36.9 | 38.6 | 40.1 | 40.5 | 38.6 | 40.6 | 39.7 | 39.1 | 37.9 | 40.7 | 40.7 |
| Top 5 Percent | 23.4 | 25.0 | 26.1 | 27.6 | 25.4 | 27.2 | 27.5 | 26.8 | 24.8 | 28.7 | 28.8 |
| Top 1 Percent | 9.3 | 9.8 | 11.1 | 12.6 | 10.7 | 11.6 | 12.1 | 11.4 | 9.3 | 13.6 | 13.6 |
| Minimum Adjusted Income (1997 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 13,000 | 12,200 | 11,300 | 12,300 | 12,700 | 13,200 | 12,900 | 12,800 | 13,400 | 13,700 | 13,700 |
| Middle Quintile | 21,100 | 20,100 | 19,400 | 20,700 | 21,700 | 22,300 | 22,000 | 22,000 | 23,000 | 23,600 | 23,600 |
| Fourth Quintile | 29,200 | 28,300 | 28,300 | 30,000 | 31,300 | 32,200 | 31,800 | 31,900 | 33,100 | 34,400 | 34,400 |
| Highest Quintile | 41,200 | 40,600 | 41,300 | 43,800 | 46,200 | 47,200 | 46,300 | 47,800 | 48,600 | 50,800 | 50,800 |
| Top 10 Percent | 53,000 | 52,800 | 53,700 | 58,200 | 60,700 | 62,400 | 61,800 | 63,500 | 65,500 | 69,900 | 69,900 |
| Top 5 Percent | 67,200 | 67,200 | 69,200 | 76,100 | 78,500 | 81,600 | 80,500 | 81,900 | 86,800 | 93,300 | 93,300 |
| Top 1 Percent | 130,800 | 126,500 | 133,800 | 154,900 | 162,600 | 181,000 | 173,700 | 182,000 | 199,000 | 245,700 | 245,700 |

NOTES: (Continued)
Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted for household size-that is, divided by the square root of the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Appendix H
Distributional Estimates Using Household Cash Income, by Dollar Income Category, 1979-1997

Table H-1a.
Effective Federal Tax Rates for All Households, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997 (In percent)

| Income Category | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 | Under 2000 |
| Total Effective Federal Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 8.2 | 7.3 | 7.1 | 8.3 | 8.6 | 7.9 | 8.1 | 8.0 | 6.9 | 7.2 | 7.1 |
| \$10,000 to \$20,000 | 11.2 | 11.3 | 11.2 | 12.6 | 12.0 | 11.6 | 11.5 | 11.4 | 10.1 | 9.7 | 9.6 |
| \$20,000 to \$30,000 | 16.2 | 16.9 | 15.9 | 16.8 | 16.0 | 16.1 | 16.1 | 16.1 | 16.1 | 15.6 | 15.0 |
| \$30,000 to \$40,000 | 19.3 | 19.8 | 18.3 | 18.8 | 18.6 | 18.5 | 18.5 | 18.7 | 19.0 | 18.7 | 17.9 |
| \$40,000 to \$50,000 | 21.2 | 21.9 | 20.1 | 20.2 | 20.2 | 20.7 | 20.5 | 20.9 | 21.4 | 20.8 | 20.0 |
| \$50,000 to \$75,000 | 23.0 | 24.0 | 21.9 | 22.2 | 21.9 | 22.3 | 22.4 | 22.8 | 23.4 | 22.9 | 22.1 |
| \$75,000 to \$100,000 | 24.3 | 25.7 | 23.1 | 23.4 | 23.8 | 24.0 | 24.1 | 24.7 | 25.5 | 24.6 | 24.0 |
| \$100,000 to \$150,000 | 26.2 | 27.2 | 24.0 | 24.1 | 25.1 | 25.0 | 25.3 | 26.1 | 26.9 | 26.0 | 25.7 |
| \$150,000 to \$200,000 | 29.8 | 28.5 | 24.3 | 24.3 | 26.6 | 26.0 | 26.6 | 27.3 | 28.7 | 27.8 | 27.6 |
| \$200,000 and Over | 36.2 | 31.4 | 26.7 | 25.8 | 29.5 | 28.3 | 28.6 | 32.5 | 35.1 | 32.4 | 31.9 |
| All Categories | 23.4 | 23.5 | 21.2 | 21.8 | 22.6 | 22.8 | 22.6 | 23.8 | 24.9 | 24.6 | 24.1 |
| Effective Individual Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | -0.5 | -0.3 | -0.4 | -0.4 | -0.9 | -1.0 | -1.3 | -1.9 | -3.9 | -4.3 | -4.3 |
| \$10,000 to \$20,000 | 1.3 | 2.2 | 2.0 | 2.1 | 1.1 | 1.0 | 0.4 | 0 | -1.7 | -2.1 | -2.2 |
| \$20,000 to \$30,000 | 4.9 | 6.1 | 5.1 | 5.2 | 4.2 | 4.2 | 4.1 | 3.5 | 3.1 | 2.8 | 2.2 |
| \$30,000 to \$40,000 | 7.4 | 8.5 | 7.2 | 7.0 | 6.2 | 6.3 | 6.2 | 5.8 | 5.6 | 5.6 | 4.8 |
| \$40,000 to \$50,000 | 9.2 | 10.3 | 8.7 | 8.3 | 7.7 | 7.9 | 7.7 | 7.4 | 7.5 | 7.3 | 6.5 |
| \$50,000 to \$75,000 | 11.1 | 12.3 | 10.3 | 9.8 | 9.1 | 9.3 | 9.3 | 8.9 | 9.0 | 9.0 | 8.2 |
| \$75,000 to \$100,000 | 13.1 | 14.6 | 12.0 | 11.6 | 11.3 | 11.2 | 11.1 | 10.9 | 11.2 | 10.8 | 10.2 |
| \$100,000 to \$150,000 | 15.0 | 16.6 | 13.8 | 13.2 | 13.2 | 13.0 | 12.8 | 12.6 | 13.0 | 12.8 | 12.5 |
| \$150,000 to \$200,000 | 17.6 | 18.7 | 15.2 | 14.5 | 15.5 | 15.2 | 15.1 | 14.9 | 15.3 | 14.9 | 14.7 |
| \$200,000 and Over | 22.4 | 21.8 | 19.0 | 18.0 | 20.3 | 19.1 | 19.1 | 21.4 | 22.2 | 21.7 | 21.2 |
| All Categories | 11.6 | 12.6 | 10.7 | 10.7 | 10.8 | 10.9 | 10.5 | 10.8 | 11.3 | 11.9 | 11.3 |
| Effective Social Insurance Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 3.5 | 4.0 | 4.1 | 4.3 | 4.5 | 5.5 | 4.9 | 5.1 | 5.6 | 5.9 | 5.9 |
| \$10,000 to \$20,000 | 6.0 | 6.5 | 6.6 | 7.2 | 7.3 | 7.6 | 7.9 | 7.7 | 7.7 | 7.8 | 7.8 |
| \$20,000 to \$30,000 | 7.6 | 8.3 | 8.4 | 8.8 | 8.7 | 8.9 | 9.2 | 9.4 | 9.4 | 9.5 | 9.5 |
| \$30,000 to \$40,000 | 8.5 | 9.1 | 8.8 | 9.5 | 9.6 | 9.5 | 9.7 | 10.0 | 10.1 | 10.1 | 10.1 |
| \$40,000 to \$50,000 | 9.0 | 9.4 | 9.3 | 9.7 | 9.9 | 10.4 | 10.4 | 10.9 | 11.1 | 10.7 | 10.7 |
| \$50,000 to \$75,000 | 8.8 | 9.5 | 9.5 | 10.3 | 10.4 | 10.8 | 10.9 | 11.4 | 11.7 | 11.4 | 11.4 |
| \$75,000 to \$100,000 | 8.0 | 8.6 | 9.1 | 9.8 | 10.0 | 10.6 | 10.8 | 11.5 | 11.4 | 11.3 | 11.3 |
| \$100,000 to \$150,000 | 6.4 | 7.1 | 7.5 | 8.2 | 8.9 | 9.3 | 10.1 | 10.4 | 10.5 | 10.0 | 10.0 |
| \$150,000 to \$200,000 | 4.4 | 4.9 | 5.5 | 6.5 | 6.9 | 7.1 | 8.0 | 8.3 | 8.5 | 8.7 | 8.7 |
| \$200,000 and Over | 1.7 | 1.8 | 2.0 | 2.2 | 2.5 | 2.4 | 3.4 | 3.3 | 3.9 | 3.4 | 3.4 |
| All Categories | 7.2 | 7.8 | 7.8 | 8.2 | 8.4 | 8.5 | 9.0 | 9.2 | 9.3 | 8.7 | 8.7 |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by household cash income plus taxes paid by businesses.
A household consists of the people who share a housing unit, regardless of the relationships among them.

Table H-1a. Continued

| Income Category | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Under } \\ & 1997 \\ & \text { Law } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 1.4 | 0.8 | 0.7 | 0.6 | 0.6 | 0.8 | 0.6 | 0.7 | 0.6 | 0.5 | 0.5 |
| \$10,000 to \$20,000 | 2.0 | 1.1 | 0.9 | 1.0 | 1.2 | 1.1 | 1.0 | 1.3 | 1.3 | 1.2 | 1.2 |
| \$20,000 to \$30,000 | 2.3 | 1.4 | 1.2 | 1.2 | 1.6 | 1.5 | 1.3 | 1.5 | 1.7 | 1.5 | 1.5 |
| \$30,000 to \$40,000 | 2.1 | 1.3 | 1.3 | 1.2 | 1.6 | 1.5 | 1.4 | 1.5 | 1.7 | 1.7 | 1.7 |
| \$40,000 to \$50,000 | 1.9 | 1.4 | 1.2 | 1.3 | 1.6 | 1.4 | 1.3 | 1.5 | 1.5 | 1.6 | 1.6 |
| \$50,000 to \$75,000 | 2.1 | 1.4 | 1.2 | 1.2 | 1.7 | 1.4 | 1.3 | 1.5 | 1.5 | 1.5 | 1.5 |
| \$75,000 to \$100,000 | 2.4 | 1.8 | 1.3 | 1.3 | 1.8 | 1.5 | 1.4 | 1.6 | 1.9 | 1.7 | 1.7 |
| \$100,000 to \$150,000 | 4.0 | 2.9 | 2.1 | 2.0 | 2.3 | 2.1 | 1.8 | 2.3 | 2.5 | 2.5 | 2.5 |
| \$150,000 to \$200,000 | 7.1 | 4.5 | 3.0 | 2.7 | 3.6 | 3.1 | 2.9 | 3.4 | 4.3 | 3.6 | 3.6 |
| \$200,000 and over | 11.7 | 7.4 | 5.3 | 5.2 | 6.4 | 6.4 | 5.8 | 7.4 | 8.6 | 6.9 | 6.9 |
| All Categories | 3.6 | 2.3 | 1.9 | 2.0 | 2.5 | 2.5 | 2.1 | 2.7 | 3.2 | 3.1 | 3.1 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 3.7 | 2.8 | 2.7 | 3.9 | 4.4 | 2.6 | 3.9 | 4.0 | 4.5 | 5.0 | 5.0 |
| \$10,000 to \$20,000 | 2.0 | 1.5 | 1.7 | 2.3 | 2.3 | 1.9 | 2.2 | 2.4 | 2.8 | 2.8 | 2.8 |
| \$20,000 to \$30,000 | 1.5 | 1.1 | 1.2 | 1.6 | 1.5 | 1.5 | 1.5 | 1.7 | 2.0 | 1.7 | 1.7 |
| \$30,000 to \$40,000 | 1.2 | 0.9 | 1.0 | 1.2 | 1.2 | 1.2 | 1.3 | 1.4 | 1.6 | 1.4 | 1.4 |
| \$40,000 to \$50,000 | 1.1 | 0.8 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 | 1.2 | 1.3 | 1.2 | 1.2 |
| \$50,000 to \$75,000 | 1.0 | 0.7 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.1 | 1.0 | 1.0 |
| \$75,000 to \$100,000 | 0.8 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | 0.8 | 0.8 |
| \$100,000 to \$150,000 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 |
| \$150,000 to \$200,000 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.7 | 0.6 | 0.6 |
| \$200,000 and over | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 |
| All Categories | 1.0 | 0.8 | 0.9 | 1.0 | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 | 0.9 | 0.9 |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-1b.
Shares of Federal Tax Liabilities for All Households, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them.

Table H-1b. Continued

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-1c.
Number of Households, Average Pretax and After-Tax Income, and Shares of Pretax and After-Tax Income for All Households, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997

|  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them.

Table H-1c. Continued

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-2a.
Effective Federal Tax Rates for Households with Children, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997 (In percent)

| Income Category | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | Under 2000 <br> Law |
| Total Effective Federal Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 6.5 | 6.2 | 6.3 | 7.2 | 4.4 | 6.0 | 4.7 | 4.1 | -2.0 | -2.7 | -2.9 |
| \$10,000 to \$20,000 | 8.0 | 10.0 | 10.6 | 11.9 | 9.4 | 8.2 | 6.4 | 6.6 | 1.6 | 0.6 | 0.2 |
| \$20,000 to \$30,000 | 14.6 | 16.3 | 15.7 | 16.7 | 15.7 | 14.9 | 14.5 | 14.2 | 12.8 | 12.2 | 10.4 |
| \$30,000 to \$40,000 | 17.8 | 19.3 | 18.4 | 18.9 | 18.5 | 18.4 | 18.5 | 18.3 | 18.3 | 17.7 | 15.6 |
| \$40,000 to \$50,000 | 19.8 | 21.2 | 20.0 | 20.2 | 19.6 | 20.1 | 20.2 | 20.5 | 20.6 | 20.0 | 18.1 |
| \$50,000 to \$75,000 | 21.7 | 23.2 | 21.7 | 22.0 | 21.2 | 21.7 | 22.0 | 22.2 | 22.6 | 22.0 | 20.6 |
| \$75,000 to \$100,000 | 23.0 | 24.7 | 22.6 | 22.8 | 23.0 | 23.2 | 23.5 | 24.2 | 24.5 | 23.7 | 22.6 |
| \$100,000 to \$150,000 | 24.4 | 25.9 | 23.3 | 23.2 | 23.9 | 24.1 | 24.7 | 25.6 | 26.0 | 25.3 | 24.8 |
| \$150,000 to \$200,000 | 27.2 | 26.5 | 23.2 | 24.2 | 25.2 | 24.8 | 25.7 | 26.4 | 28.2 | 27.2 | 27.0 |
| \$200,000 and Over | 33.3 | 29.7 | 26.9 | 25.6 | 30.0 | 27.7 | 28.6 | 32.6 | 35.3 | 32.9 | 32.3 |
| All Categories | 22.2 | 22.8 | 21.3 | 21.8 | 22.4 | 22.3 | 22.3 | 23.7 | 24.8 | 24.3 | 23.3 |
| Effective Individual Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | -2.7 | -2.7 | -2.7 | -2.9 | -4.2 | -4.9 | -5.4 | -6.4 | -13.5 | -15.6 | -15.7 |
| \$10,000 to \$20,000 | -2.4 | -0.4 | -0.4 | -0.3 | -2.9 | -4.5 | -6.3 | -6.3 | -11.7 | -12.7 | -13.1 |
| \$20,000 to \$30,000 | 3.0 | 4.5 | 3.6 | 3.7 | 2.3 | 1.6 | 1.0 | 0.2 | -1.7 | -2.0 | -3.7 |
| \$30,000 to \$40,000 | 6.0 | 7.3 | 6.3 | 5.9 | 4.9 | 5.0 | 4.7 | 4.2 | 3.7 | 3.3 | 1.2 |
| \$40,000 to \$50,000 | 8.1 | 9.3 | 7.9 | 7.3 | 6.3 | 6.6 | 6.4 | 6.0 | 5.9 | 5.6 | 3.7 |
| \$50,000 to \$75,000 | 10.4 | 11.5 | 9.8 | 9.2 | 7.9 | 8.2 | 8.0 | 7.7 | 7.7 | 7.5 | 6.1 |
| \$75,000 to \$100,000 | 12.4 | 13.9 | 11.4 | 10.9 | 10.5 | 10.2 | 10.1 | 10.0 | 10.0 | 9.5 | 8.5 |
| \$100,000 to \$150,000 | 14.3 | 15.6 | 13.2 | 12.3 | 12.2 | 12.1 | 12.0 | 12.1 | 12.1 | 11.8 | 11.3 |
| \$150,000 to \$200,000 | 16.4 | 17.4 | 14.5 | 14.5 | 15.0 | 14.6 | 14.4 | 14.4 | 15.2 | 14.5 | 14.3 |
| \$200,000 and Over | 22.1 | 21.8 | 20.1 | 18.8 | 22.7 | 20.1 | 20.3 | 22.7 | 23.0 | 23.1 | 22.6 |
| All Categories | 11.0 | 11.7 | 10.3 | 10.2 | 10.4 | 10.1 | 9.7 | 10.4 | 10.8 | 11.3 | 10.3 |
| Effective Social Insurance Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 5.8 | 6.3 | 5.9 | 6.1 | 5.4 | 7.9 | 6.5 | 6.5 | 7.4 | 8.8 | 8.8 |
| \$10,000 to \$20,000 | 8.0 | 8.7 | 9.0 | 9.9 | 9.9 | 10.5 | 10.5 | 10.2 | 10.3 | 10.5 | 10.5 |
| \$20,000 to \$30,000 | 9.5 | 10.3 | 10.6 | 11.2 | 11.6 | 11.6 | 11.7 | 12.0 | 12.3 | 12.1 | 12.1 |
| \$30,000 to \$40,000 | 9.9 | 10.7 | 10.7 | 11.5 | 11.9 | 11.9 | 12.2 | 12.5 | 12.6 | 12.6 | 12.6 |
| \$40,000 to \$50,000 | 10.0 | 10.7 | 11.0 | 11.5 | 11.8 | 12.1 | 12.3 | 13.0 | 13.0 | 12.8 | 12.8 |
| \$50,000 to \$75,000 | 9.5 | 10.5 | 10.7 | 11.5 | 11.9 | 12.1 | 12.5 | 13.1 | 13.2 | 13.0 | 13.0 |
| \$75,000 to \$100,000 | 8.4 | 9.3 | 9.9 | 10.6 | 11.1 | 11.6 | 12.0 | 12.6 | 12.7 | 12.6 | 12.6 |
| \$100,000 to \$150,000 | 6.8 | 8.0 | 8.4 | 9.1 | 9.6 | 10.2 | 10.9 | 11.4 | 11.7 | 11.4 | 11.4 |
| \$150,000 to \$200,000 | 5.0 | 5.6 | 6.3 | 7.3 | 7.5 | 7.6 | 8.9 | 9.0 | 9.5 | 9.8 | 9.8 |
| \$200,000 and Over | 1.9 | 2.2 | 2.5 | 2.5 | 2.9 | 2.7 | 4.3 | 3.7 | 4.2 | 4.0 | 4.0 |
| All Categories | 8.1 | 9.1 | 9.2 | 9.6 | 9.9 | 10.0 | 10.7 | 10.7 | 10.6 | 10.2 | 10.2 |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by household cash income plus taxes paid by businesses.
A household consists of the people who share a housing unit, regardless of the relationships among them. A household with children has at least one member under age 18.

Table H-2a. Continued

| Income Category | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | Under 2000 <br> Law |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 0.8 | 0.6 | 0.6 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 |
| \$10,000 to \$20,000 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.4 | 0.2 | 0.2 |
| \$20,000 to \$30,000 | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 |
| \$30,000 to \$40,000 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 |
| \$40,000 to \$50,000 | 0.7 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 |
| \$50,000 to \$75,000 | 0.9 | 0.6 | 0.4 | 0.4 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 |
| \$75,000 to \$100,000 | 1.4 | 0.9 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 | 0.8 |
| \$100,000 to \$150,000 | 2.6 | 1.8 | 1.1 | 1.1 | 1.4 | 1.2 | 1.1 | 1.4 | 1.4 | 1.4 | 1.4 |
| \$150,000 to \$200,000 | 5.3 | 3.0 | 2.0 | 1.8 | 2.1 | 2.0 | 1.8 | 2.4 | 2.8 | 2.4 | 2.4 |
| \$200,000 and Over | 8.9 | 5.4 | 3.9 | 3.9 | 4.1 | 4.6 | 3.7 | 5.6 | 7.8 | 5.5 | 5.5 |
| All Categories | 2.1 | 1.2 | 1.0 | 1.1 | 1.3 | 1.3 | 1.1 | 1.6 | 2.4 | 2.0 | 2.0 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 2.6 | 2.0 | 2.5 | 3.7 | 2.9 | 2.6 | 3.5 | 3.5 | 3.9 | 3.8 | 3.8 |
| \$10,000 to \$20,000 | 1.9 | 1.4 | 1.7 | 2.1 | 2.1 | 1.9 | 2.0 | 2.3 | 2.6 | 2.5 | 2.5 |
| \$20,000 to \$30,000 | 1.5 | 1.1 | 1.2 | 1.5 | 1.5 | 1.4 | 1.5 | 1.7 | 1.9 | 1.7 | 1.7 |
| \$30,000 to \$40,000 | 1.2 | 0.9 | 1.0 | 1.2 | 1.2 | 1.1 | 1.2 | 1.3 | 1.5 | 1.3 | 1.3 |
| \$40,000 to \$50,000 | 1.0 | 0.8 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.3 | 1.1 | 1.1 |
| \$50,000 to \$75,000 | 0.9 | 0.7 | 0.7 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 1.1 | 0.9 | 0.9 |
| \$75,000 to \$100,000 | 0.8 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 | 0.8 |
| \$100,000 to \$150,000 | 0.7 | 0.5 | 0.6 | 0.6 | 0.7 | 0.6 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 |
| \$150,000 to \$200,000 | 0.6 | 0.4 | 0.5 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.7 | 0.6 | 0.6 |
| \$200,000 and Over | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.3 | 0.3 | 0.3 |
| All Categories | 0.9 | 0.7 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 1.0 | 1.0 | 0.8 | 0.8 |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-2b.
Shares of Federal Tax Liabilities for Households with Children, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. A household with children has at least one member under age 18.

Table H-2b. Continued

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-2c.
Number of Households, Average Pretax and After-Tax Income, and Shares of Pretax and After-Tax Income for Households with Children, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. A household with children has at least one member under age 18.

Table H-2c. Continued

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |  |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-3a.
Effective Federal Tax Rates for Elderly Childless Households, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by household cash income plus taxes paid by businesses.
A household consists of the people who share a housing unit, regardless of the relationships among them. An elderly childless household is one headed by a person age 65 or older and with no member under age 18.

Table H-3a. Continued

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-3b.
Shares of Federal Tax Liabilities for Elderly Childless Households, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. An elderly childless household is one headed by a person age 65 or older and with no member under age 18.

Table H-3b. Continued

| Income Category | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | $\begin{aligned} & \hline \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 0.8 | 0.6 | 0.6 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 |
| \$10,000 to \$20,000 | 4.9 | 3.9 | 3.7 | 3.8 | 3.2 | 3.0 | 3.1 | 3.4 | 3.0 | 2.3 | 2.3 |
| \$20,000 to \$30,000 | 8.7 | 7.2 | 7.5 | 7.4 | 6.9 | 6.6 | 6.7 | 6.8 | 6.5 | 4.9 | 4.9 |
| \$30,000 to \$40,000 | 9.0 | 8.3 | 8.7 | 8.5 | 7.8 | 7.7 | 8.8 | 7.7 | 7.3 | 5.8 | 5.8 |
| \$40,000 to \$50,000 | 8.4 | 8.1 | 8.6 | 8.4 | 7.6 | 6.8 | 7.6 | 7.6 | 6.3 | 6.1 | 6.1 |
| \$50,000 to \$75,000 | 18.4 | 15.9 | 18.0 | 16.1 | 16.4 | 12.3 | 15.2 | 15.8 | 12.7 | 11.9 | 11.9 |
| \$75,000 to \$100,000 | 8.9 | 9.7 | 8.9 | 9.4 | 10.0 | 7.9 | 9.8 | 9.8 | 10.1 | 8.9 | 8.9 |
| \$100,000 to \$150,000 | 10.2 | 12.9 | 12.6 | 14.9 | 10.1 | 10.7 | 10.3 | 10.6 | 10.6 | 11.3 | 11.3 |
| \$150,000 to \$200,000 | 7.0 | 7.5 | 5.8 | 5.3 | 7.3 | 6.9 | 5.5 | 5.6 | 6.9 | 5.3 | 5.3 |
| \$200,000 and Over | 23.7 | 25.8 | 25.6 | 25.6 | 30.4 | 37.8 | 32.5 | 32.3 | 36.1 | 43.3 | 43.3 |
| All Categories | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 16.5 | 15.1 | 8.5 | 10.0 | 9.5 | 4.4 | 10.0 | 9.0 | 5.1 | 8.8 | 8.8 |
| \$10,000 to \$20,000 | 18.0 | 17.3 | 17.0 | 19.1 | 17.5 | 14.2 | 16.7 | 17.0 | 15.6 | 16.5 | 16.5 |
| \$20,000 to \$30,000 | 13.8 | 12.7 | 15.7 | 16.0 | 15.6 | 16.2 | 14.9 | 15.4 | 16.6 | 13.9 | 13.9 |
| \$30,000 to \$40,000 | 10.9 | 11.1 | 13.3 | 12.5 | 12.7 | 14.1 | 13.7 | 13.1 | 14.2 | 11.6 | 11.6 |
| \$40,000 to \$50,000 | 8.3 | 8.6 | 10.2 | 9.2 | 9.4 | 9.8 | 9.5 | 9.5 | 9.1 | 9.3 | 9.3 |
| \$50,000 to \$75,000 | 14.4 | 13.5 | 15.7 | 12.7 | 14.1 | 14.6 | 14.9 | 14.6 | 14.3 | 13.6 | 13.6 |
| \$75,000 to \$100,000 | 6.1 | 6.7 | 6.5 | 5.7 | 6.8 | 7.1 | 7.3 | 6.9 | 8.4 | 7.0 | 7.0 |
| \$100,000 to \$150,000 | 5.0 | 6.5 | 5.9 | 6.9 | 5.5 | 6.8 | 5.8 | 5.9 | 6.7 | 7.9 | 7.9 |
| \$150,000 to \$200,000 | 2.0 | 2.6 | 2.0 | 2.1 | 2.8 | 3.7 | 2.0 | 2.4 | 2.8 | 3.0 | 3.0 |
| \$200,000 and Over | 4.9 | 5.7 | 5.0 | 5.8 | 6.1 | 9.1 | 5.1 | 6.1 | 7.3 | 8.3 | 8.3 |
| All Categories | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-3c.
Number of Households, Average Pretax and After-Tax Income, and Shares of Pretax and AfterTax Income for Elderly Childless Households, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. An elderly childless household is one headed by a person age 65 or older and with no member under age 18.

Table H-3c. Continued

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-4a.
Effective Federal Tax Rates for Nonelderly Childless Households, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by household cash income plus taxes paid by businesses.
A household consists of the people who share a housing unit, regardless of the relationships among them. A nonelderly childless household is one headed by a person under age 65 and with no member under age 18.

Table H-4a. Continued

| Income Category | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | Under 2000 <br> Law |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 1.7 | 1.0 | 0.8 | 0.7 | 0.8 | 1.0 | 0.7 | 0.8 | 0.7 | 0.6 | 0.6 |
| \$10,000 to \$20,000 | 1.3 | 0.8 | 0.7 | 0.6 | 0.7 | 0.7 | 0.6 | 0.8 | 0.7 | 0.7 | 0.7 |
| \$20,000 to \$30,000 | 1.3 | 0.9 | 0.7 | 0.6 | 0.9 | 0.8 | 0.6 | 0.8 | 0.7 | 0.8 | 0.8 |
| \$30,000 to \$40,000 | 1.3 | 0.8 | 0.9 | 0.8 | 1.0 | 0.8 | 0.8 | 1.0 | 0.8 | 0.9 | 0.9 |
| \$40,000 to \$50,000 | 1.3 | 1.1 | 0.9 | 0.9 | 1.1 | 0.9 | 0.9 | 0.8 | 0.9 | 1.0 | 1.0 |
| \$50,000 to \$75,000 | 1.7 | 1.1 | 0.9 | 0.9 | 1.2 | 1.1 | 0.9 | 1.0 | 1.1 | 1.0 | 1.0 |
| \$75,000 to \$100,000 | 2.1 | 1.6 | 1.1 | 1.1 | 1.4 | 1.3 | 1.1 | 1.2 | 1.4 | 1.2 | 1.2 |
| \$100,000 to \$150,000 | 3.6 | 2.5 | 1.6 | 1.4 | 1.8 | 1.6 | 1.3 | 2.0 | 2.1 | 2.0 | 2.0 |
| \$150,000 to \$200,000 | 5.9 | 3.6 | 2.4 | 2.3 | 2.8 | 2.2 | 2.6 | 2.9 | 3.7 | 3.2 | 3.2 |
| \$200,000 and Over | 11.9 | 6.9 | 5.1 | 5.1 | 6.2 | 5.5 | 5.4 | 7.0 | 6.6 | 5.9 | 5.9 |
| All Categories | 3.1 | 2.0 | 1.6 | 1.7 | 2.0 | 1.9 | 1.8 | 2.2 | 2.2 | 2.4 | 2.4 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 3.9 | 3.0 | 3.6 | 4.4 | 5.7 | 3.5 | 4.0 | 4.2 | 6.2 | 5.6 | 5.6 |
| \$10,000 to \$20,000 | 2.0 | 1.5 | 1.7 | 2.0 | 2.2 | 1.9 | 1.9 | 2.2 | 2.6 | 2.5 | 2.5 |
| \$20,000 to \$30,000 | 1.5 | 1.2 | 1.1 | 1.4 | 1.4 | 1.3 | 1.4 | 1.5 | 1.6 | 1.4 | 1.4 |
| \$30,000 to \$40,000 | 1.2 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.4 | 1.2 | 1.2 |
| \$40,000 to \$50,000 | 1.1 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.1 | 1.1 |
| \$50,000 to \$75,000 | 1.0 | 0.7 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 1.0 | 0.9 | 0.9 |
| \$75,000 to \$100,000 | 0.8 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 | 0.8 |
| \$100,000 to \$150,000 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 |
| \$150,000 to \$200,000 | 0.7 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 |
| \$200,000 and Over | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 |
| All Categories | 1.0 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.1 | 0.9 | 0.9 |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-4b.
Shares of Federal Tax Liabilities for Nonelderly Childless Households, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. A nonelderly childless household is one headed by a person under age 65 and with no member under age 18.

Table H-4b. Continued

| Income Category | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \hline \text { Under } \\ & 1997 \\ & \text { Law } \end{aligned}$ | Under 2000 <br> Law |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 |
| \$10,000 to \$20,000 | 1.9 | 2.0 | 2.2 | 1.8 | 1.6 | 1.6 | 1.4 | 1.7 | 1.5 | 1.2 | 1.2 |
| \$20,000 to \$30,000 | 3.4 | 3.6 | 3.8 | 2.8 | 3.1 | 2.8 | 2.5 | 2.5 | 2.4 | 2.0 | 2.0 |
| \$30,000 to \$40,000 | 4.0 | 4.1 | 5.3 | 4.5 | 4.5 | 3.4 | 4.0 | 4.0 | 3.1 | 2.7 | 2.7 |
| \$40,000 to \$50,000 | 4.7 | 6.0 | 5.6 | 4.7 | 4.8 | 4.3 | 4.3 | 3.1 | 3.7 | 3.3 | 3.3 |
| \$50,000 to \$75,000 | 12.8 | 13.1 | 13.5 | 11.8 | 12.2 | 12.0 | 10.8 | 8.8 | 9.6 | 7.7 | 7.7 |
| \$75,000 to \$100,000 | 9.8 | 11.9 | 10.7 | 9.9 | 10.6 | 9.6 | 8.7 | 7.9 | 9.2 | 6.5 | 6.5 |
| \$100,000 to \$150,000 | 13.8 | 15.8 | 13.9 | 10.9 | 12.4 | 11.9 | 9.8 | 11.6 | 13.0 | 11.6 | 11.6 |
| \$150,000 to \$200,000 | 7.5 | 7.0 | 6.1 | 7.4 | 7.8 | 6.1 | 8.2 | 7.1 | 9.6 | 8.1 | 8.1 |
| \$200,000 and Over | 41.1 | 35.7 | 37.8 | 45.6 | 42.5 | 47.4 | 49.7 | 52.7 | 47.4 | 56.5 | 56.5 |
| All Categories | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| \$0 to \$10,000 | 5.0 | 5.4 | 6.0 | 6.3 | 8.5 | 5.0 | 5.9 | 5.8 | 8.2 | 8.4 | 8.4 |
| \$10,000 to \$20,000 | 8.9 | 9.2 | 9.4 | 10.5 | 10.5 | 9.5 | 9.3 | 10.3 | 10.6 | 11.0 | 11.0 |
| \$20,000 to \$30,000 | 11.7 | 12.3 | 10.3 | 12.2 | 10.7 | 10.7 | 10.9 | 11.4 | 10.5 | 10.2 | 10.2 |
| \$30,000 to \$40,000 | 11.1 | 11.1 | 10.7 | 11.4 | 11.2 | 10.6 | 11.8 | 11.5 | 11.2 | 9.7 | 9.7 |
| \$40,000 to \$50,000 | 11.3 | 11.1 | 10.9 | 9.3 | 9.9 | 10.5 | 10.4 | 9.2 | 9.8 | 9.4 | 9.4 |
| \$50,000 to \$75,000 | 22.5 | 21.1 | 22.4 | 19.4 | 18.8 | 20.2 | 19.8 | 18.2 | 18.6 | 18.3 | 18.3 |
| \$75,000 to \$100,000 | 11.6 | 11.9 | 11.3 | 11.5 | 11.5 | 12.5 | 11.8 | 11.7 | 11.8 | 11.1 | 11.1 |
| \$100,000 to \$150,000 | 8.8 | 9.2 | 9.5 | 8.8 | 9.8 | 10.4 | 9.4 | 9.7 | 9.3 | 10.2 | 10.2 |
| \$150,000 to \$200,000 | 2.6 | 2.5 | 2.6 | 3.0 | 3.2 | 3.1 | 3.4 | 3.5 | 3.2 | 3.7 | 3.7 |
| \$200,000 and Over | 5.7 | 5.0 | 5.8 | 5.1 | 4.2 | 5.8 | 6.2 | 7.2 | 5.1 | 6.8 | 6.8 |
| All Categories | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Table H-4c.
Number of Households, Average Pretax and After-Tax Income, and Shares of Pretax and After-Tax Income for Nonelderly Childless Households, by Dollar Income Category, Using Household Cash Income Plus Taxes Paid by Businesses, 1979-1997

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.
NOTES: A household consists of the people who share a housing unit, regardless of the relationships among them. A nonelderly childless household is one headed by a person under age 65 and with no member under age 18.

Table H-4c. Continued

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |

NOTES: (Continued)
Pretax household cash income equals cash income plus taxes paid by businesses. Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include the corporate income tax and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

Appendix I
Distributional Estimates Using Alternative Measures of Income, 1979-1997

Table l-1a.
Effective Federal Tax Rates for All Families, by Income Quintile, Using Family Cash Income, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.

Table I-1a. Continued

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

NOTES: Effective tax rates are calculated by dividing tax liabilities by family cash income.
Families are people related by blood, marriage, or adoption who live together.
Family cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Families with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to families paying those taxes. Payroll taxes are distributed to families paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to families according to their consumption of the taxed good or service. Corporate income taxes are distributed to families according to their share of capital income.
a. Income categories are defined by ranking all people by their family cash income. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table l-1b.
Shares of Federal Tax Liabilities for All Families, by Income Quintile, Using Family Cash Income, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

SOURCE: Congressional Budget Office.

Table l-1b.
Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 3.8 | 2.6 | 2.1 | 2.2 | 2.0 | 2.0 | 1.9 | 1.9 | 1.5 | 1.3 | 1.3 |
| Second Quintile | 8.7 | 7.6 | 6.7 | 7.0 | 7.6 | 6.9 | 6.5 | 6.3 | 6.0 | 5.2 | 5.2 |
| Middle Quintile | 10.4 | 10.3 | 10.9 | 10.6 | 10.5 | 9.9 | 10.4 | 9.1 | 8.2 | 8.1 | 8.1 |
| Fourth Quintile | 13.0 | 13.2 | 15.1 | 13.0 | 14.7 | 12.2 | 13.2 | 13.0 | 11.0 | 10.4 | 10.4 |
| Highest Quintile | 63.8 | 66.1 | 64.9 | 67.0 | 65.3 | 69.5 | 67.9 | 69.7 | 73.3 | 75.3 | 75.3 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 54.9 | 55.5 | 54.9 | 57.5 | 55.2 | 60.9 | 58.5 | 61.3 | 64.9 | 66.9 | 66.9 |
| Top 5 Percent | 47.1 | 46.3 | 46.6 | 48.9 | 47.2 | 53.4 | 51.1 | 53.4 | 57.5 | 58.7 | 58.7 |
| Top 1 Percent | 29.3 | 28.9 | 30.3 | 32.7 | 32.2 | 35.5 | 35.5 | 36.7 | 39.2 | 40.7 | 40.7 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 15.4 | 14.3 | 12.8 | 15.3 | 16.5 | 12.6 | 14.8 | 13.8 | 14.0 | 16.5 | 16.5 |
| Second Quintile | 18.1 | 18.0 | 17.1 | 19.4 | 18.6 | 18.5 | 18.4 | 18.8 | 19.3 | 19.0 | 19.0 |
| Middle Quintile | 18.3 | 18.6 | 19.1 | 18.2 | 18.8 | 19.4 | 19.3 | 18.6 | 19.3 | 18.4 | 18.4 |
| Fourth Quintile | 20.2 | 19.9 | 21.4 | 18.7 | 18.9 | 19.7 | 19.9 | 19.2 | 19.5 | 18.6 | 18.6 |
| Highest Quintile | 27.4 | 28.2 | 28.7 | 26.6 | 25.8 | 27.9 | 26.7 | 28.4 | 26.8 | 26.6 | 26.6 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 16.4 | 16.7 | 17.4 | 16.1 | 15.4 | 16.8 | 16.1 | 18.0 | 16.0 | 16.7 | 16.7 |
| Top 5 Percent | 10.3 | 10.4 | 10.8 | 10.0 | 9.2 | 10.6 | 10.3 | 11.9 | 9.8 | 10.2 | 10.2 |
| Top 1 Percent | 3.9 | 4.0 | 4.3 | 4.0 | 3.2 | 4.1 | 4.1 | 5.6 | 3.4 | 3.5 | 3.5 |

NOTES: Families are people related by blood, marriage, or adoption who live together.
Family cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Families with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to families paying those taxes. Payroll taxes are distributed to families paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to families according to their consumption of the taxed good or service. Corporate income taxes are distributed to families according to their share of capital income.
a. Income categories are defined by ranking all people by their family cash income. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table l-1c.
Number of Families, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for All Families, by Income Quintile, Using Family Cash Income, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 | Under 2000 |
|  |  |  |  |  |  |  |  |  |  | Law | Law |


| Number of Families (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 23.6 | 23.4 | 23.1 | 24.6 | 25.6 | 26.5 | 26.9 | 27.5 | 28.6 | 29.7 | 29.7 |
| Second Quintile | 19.2 | 19.9 | 20.3 | 21.3 | 22.2 | 23.0 | 23.7 | 24.4 | 24.8 | 25.5 | 25.5 |
| Middle Quintile | 15.9 | 16.8 | 17.5 | 18.3 | 18.8 | 19.5 | 20.1 | 20.7 | 20.7 | 21.2 | 21.2 |
| Fourth Quintile | 14.0 | 14.6 | 15.7 | 15.8 | 16.5 | 16.8 | 17.4 | 17.7 | 17.8 | 18.6 | 18.6 |
| Highest Quintile | 12.9 | 13.8 | 14.3 | 14.9 | 15.2 | 15.7 | 16.1 | 16.4 | 16.8 | 17.4 | 17.4 |
| All Quintiles | 86.1 | 89.3 | 91.8 | 95.7 | 98.7 | 102.1 | 104.7 | 107.2 | 109.1 | 112.9 | 112.9 |
| Top 10 Percent | 6.4 | 6.9 | 7.2 | 7.4 | 7.5 | 7.9 | 8.0 | 8.0 | 8.4 | 8.8 | 8.8 |
| Top 5 Percent | 3.2 | 3.5 | 3.6 | 3.7 | 3.8 | 4.1 | 4.1 | 4.1 | 4.3 | 4.4 | 4.4 |
| Top 1 Percent | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |

## Average Income (1997 dollars)

| Lowest Quintile | 9,700 | 9,000 | 8,200 | 8,800 | 8,800 | 9,100 | 8,600 | 7,900 | 8,200 | 8,300 | 8,300 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Second Quintile | 24,200 | 22,900 | 21,200 | 22,600 | 22,900 | 23,200 | 22,500 | 21,600 | 22,100 | 22,800 | 22,800 |
| Middle Quintile | 38,600 | 36,900 | 35,000 | 36,700 | 37,700 | 38,000 | 36,800 | 36,000 | 37,100 | 38,400 | 38,400 |
| Fourth Quintile | 54,900 | 53,300 | 52,600 | 54,800 | 56,300 | 56,900 | 55,600 | 55,300 | 56,300 | 58,400 | 58,400 |
| Highest Quintile | 110,900 | 108,600 | 113,500 | 123,800 | 128,400 | 136,400 | 128,700 | 132,200 | 137,300 | 160,200 | 160,200 |
| All Quintiles | 40,600 | 39,700 | 40,000 | 42,400 | 43,500 | 45,000 | 43,200 | 43,000 | 44,400 | 48,700 | 48,700 |
| Top 10 Percent | 148,400 | 144,300 | 154,000 | 171,400 | 178,300 | 191,700 | 179,300 | 186,700 | 194,900 | 234,800 | 234,800 |
| Top 5 Percent | 200,300 | 192,200 | 211,600 | 241,600 | 249,000 | 272,000 | 251,100 | 266,200 | 278,400 | 352,400 | 352,400 |
| Top 1 Percent | 423,800 | 398,600 | 480,300 | 568,900 | 580,000 | 677,300 | 594,300 | 638,100 | 699,900 | 944,800 | 944,800 |


| Lowest Quintile | 8,600 | 8,100 | 7,300 | 7,800 | 7,800 | 8,100 | 7,600 | 7,100 | 7,400 | 7,500 | 7,500 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second Quintile | 19,800 | 18,700 | 17,700 | 18,500 | 18,900 | 19,100 | 18,600 | 17,800 | 18,300 | 18,900 | 19,000 |
| Middle Quintile | 29,900 | 28,600 | 27,900 | 29,000 | 29,600 | 29,800 | 29,000 | 28,100 | 28,700 | 29,800 | 30,200 |
| Fourth Quintile | 41,300 | 39,700 | 40,400 | 41,900 | 43,000 | 43,200 | 42,200 | 41,600 | 41,800 | 43,700 | 44,100 |
| Highest Quintile | 76,600 | 76,400 | 84,200 | 91,600 | 92,000 | 98,200 | 92,400 | 91,800 | 92,300 | 109,700 | 110,500 |
| All Quintiles | 30,400 | 29,700 | 31,000 | 32,600 | 33,000 | 34,000 | 32,800 | 32,000 | 32,400 | 35,800 | 36,100 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Top 10 Percent | 98,700 | 99,700 | 113,000 | 126,000 | 125,600 | 136,200 | 127,000 | 126,600 | 127,100 | 157,200 | 158,200 |
| Top 5 Percent | 127,300 | 130,500 | 153,900 | 176,800 | 172,700 | 191,300 | 175,700 | 176,400 | 176,000 | 230,800 | 232,500 |
| Top 1 Percent | 243,700 | 262,000 | 341,500 | 410,100 | 390,100 | 470,400 | 406,600 | 402,700 | 411,800 | 596,000 | 602,800 |

SOURCE: Congressional Budget Office.
NOTES: Families are people related by blood, marriage, or adoption who live together.
Family cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Families with negative income are excluded from the lowest income category but are included in totals.

Table l-1c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 | Under 2000 |
|  |  |  |  |  |  |  |  |  |  | Law | Law |


| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 6.6 | 5.9 | 5.1 | 5.3 | 5.2 | 5.3 | 5.1 | 4.7 | 4.8 | 4.5 | 4.5 |
| Second Quintile | 13.3 | 12.8 | 11.7 | 11.9 | 11.9 | 11.7 | 11.8 | 11.4 | 11.4 | 10.6 | 10.6 |
| Middle Quintile | 17.5 | 17.5 | 16.7 | 16.5 | 16.5 | 16.1 | 16.4 | 16.1 | 15.8 | 14.8 | 14.8 |
| Fourth Quintile | 22.0 | 22.0 | 22.4 | 21.3 | 21.6 | 20.9 | 21.4 | 21.3 | 20.7 | 19.8 | 19.8 |
| Highest Quintile | 40.8 | 42.3 | 44.4 | 45.5 | 45.3 | 46.8 | 45.7 | 46.9 | 47.7 | 50.6 | 50.6 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 27.0 | 28.0 | 30.1 | 31.4 | 31.2 | 33.1 | 31.7 | 32.6 | 33.6 | 37.4 | 37.4 |
| Top 5 Percent | 18.4 | 19.2 | 21.0 | 22.2 | 22.2 | 24.2 | 22.8 | 23.5 | 24.5 | 28.3 | 28.3 |
| Top 1 Percent | 8.2 | 8.7 | 10.1 | 11.3 | 11.2 | 12.7 | 11.3 | 12.1 | 12.6 | 16.3 | 16.3 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 7.8 | 7.1 | 6.0 | 6.1 | 6.1 | 6.2 | 6.0 | 5.7 | 6.0 | 5.5 | 5.5 |
| Second Quintile | 14.5 | 14.0 | 12.6 | 12.7 | 12.9 | 12.7 | 12.8 | 12.7 | 12.8 | 11.9 | 11.9 |
| Middle Quintile | 18.2 | 18.1 | 17.2 | 17.0 | 17.1 | 16.7 | 17.0 | 17.0 | 16.8 | 15.7 | 15.7 |
| Fourth Quintile | 22.2 | 21.8 | 22.3 | 21.2 | 21.8 | 20.9 | 21.4 | 21.6 | 21.1 | 20.1 | 20.2 |
| Highest Quintile | 37.7 | 39.7 | 42.5 | 43.9 | 42.9 | 44.5 | 43.3 | 43.8 | 43.9 | 47.2 | 47.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 24.0 | 25.8 | 28.5 | 30.1 | 29.0 | 31.1 | 29.6 | 29.7 | 30.0 | 34.0 | 34.0 |
| Top 5 Percent | 15.6 | 17.4 | 19.7 | 21.2 | 20.4 | 22.5 | 21.0 | 20.9 | 21.2 | 25.2 | 25.2 |
| Top 1 Percent | 6.3 | 7.7 | 9.3 | 10.6 | 10.0 | 11.6 | 10.2 | 10.3 | 10.2 | 14.0 | 14.0 |
| Minimum Income (1997 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 17,500 | 16,400 | 14,900 | 16,000 | 16,000 | 16,500 | 15,700 | 15,000 | 15,300 | 15,500 | 15,500 |
| Middle Quintile | 31,400 | 29,900 | 27,900 | 29,600 | 30,300 | 30,300 | 29,600 | 28,600 | 29,400 | 30,400 | 30,400 |
| Fourth Quintile | 46,100 | 44,500 | 42,800 | 45,300 | 46,100 | 46,500 | 45,200 | 44,500 | 45,500 | 47,200 | 47,200 |
| Highest Quintile | 65,600 | 64,400 | 64,300 | 67,000 | 69,400 | 70,000 | 68,500 | 69,400 | 69,900 | 72,900 | 72,900 |
| Top 10 Percent | 85,600 | 84,700 | 84,700 | 89,000 | 92,600 | 94,400 | 91,400 | 93,100 | 94,300 | 100,200 | 100,200 |
| Top 5 Percent | 109,300 | 105,400 | 108,100 | 116,700 | 120,300 | 123,300 | 120,600 | 123,400 | 126,200 | 136,900 | 136,900 |
| Top 1 Percent | 214,200 | 199,900 | 212,700 | 234,400 | 247,400 | 271,300 | 251,600 | 263,100 | 280,900 | 372,100 | 372,100 |

NOTES: (Continued)
Individual income taxes are distributed directly to families paying those taxes. Payroll taxes are distributed to families paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to families according to their consumption of the taxed good or service. Corporate income taxes are distributed to families according to their share of capital income.
a. Income categories are defined by ranking all people by their family cash income. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-2a.
Effective Federal Tax Rates for All Households, by Income Quintile, Using Household Cash Income, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.

Table I-2a.
Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \hline \text { Under } \\ & 1997 \\ & \text { Law } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.3 | 1.2 | 0.9 | 0.9 | 1.2 | 1.2 | 0.9 | 1.3 | 1.3 | 1.2 | 1.2 |
| Second Quintile | 2.6 | 1.5 | 1.3 | 1.3 | 1.8 | 1.7 | 1.4 | 1.7 | 1.9 | 1.8 | 1.8 |
| Middle Quintile | 2.3 | 1.5 | 1.3 | 1.3 | 1.7 | 1.6 | 1.5 | 1.6 | 1.7 | 1.8 | 1.8 |
| Fourth Quintile | 2.3 | 1.5 | 1.3 | 1.3 | 1.9 | 1.5 | 1.4 | 1.7 | 1.8 | 1.8 | 1.8 |
| Highest Quintile | 6.0 | 3.9 | 2.9 | 3.1 | 3.9 | 3.9 | 3.4 | 4.4 | 5.4 | 5.0 | 5.0 |
| All Quintiles | 3.9 | 2.5 | 2.0 | 2.1 | 2.7 | 2.6 | 2.3 | 2.9 | 3.5 | 3.3 | 3.3 |
| Top 10 Percent | 7.8 | 4.9 | 3.7 | 3.8 | 4.8 | 4.9 | 4.2 | 5.6 | 6.8 | 6.0 | 6.0 |
| Top 5 Percent | 9.8 | 6.0 | 4.4 | 4.6 | 5.7 | 5.8 | 5.2 | 6.6 | 8.1 | 6.9 | 6.9 |
| Top 1 Percent | 14.0 | 8.4 | 5.9 | 5.9 | 7.7 | 7.4 | 7.0 | 8.7 | 10.8 | 8.4 | 8.4 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.5 | 2.0 | 2.2 | 2.9 | 3.0 | 2.2 | 2.9 | 3.1 | 3.4 | 3.6 | 3.6 |
| Second Quintile | 1.5 | 1.1 | 1.3 | 1.6 | 1.5 | 1.5 | 1.6 | 1.8 | 2.0 | 1.7 | 1.7 |
| Middle Quintile | 1.1 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.2 | 1.3 | 1.5 | 1.2 | 1.2 |
| Fourth Quintile | 1.0 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 1.2 | 1.0 | 1.0 |
| Highest Quintile | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 |
| All Quintiles | 1.1 | 0.8 | 0.9 | 1.0 | 1.0 | 0.9 | 1.0 | 1.1 | 1.2 | 1.0 | 1.0 |
| Top 10 Percent | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 |
| Top 5 Percent | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 |
| Top 1 Percent | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 |

NOTES: Effective tax rates are calculated by dividing tax liabilities by household cash income.
Households are people who share a single housing unit, regardless of the relationships among them.
Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their household cash income. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table l-2b.
Shares of Federal Tax Liabilities for All Households, by Income Quintile, Using Household Cash Income, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.

Table l-2b.
Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 4.1 | 2.9 | 2.3 | 2.5 | 2.4 | 2.5 | 2.3 | 2.3 | 2.1 | 1.7 | 1.7 |
| Second Quintile | 9.1 | 8.0 | 7.5 | 7.5 | 8.0 | 7.5 | 7.3 | 6.9 | 6.5 | 5.8 | 5.8 |
| Middle Quintile | 10.2 | 10.3 | 10.9 | 10.5 | 10.6 | 9.7 | 10.6 | 8.9 | 7.8 | 7.7 | 7.7 |
| Fourth Quintile | 13.1 | 13.2 | 14.8 | 13.1 | 14.9 | 12.0 | 12.8 | 12.8 | 11.0 | 10.4 | 10.4 |
| Highest Quintile | 63.3 | 65.3 | 64.2 | 66.3 | 64.0 | 68.9 | 66.9 | 69.1 | 72.6 | 74.7 | 74.7 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 53.8 | 54.6 | 54.4 | 56.9 | 54.1 | 60.0 | 57.4 | 60.9 | 64.2 | 65.6 | 65.6 |
| Top 5 Percent | 45.9 | 45.1 | 45.4 | 47.5 | 46.0 | 51.6 | 49.9 | 51.7 | 56.2 | 57.5 | 57.5 |
| Top 1 Percent | 28.9 | 28.6 | 29.8 | 31.8 | 31.2 | 34.5 | 33.9 | 35.2 | 38.5 | 40.3 | 40.3 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 15.2 | 14.4 | 12.8 | 15.6 | 16.5 | 12.9 | 15.0 | 14.3 | 14.6 | 17.2 | 17.2 |
| Second Quintile | 17.7 | 17.6 | 17.0 | 18.9 | 18.3 | 18.2 | 18.1 | 18.4 | 19.1 | 18.3 | 18.3 |
| Middle Quintile | 18.3 | 18.3 | 19.1 | 17.9 | 18.5 | 19.0 | 19.2 | 18.1 | 18.6 | 17.9 | 17.9 |
| Fourth Quintile | 20.5 | 20.2 | 21.4 | 19.1 | 19.2 | 19.8 | 19.8 | 19.4 | 19.8 | 18.8 | 18.8 |
| Highest Quintile | 27.8 | 28.6 | 28.9 | 26.9 | 26.2 | 28.1 | 27.0 | 28.6 | 26.8 | 27.1 | 27.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 16.5 | 16.9 | 17.5 | 16.3 | 15.5 | 16.8 | 16.3 | 18.2 | 15.9 | 16.5 | 16.5 |
| Top 5 Percent | 10.3 | 10.3 | 10.8 | 9.8 | 9.1 | 10.4 | 10.1 | 11.8 | 9.6 | 10.0 | 10.0 |
| Top 1 Percent | 3.9 | 3.9 | 4.2 | 3.9 | 3.1 | 4.0 | 4.0 | 5.5 | 3.2 | 3.5 | 3.5 |

NOTES: Households are people who share a single housing unit, regardless of the relationships among them.
Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their household cash income. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-2c.
Number of Households, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for All Households, by Income Quintile, Using Household Cash Income, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Number of Households (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 22.4 | 22.3 | 22.0 | 23.3 | 24.3 | 25.2 | 25.5 | 25.8 | 26.9 | 28.0 | 28.0 |
| Second Quintile | 17.9 | 18.7 | 19.0 | 19.8 | 20.5 | 21.0 | 21.5 | 22.2 | 22.4 | 22.8 | 22.8 |
| Middle Quintile | 15.0 | 15.7 | 16.4 | 16.9 | 17.4 | 17.9 | 18.4 | 18.5 | 18.6 | 19.1 | 19.1 |
| Fourth Quintile | 13.4 | 13.9 | 14.7 | 15.0 | 15.5 | 15.7 | 16.2 | 16.4 | 16.4 | 16.9 | 16.9 |
| Highest Quintile | 12.1 | 13.0 | 13.4 | 13.9 | 13.9 | 14.4 | 14.6 | 14.7 | 15.2 | 15.7 | 15.7 |
| All Quintiles | 81.4 | 84.2 | 86.2 | 89.5 | 92.0 | 94.6 | 96.7 | 98.2 | 99.7 | 102.9 | 102.9 |
| Top 10 Percent | 5.9 | 6.4 | 6.6 | 6.9 | 6.9 | 7.2 | 7.2 | 7.2 | 7.5 | 7.8 | 7.8 |
| Top 5 Percent | 3.0 | 3.2 | 3.3 | 3.3 | 3.5 | 3.6 | 3.6 | 3.6 | 3.8 | 3.9 | 3.9 |
| Top 1 Percent | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 |
| Average Income (1997 dollars) <br> Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 10,400 | 9,700 | 8,900 | 9,700 | 9,700 | 10,200 | 9,700 | 9,200 | 9,600 | 9,700 | 9,700 |
| Second Quintile | 26,000 | 24,600 | 23,000 | 24,600 | 25,200 | 25,800 | 25,200 | 24,400 | 25,300 | 26,100 | 26,100 |
| Middle Quintile | 40,900 | 39,200 | 37,700 | 39,600 | 40,800 | 41,700 | 40,400 | 39,900 | 41,200 | 42,900 | 42,900 |
| Fourth Quintile | 57,700 | 56,300 | 55,900 | 58,500 | 60,500 | 61,700 | 60,300 | 60,600 | 61,700 | 64,300 | 64,300 |
| Highest Quintile | 116,700 | 114,600 | 120,600 | 132,300 | 138,200 | 147,100 | 139,100 | 144,100 | 149,200 | 175,600 | 175,600 |
| All Quintiles | 43,000 | 42,000 | 42,600 | 45,400 | 46,700 | 48,600 | 46,800 | 47,000 | 48,600 | 53,700 | 53,700 |
| Top 10 Percent | 156,700 | 153,100 | 165,000 | 184,100 | 192,500 | 207,200 | 194,900 | 203,700 | 213,100 | 260,400 | 260,400 |
| Top 5 Percent | 211,900 | 206,000 | 228,600 | 263,600 | 270,300 | 298,200 | 274,600 | 291,500 | 304,100 | 390,800 | 390,800 |
| Top 1 Percent | 446,100 | 424,000 | 511,300 | 616,000 | 625,600 | 730,000 | 641,500 | 686,300 | 763,300 | 1,019,800 | 1,019,800 |


| Lowest Quintile | 9,300 | 8,700 | 8,000 | 8,500 | 8,600 | 9,100 | 8,600 | 8,200 | 8,600 | 8,700 | 8,700 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second Quintile | 21,20 | 20,100 | 19,200 | 20,200 | 20,700 | 21,100 | 20,700 | 20,000 | 20,700 | 21,400 | 21,600 |
| Middle Quintile | 31,700 | 30,300 | 29,900 | 31,200 | 32,000 | 32,600 | 31,700 | 31,100 | 31,800 | 33,200 | 3,600 |
| Fourth Quintile | 43,500 | 42,000 | 42,900 | 44,600 | 46,100 | 46,700 | 45,700 | 45,500 | 45,800 | 48,000 | 48,500 |
| Highest Quintile | 80,600 | 80,700 | 89,400 | 98,000 | 99,100 | 105,900 | 100,000 | 100,000 | 100,200 | 120,300 | 121,100 |
| All Quintiles |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 31,500 | 33,000 | 34,900 | 35,400 | 36,800 | 35,500 | 34,900 | 35,500 | 39,400 | 39,700 |
| Top 10 Percent | 104,200 | 105,800 | 121,000 | 135,400 | 135,600 | 147,300 | 138,000 | 138,100 | 138,800 | 174,300 | 175,400 |
| Top 5 Percent | 134,700 | 139,800 | 166,200 | 192,900 | 187,400 | 209,700 | 192,200 | 193,100 | 191,500 | 256,000 | 257,900 |
| Top 1 Percent | 256,400 | 278,400 | 364,000 | 444,200 | 421,500 | 506,800 | 438,200 | 433,700 | 447,100 | 644,300 | 651,700 |

SOURCE: Congressional Budget Office.
NOTES: Households are people who share a single housing unit, regardless of the relationships among them.

[^34]Table l-2c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \hline \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 6.7 | 6.1 | 5.3 | 5.5 | 5.5 | 5.6 | 5.5 | 5.2 | 5.3 | 4.9 | 4.9 |
| Second Quintile | 13.3 | 13.0 | 11.9 | 12.0 | 12.0 | 11.8 | 12.0 | 11.7 | 11.7 | 10.8 | 10.8 |
| Middle Quintile | 17.5 | 17.3 | 16.8 | 16.4 | 16.5 | 16.2 | 16.4 | 16.0 | 15.8 | 14.8 | 14.8 |
| Fourth Quintile | 22.2 | 22.1 | 22.4 | 21.5 | 21.8 | 21.0 | 21.5 | 21.5 | 20.8 | 19.7 | 19.7 |
| Highest Quintile | 40.5 | 42.0 | 43.9 | 45.1 | 44.7 | 46.1 | 44.9 | 46.0 | 46.8 | 50.1 | 50.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 26.6 | 27.5 | 29.6 | 31.0 | 30.7 | 32.4 | 31.0 | 31.9 | 32.8 | 36.7 | 36.7 |
| Top 5 Percent | 18.0 | 18.7 | 20.5 | 21.7 | 21.7 | 23.3 | 22.0 | 22.8 | 23.9 | 27.7 | 27.7 |
| Top 1 Percent | 8.0 | 8.5 | 10.0 | 11.1 | 11.0 | 12.3 | 11.0 | 11.8 | 12.3 | 16.0 | 16.0 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 7.9 | 7.3 | 6.2 | 6.4 | 6.4 | 6.6 | 6.4 | 6.2 | 6.6 | 6.0 | 6.0 |
| Second Quintile | 14.5 | 14.1 | 12.8 | 12.8 | 13.0 | 12.8 | 13.0 | 13.0 | 13.1 | 12.0 | 12.1 |
| Middle Quintile | 18.1 | 17.9 | 17.3 | 16.9 | 17.1 | 16.7 | 16.9 | 16.8 | 16.7 | 15.6 | 15.6 |
| Fourth Quintile | 22.3 | 22.0 | 22.2 | 21.4 | 21.9 | 21.0 | 21.5 | 21.8 | 21.2 | 20.0 | 20.1 |
| Highest Quintile | 37.4 | 39.4 | 42.1 | 43.4 | 42.3 | 43.9 | 42.6 | 43.0 | 43.1 | 46.7 | 46.6 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 23.6 | 25.4 | 28.0 | 29.7 | 28.5 | 30.4 | 28.9 | 29.1 | 29.3 | 33.4 | 33.3 |
| Top 5 Percent | 15.3 | 16.9 | 19.2 | 20.6 | 19.9 | 21.7 | 20.3 | 20.3 | 20.6 | 24.7 | 24.7 |
| Top 1 Percent | 6.1 | 7.4 | 9.2 | 10.4 | 9.7 | 11.3 | 9.9 | 10.0 | 9.9 | 13.8 | 13.8 |
| Minimum Income (1997 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 18,900 | 17,600 | 16,300 | 17,600 | 17,900 | 18,500 | 17,800 | 17,300 | 17,700 | 18,400 | 18,400 |
| Middle Quintile | 33,700 | 32,100 | 30,200 | 31,900 | 32,900 | 33,400 | 32,700 | 32,000 | 33,200 | 34,500 | 34,500 |
| Fourth Quintile | 48,500 | 46,900 | 45,800 | 48,400 | 49,500 | 50,700 | 49,300 | 49,100 | 50,200 | 52,400 | 52,400 |
| Highest Quintile | 69,200 | 68,000 | 68,100 | 71,400 | 74,800 | 75,900 | 74,200 | 75,700 | 76,100 | 79,900 | 79,900 |
| Top 10 Percent | 90,800 | 89,600 | 90,100 | 95,600 | 100,300 | 102,000 | 100,200 | 101,900 | 103,500 | 111,200 | 111,200 |
| Top 5 Percent | 116,200 | 113,600 | 116,500 | 126,100 | 131,000 | 134,900 | 131,900 | 136,400 | 138,400 | 151,500 | 151,500 |
| Top 1 Percent | 222,700 | 210,000 | 228,100 | 253,000 | 270,200 | 294,400 | 287,000 | 278,300 | 312,600 | 428,400 | 428,400 |

NOTES: (Continued)
Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their household cash income. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-3a.
Effective Federal Tax Rates for All Households, by Income Quintile, Using Household Cash Income Plus Taxes Paid by Businesses and Employee Contributions to 401(k) Retirement Plans, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | Under 2000 Law |
| Total Effective Federal Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 10.4 | 9.7 | 9.2 | 11.1 | 10.8 | 10.4 | 10.3 | 9.6 | 8.8 | 8.9 | 8.8 |
| Second Quintile | 17.3 | 17.3 | 15.6 | 17.0 | 16.6 | 16.8 | 16.5 | 16.4 | 16.6 | 16.5 | 15.8 |
| Middle Quintile | 21.0 | 21.4 | 19.4 | 19.8 | 19.9 | 20.4 | 20.0 | 20.4 | 20.9 | 20.6 | 19.8 |
| Fourth Quintile | 23.0 | 23.9 | 21.8 | 22.1 | 22.1 | 22.4 | 22.5 | 22.9 | 23.5 | 23.0 | 22.3 |
| Highest Quintile | 28.5 | 27.7 | 24.4 | 24.3 | 26.2 | 25.9 | 26.0 | 28.0 | 29.7 | 28.8 | 28.4 |
| All Quintiles | 23.4 | 23.5 | 21.2 | 21.7 | 22.5 | 22.6 | 22.4 | 23.6 | 24.6 | 24.3 | 23.7 |
| Top 10 Percent | 30.6 | 28.8 | 25.1 | 24.7 | 27.3 | 26.7 | 27.0 | 29.5 | 31.5 | 30.3 | 29.9 |
| Top 5 Percent | 32.9 | 29.9 | 25.7 | 25.1 | 28.4 | 27.5 | 27.8 | 30.9 | 33.3 | 31.6 | 31.1 |
| Top 1 Percent | 37.3 | 31.8 | 27.0 | 26.2 | 30.1 | 28.3 | 29.4 | 33.7 | 37.0 | 33.7 | 33.0 |
| Effective Individual Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0.8 | 1.2 | 0.8 | 1.2 | 0.5 | 0.3 | -0.2 | -1.1 | -2.6 | -2.7 | -2.9 |
| Second Quintile | 5.7 | 6.4 | 5.0 | 5.4 | 4.7 | 4.8 | 4.5 | 3.9 | 3.6 | 3.8 | 3.1 |
| Middle Quintile | 9.0 | 9.8 | 8.1 | 8.0 | 7.4 | 7.8 | 7.5 | 7.1 | 7.2 | 7.3 | 6.5 |
| Fourth Quintile | 11.2 | 12.2 | 10.2 | 9.9 | 9.4 | 9.5 | 9.5 | 9.2 | 9.4 | 9.3 | 8.7 |
| Highest Quintile | 16.5 | 17.2 | 14.6 | 14.3 | 15.2 | 15.0 | 14.7 | 15.5 | 16.3 | 16.9 | 16.5 |
| All Quintiles | 11.6 | 12.6 | 10.7 | 10.6 | 10.7 | 10.8 | 10.4 | 10.7 | 11.1 | 11.7 | 11.2 |
| Top 10 Percent | 18.2 | 18.7 | 16.0 | 15.5 | 17.0 | 16.5 | 16.2 | 17.5 | 18.4 | 18.9 | 18.5 |
| Top 5 Percent | 20.0 | 20.1 | 17.3 | 16.6 | 18.5 | 17.9 | 17.7 | 19.4 | 20.4 | 20.7 | 20.2 |
| Top 1 Percent | 22.7 | 22.1 | 19.5 | 18.6 | 20.9 | 19.7 | 20.3 | 23.0 | 24.1 | 23.5 | 22.8 |
| Effective Social Insurance Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.3 | 5.6 | 5.5 | 6.2 | 6.4 | 6.9 | 7.0 | 6.6 | 7.0 | 7.2 | 7.2 |
| Second Quintile | 7.9 | 8.4 | 8.3 | 8.8 | 8.8 | 9.0 | 9.2 | 9.3 | 9.4 | 9.5 | 9.5 |
| Middle Quintile | 9.0 | 9.4 | 9.1 | 9.6 | 9.9 | 10.1 | 10.1 | 10.6 | 10.8 | 10.6 | 10.6 |
| Fourth Quintile | 8.7 | 9.6 | 9.6 | 10.2 | 10.2 | 10.7 | 10.9 | 11.2 | 11.4 | 11.2 | 11.2 |
| Highest Quintile | 5.6 | 6.3 | 6.4 | 6.5 | 6.8 | 6.7 | 7.7 | 7.7 | 7.8 | 6.8 | 6.8 |
| All Quintiles | 7.2 | 7.8 | 7.8 | 8.1 | 8.3 | 8.4 | 8.9 | 9.1 | 9.2 | 8.6 | 8.6 |
| Top 10 Percent | 4.3 | 5.0 | 5.1 | 5.1 | 5.4 | 5.2 | 6.3 | 6.2 | 6.4 | 5.4 | 5.4 |
| Top 5 Percent | 3.1 | 3.7 | 3.8 | 3.7 | 4.0 | 3.7 | 4.8 | 4.7 | 5.0 | 4.2 | 4.2 |
| Top 1 Percent | 1.3 | 1.5 | 1.5 | 1.5 | 1.7 | 1.5 | 2.2 | 2.0 | 2.8 | 2.2 | 2.2 |

SOURCE: Congressional Budget Office.

Table I-3a. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \hline \text { Under } \\ & 1997 \\ & \text { Law } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.9 | 1.0 | 0.8 | 0.9 | 1.0 | 1.1 | 0.8 | 1.1 | 1.1 | 1.0 | 1.0 |
| Second Quintile | 2.3 | 1.4 | 1.1 | 1.2 | 1.6 | 1.5 | 1.3 | 1.5 | 1.7 | 1.6 | 1.6 |
| Middle Quintile | 1.9 | 1.3 | 1.2 | 1.2 | 1.6 | 1.4 | 1.3 | 1.5 | 1.6 | 1.6 | 1.6 |
| Fourth Quintile | 2.1 | 1.4 | 1.2 | 1.1 | 1.7 | 1.4 | 1.3 | 1.5 | 1.6 | 1.6 | 1.6 |
| Highest Quintile | 5.7 | 3.7 | 2.8 | 2.9 | 3.7 | 3.6 | 3.2 | 4.1 | 4.9 | 4.6 | 4.6 |
| All Quintiles | 3.6 | 2.3 | 1.9 | 1.9 | 2.5 | 2.4 | 2.1 | 2.7 | 3.2 | 3.1 | 3.1 |
| Top 10 Percent | 7.4 | 4.7 | 3.5 | 3.6 | 4.5 | 4.5 | 3.9 | 5.2 | 6.2 | 5.5 | 5.5 |
| Top 5 Percent | 9.2 | 5.7 | 4.2 | 4.3 | 5.4 | 5.4 | 4.9 | 6.3 | 7.5 | 6.4 | 6.4 |
| Top 1 Percent | 12.8 | 7.9 | 5.7 | 5.7 | 7.2 | 6.9 | 6.6 | 8.2 | 9.8 | 7.8 | 7.8 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.4 | 1.9 | 2.1 | 2.8 | 2.9 | 2.1 | 2.7 | 3.0 | 3.3 | 3.4 | 3.4 |
| Second Quintile | 1.4 | 1.1 | 1.2 | 1.5 | 1.4 | 1.4 | 1.5 | 1.7 | 1.9 | 1.6 | 1.6 |
| Middle Quintile | 1.1 | 0.8 | 1.0 | 1.1 | 1.1 | 1.0 | 1.1 | 1.2 | 1.3 | 1.1 | 1.1 |
| Fourth Quintile | 1.0 | 0.7 | 0.8 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 1.1 | 0.9 | 0.9 |
| Highest Quintile | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 |
| All Quintiles | 1.0 | 0.8 | 0.9 | 1.0 | 0.9 | 0.9 | 1.0 | 1.0 | 1.1 | 0.9 | 0.9 |
| Top 10 Percent | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 |
| Top 5 Percent | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.3 | 0.3 |
| Top 1 Percent | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 |

NOTES: Effective tax rates are calculated by dividing tax liabilities by household cash income plus taxes paid by businesses and employee contributions to $401(\mathrm{k})$ retirement plans.

Households are people who share a single housing unit, regardless of the relationships among them.
Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their household cash income plus taxes paid by businesses and employee contributions to $401(\mathrm{k})$ retirement plans. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-3b.
Shares of Federal Tax Liabilities for All Households, by Income Quintile, Using Household Cash Income Plus Taxes Paid by Businesses and Employee Contributions to 401(k) Retirement Plans, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

SOURCE: Congressional Budget Office.

Table l-3b. Continued

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

NOTES: Households are people who share a single housing unit, regardless of the relationships among them.
Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their household cash income plus taxes paid by businesses and employee contributions to $401(\mathrm{k})$ retirement plans. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-3c.
Number of Households, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for All Households, by Income Quintile, Using Household Cash Income Plus Taxes Paid by Businesses and Employee Contributions to 401(k) Retirement Plans, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Under } \\ & 1997 \\ & \text { Law } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Number of Households (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 22.3 | 22.3 | 21.9 | 23.4 | 24.3 | 25.1 | 25.5 | 25.8 | 26.8 | 27.9 | 27.9 |
| Second Quintile | 17.9 | 18.6 | 19.0 | 19.7 | 20.5 | 21.1 | 21.5 | 22.1 | 22.4 | 22.8 | 22.8 |
| Middle Quintile | 15.0 | 15.7 | 16.4 | 16.9 | 17.3 | 17.9 | 18.4 | 18.6 | 18.6 | 19.1 | 19.1 |
| Fourth Quintile | 13.5 | 13.9 | 14.7 | 14.9 | 15.6 | 15.7 | 16.2 | 16.4 | 16.4 | 16.9 | 16.9 |
| Highest Quintile | 12.2 | 13.0 | 13.4 | 13.9 | 14.0 | 14.5 | 14.7 | 14.8 | 15.2 | 15.8 | 15.8 |
| All Quintiles | 81.4 | 84.2 | 86.2 | 89.5 | 92.0 | 94.6 | 96.7 | 98.2 | 99.7 | 102.9 | 102.9 |
| Top 10 Percent | 6.0 | 6.4 | 6.6 | 6.9 | 6.9 | 7.2 | 7.2 | 7.3 | 7.5 | 7.8 | 7.8 |
| Top 5 Percent | 3.0 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.6 | 3.6 | 3.8 | 4.0 | 4.0 |
| Top 1 Percent | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 |
| Average Income (1997 dollars) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 10,900 | 10,100 | 9,200 | 10,100 | 10,200 | 10,700 | 10,100 | 9,700 | 10,000 | 10,100 | 10,100 |
| Second Quintile | 27,600 | 26,000 | 24,300 | 26,100 | 26,800 | 27,500 | 26,800 | 26,100 | 27,100 | 28,100 | 28,100 |
| Middle Quintile | 43,600 | 41,600 | 39,900 | 42,300 | 43,700 | 44,800 | 43,500 | 43,200 | 44,700 | 46,700 | 46,700 |
| Fourth Quintile | 61,600 | 59,900 | 59,300 | 62,800 | 65,300 | 66,800 | 65,300 | 66,100 | 67,700 | 70,600 | 70,600 |
| Highest Quintile | 127,000 | 122,700 | 127,900 | 141,500 | 149,200 | 159,100 | 150,400 | 157,600 | 165,100 | 192,400 | 192,400 |
| All Quintiles | 46,300 | 44,800 | 45,100 | 48,600 | 50,300 | 52,400 | 50,500 | 51,100 | 53,300 | 58,600 | 58,600 |
| Top 10 Percent | 171,700 | 164,300 | 175,300 | 196,700 | 207,900 | 223,500 | 210,400 | 222,700 | 235,900 | 284,700 | 284,700 |
| Top 5 Percent | 235,000 | 221,200 | 242,500 | 281,100 | 291,700 | 321,600 | 296,800 | 318,200 | 336,900 | 425,600 | 425,600 |
| Top 1 Percent | 506,200 | 462,600 | 542,300 | 658,100 | 677,700 | 786,900 | 691,000 | 746,000 | 854,300 | 1,114,800 | 1,114,800 |

After-Tax Income

| Lowest Quintile | 9,800 | 9,100 | 8,400 | 9,000 | 9,100 | 9,600 | 9,100 | 8,700 | 9,100 | 9,200 | 9,300 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second Quintile | 22,900 | 21,500 | 20,500 | 21,700 | 22,400 | 22,900 | 22,400 | 21,800 | 22,600 | 23,500 | 23,700 |
| Middle Quintile | 34,400 | 32,700 | 32,200 | 33,900 | 35,000 | 35,700 | 34,800 | 34,400 | 35,400 | 37,100 | 37,400 |
| Fourth Quintile | 47,400 | 45,600 | 46,400 | 48,900 | 50,900 | 51,800 | 50,600 | 51,000 | 51,800 | 54,400 | 54,800 |
| Highest Quintile | 9,800 | 88,700 | 96,700 | 107,200 | 110,100 | 117,900 | 111,300 | 113,500 | 116,000 | 137,000 | 137,800 |
| All Quintiles | 35,400 | 34,300 | 35,600 | 38,000 | 39,000 | 40,600 | 39,200 | 39,100 | 40,200 | 44,400 | 44,700 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Top 10 Percent | 119,200 | 117,000 | 131,300 | 148,000 | 151,100 | 163,700 | 153,600 | 157,000 | 161,700 | 198,400 | 199,600 |
| Top 5 Percent | 157,700 | 155,100 | 180,200 | 210,500 | 208,900 | 233,300 | 214,300 | 219,900 | 224,700 | 291,100 | 29,100 |
| Top 1 Percent | 317,300 | 315,500 | 395,700 | 485,900 | 473,900 | 564,200 | 488,100 | 494,800 | 538,400 | 739,400 | 746,800 |

SOURCE: Congressional Budget Office.
NOTES: Households are people who share a single housing unit, regardless of the relationships among them.
Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Households with negative income are excluded from the lowest income category but are included in totals.

Table l-3c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 | Under 2000 |
|  |  |  |  |  |  |  |  |  |  | Law | Law |


| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 6.5 | 6.0 | 5.2 | 5.4 | 5.3 | 5.4 | 5.3 | 5.0 | 5.0 | 4.7 | 4.7 |
| Second Quintile | 13.1 | 12.8 | 11.8 | 11.9 | 11.9 | 11.7 | 11.8 | 11.5 | 11.4 | 10.6 | 10.6 |
| Middle Quintile | 17.3 | 17.3 | 16.8 | 16.5 | 16.4 | 16.1 | 16.4 | 16.0 | 15.6 | 14.8 | 14.8 |
| Fourth Quintile | 22.1 | 22.1 | 22.4 | 21.6 | 21.9 | 21.1 | 21.6 | 21.6 | 20.9 | 19.8 | 19.8 |
| Highest Quintile | 41.2 | 42.3 | 44.1 | 45.2 | 45.0 | 46.3 | 45.2 | 46.4 | 47.4 | 50.4 | 50.4 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 27.5 | 27.9 | 29.6 | 31.0 | 30.9 | 32.6 | 31.1 | 32.3 | 33.3 | 36.8 | 36.8 |
| Top 5 Percent | 18.9 | 19.0 | 20.6 | 21.7 | 21.9 | 23.5 | 22.0 | 23.1 | 24.4 | 27.9 | 27.9 |
| Top 1 Percent | 8.6 | 8.7 | 10.1 | 11.1 | 11.1 | 12.4 | 11.0 | 12.0 | 12.6 | 16.1 | 16.1 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 7.5 | 7.0 | 6.0 | 6.1 | 6.1 | 6.2 | 6.1 | 5.9 | 6.1 | 5.7 | 5.6 |
| Second Quintile | 14.2 | 13.9 | 12.7 | 12.6 | 12.8 | 12.5 | 12.7 | 12.6 | 12.6 | 11.7 | 11.7 |
| Middle Quintile | 17.9 | 17.8 | 17.2 | 16.9 | 16.9 | 16.6 | 16.9 | 16.7 | 16.4 | 15.5 | 15.5 |
| Fourth Quintile | 22.2 | 22.0 | 22.3 | 21.4 | 22.0 | 21.2 | 21.6 | 21.8 | 21.2 | 20.1 | 20.2 |
| Highest Quintile | 38.5 | 40.0 | 42.3 | 43.7 | 42.9 | 44.3 | 43.0 | 43.7 | 44.2 | 47.4 | 47.3 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 24.9 | 26.0 | 28.2 | 29.8 | 28.9 | 30.8 | 29.2 | 29.8 | 30.3 | 33.9 | 33.9 |
| Top 5 Percent | 16.5 | 17.4 | 19.4 | 20.7 | 20.2 | 22.0 | 20.5 | 20.8 | 21.5 | 25.2 | 25.2 |
| Top 1 Percent | 7.1 | 7.8 | 9.3 | 10.5 | 10.0 | 11.5 | 10.0 | 10.4 | 10.6 | 14.1 | 14.1 |
| Minimum Income (1997 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 19,900 | 18,400 | 17,100 | 18,500 | 18,900 | 19,600 | 18,900 | 18,200 | 18,800 | 19,500 | 19,500 |
| Middle Quintile | 35,800 | 34,000 | 32,000 | 34,000 | 35,300 | 35,900 | 35,100 | 34,400 | 35,700 | 37,400 | 37,400 |
| Fourth Quintile | 51,800 | 50,000 | 48,700 | 51,800 | 53,300 | 54,700 | 53,200 | 53,400 | 54,800 | 57,100 | 57,100 |
| Highest Quintile | 73,700 | 72,400 | 72,300 | 76,700 | 80,700 | 82,100 | 80,400 | 82,900 | 83,600 | 88,000 | 88,000 |
| Top 10 Percent | 96,600 | 95,300 | 95,400 | 102,500 | 108,600 | 110,600 | 108,800 | 111,100 | 113,600 | 122,300 | 122,300 |
| Top 5 Percent | 124,600 | 120,300 | 123,400 | 134,900 | 141,100 | 145,900 | 143,200 | 148,100 | 152,200 | 166,500 | 166,500 |
| Top 1 Percent | 236,400 | 220,100 | 238,000 | 270,300 | 287,300 | 320,300 | 302,200 | 308,700 | 355,100 | 456,100 | 456,100 |

NOTES: (Continued)
Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their household cash income plus taxes paid by businesses and employee contributions to $401(\mathrm{k})$ retirement plans. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-4a.
Effective Federal Tax Rates for All Households, by Income Quintile, Using Household Cash Income Plus Taxes Paid by Businesses, Employee Contributions to 401(k) Retirement Plans, and Nonhealth In-Kind Benefits, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

SOURCE: Congressional Budget Office.

Table l-4a. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | $\begin{aligned} & \hline \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.8 | 1.0 | 0.8 | 0.8 | 1.0 | 1.0 | 0.8 | 1.0 | 1.1 | 1.0 | 1.0 |
| Second Quintile | 2.2 | 1.4 | 1.1 | 1.2 | 1.6 | 1.5 | 1.3 | 1.5 | 1.7 | 1.6 | 1.6 |
| Middle Quintile | 1.9 | 1.3 | 1.2 | 1.2 | 1.6 | 1.4 | 1.3 | 1.5 | 1.5 | 1.6 | 1.6 |
| Fourth Quintile | 2.1 | 1.4 | 1.2 | 1.1 | 1.7 | 1.4 | 1.2 | 1.5 | 1.6 | 1.6 | 1.6 |
| Highest Quintile | 5.7 | 3.7 | 2.8 | 2.9 | 3.7 | 3.6 | 3.2 | 4.1 | 4.9 | 4.6 | 4.6 |
| All Quintiles | 3.6 | 2.3 | 1.9 | 1.9 | 2.5 | 2.4 | 2.1 | 2.7 | 3.1 | 3.0 | 3.0 |
| Top 10 Percent | 7.4 | 4.7 | 3.5 | 3.6 | 4.5 | 4.5 | 3.9 | 5.2 | 6.2 | 5.5 | 5.5 |
| Top 5 Percent | 9.2 | 5.7 | 4.2 | 4.3 | 5.4 | 5.4 | 4.8 | 6.2 | 7.5 | 6.4 | 6.4 |
| Top 1 Percent | 12.8 | 7.9 | 5.7 | 5.7 | 7.2 | 6.9 | 6.6 | 8.2 | 9.8 | 7.8 | 7.8 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.3 | 1.8 | 2.0 | 2.6 | 2.7 | 2.0 | 2.5 | 2.7 | 3.0 | 3.2 | 3.2 |
| Second Quintile | 1.4 | 1.1 | 1.2 | 1.5 | 1.4 | 1.4 | 1.5 | 1.6 | 1.8 | 1.6 | 1.6 |
| Middle Quintile | 1.1 | 0.8 | 1.0 | 1.1 | 1.1 | 1.0 | 1.1 | 1.2 | 1.3 | 1.1 | 1.1 |
| Fourth Quintile | 1.0 | 0.7 | 0.8 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 1.1 | 0.9 | 0.9 |
| Highest Quintile | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 |
| All Quintiles | 1.0 | 0.8 | 0.9 | 1.0 | 0.9 | 0.9 | 1.0 | 1.0 | 1.1 | 0.9 | 0.9 |
| Top 10 Percent | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 |
| Top 5 Percent | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.3 | 0.3 |
| Top 1 Percent | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 |

NOTES: Effective tax rates are calculated by dividing tax liabilities by household cash income plus taxes paid by businesses, employee contributions to $401(\mathrm{k})$ retirement plans, and nonhealth in-kind benefits.

Households are people who share a single housing unit, regardless of the relationships among them.
Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Nonhealth in-kind benefits include food stamps, school lunches and breakfasts, housing assistance, and energy assistance. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their household cash income plus taxes paid by businesses, employee contributions to $401(\mathrm{k})$ retirement plans, and nonhealth in-kind benefits. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table l-4b.
Shares of Federal Tax Liabilities for All Households, by Income Quintile, Using Household Cash Income Plus Taxes Paid by Businesses, Employee Contributions to 401(k) Retirement Plans, and Nonhealth In-Kind Benefits, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \hline \text { Under } \\ 1997 \\ \text { Law } \end{gathered}$ | Under 2000 Law |
| Share of Total Federal Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 3.1 | 2.7 | 2.4 | 2.9 | 2.7 | 2.7 | 2.6 | 2.3 | 2.0 | 1.8 | 1.8 |
| Second Quintile | 9.6 | 9.3 | 8.6 | 9.2 | 8.7 | 8.6 | 8.7 | 7.9 | 7.6 | 7.2 | 7.1 |
| Middle Quintile | 15.5 | 15.7 | 15.2 | 15.0 | 14.5 | 14.5 | 14.5 | 13.8 | 13.2 | 12.5 | 12.3 |
| Fourth Quintile | 21.7 | 22.4 | 23.0 | 22.1 | 21.5 | 21.0 | 21.7 | 20.9 | 20.0 | 18.7 | 18.6 |
| Highest Quintile | 50.1 | 49.8 | 50.6 | 50.6 | 52.4 | 53.2 | 52.4 | 55.1 | 57.1 | 59.7 | 60.2 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 35.9 | 34.2 | 35.0 | 35.4 | 37.5 | 38.6 | 37.4 | 40.3 | 42.6 | 46.0 | 46.4 |
| Top 5 Percent | 26.5 | 24.2 | 24.9 | 25.1 | 27.7 | 28.5 | 27.3 | 30.2 | 33.0 | 36.3 | 36.6 |
| Top 1 Percent | 13.8 | 11.8 | 12.8 | 13.4 | 14.8 | 15.5 | 14.5 | 17.2 | 19.0 | 22.3 | 22.4 |
| Share of Individual Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0.6 | 0.7 | 0.5 | 0.7 | 0.3 | 0.3 | 0 | -0.3 | -1.0 | -1.0 | -1.1 |
| Second Quintile | 6.4 | 6.5 | 5.5 | 6.0 | 5.2 | 5.2 | 5.2 | 4.1 | 3.7 | 3.4 | 2.9 |
| Middle Quintile | 13.4 | 13.5 | 12.6 | 12.3 | 11.3 | 11.6 | 11.7 | 10.5 | 10.1 | 9.2 | 8.6 |
| Fourth Quintile | 21.2 | 21.4 | 21.3 | 20.1 | 19.1 | 18.6 | 19.6 | 18.4 | 17.6 | 15.8 | 15.3 |
| Highest Quintile | 58.3 | 57.9 | 60.2 | 60.8 | 64.0 | 64.3 | 63.5 | 67.2 | 69.5 | 72.6 | 74.3 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 43.1 | 41.3 | 44.3 | 45.4 | 48.8 | 49.9 | 48.4 | 52.6 | 55.0 | 59.4 | 61.0 |
| Top 5 Percent | 32.4 | 30.3 | 33.2 | 33.9 | 37.9 | 38.8 | 37.4 | 41.8 | 44.6 | 49.2 | 50.4 |
| Top 1 Percent | 16.9 | 15.3 | 18.4 | 19.5 | 21.6 | 22.5 | 21.5 | 25.8 | 27.4 | 32.2 | 32.9 |
| Share of Social Insurance Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.0 | 4.6 | 3.9 | 4.4 | 4.3 | 4.7 | 4.3 | 3.9 | 4.1 | 4.1 | 4.1 |
| Second Quintile | 14.4 | 13.6 | 12.4 | 12.7 | 12.5 | 12.4 | 12.1 | 11.6 | 11.5 | 11.8 | 11.8 |
| Middle Quintile | 21.6 | 20.7 | 19.6 | 19.3 | 19.4 | 19.3 | 18.4 | 18.6 | 18.3 | 18.2 | 18.2 |
| Fourth Quintile | 26.8 | 27.1 | 27.6 | 27.1 | 27.0 | 26.7 | 26.4 | 26.5 | 26.0 | 25.8 | 25.8 |
| Highest Quintile | 32.0 | 33.9 | 36.3 | 36.3 | 36.7 | 36.9 | 38.7 | 39.3 | 40.1 | 40.0 | 40.0 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 16.6 | 17.7 | 19.4 | 19.4 | 19.9 | 20.2 | 22.1 | 22.0 | 23.1 | 23.4 | 23.4 |
| Top 5 Percent | 8.2 | 8.9 | 10.0 | 10.0 | 10.6 | 10.4 | 11.9 | 11.8 | 13.3 | 13.5 | 13.5 |
| Top 1 Percent | 1.6 | 1.7 | 2.0 | 2.1 | 2.3 | 2.2 | 2.7 | 2.6 | 3.8 | 4.1 | 4.1 |

SOURCE: Congressional Budget Office.

Table l-4b. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \hline \text { Under } \\ 1997 \\ \text { Law } \end{gathered}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 3.6 | 2.9 | 2.4 | 2.5 | 2.3 | 2.5 | 2.3 | 2.2 | 2.0 | 1.6 | 1.6 |
| Second Quintile | 8.2 | 7.5 | 7.1 | 7.3 | 7.6 | 7.3 | 7.2 | 6.5 | 6.1 | 5.5 | 5.5 |
| Middle Quintile | 9.1 | 9.9 | 10.8 | 10.4 | 10.3 | 9.4 | 10.1 | 8.7 | 7.6 | 7.5 | 7.5 |
| Fourth Quintile | 13.1 | 12.9 | 14.4 | 12.7 | 14.5 | 12.0 | 12.8 | 12.3 | 10.7 | 10.3 | 10.3 |
| Highest Quintile | 65.8 | 66.7 | 65.1 | 67.0 | 65.1 | 69.4 | 67.5 | 70.3 | 73.6 | 75.3 | 75.3 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 56.7 | 56.2 | 55.0 | 57.4 | 55.3 | 60.5 | 57.9 | 61.9 | 65.1 | 66.6 | 66.6 |
| Top 5 Percent | 48.4 | 46.6 | 46.3 | 48.0 | 47.1 | 52.5 | 50.7 | 53.5 | 57.8 | 58.6 | 58.6 |
| Top 1 Percent | 30.9 | 29.4 | 30.4 | 32.3 | 31.6 | 35.0 | 34.5 | 36.7 | 39.2 | 40.8 | 40.8 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 15.5 | 14.8 | 13.2 | 16.1 | 16.9 | 13.3 | 15.5 | 14.7 | 15.3 | 17.6 | 17.6 |
| Second Quintile | 17.3 | 17.2 | 16.7 | 18.4 | 18.0 | 17.9 | 17.8 | 18.1 | 18.6 | 18.1 | 18.1 |
| Middle Quintile | 18.1 | 18.2 | 18.9 | 17.8 | 18.4 | 18.8 | 19.1 | 18.0 | 18.4 | 17.9 | 17.9 |
| Fourth Quintile | 20.5 | 20.1 | 21.4 | 19.0 | 19.2 | 19.9 | 19.8 | 19.3 | 19.7 | 18.5 | 18.5 |
| Highest Quintile | 27.9 | 28.7 | 28.9 | 26.9 | 26.3 | 28.1 | 27.0 | 28.7 | 26.9 | 27.1 | 27.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 16.8 | 17.0 | 17.5 | 16.3 | 15.6 | 16.9 | 16.3 | 18.3 | 16.0 | 16.7 | 16.7 |
| Top 5 Percent | 10.5 | 10.5 | 10.8 | 9.9 | 9.2 | 10.5 | 10.1 | 11.9 | 9.8 | 10.2 | 10.2 |
| Top 1 Percent | 3.9 | 4.0 | 4.2 | 3.9 | 3.2 | 4.1 | 4.0 | 5.6 | 3.3 | 3.5 | 3.5 |

NOTES: Households are people who share a single housing unit, regardless of the relationships among them.
Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Nonhealth in-kind benefits include food stamps, school lunches and breakfasts, housing assistance, and energy assistance. Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their household cash income plus taxes paid by businesses, employee contributions to $401(\mathrm{k})$ retirement plans, and nonhealth in-kind benefits. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-4c.
Number of Households, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for All Households, by Income Quintile, Using Household Cash Income Plus Taxes Paid by Businesses, Employee Contributions to 401(k) Retirement Plans, and Nonhealth In-Kind Benefits, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under <br> 1997 <br> Law | Under 2000 <br> Law |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Number of Households (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 22.8 | 22.8 | 22.5 | 23.8 | 24.7 | 25.6 | 26.1 | 26.4 | 27.4 | 28.3 | 28.3 |
| Second Quintile | 17.6 | 18.2 | 18.6 | 19.4 | 20.2 | 20.7 | 21.1 | 21.7 | 21.9 | 22.6 | 22.6 |
| Middle Quintile | 14.9 | 15.6 | 16.3 | 16.8 | 17.3 | 17.8 | 18.2 | 18.4 | 18.5 | 19.0 | 19.0 |
| Fourth Quintile | 13.5 | 13.9 | 14.7 | 14.9 | 15.5 | 15.7 | 16.1 | 16.3 | 16.4 | 16.8 | 16.8 |
| Highest Quintile | 12.2 | 13.0 | 13.4 | 13.9 | 13.9 | 14.4 | 14.6 | 14.8 | 15.2 | 15.8 | 15.8 |
| All Quintiles | 81.4 | 84.2 | 86.2 | 89.5 | 92.0 | 94.6 | 96.7 | 98.2 | 99.7 | 102.9 | 102.9 |
| Top 10 Percent | 6.0 | 6.4 | 6.6 | 6.9 | 6.9 | 7.2 | 7.2 | 7.3 | 7.5 | 7.8 | 7.8 |
| Top 5 Percent | 3.0 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.6 | 3.6 | 3.8 | 4.0 | 4.0 |
| Top 1 Percent | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 |
| Average Income (1997 dollars) <br> Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 11,700 | 10,900 | 10,100 | 11,000 | 11,100 | 11,500 | 11,200 | 10,800 | 11,000 | 11,000 | 11,000 |
| Second Quintile | 28,100 | 26,500 | 24,700 | 26,500 | 27,200 | 27,900 | 27,300 | 26,600 | 27,600 | 28,500 | 28,500 |
| Middle Quintile | 43,800 | 41,800 | 40,100 | 42,500 | 43,900 | 45,000 | 43,700 | 43,400 | 45,000 | 46,900 | 46,900 |
| Fourth Quintile | 61,700 | 60,000 | 59,400 | 62,900 | 65,400 | 66,900 | 65,400 | 66,200 | 67,900 | 70,800 | 70,800 |
| Highest Quintile | 127,100 | 122,800 | 128,000 | 141,600 | 149,400 | 159,200 | 150,600 | 157,800 | 165,300 | 192,500 | 192,500 |
| All Quintiles | 46,500 | 45,100 | 45,400 | 48,800 | 50,600 | 52,700 | 50,800 | 51,500 | 53,600 | 58,900 | 58,900 |
| Top 10 Percent | 171,800 | 164,400 | 175,400 | 196,800 | 207,900 | 223,600 | 210,600 | 222,800 | 236,100 | 284,800 | 284,800 |
| Top 5 Percent | 235,100 | 221,200 | 242,600 | 281,100 | 291,700 | 321,700 | 296,900 | 318,200 | 337,000 | 425,600 | 425,600 |
| Top 1 Percent | 506,300 | 462,600 | 542,300 | 658,100 | 677,700 | 786,900 | 691,100 | 746,000 | 854,300 | 1,114,900 | 1,114,900 |


| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 10,500 | 9,900 | 9,200 | 9,800 | 9,900 | 10,400 | 10,100 | 9,700 | 10,000 | 10,000 | 10,000 |
| Second Quintile | 23,300 | 21,900 | 20,900 | 22,100 | 22,700 | 23,200 | 22,800 | 22,300 | 23,100 | 23,800 | 24,000 |
| Middle Quintile | 34,600 | 32,900 | 32,300 | 34,000 | 35,200 | 35,800 | 35,000 | 34,600 | 35,600 | 37,300 | 37,600 |
| Fourth Quintile | 47,500 | 45,700 | 46,500 | 49,000 | 51,000 | 51,900 | 50,700 | 51,100 | 51,900 | 54,500 | 55,000 |
| Highest Quintile | 90,900 | 88,800 | 96,800 | 107,300 | 110,200 | 118,000 | 111,400 | 113,600 | 116,200 | 137,100 | 137,900 |
| All Quintiles | 35,700 | 34,500 | 35,800 | 38,300 | 39,300 | 40,900 | 39,500 | 39,400 | 40,500 | 44,700 | 45,000 |
| Top 10 Percent | 119,300 | 117,100 | 131,400 | 148,200 | 151,100 | 163,800 | 153,700 | 157,200 | 161,900 | 198,500 | 199,700 |
| Top 5 Percent | 157,800 | 155,200 | 180,200 | 210,500 | 208,900 | 233,400 | 214,300 | 219,900 | 224,700 | 291,200 | 293,100 |
| Top 1 Percent | 317,300 | 315,500 | 395,700 | 485,900 | 473,900 | 564,200 | 488,100 | 494,900 | 538,400 | 739,400 | 746,900 |

SOURCE: Congressional Budget Office.
NOTES: Households are people who share a single housing unit, regardless of the relationships among them.

> Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Nonhealth in-kind benefits include food stamps, school lunches and breakfasts, housing assistance, and energy assistance. Households with negative income are excluded from the lowest income category but are included in totals.

Table l-4c. Continued

|  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 7.0 | 6.6 | 5.8 | 6.0 | 5.9 | 5.9 | 5.9 | 5.6 | 5.6 | 5.1 | 5.1 |
| Second Quintile | 13.1 | 12.7 | 11.7 | 11.8 | 11.8 | 11.6 | 11.7 | 11.5 | 11.3 | 10.6 | 10.6 |
| Middle Quintile | 17.2 | 17.2 | 16.7 | 16.3 | 16.3 | 16.0 | 16.2 | 15.9 | 15.5 | 14.7 | 14.7 |
| Fourth Quintile | 22.0 | 22.0 | 22.3 | 21.5 | 21.8 | 21.0 | 21.5 | 21.4 | 20.8 | 19.7 | 19.7 |
| Highest Quintile | 41.0 | 42.0 | 43.8 | 45.0 | 44.7 | 46.1 | 44.9 | 46.1 | 47.0 | 50.1 | 50.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 27.3 | 27.7 | 29.5 | 30.9 | 30.7 | 32.4 | 30.9 | 32.0 | 33.1 | 36.7 | 36.7 |
| Top 5 Percent | 18.8 | 18.9 | 20.5 | 21.5 | 21.8 | 23.3 | 21.9 | 22.9 | 24.2 | 27.8 | 27.8 |
| Top 1 Percent | 8.6 | 8.7 | 10.0 | 11.0 | 11.0 | 12.3 | 11.0 | 11.9 | 12.6 | 16.0 | 16.0 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 8.2 | 7.8 | 6.7 | 6.8 | 6.8 | 6.9 | 6.9 | 6.6 | 6.8 | 6.2 | 6.1 |
| Second Quintile | 14.1 | 13.7 | 12.6 | 12.5 | 12.7 | 12.5 | 12.6 | 12.5 | 12.5 | 11.7 | 11.7 |
| Middle Quintile | 17.7 | 17.7 | 17.0 | 16.7 | 16.8 | 16.5 | 16.7 | 16.5 | 16.3 | 15.4 | 15.4 |
| Fourth Quintile | 22.0 | 21.8 | 22.1 | 21.3 | 21.9 | 21.0 | 21.4 | 21.6 | 21.1 | 20.0 | 20.0 |
| Highest Quintile | 38.2 | 39.7 | 42.0 | 43.4 | 42.5 | 44.1 | 42.7 | 43.3 | 43.8 | 47.1 | 47.0 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 24.7 | 25.8 | 28.0 | 29.6 | 28.7 | 30.6 | 29.0 | 29.5 | 30.1 | 33.7 | 33.6 |
| Top 5 Percent | 16.4 | 17.3 | 19.3 | 20.6 | 20.1 | 21.8 | 20.3 | 20.7 | 21.4 | 25.0 | 25.0 |
| Top 1 Percent | 7.0 | 7.7 | 9.3 | 10.4 | 9.9 | 11.4 | 10.0 | 10.3 | 10.5 | 14.0 | 14.0 |
| Minimum Income (1997 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 20,800 | 19,200 | 17,800 | 19,100 | 19,500 | 20,100 | 19,700 | 19,000 | 19,700 | 20,100 | 20,100 |
| Middle Quintile | 36,100 | 34,300 | 32,200 | 34,200 | 35,400 | 36,100 | 35,300 | 34,700 | 36,000 | 37,600 | 37,600 |
| Fourth Quintile | 52,000 | 50,100 | 48,800 | 51,900 | 53,400 | 54,800 | 53,400 | 53,500 | 55,000 | 57,300 | 57,300 |
| Highest Quintile | 73,800 | 72,500 | 72,300 | 76,800 | 80,800 | 82,200 | 80,600 | 83,000 | 83,700 | 88,000 | 88,000 |
| Top 10 Percent | 96,700 | 95,400 | 95,500 | 102,600 | 108,600 | 110,700 | 108,900 | 111,300 | 113,700 | 122,400 | 122,400 |
| Top 5 Percent | 124,700 | 120,300 | 123,400 | 134,900 | 141,100 | 146,200 | 143,200 | 148,100 | 152,300 | 166,500 | 166,500 |
| Top 1 Percent | 236,400 | 220,100 | 238,000 | 270,300 | 287,300 | 320,300 | 302,200 | 308,800 | 355,100 | 456,100 | 456,100 |

NOTES: (Continued)
Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their household cash income plus taxes paid by businesses, employee contributions to $401(\mathrm{k})$ retirement plans, and nonhealth in-kind benefits. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-5a.
Effective Federal Tax Rates for All Households, by Income Quintile, Using Comprehensive Household Income, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by comprehensive household income.
Households are people who share a single housing unit, regardless of the relationships among them.

Table l-5a.
Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | Under 2000 Law |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.7 | 0.9 | 0.7 | 0.7 | 0.9 | 0.9 | 0.7 | 0.9 | 0.9 | 0.8 | 0.8 |
| Second Quintile | 2.1 | 1.2 | 1.0 | 1.1 | 1.5 | 1.3 | 1.1 | 1.3 | 1.4 | 1.3 | 1.3 |
| Middle Quintile | 1.8 | 1.3 | 1.1 | 1.2 | 1.5 | 1.4 | 1.3 | 1.4 | 1.4 | 1.5 | 1.5 |
| Fourth Quintile | 2.1 | 1.3 | 1.2 | 1.1 | 1.6 | 1.3 | 1.2 | 1.5 | 1.5 | 1.5 | 1.5 |
| Highest Quintile | 5.6 | 3.6 | 2.7 | 2.8 | 3.6 | 3.6 | 3.1 | 3.9 | 4.8 | 4.5 | 4.5 |
| All Quintiles | 3.4 | 2.2 | 1.8 | 1.8 | 2.4 | 2.3 | 2.0 | 2.5 | 2.9 | 2.9 | 2.9 |
| Top 10 Percent | 7.2 | 4.6 | 3.4 | 3.5 | 4.4 | 4.4 | 3.8 | 5.0 | 6.0 | 5.4 | 5.4 |
| Top 5 Percent | 9.0 | 5.6 | 4.2 | 4.2 | 5.3 | 5.3 | 4.8 | 6.1 | 7.3 | 6.3 | 6.3 |
| Top 1 Percent | 12.7 | 7.8 | 5.6 | 5.6 | 7.1 | 6.8 | 6.5 | 8.1 | 9.7 | 7.7 | 7.7 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.1 | 1.6 | 1.8 | 2.3 | 2.4 | 1.8 | 2.3 | 2.4 | 2.6 | 2.8 | 2.8 |
| Second Quintile | 1.3 | 1.0 | 1.1 | 1.4 | 1.3 | 1.2 | 1.3 | 1.5 | 1.6 | 1.4 | 1.4 |
| Middle Quintile | 1.0 | 0.8 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.0 | 1.0 |
| Fourth Quintile | 0.9 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 1.0 | 0.8 | 0.8 |
| Highest Quintile | 0.7 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 |
| All Quintiles | 1.0 | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 1.0 | 1.0 | 0.9 | 0.9 |
| Top 10 Percent | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 |
| Top 5 Percent | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.3 | 0.3 |
| Top 1 Percent | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 |

## NOTES: (Continued)

Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table l-5b.
Shares of Federal Tax Liabilities for All Households, by Income Quintile, Using Comprehensive Household Income, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | Under 2000 Law |
| Share of Total Federal Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 3.3 | 2.9 | 2.7 | 3.1 | 2.9 | 2.9 | 2.8 | 2.5 | 2.2 | 2.0 | 2.1 |
| Second Quintile | 9.6 | 9.3 | 8.7 | 9.3 | 8.8 | 8.7 | 8.9 | 8.2 | 7.9 | 7.4 | 7.3 |
| Middle Quintile | 15.4 | 15.6 | 15.2 | 15.0 | 14.4 | 14.5 | 14.5 | 13.7 | 13.1 | 12.5 | 12.3 |
| Fourth Quintile | 21.6 | 22.3 | 22.9 | 22.0 | 21.5 | 20.9 | 21.5 | 20.8 | 19.9 | 18.5 | 18.4 |
| Highest Quintile | 49.9 | 49.7 | 50.4 | 50.4 | 52.3 | 53.0 | 52.3 | 54.8 | 56.8 | 59.5 | 60.0 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 35.8 | 34.0 | 35.0 | 35.3 | 37.4 | 38.5 | 37.3 | 40.0 | 42.4 | 45.7 | 46.2 |
| Top 5 Percent | 26.4 | 24.0 | 24.8 | 25.1 | 27.6 | 28.5 | 27.3 | 30.1 | 32.9 | 36.2 | 36.5 |
| Top 1 Percent | 13.8 | 11.8 | 12.8 | 13.4 | 14.8 | 15.5 | 14.4 | 17.2 | 18.9 | 22.3 | 22.4 |
| Share of Individual Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0.8 | 0.9 | 0.6 | 0.9 | 0.5 | 0.5 | 0.2 | -0.1 | -0.8 | -0.9 | -1.0 |
| Second Quintile | 6.5 | 6.6 | 5.6 | 6.2 | 5.3 | 5.3 | 5.4 | 4.4 | 4.1 | 3.7 | 3.2 |
| Middle Quintile | 13.4 | 13.4 | 12.5 | 12.3 | 11.2 | 11.6 | 11.7 | 10.5 | 10.1 | 9.2 | 8.6 |
| Fourth Quintile | 21.1 | 21.4 | 21.2 | 20.1 | 19.1 | 18.5 | 19.4 | 18.3 | 17.6 | 15.6 | 15.1 |
| Highest Quintile | 58.1 | 57.7 | 60.0 | 60.6 | 63.8 | 64.1 | 63.3 | 66.9 | 69.1 | 72.4 | 74.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 42.9 | 41.1 | 44.2 | 45.2 | 48.7 | 49.6 | 48.3 | 52.3 | 54.8 | 59.1 | 60.7 |
| Top 5 Percent | 32.4 | 30.1 | 33.0 | 33.9 | 37.8 | 38.7 | 37.4 | 41.7 | 44.4 | 49.0 | 50.3 |
| Top 1 Percent | 16.9 | 15.3 | 18.3 | 19.5 | 21.7 | 22.5 | 21.4 | 25.9 | 27.3 | 32.3 | 32.9 |
| Share of Social Insurance Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.4 | 5.0 | 4.3 | 4.7 | 4.8 | 5.1 | 4.8 | 4.4 | 4.6 | 4.6 | 4.6 |
| Second Quintile | 14.3 | 13.6 | 12.4 | 12.8 | 12.6 | 12.5 | 12.4 | 11.9 | 11.9 | 12.1 | 12.1 |
| Middle Quintile | 21.5 | 20.5 | 19.5 | 19.2 | 19.1 | 19.2 | 18.2 | 18.4 | 18.1 | 18.0 | 18.0 |
| Fourth Quintile | 26.7 | 26.9 | 27.4 | 27.0 | 26.9 | 26.5 | 26.1 | 26.3 | 25.8 | 25.5 | 25.5 |
| Highest Quintile | 32.0 | 33.9 | 36.2 | 36.1 | 36.5 | 36.7 | 38.5 | 38.9 | 39.7 | 39.7 | 39.7 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 16.6 | 17.7 | 19.4 | 19.4 | 19.9 | 20.0 | 22.0 | 21.7 | 22.9 | 23.2 | 23.2 |
| Top 5 Percent | 8.2 | 8.9 | 9.9 | 9.9 | 10.6 | 10.4 | 11.9 | 11.7 | 13.2 | 13.4 | 13.4 |
| Top 1 Percent | 1.6 | 1.7 | 2.0 | 2.1 | 2.3 | 2.2 | 2.6 | 2.6 | 3.8 | 4.1 | 4.1 |

SOURCE: Congressional Budget Office.

Table l-5b.
Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | Under 2000 <br> Law |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 3.7 | 2.9 | 2.4 | 2.4 | 2.2 | 2.4 | 2.2 | 2.2 | 1.9 | 1.5 | 1.5 |
| Second Quintile | 8.1 | 7.3 | 7.1 | 7.1 | 7.5 | 7.1 | 6.8 | 6.4 | 5.8 | 5.1 | 5.1 |
| Middle Quintile | 9.3 | 10.1 | 10.8 | 10.5 | 10.4 | 9.7 | 10.5 | 8.8 | 7.7 | 7.9 | 7.9 |
| Fourth Quintile | 13.2 | 13.0 | 14.5 | 13.0 | 14.7 | 12.1 | 12.9 | 12.5 | 10.9 | 10.2 | 10.2 |
| Highest Quintile | 65.6 | 66.5 | 64.9 | 66.8 | 65.1 | 69.4 | 67.5 | 70.2 | 73.7 | 75.6 | 75.6 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 56.3 | 55.9 | 54.8 | 57.2 | 55.1 | 60.6 | 58.0 | 61.6 | 65.0 | 66.5 | 66.5 |
| Top 5 Percent | 48.1 | 46.3 | 46.2 | 47.9 | 46.9 | 52.2 | 50.6 | 53.4 | 57.6 | 58.5 | 58.5 |
| Top 1 Percent | 30.9 | 29.4 | 30.3 | 32.1 | 31.6 | 35.0 | 34.3 | 36.6 | 39.0 | 40.8 | 40.8 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 15.8 | 15.0 | 13.1 | 15.7 | 16.7 | 13.0 | 15.3 | 14.6 | 14.8 | 17.1 | 17.1 |
| Second Quintile | 17.3 | 17.1 | 16.7 | 18.8 | 18.1 | 18.0 | 17.9 | 18.1 | 18.9 | 18.3 | 18.3 |
| Middle Quintile | 18.0 | 18.2 | 19.0 | 18.0 | 18.4 | 19.1 | 19.2 | 18.2 | 18.6 | 18.1 | 18.1 |
| Fourth Quintile | 20.5 | 20.1 | 21.4 | 19.1 | 19.3 | 19.9 | 19.8 | 19.3 | 19.8 | 18.6 | 18.6 |
| Highest Quintile | 27.9 | 28.6 | 28.9 | 26.8 | 26.3 | 28.1 | 27.0 | 28.6 | 26.8 | 27.2 | 27.2 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 16.7 | 17.0 | 17.5 | 16.2 | 15.5 | 16.8 | 16.2 | 18.2 | 15.9 | 16.6 | 16.6 |
| Top 5 Percent | 10.5 | 10.4 | 10.8 | 9.9 | 9.2 | 10.4 | 10.1 | 11.9 | 9.8 | 10.1 | 10.1 |
| Top 1 Percent | 3.9 | 4.0 | 4.2 | 3.9 | 3.2 | 4.0 | 4.0 | 5.6 | 3.3 | 3.5 | 3.5 |

NOTES: Households are people who share a single housing unit, regardless of the relationships among them.
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to 401(k) retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table l-5c.
Number of Households, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for All Households, by Income Quintile, Using Comprehensive Household Income, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Number of Households (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 23.0 | 22.9 | 22.5 | 23.8 | 24.7 | 25.6 | 26.0 | 26.4 | 27.5 | 28.2 | 28.2 |
| Second Quintile | 17.6 | 18.2 | 18.7 | 19.6 | 20.3 | 20.8 | 21.2 | 21.9 | 22.1 | 22.7 | 22.7 |
| Middle Quintile | 14.8 | 15.6 | 16.3 | 16.8 | 17.2 | 17.9 | 18.3 | 18.5 | 18.4 | 19.1 | 19.1 |
| Fourth Quintile | 13.4 | 13.9 | 14.7 | 14.9 | 15.5 | 15.6 | 16.1 | 16.3 | 16.3 | 16.7 | 16.7 |
| Highest Quintile | 12.2 | 13.0 | 13.4 | 13.8 | 13.9 | 14.4 | 14.6 | 14.7 | 15.1 | 15.7 | 15.7 |
| All Quintiles | 81.4 | 84.2 | 86.2 | 89.5 | 92.0 | 94.6 | 96.7 | 98.2 | 99.7 | 102.9 | 102.9 |
| Top 10 Percent | 6.0 | 6.4 | 6.6 | 6.8 | 6.8 | 7.2 | 7.2 | 7.2 | 7.4 | 7.7 | 7.7 |
| Top 5 Percent | 3.0 | 3.2 | 3.3 | 3.3 | 3.5 | 3.6 | 3.6 | 3.6 | 3.8 | 3.9 | 3.9 |
| Top 1 Percent | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 |
| Average Income (1997 dollars) <br> Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 12,700 | 11,900 | 11,000 | 11,900 | 12,100 | 12,700 | 12,200 | 11,900 | 12,400 | 12,300 | 12,300 |
| Second Quintile | 30,100 | 28,300 | 26,600 | 28,500 | 29,500 | 30,400 | 29,900 | 29,700 | 31,100 | 31,800 | 31,800 |
| Middle Quintile | 46,100 | 43,900 | 42,400 | 45,000 | 46,800 | 48,100 | 47,000 | 47,500 | 49,400 | 51,100 | 51,100 |
| Fourth Quintile | 64,500 | 62,500 | 62,200 | 65,900 | 68,800 | 70,600 | 69,200 | 71,100 | 73,000 | 75,500 | 75,500 |
| Highest Quintile | 130,600 | 126,000 | 131,700 | 145,800 | 153,900 | 164,200 | 155,600 | 164,100 | 172,200 | 198,600 | 198,600 |
| All Quintiles | 48,500 | 47,000 | 47,500 | 51,000 | 53,100 | 55,400 | 53,600 | 54,800 | 57,300 | 62,400 | 62,400 |
| Top 10 Percent | 175,800 | 168,200 | 179,400 | 201,500 | 212,900 | 229,400 | 216,100 | 230,200 | 244,000 | 292,700 | 292,700 |
| Top 5 Percent | 238,900 | 225,600 | 247,800 | 286,000 | 297,000 | 328,400 | 302,800 | 325,700 | 345,800 | 434,400 | 434,400 |
| Top 1 Percent | 508,000 | 466,300 | 548,300 | 665,900 | 682,800 | 792,900 | 701,900 | 751,400 | 865,600 | 1,121,500 | 1,121,500 |


| Lowest Quintile | 11,400 | 10,700 | 10,000 | 10,600 | 10,900 | 11,400 | 11,000 | 10,700 | 11,300 | 11,300 | 11,300 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second Quintile | 25,300 | 23,800 | 22,800 | 24,000 | 25,000 | 25,700 | 25,400 | 25,300 | 26,500 | 27,100 | 27,300 |
| Middle Quintile | 36,900 | 35,000 | 34,700 | 36,600 | 38,100 | 39,000 | 38,300 | 38,800 | 40,100 | 41,500 | 41,800 |
| Fourth Quintile | 50,400 | 48,200 | 49,400 | 52,000 | 54,400 | 55,700 | 54,600 | 56,000 | 57,100 | 59,300 | 59,800 |
| Highest Quintile | 94,400 | 92,000 | 100,500 | 111,300 | 114,700 | 122,900 | 116,400 | 119,900 | 123,100 | 143,200 | 144,000 |
| All Quintiles | 37,700 | 36,400 | 37,900 | 40,500 | 41,800 | 43,600 | 42,300 | 42,700 | 44,200 | 48,200 | 48,500 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Top 10 Percent | 123,100 | 120,700 | 135,400 | 152,700 | 156,000 | 169,500 | 159,200 | 164,300 | 169,500 | 206,100 | 207,200 |
| Top 5 Percent | 161,500 | 159,300 | 185,100 | 215,300 | 214,200 | 239,800 | 220,100 | 227,100 | 233,100 | 299,400 | 301,300 |
| Top 1 Percent | 319,600 | 319,200 | 401,000 | 492,800 | 478,900 | 570,000 | 497,200 | 499,900 | 548,300 | 746,300 | 753,700 |

SOURCE: Congressional Budget Office.
NOTES: Households are people who share a single housing unit, regardless of the relationships among them.
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Table l-5c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 | Under 2000 |
|  |  |  |  |  |  |  |  |  |  | Law | Law |


| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 7.4 | 6.9 | 6.0 | 6.2 | 6.1 | 6.2 | 6.1 | 5.8 | 5.9 | 5.4 | 5.4 |
| Second Quintile | 13.4 | 13.1 | 12.1 | 12.2 | 12.3 | 12.0 | 12.3 | 12.1 | 12.1 | 11.3 | 11.3 |
| Middle Quintile | 17.3 | 17.3 | 16.9 | 16.6 | 16.5 | 16.4 | 16.6 | 16.3 | 15.9 | 15.2 | 15.2 |
| Fourth Quintile | 21.9 | 21.9 | 22.3 | 21.5 | 21.8 | 21.1 | 21.4 | 21.5 | 20.9 | 19.7 | 19.7 |
| Highest Quintile | 40.2 | 41.3 | 42.9 | 44.0 | 43.7 | 45.0 | 43.8 | 44.7 | 45.5 | 48.7 | 48.7 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 26.6 | 27.0 | 28.7 | 30.1 | 29.8 | 31.4 | 29.9 | 30.7 | 31.8 | 35.2 | 35.2 |
| Top 5 Percent | 18.2 | 18.4 | 19.8 | 20.9 | 21.1 | 22.5 | 21.1 | 21.9 | 23.1 | 26.5 | 26.5 |
| Top 1 Percent | 8.3 | 8.4 | 9.6 | 10.6 | 10.6 | 11.8 | 10.4 | 11.3 | 11.8 | 15.2 | 15.2 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 8.5 | 8.0 | 6.9 | 7.0 | 7.0 | 7.1 | 7.0 | 6.8 | 7.0 | 6.4 | 6.4 |
| Second Quintile | 14.4 | 14.1 | 13.0 | 13.0 | 13.2 | 12.9 | 13.2 | 13.2 | 13.3 | 12.4 | 12.4 |
| Middle Quintile | 17.9 | 17.8 | 17.3 | 17.0 | 17.1 | 16.9 | 17.2 | 17.0 | 16.7 | 16.0 | 16.0 |
| Fourth Quintile | 22.0 | 21.8 | 22.2 | 21.4 | 21.9 | 21.1 | 21.4 | 21.7 | 21.2 | 20.0 | 20.1 |
| Highest Quintile | 37.4 | 38.8 | 41.0 | 42.4 | 41.4 | 42.8 | 41.5 | 41.8 | 42.2 | 45.5 | 45.4 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 24.0 | 25.0 | 27.1 | 28.7 | 27.8 | 29.5 | 28.0 | 28.1 | 28.6 | 32.1 | 32.1 |
| Top 5 Percent | 15.8 | 16.7 | 18.5 | 19.8 | 19.3 | 20.9 | 19.4 | 19.5 | 20.1 | 23.7 | 23.7 |
| Top 1 Percent | 6.7 | 7.4 | 8.8 | 9.9 | 9.4 | 10.8 | 9.4 | 9.6 | 9.7 | 13.1 | 13.1 |
| Minimum Income (1997 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 22,500 | 21,000 | 19,500 | 20,900 | 21,500 | 22,300 | 21,800 | 21,500 | 22,500 | 22,900 | 22,900 |
| Middle Quintile | 38,400 | 36,300 | 34,400 | 36,500 | 38,100 | 39,100 | 38,300 | 38,400 | 40,400 | 41,500 | 41,500 |
| Fourth Quintile | 54,500 | 52,300 | 51,300 | 54,700 | 56,400 | 58,100 | 56,900 | 58,000 | 59,700 | 61,900 | 61,900 |
| Highest Quintile | 76,900 | 75,100 | 75,400 | 80,200 | 84,500 | 86,500 | 84,700 | 88,200 | 89,400 | 93,000 | 93,000 |
| Top 10 Percent | 100,100 | 98,600 | 99,200 | 106,400 | 112,800 | 115,500 | 113,700 | 117,700 | 120,500 | 128,600 | 128,600 |
| Top 5 Percent | 128,500 | 124,000 | 128,000 | 139,400 | 145,700 | 151,400 | 148,900 | 154,900 | 159,900 | 173,500 | 173,500 |
| Top 1 Percent | 239,300 | 225,800 | 242,900 | 275,700 | 295,400 | 325,800 | 310,300 | 315,400 | 362,000 | 461,900 | 461,900 |

NOTES: (Continued)
Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
a. Income categories are defined by ranking all people by their comprehensive household income. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-6a.
Effective Federal Tax Rates for All Households, by Income Quintile, Based on Comprehensive Household Income Adjusted Using Federal Poverty Thresholds, 1979-1997 (In percent)

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by comprehensive household income.
Households are people who share a single housing unit, regardless of the relationships among them.
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Table I-6a. Continued

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## NOTES: (Continued)

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
n.a. = not applicable.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted using federal poverty thresholdsthat is, divided by the federal poverty threshold appropriate for the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-6b.
Shares of Federal Tax Liabilities for All Households, by Income Quintile, Based on Comprehensive Household Income Adjusted Using Federal Poverty Thresholds, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Share of Total Federal Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.9 | 1.8 | 1.7 | 2.1 | 1.9 | 1.7 | 1.6 | 1.5 | 1.1 | 1.0 | 0.9 |
| Second Quintile | 6.8 | 6.7 | 6.5 | 7.0 | 6.7 | 6.6 | 6.6 | 5.9 | 5.7 | 5.4 | 5.1 |
| Middle Quintile | 12.6 | 12.8 | 12.8 | 12.9 | 12.0 | 12.2 | 12.5 | 11.7 | 11.3 | 10.6 | 10.3 |
| Fourth Quintile | 20.9 | 21.6 | 21.6 | 21.1 | 20.5 | 20.1 | 20.6 | 19.9 | 19.1 | 18.0 | 17.9 |
| Highest Quintile | 57.7 | 56.9 | 57.3 | 56.8 | 58.8 | 59.4 | 58.7 | 60.9 | 62.8 | 65.0 | 65.8 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 41.5 | 40.1 | 40.5 | 40.3 | 42.7 | 43.4 | 42.4 | 44.9 | 47.4 | 50.2 | 50.7 |
| Top 5 Percent | 30.3 | 28.2 | 28.6 | 28.7 | 31.1 | 32.1 | 30.6 | 33.6 | 36.0 | 39.3 | 39.6 |
| Top 1 Percent | 15.6 | 13.1 | 13.8 | 14.3 | 15.9 | 16.6 | 15.2 | 18.1 | 20.0 | 23.2 | 23.3 |
| Share of Individual Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | -0.1 | 0.1 | 0 | 0.1 | -0.3 | -0.4 | -0.8 | -0.9 | -1.9 | -1.8 | -2.0 |
| Second Quintile | 3.9 | 4.0 | 3.5 | 3.8 | 3.3 | 3.3 | 3.0 | 2.2 | 2.0 | 1.9 | 1.0 |
| Middle Quintile | 10.1 | 10.2 | 9.8 | 9.7 | 8.4 | 8.8 | 9.1 | 8.1 | 7.7 | 7.0 | 6.2 |
| Fourth Quintile | 19.9 | 20.2 | 19.5 | 18.9 | 17.8 | 17.4 | 18.0 | 17.1 | 16.3 | 14.7 | 14.4 |
| Highest Quintile | 66.2 | 65.5 | 67.2 | 67.5 | 70.7 | 70.9 | 70.6 | 73.5 | 75.8 | 78.2 | 80.4 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 49.2 | 48.1 | 50.4 | 51.0 | 54.7 | 55.1 | 54.3 | 57.8 | 60.6 | 64.1 | 65.9 |
| Top 5 Percent | 36.7 | 35.0 | 37.6 | 38.5 | 42.1 | 43.0 | 41.4 | 45.7 | 48.1 | 52.6 | 54.0 |
| Top 1 Percent | 18.9 | 16.8 | 19.5 | 20.8 | 23.1 | 23.9 | 22.3 | 26.7 | 28.3 | 33.1 | 33.7 |
| Share of Social Insurance Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 4.1 | 3.9 | 3.4 | 3.7 | 3.7 | 3.9 | 3.6 | 3.4 | 3.6 | 3.6 | 3.6 |
| Second Quintile | 11.8 | 11.2 | 10.5 | 10.9 | 11.0 | 10.8 | 10.6 | 10.1 | 10.0 | 10.2 | 10.2 |
| Middle Quintile | 18.8 | 18.3 | 18.0 | 17.8 | 17.4 | 17.4 | 17.0 | 16.8 | 16.5 | 16.7 | 16.7 |
| Fourth Quintile | 26.9 | 26.8 | 26.4 | 26.1 | 26.3 | 25.7 | 25.2 | 25.7 | 25.1 | 25.1 | 25.1 |
| Highest Quintile | 38.2 | 39.7 | 41.6 | 41.3 | 41.5 | 42.0 | 43.5 | 44.0 | 44.8 | 44.4 | 44.4 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 20.5 | 21.7 | 23.3 | 23.2 | 23.6 | 24.0 | 25.7 | 25.7 | 26.8 | 26.4 | 26.4 |
| Top 5 Percent | 10.2 | 11.1 | 11.9 | 11.8 | 12.5 | 12.5 | 14.2 | 14.4 | 15.2 | 15.3 | 15.3 |
| Top 1 Percent | 2.0 | 2.0 | 2.2 | 2.3 | 2.4 | 2.4 | 3.1 | 2.9 | 4.0 | 4.3 | 4.3 |

SOURCE: Congressional Budget Office.
NOTES: Households are people who share a single housing unit, regardless of the relationships among them.
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Table l-6b.
Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \hline \text { Under } \\ 1997 \\ \text { Law } \end{gathered}$ | Under 2000 Law |
| Share of Corporate Income Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.5 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 0.7 | 0.6 | 0.6 |
| Second Quintile | 4.2 | 3.4 | 3.2 | 3.1 | 3.4 | 3.2 | 2.9 | 2.8 | 2.5 | 2.1 | 2.1 |
| Middle Quintile | 7.1 | 6.8 | 6.9 | 7.1 | 7.4 | 7.0 | 7.2 | 6.5 | 5.9 | 5.3 | 5.3 |
| Fourth Quintile | 11.7 | 12.2 | 13.2 | 12.7 | 13.0 | 12.2 | 13.1 | 11.3 | 10.3 | 9.9 | 9.9 |
| Highest Quintile | 75.4 | 76.2 | 75.4 | 75.9 | 75.1 | 77.3 | 75.8 | 78.4 | 80.5 | 82.3 | 82.3 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 64.4 | 64.7 | 63.4 | 64.5 | 63.2 | 66.7 | 64.7 | 67.9 | 71.3 | 72.9 | 72.9 |
| Top 5 Percent | 54.5 | 54.0 | 53.8 | 54.9 | 52.9 | 58.3 | 55.4 | 58.5 | 62.4 | 63.9 | 63.9 |
| Top 1 Percent | 35.4 | 33.0 | 33.6 | 34.1 | 34.1 | 37.8 | 36.8 | 39.6 | 42.7 | 44.0 | 44.0 |
| Share of Federal Excise Tax Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 11.2 | 10.4 | 9.4 | 11.5 | 12.1 | 9.5 | 11.0 | 10.3 | 10.7 | 12.1 | 12.1 |
| Second Quintile | 14.9 | 14.8 | 14.7 | 16.3 | 16.1 | 15.0 | 15.5 | 15.4 | 15.8 | 16.3 | 16.3 |
| Middle Quintile | 17.3 | 17.3 | 17.3 | 18.0 | 17.7 | 18.0 | 18.4 | 18.1 | 18.6 | 17.6 | 17.6 |
| Fourth Quintile | 21.3 | 21.1 | 21.6 | 20.8 | 21.3 | 21.9 | 21.8 | 21.1 | 21.7 | 20.6 | 20.6 |
| Highest Quintile | 34.8 | 35.3 | 36.2 | 31.7 | 31.6 | 33.7 | 32.5 | 33.8 | 32.0 | 32.5 | 32.5 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 21.2 | 21.6 | 21.8 | 19.4 | 19.0 | 20.3 | 19.7 | 21.3 | 19.2 | 19.9 | 19.9 |
| Top 5 Percent | 13.0 | 13.3 | 13.5 | 11.9 | 11.2 | 12.6 | 12.1 | 13.9 | 11.6 | 12.3 | 12.3 |
| Top 1 Percent | 4.9 | 4.7 | 4.9 | 4.3 | 3.6 | 4.4 | 4.3 | 6.0 | 4.0 | 4.1 | 4.1 |
| Memorandum: <br> Federal Poverty <br> Thresholds, by <br> Number of Family <br> Members (Dollars) |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| One | 3,460 | 4,213 | 4,658 | 5,029 | 5,313 | 5,797 | 6,368 | 6,760 | 7,125 | 7,504 | n.a. |
| Two | 4,427 | 5,392 | 5,960 | 6,435 | 6,798 | 7,419 | 8,149 | 8,651 | 9,118 | 9,602 | n.a. |
| Three | 5,419 | 6,599 | 7,295 | 7,876 | 8,321 | 9,080 | 9,974 | 10,589 | 11,160 | 11,753 | n.a. |
| Four | 6,948 | 8,462 | 9,354 | 10,099 | 10,670 | 11,643 | 12,789 | 13,577 | 14,310 | 15,071 | n.a. |
| Five | 8,218 | 10,007 | 11,063 | 11,944 | 12,619 | 13,770 | 15,125 | 16,057 | 16,924 | 17,823 | n.a. |
| Six | 9,276 | 11,296 | 12,488 | 13,483 | 14,244 | 15,544 | 17,073 | 18,126 | 19,104 | 20,119 | n.a. |
| Seven | 10,505 | 12,793 | 14,142 | 15,268 | 16,131 | 17,602 | 19,334 | 20,526 | 21,634 | 22,784 | n.a. |
| Eight | 11,692 | 14,239 | 15,740 | 16,994 | 17,954 | 19,592 | 21,520 | 22,847 | 24,079 | 25,359 | n.a. |
| Nine or more | 13,968 | 17,010 | 18,804 | 20,302 | 21,449 | 23,406 | 25,709 | 27,294 | 28,767 | 30,296 | n.a. |

NOTES: (Continued)
Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
n.a. $=$ not applicable.
a. Income categories are defined by ranking all people by their comprehensive household income adjusted using federal poverty thresholdsthat is, divided by the federal poverty threshold appropriate for the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table l-6c.
Number of Households, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for All Households, by Income Quintile, Based on Comprehensive Household Income Adjusted Using Federal Poverty Thresholds, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Number of Households (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 17.1 | 17.2 | 16.8 | 17.9 | 18.8 | 19.2 | 19.7 | 20.0 | 21.0 | 21.8 | 21.8 |
| Second Quintile | 15.8 | 16.3 | 17.1 | 17.6 | 18.2 | 18.7 | 18.8 | 19.3 | 19.3 | 19.8 | 19.8 |
| Middle Quintile | 15.0 | 15.8 | 16.5 | 17.2 | 17.6 | 18.3 | 18.9 | 19.3 | 19.3 | 19.8 | 19.8 |
| Fourth Quintile | 15.7 | 16.4 | 16.8 | 17.5 | 18.1 | 18.4 | 19.0 | 19.2 | 19.4 | 20.1 | 20.1 |
| Highest Quintile | 17.2 | 18.0 | 18.4 | 18.7 | 19.0 | 19.7 | 19.9 | 20.0 | 20.4 | 21.1 | 21.1 |
| All Quintiles | 81.4 | 84.2 | 86.2 | 89.5 | 92.0 | 94.6 | 96.7 | 98.2 | 99.7 | 102.9 | 102.9 |
| Top 10 Percent | 8.8 | 9.3 | 9.5 | 9.5 | 9.7 | 10.0 | 10.1 | 10.1 | 10.4 | 10.7 | 10.7 |
| Top 5 Percent | 4.4 | 4.7 | 4.8 | 4.8 | 4.8 | 5.1 | 5.1 | 5.1 | 5.2 | 5.3 | 5.3 |
| Top 1 Percent | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Average Income (1997 dollars) <br> Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 11,900 | 11,100 | 10,300 | 11,100 | 11,400 | 11,800 | 11,400 | 11,000 | 11,400 | 11,400 | 11,400 |
| Second Quintile | 27,100 | 25,500 | 23,800 | 25,600 | 26,600 | 27,300 | 26,900 | 26,700 | 28,000 | 28,700 | 28,700 |
| Middle Quintile | 41,000 | 38,900 | 37,800 | 39,800 | 41,500 | 42,400 | 41,500 | 41,400 | 43,200 | 44,600 | 44,600 |
| Fourth Quintile | 55,600 | 53,900 | 54,000 | 56,900 | 59,200 | 60,700 | 59,400 | 60,900 | 62,300 | 64,500 | 64,500 |
| Highest Quintile | 106,400 | 104,000 | 109,000 | 120,900 | 127,300 | 134,700 | 128,500 | 135,300 | 142,400 | 163,400 | 163,400 |
| All Quintiles | 48,500 | 47,000 | 47,500 | 51,000 | 53,100 | 55,400 | 53,600 | 54,800 | 57,300 | 62,400 | 62,400 |
| Top 10 Percent | 139,600 | 134,700 | 143,200 | 163,200 | 170,800 | 185,400 | 173,900 | 184,400 | 196,100 | 234,400 | 234,400 |
| Top 5 Percent | 190,100 | 179,000 | 195,200 | 226,600 | 239,400 | 261,100 | 243,100 | 257,600 | 282,100 | 348,400 | 348,400 |
| Top 1 Percent | 406,000 | 390,000 | 460,900 | 577,600 | 591,700 | 692,000 | 602,300 | 650,800 | 747,400 | 985,600 | 985,600 |

After-Tax Income

| Lowest Quintilie | 10,900 | 10,200 | 9,400 | 10,000 | 10,300 | 10,800 | 10,500 | 10,200 | 10,800 | 10,800 | 10,800 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second Quintile | 23,300 | 21,800 | 20,700 | 21,900 | 22,800 | 23,400 | 23,100 | 23,000 | 24,200 | 24,700 | 25,000 |
| Middle Quintile | 3,600 | 31,700 | 31,000 | 32,700 | 34,300 | 34,900 | 34,200 | 34,300 | 35,600 | 36,700 | 37,100 |
| Fourth Quintile | 44,000 | 42,200 | 43,400 | 45,500 | 47,400 | 48,500 | 47,500 | 48,600 | 49,500 | 51,400 | 51,700 |
| Highest Quintile | 76,900 | 75,900 | 83,200 | 92,300 | 95,000 | 100,900 | 96,200 | 99,200 | 102,100 | 118,200 | 118,700 |
| All Quintiles | 37,700 | 36,400 | 37,900 | 40,500 | 41,800 | 43,600 | 42,300 | 42,700 | 44,200 | 48,200 | 48,500 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Top 10 Percent | 97,900 | 96,400 | 107,900 | 123,400 | 125,100 | 136,900 | 128,200 | 132,000 | 136,600 | 165,600 | 166,400 |
| Top 5 Percent | 128,900 | 126,100 | 145,800 | 170,200 | 172,600 | 190,500 | 176,900 | 180,300 | 191,100 | 240,800 | 242,300 |
| Top 1 Percent | 254,700 | 266,400 | 337,700 | 426,900 | 415,100 | 496,400 | 429,100 | 434,800 | 475,400 | 657,100 | 663,500 |

DISTRIBUTIONAL ESTIMATES USING ALTERNATIVE MEASURES OF INCOME, 1979-1997 159
Table l-6c.
Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 | Under 2000 |
|  |  |  |  |  |  |  |  |  |  | Law | Law |


| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 5.2 | 4.8 | 4.2 | 4.4 | 4.4 | 4.3 | 4.3 | 4.1 | 4.2 | 3.9 | 3.9 |
| Second Quintile | 10.8 | 10.5 | 9.9 | 9.8 | 9.9 | 9.7 | 9.7 | 9.5 | 9.5 | 8.8 | 8.8 |
| Middle Quintile | 15.6 | 15.5 | 15.2 | 15.0 | 14.9 | 14.8 | 15.1 | 14.9 | 14.6 | 13.8 | 13.8 |
| Fourth Quintile | 22.1 | 22.3 | 22.1 | 21.8 | 21.9 | 21.3 | 21.7 | 21.7 | 21.1 | 20.2 | 20.2 |
| Highest Quintile | 46.4 | 47.3 | 48.8 | 49.5 | 49.4 | 50.5 | 49.3 | 50.2 | 50.9 | 53.6 | 53.6 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 31.0 | 31.7 | 33.2 | 34.1 | 34.0 | 35.4 | 34.0 | 34.8 | 35.8 | 39.0 | 39.0 |
| Top 5 Percent | 21.0 | 21.4 | 22.8 | 23.8 | 23.7 | 25.3 | 23.8 | 24.7 | 25.5 | 29.0 | 29.0 |
| Top 1 Percent | 9.4 | 9.3 | 10.5 | 11.3 | 11.3 | 12.5 | 11.2 | 12.0 | 12.6 | 15.9 | 15.9 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 6.1 | 5.7 | 4.8 | 4.9 | 5.0 | 5.0 | 5.0 | 4.9 | 5.1 | 4.7 | 4.7 |
| Second Quintile | 12.0 | 11.6 | 10.8 | 10.6 | 10.8 | 10.6 | 10.6 | 10.6 | 10.6 | 9.9 | 9.9 |
| Middle Quintile | 16.5 | 16.3 | 15.8 | 15.5 | 15.7 | 15.5 | 15.8 | 15.8 | 15.6 | 14.7 | 14.8 |
| Fourth Quintile | 22.5 | 22.5 | 22.3 | 22.0 | 22.3 | 21.6 | 22.0 | 22.2 | 21.8 | 20.8 | 20.8 |
| Highest Quintile | 43.2 | 44.5 | 46.7 | 47.6 | 46.8 | 48.1 | 46.8 | 47.2 | 47.3 | 50.2 | 50.1 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 28.0 | 29.2 | 31.3 | 32.5 | 31.6 | 33.2 | 31.8 | 31.9 | 32.4 | 35.7 | 35.6 |
| Top 5 Percent | 18.3 | 19.4 | 21.3 | 22.5 | 21.7 | 23.5 | 21.9 | 22.1 | 22.4 | 26.0 | 26.0 |
| Top 1 Percent | 7.6 | 8.2 | 9.6 | 10.5 | 10.1 | 11.4 | 10.1 | 10.2 | 10.4 | 13.7 | 13.7 |

Minimum Adjusted Income as a Multiple of the Appropriate Poverty Threshold

| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Second Quintile | 1.78 | 1.67 | 1.55 | 1.68 | 1.74 | 1.82 | 1.76 | 1.73 | 1.82 | 1.87 | 1.87 |
| Middle Quintile | 2.89 | 2.76 | 2.69 | 2.86 | 3.01 | 3.08 | 3.04 | 3.04 | 3.17 | 3.24 | 3.24 |
| Fourth Quintile | 4.04 | 3.93 | 3.93 | 4.18 | 4.36 | 4.49 | 4.43 | 4.46 | 4.61 | 4.77 | 4.77 |
| Highest Quintile | 5.79 | 5.71 | 5.82 | 6.19 | 6.52 | 6.65 | 6.53 | 6.70 | 6.85 | 7.17 | 7.17 |
| Top 10 Percent | 7.51 | 7.49 | 7.66 | 8.27 | 8.61 | 8.88 | 8.73 | 9.00 | 9.34 | 9.96 | 9.96 |
| Top 5 Percent | 9.56 | 9.59 | 9.90 | 10.83 | 11.23 | 11.71 | 11.52 | 11.67 | 12.37 | 13.37 | 13.37 |
| Top 1 Percent | 18.42 | 18.59 | 19.52 | 22.54 | 23.67 | 26.46 | 24.65 | 25.99 | 27.98 | 33.24 | 33.24 |

Table I-6c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \hline \text { Under } \\ 1997 \\ \text { Law } \end{gathered}$ | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Memorandum: |  |  |  |  |  |  |  |  |  |  |  |
| Federal Poverty |  |  |  |  |  |  |  |  |  |  |  |
| Thresholds, by |  |  |  |  |  |  |  |  |  |  |  |
| Number of Family |  |  |  |  |  |  |  |  |  |  |  |
| Members (Dollars) |  |  |  |  |  |  |  |  |  |  |  |
| One | 3,460 | 4,213 | 4,658 | 5,029 | 5,313 | 5,797 | 6,368 | 6,760 | 7,125 | 7,504 | n.a. |
| Two | 4,427 | 5,392 | 5,960 | 6,435 | 6,798 | 7,419 | 8,149 | 8,651 | 9,118 | 9,602 | n.a. |
| Three | 5,419 | 6,599 | 7,295 | 7,876 | 8,321 | 9,080 | 9,974 | 10,589 | 11,160 | 11,753 | n.a. |
| Four | 6,948 | 8,462 | 9,354 | 10,099 | 10,670 | 11,643 | 12,789 | 13,577 | 14,310 | 15,071 | n.a. |
| Five | 8,218 | 10,007 | 11,063 | 11,944 | 12,619 | 13,770 | 15,125 | 16,057 | 16,924 | 17,823 | n.a. |
| Six | 9,276 | 11,296 | 12,488 | 13,483 | 14,244 | 15,544 | 17,073 | 18,126 | 19,104 | 20,119 | n.a. |
| Seven | 10,505 | 12,793 | 14,142 | 15,268 | 16,131 | 17,602 | 19,334 | 20,526 | 21,634 | 22,784 | n.a. |
| Eight | 11,692 | 14,239 | 15,740 | 16,994 | 17,954 | 19,592 | 21,520 | 22,847 | 24,079 | 25,359 | n.a. |
| Nine or more | 13,968 | 17,010 | 18,804 | 20,302 | 21,449 | 23,406 | 25,709 | 27,294 | 28,767 | 30,296 | n.a. |

## SOURCE: Congressional Budget Office.

NOTES: Households are people who share a single housing unit, regardless of the relationships among them.
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits plus taxes paid by businesses (corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes) and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include all in-kind benefits (Medicare, Medicaid, employer-paid health insurance premiums, food stamps, school lunches and breakfasts, housing assistance, and energy assistance). Households with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.

```
n.a. = not applicable.
```

a. Income categories are defined by ranking all people by their comprehensive household income adjusted using federal poverty thresholdsthat is, divided by the federal poverty threshold appropriate for the household's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-7a.
Effective Federal Tax Rates for All Families, by Income Quintile, Based on Family Cash Income Plus Taxes Paid by Businesses, Adjusted Using Federal Poverty Thresholds, 1979-1997 (In percent)

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Under } \\ 1997 \end{gathered}$ Law | Under 2000 <br> Law |
| Total Effective Federal Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 8.6 | 8.5 | 8.4 | 10.2 | 9.5 | 8.7 | 8.0 | 7.8 | 5.2 | 5.1 | 4.9 |
| Second Quintile | 14.9 | 15.1 | 14.0 | 15.6 | 15.3 | 15.4 | 15.1 | 14.3 | 14.6 | 14.6 | 13.3 |
| Middle Quintile | 19.1 | 19.6 | 18.0 | 18.8 | 18.5 | 19.0 | 18.9 | 19.1 | 19.8 | 19.6 | 18.6 |
| Fourth Quintile | 22.0 | 22.8 | 20.8 | 21.3 | 21.3 | 21.6 | 21.6 | 22.1 | 22.7 | 22.4 | 21.8 |
| Highest Quintile | 28.5 | 27.8 | 24.4 | 24.5 | 26.4 | 26.2 | 26.3 | 28.1 | 29.9 | 29.0 | 28.7 |
| All Quintiles | 23.4 | 23.5 | 21.2 | 21.8 | 22.6 | 22.8 | 22.6 | 23.8 | 24.9 | 24.6 | 24.0 |
| Top 10 Percent | 30.6 | 29.0 | 25.2 | 25.1 | 27.6 | 27.1 | 27.3 | 29.6 | 31.6 | 30.4 | 30.0 |
| Top 5 Percent | 32.7 | 30.1 | 25.8 | 25.5 | 28.6 | 27.8 | 28.0 | 30.9 | 33.2 | 31.6 | 31.2 |
| Top 1 Percent | 37.5 | 31.9 | 27.1 | 26.3 | 30.2 | 28.5 | 29.2 | 33.5 | 36.7 | 33.6 | 33.0 |
| Effective Individual Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | -0.8 | -0.2 | -0.6 | -0.2 | -1.3 | -1.9 | -2.9 | -3.4 | -6.8 | -7.1 | -7.3 |
| Second Quintile | 3.9 | 4.6 | 3.5 | 3.9 | 3.2 | 3.3 | 2.7 | 1.7 | 1.5 | 1.6 | 0.3 |
| Middle Quintile | 7.5 | 8.2 | 6.8 | 6.8 | 6.1 | 6.5 | 6.3 | 5.9 | 6.1 | 6.2 | 5.2 |
| Fourth Quintile | 10.4 | 11.3 | 9.5 | 9.3 | 8.7 | 8.9 | 8.7 | 8.5 | 8.7 | 8.8 | 8.2 |
| Highest Quintile | 16.3 | 17.1 | 14.5 | 14.3 | 15.1 | 15.0 | 14.7 | 15.4 | 16.3 | 16.8 | 16.4 |
| All Quintiles | 11.6 | 12.6 | 10.7 | 10.7 | 10.8 | 10.9 | 10.5 | 10.8 | 11.3 | 11.8 | 11.3 |
| Top 10 Percent | 18.0 | 18.7 | 15.9 | 15.6 | 16.9 | 16.5 | 16.3 | 17.3 | 18.3 | 18.7 | 18.3 |
| Top 5 Percent | 19.7 | 20.0 | 17.1 | 16.8 | 18.5 | 17.9 | 17.6 | 19.1 | 20.1 | 20.4 | 19.9 |
| Top 1 Percent | 22.6 | 22.0 | 19.3 | 18.7 | 20.9 | 19.6 | 19.9 | 22.6 | 23.6 | 23.1 | 22.5 |
| Effective Social Insurance Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.7 | 6.1 | 6.2 | 6.8 | 7.1 | 7.8 | 7.5 | 7.4 | 7.8 | 8.1 | 8.1 |
| Second Quintile | 8.0 | 8.6 | 8.5 | 9.3 | 9.5 | 9.7 | 9.9 | 9.8 | 10.0 | 10.1 | 10.1 |
| Middle Quintile | 8.8 | 9.4 | 9.3 | 9.9 | 10.0 | 10.3 | 10.3 | 10.7 | 10.9 | 10.9 | 10.9 |
| Fourth Quintile | 8.7 | 9.4 | 9.4 | 10.0 | 10.2 | 10.5 | 10.7 | 11.2 | 11.4 | 11.2 | 11.2 |
| Highest Quintile | 5.8 | 6.4 | 6.5 | 6.7 | 6.9 | 7.0 | 7.8 | 7.9 | 8.0 | 7.1 | 7.1 |
| All Quintiles | 7.2 | 7.8 | 7.8 | 8.2 | 8.4 | 8.5 | 9.0 | 9.2 | 9.3 | 8.7 | 8.7 |
| Top 10 Percent | 4.6 | 5.2 | 5.4 | 5.4 | 5.7 | 5.6 | 6.6 | 6.6 | 6.7 | 5.7 | 5.7 |
| Top 5 Percent | 3.3 | 3.9 | 4.0 | 3.9 | 4.2 | 4.1 | 5.2 | 5.1 | 5.2 | 4.4 | 4.4 |
| Top 1 Percent | 1.4 | 1.6 | 1.6 | 1.6 | 1.7 | 1.5 | 2.3 | 2.1 | 2.8 | 2.2 | 2.2 |

SOURCE: Congressional Budget Office.
NOTES: Effective tax rates are calculated by dividing tax liabilities by family cash income plus taxes paid by businesses, adjusted using federal poverty thresholds.

Families are people related by blood, marriage, or adoption who live together.
Family cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Families with negative income are excluded from the lowest income category but are included in totals.

Table I-7a. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | $\begin{aligned} & \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
| Effective Corporate Income Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 1.1 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| Second Quintile | 1.5 | 0.8 | 0.6 | 0.7 | 1.0 | 0.9 | 0.7 | 0.9 | 1.0 | 0.9 | 0.9 |
| Middle Quintile | 1.6 | 1.0 | 0.9 | 0.9 | 1.3 | 1.2 | 1.1 | 1.2 | 1.3 | 1.3 | 1.3 |
| Fourth Quintile | 1.9 | 1.2 | 1.1 | 1.1 | 1.5 | 1.4 | 1.2 | 1.4 | 1.5 | 1.5 | 1.5 |
| Highest Quintile | 5.7 | 3.7 | 2.8 | 2.9 | 3.8 | 3.6 | 3.2 | 4.1 | 4.9 | 4.6 | 4.6 |
| All Quintiles | 3.6 | 2.3 | 1.9 | 1.9 | 2.5 | 2.4 | 2.1 | 2.7 | 3.2 | 3.1 | 3.1 |
| Top 10 Percent | 7.2 | 4.6 | 3.5 | 3.6 | 4.6 | 4.5 | 3.9 | 5.1 | 6.0 | 5.6 | 5.6 |
| Top 5 Percent | 9.1 | 5.7 | 4.2 | 4.3 | 5.5 | 5.4 | 4.8 | 6.2 | 7.4 | 6.5 | 6.5 |
| Top 1 Percent | 13.0 | 8.0 | 5.7 | 5.6 | 7.3 | 7.0 | 6.7 | 8.4 | 10.0 | 8.1 | 8.1 |
| Effective Federal Excise Tax Rate |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 2.6 | 2.0 | 2.3 | 3.1 | 3.2 | 2.3 | 3.0 | 3.2 | 3.6 | 3.7 | 3.7 |
| Second Quintile | 1.5 | 1.2 | 1.4 | 1.7 | 1.7 | 1.5 | 1.7 | 1.9 | 2.1 | 2.0 | 2.0 |
| Middle Quintile | 1.2 | 0.9 | 1.0 | 1.2 | 1.1 | 1.1 | 1.2 | 1.3 | 1.5 | 1.2 | 1.2 |
| Fourth Quintile | 1.0 | 0.7 | 0.8 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 1.2 | 1.0 | 1.0 |
| Highest Quintile | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 |
| All Quintiles | 1.0 | 0.8 | 0.9 | 1.0 | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 | 0.9 | 0.9 |
| Top 10 Percent | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 |
| Top 5 Percent | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 |
| Top 1 Percent | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 |
| Memorandum: Federal Poverty Thresholds, by Number of Family |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Members (Dollars) |  |  |  |  |  |  |  |  |  |  |  |
| One | 3,460 | 4,213 | 4,658 | 5,029 | 5,313 | 5,797 | 6,368 | 6,760 | 7,125 | 7,504 | n.a. |
| Two | 4,427 | 5,392 | 5,960 | 6,435 | 6,798 | 7,419 | 8,149 | 8,651 | 9,118 | 9,602 | n.a. |
| Three | 5,419 | 6,599 | 7,295 | 7,876 | 8,321 | 9,080 | 9,974 | 10,589 | 11,160 | 11,753 | n.a. |
| Four | 6,948 | 8,462 | 9,354 | 10,099 | 10,670 | 11,643 | 12,789 | 13,577 | 14,310 | 15,071 | n.a. |
| Five | 8,218 | 10,007 | 11,063 | 11,944 | 12,619 | 13,770 | 15,125 | 16,057 | 16,924 | 17,823 | n.a. |
| Six | 9,276 | 11,296 | 12,488 | 13,483 | 14,244 | 15,544 | 17,073 | 18,126 | 19,104 | 20,119 | n.a. |
| Seven | 10,505 | 12,793 | 14,142 | 15,268 | 16,131 | 17,602 | 19,334 | 20,526 | 21,634 | 22,784 | n.a. |
| Eight | 11,692 | 14,239 | 15,740 | 16,994 | 17,954 | 19,592 | 21,520 | 22,847 | 24,079 | 25,359 | n.a. |
| Nine or more | 13,968 | 17,010 | 18,804 | 20,302 | 21,449 | 23,406 | 25,709 | 27,294 | 28,767 | 30,296 | n.a. |

NOTES: (Continued)
Individual income taxes are distributed directly to families paying those taxes. Payroll taxes are distributed to families paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to families according to their consumption of the taxed good or service. Corporate income taxes are distributed to families according to their share of capital income.
n.a. = not applicable.
a. Income categories are defined by ranking all people by their family cash income plus taxes paid by businesses adjusted using federal poverty thresholds-that is, divided by the federal poverty threshold appropriate for the family's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-7b.
Shares of Federal Tax Liabilities for All Families, by Income Quintile, Based on Family Cash Income Plus Taxes Paid by Businesses, Adjusted Using Federal Poverty Thresholds, 1979-1997 (In percent)

| lrinder |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |

SOURCE: Congressional Budget Office.
NOTES: Families are people related by blood, marriage, or adoption who live together.
Family cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Families with negative income are excluded from the lowest income category but are included in totals.

Table I-7b. Continued

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

NOTES: (Continued)
Individual income taxes are distributed directly to families paying those taxes. Payroll taxes are distributed to families paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to families according to their consumption of the taxed good or service. Corporate income taxes are distributed to families according to their share of capital income.
n.a. $=$ not applicable.
a. Income categories are defined by ranking all people by their family cash income plus taxes paid by businesses, adjusted using federal poverty thresholds-that is, divided by the federal poverty threshold appropriate for the family's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Table I-7c.
Number of Families, Average Pretax and After-Tax Income, Shares of Pretax and After-Tax Income, and Income Category Minimums for All Families, by Income Quintile, Based on Family Cash Income Plus Taxes Paid by Businesses, Adjusted Using Federal Poverty Thresholds, 1979-1997

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 <br> Law | Under 2000 Law |
| Number of Families (Millions) |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 18.2 | 18.3 | 18.0 | 19.3 | 20.3 | 20.5 | 21.0 | 21.6 | 22.7 | 23.9 | 23.9 |
| Second Quintile | 16.7 | 17.2 | 18.1 | 18.6 | 19.5 | 20.5 | 20.8 | 21.3 | 21.7 | 22.2 | 22.2 |
| Middle Quintile | 16.0 | 16.6 | 17.6 | 18.3 | 19.0 | 19.6 | 20.4 | 21.2 | 21.1 | 21.7 | 21.7 |
| Fourth Quintile | 16.5 | 17.4 | 17.8 | 18.7 | 19.3 | 19.9 | 20.5 | 20.8 | 21.1 | 21.8 | 21.8 |
| Highest Quintile | 18.2 | 19.1 | 19.6 | 20.0 | 20.3 | 21.1 | 21.4 | 21.7 | 22.1 | 22.9 | 22.9 |
| All Quintiles | 86.1 | 89.3 | 91.8 | 95.7 | 98.7 | 102.1 | 104.7 | 107.2 | 109.1 | 112.9 | 112.9 |
| Top 10 Percent | 9.3 | 9.8 | 10.1 | 10.2 | 10.4 | 10.6 | 10.9 | 11.0 | 11.2 | 11.5 | 11.5 |
| Top 5 Percent | 4.6 | 5.0 | 5.1 | 5.1 | 5.2 | 5.4 | 5.4 | 5.5 | 5.6 | 5.7 | 5.7 |
| Top 1 Percent | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 |
| Average Income (1997 dollars) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 9,300 | 8,600 | 7,800 | 8,500 | 8,500 | 8,800 | 8,200 | 7,600 | 7,900 | 7,900 | 7,900 |
| Second Quintile | 23,300 | 21,800 | 20,000 | 21,600 | 22,000 | 22,000 | 21,300 | 20,500 | 21,100 | 21,700 | 21,700 |
| Middle Quintile | 36,300 | 34,800 | 33,100 | 34,600 | 35,500 | 36,000 | 34,800 | 33,800 | 35,000 | 36,300 | 36,300 |
| Fourth Quintile | 50,600 | 48,700 | 48,400 | 50,200 | 51,900 | 52,300 | 51,100 | 51,300 | 52,100 | 54,100 | 54,100 |
| Highest Quintile | 98,700 | 96,400 | 100,300 | 110,000 | 115,200 | 121,600 | 115,400 | 119,500 | 125,700 | 144,100 | 144,100 |
| All Quintiles | 43,700 | 42,300 | 42,400 | 45,100 | 46,500 | 48,100 | 46,200 | 46,300 | 48,000 | 52,500 | 52,500 |
| Top 10 Percent | 130,700 | 125,900 | 132,800 | 150,300 | 155,900 | 170,400 | 158,300 | 166,100 | 176,900 | 211,100 | 211,100 |
| Top 5 Percent | 179,500 | 168,600 | 183,100 | 210,200 | 220,100 | 243,100 | 224,800 | 237,000 | 256,800 | 319,800 | 319,800 |
| Top 1 Percent | 390,400 | 368,700 | 439,100 | 532,300 | 553,200 | 654,600 | 567,300 | 616,400 | 692,100 | 916,300 | 916,300 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 8,500 | 7,900 | 7,100 | 7,600 | 7,700 | 8,000 | 7,600 | 7,000 | 7,500 | 7,500 | 7,500 |
| Second Quintile | 19,800 | 18,500 | 17,200 | 18,200 | 18,600 | 18,600 | 18,100 | 17,500 | 18,000 | 18,600 | 18,800 |
| Middle Quintile | 29,400 | 28,000 | 27,100 | 28,100 | 28,900 | 29,100 | 28,200 | 27,300 | 28,100 | 29,200 | 29,500 |
| Fourth Quintile | 39,500 | 37,600 | 38,400 | 39,500 | 40,900 | 41,000 | 40,100 | 40,000 | 40,300 | 42,000 | 42,300 |
| Highest Quintile | 70,500 | 69,600 | 75,800 | 83,100 | 84,800 | 89,800 | 85,100 | 85,900 | 88,200 | 102,300 | 102,800 |
| All Quintiles | 33,500 | 32,400 | 33,400 | 35,300 | 36,000 | 37,200 | 35,700 | 35,200 | 36,000 | 39,600 | 39,900 |
| Top 10 Percent | 90,800 | 89,400 | 99,300 | 112,500 | 112,800 | 124,200 | 115,100 | 116,900 | 121,000 | 147,000 | 147,700 |
| Top 5 Percent | 120,800 | 117,900 | 135,800 | 156,600 | 157,200 | 175,600 | 161,800 | 163,700 | 171,500 | 218,800 | 220,200 |
| Top 1 Percent | 243,900 | 250,900 | 320,300 | 392,300 | 386,300 | 468,000 | 401,800 | 409,600 | 438,200 | 608,000 | 613,900 |

Table l-7c. Continued


| Share of Income (Percent) Pretax Income |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lowest Quintile | 4.5 | 4.2 | 3.6 | 3.8 | 3.7 | 3.7 | 3.6 | 3.3 | 3.4 | 3.2 | 3.2 |
| Second Quintile | 10.3 | 9.9 | 9.3 | 9.3 | 9.3 | 9.2 | 9.2 | 8.8 | 8.7 | 8.1 | 8.1 |
| Middle Quintile | 15.4 | 15.3 | 14.9 | 14.7 | 14.6 | 14.4 | 14.7 | 14.4 | 14.1 | 13.3 | 13.3 |
| Fourth Quintile | 22.2 | 22.4 | 22.1 | 21.8 | 21.8 | 21.2 | 21.7 | 21.6 | 21.0 | 19.9 | 19.9 |
| Highest Quintile | 47.8 | 48.7 | 50.4 | 51.0 | 51.0 | 52.2 | 51.2 | 52.4 | 53.2 | 55.7 | 55.7 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 32.1 | 32.8 | 34.5 | 35.3 | 35.4 | 36.9 | 35.7 | 36.7 | 37.9 | 41.0 | 41.0 |
| Top 5 Percent | 21.9 | 22.4 | 23.8 | 24.9 | 25.0 | 26.6 | 25.2 | 26.3 | 27.3 | 30.7 | 30.7 |
| Top 1 Percent | 9.9 | 9.9 | 11.0 | 12.0 | 12.1 | 13.4 | 12.1 | 13.0 | 13.7 | 17.1 | 17.1 |
| After-Tax Income |  |  |  |  |  |  |  |  |  |  |  |
| Lowest Quintile | 5.4 | 5.0 | 4.2 | 4.4 | 4.4 | 4.3 | 4.2 | 4.0 | 4.3 | 4.0 | 4.0 |
| Second Quintile | 11.5 | 11.0 | 10.2 | 10.0 | 10.2 | 10.1 | 10.0 | 9.9 | 9.9 | 9.2 | 9.3 |
| Middle Quintile | 16.3 | 16.1 | 15.5 | 15.2 | 15.4 | 15.1 | 15.4 | 15.3 | 15.0 | 14.2 | 14.3 |
| Fourth Quintile | 22.6 | 22.6 | 22.3 | 21.9 | 22.2 | 21.5 | 22.0 | 22.1 | 21.6 | 20.5 | 20.5 |
| Highest Quintile | 44.6 | 45.9 | 48.4 | 49.2 | 48.5 | 49.9 | 48.7 | 49.4 | 49.6 | 52.4 | 52.3 |
| All Quintiles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Top 10 Percent | 29.1 | 30.5 | 32.7 | 33.8 | 33.1 | 34.8 | 33.6 | 33.9 | 34.5 | 37.8 | 37.7 |
| Top 5 Percent | 19.2 | 20.4 | 22.4 | 23.7 | 23.0 | 24.9 | 23.4 | 23.8 | 24.3 | 27.8 | 27.8 |
| Top 1 Percent | 8.1 | 8.8 | 10.2 | 11.3 | 11.0 | 12.4 | 11.1 | 11.4 | 11.6 | 15.0 | 15.1 |

Minimum Adjusted Income as a Multiple of the Appropriate Poverty Threshold

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Lowest Quintile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Second Quintile | 1.52 | 1.41 | 1.29 | 1.41 | 1.45 | 1.48 | 1.42 | 1.35 | 1.40 | 1.44 |
| Middle Quintile | 2.62 | 2.51 | 2.38 | 2.56 | 2.65 | 2.69 | 2.62 | 2.54 | 2.63 | 2.72 |
| Fourth Quintile | 3.75 | 3.65 | 3.60 | 3.80 | 3.93 | 4.01 | 3.95 | 3.89 | 3.98 | 4.16 |
| Highest Quintile | 5.44 | 5.37 | 5.44 | 5.70 | 5.97 | 6.07 | 5.92 | 5.99 | 6.07 | 6.37 |
|  |  |  |  |  |  |  | 6.16 |  |  |  |
| Top 10 Percent | 7.11 | 7.10 | 7.22 | 7.70 | 8.00 | 8.20 | 8.02 | 8.13 | 8.44 | 9.00 |
| Top 5 Percent | 9.12 | 9.13 | 9.46 | 10.16 | 10.45 | 10.90 | 10.71 | 10.79 | 11.31 | 12.28 |
| Top 1 Percent | 17.96 | 18.06 | 19.13 | 21.07 | 22.31 | 25.05 | 23.33 | 24.66 | 26.39 | 31.12 |

Table l-7c. Continued

| Income Category ${ }^{\text {a }}$ | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Under } \\ 1997 \\ \text { Law } \end{gathered}$ | $\begin{aligned} & \hline \text { Under } \\ & 2000 \\ & \text { Law } \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Memorandum: |  |  |  |  |  |  |  |  |  |  |  |
| Federal Poverty |  |  |  |  |  |  |  |  |  |  |  |
| Thresholds, by |  |  |  |  |  |  |  |  |  |  |  |
| Number of Family |  |  |  |  |  |  |  |  |  |  |  |
| Members (Dollars) |  |  |  |  |  |  |  |  |  |  |  |
| One | 3,460 | 4,213 | 4,658 | 5,029 | 5,313 | 5,797 | 6,368 | 6,760 | 7,125 | 7,504 | n.a. |
| Two | 4,427 | 5,392 | 5,960 | 6,435 | 6,798 | 7,419 | 8,149 | 8,651 | 9,118 | 9,602 | n.a. |
| Three | 5,419 | 6,599 | 7,295 | 7,876 | 8,321 | 9,080 | 9,974 | 10,589 | 11,160 | 11,753 | n.a. |
| Four | 6,948 | 8,462 | 9,354 | 10,099 | 10,670 | 11,643 | 12,789 | 13,577 | 14,310 | 15,071 | n.a. |
| Five | 8,218 | 10,007 | 11,063 | 11,944 | 12,619 | 13,770 | 15,125 | 16,057 | 16,924 | 17,823 | n.a. |
| Six | 9,276 | 11,296 | 12,488 | 13,483 | 14,244 | 15,544 | 17,073 | 18,126 | 19,104 | 20,119 | n.a. |
| Seven | 10,505 | 12,793 | 14,142 | 15,268 | 16,131 | 17,602 | 19,334 | 20,526 | 21,634 | 22,784 | n.a. |
| Eight | 11,692 | 14,239 | 15,740 | 16,994 | 17,954 | 19,592 | 21,520 | 22,847 | 24,079 | 25,359 | n.a. |
| Nine or more | 13,968 | 17,010 | 18,804 | 20,302 | 21,449 | 23,406 | 25,709 | 27,294 | 28,767 | 30,296 | n.a. |

## SOURCE: Congressional Budget Office.

NOTES: Families are people related by blood, marriage, or adoption who live together.
Family cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes. Families with negative income are excluded from the lowest income category but are included in totals.

Individual income taxes are distributed directly to families paying those taxes. Payroll taxes are distributed to families paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to families according to their consumption of the taxed good or service. Corporate income taxes are distributed to families according to their share of capital income.
n.a. $=$ not applicable.
a. Income categories are defined by ranking all people by their family cash income plus taxes paid by businesses, adjusted using federal poverty thresholds-that is, divided by the federal poverty threshold appropriate for the family's size. Quintiles, or fifths, of the income distribution contain equal numbers of people.

Appendix J
Tax Liabilities and Income Based on Tax-Return Data, by Category of Adjusted Gross Income, 1995-1999

Table J-1.
Federal Individual Income Tax Liabilities and Income Based on Tax-Return Data, by Adjusted Gross Income, 1995-1999

|  |  |  |  |  |
| :--- | :---: | :---: | ---: | ---: | ---: |
| AGI Category | 1995 | 1996 | 1997 |  |
|  |  |  |  |  |

Table J-1.
Continued

| AGI Category | 1995 | 1996 | 1997 | 1998 | 1999 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| Total Individual Income Tax Liabilities In Millions of 1999 Dollars |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$0 to \$10,000 | $(7,612)$ | $(8,266)$ | $(7,994)$ | $(7,996)$ | $(7,849)$ |
| \$10,000 to \$20,000 | 1,123 | 682 | (680) | $(2,137)$ | $(1,630)$ |
| \$20,000 to \$30,000 | 30,719 | 30,107 | 30,501 | 27,540 | 27,651 |
| \$30,000 to \$50,000 | 85,091 | 87,562 | 89,021 | 84,283 | 84,597 |
| \$50,000 to \$75,000 | 105,272 | 108,422 | 110,873 | 110,145 | 112,804 |
| \$75,000 to \$100,000 | 77,824 | 79,105 | 84,210 | 86,647 | 92,024 |
| \$100,000 to \$150,000 | 78,744 | 83,425 | 90,587 | 100,574 | 106,303 |
| \$150,000 to \$200,000 | 38,192 | 41,437 | 46,576 | 49,506 | 56,205 |
| \$200,000 and Over | 208,994 | 249,622 | 288,360 | 327,368 | 378,704 |
| All Categories | 618,341 | 672,138 | 731,483 | 775,949 | 848,845 |
| As a Percentage of Total Individual Income Tax Liabilities |  |  |  |  |  |
| \$0 to \$10,000 | -1.2 | -1.2 | -1.1 | -1.0 | -0.9 |
| \$10,000 to \$20,000 | 0.2 | 0.1 | -0.1 | -0.3 | -0.2 |
| \$20,000 to \$30,000 | 5.0 | 4.5 | 4.2 | 3.5 | 3.3 |
| \$30,000 to \$50,000 | 13.8 | 13.0 | 12.2 | 10.9 | 10.0 |
| \$50,000 to \$75,000 | 17.0 | 16.1 | 15.2 | 14.2 | 13.3 |
| \$75,000 to \$100,000 | 12.6 | 11.8 | 11.5 | 11.2 | 10.8 |
| \$100,000 to \$150,000 | 12.7 | 12.4 | 12.4 | 13.0 | 12.5 |
| \$150,000 to \$200,000 | 6.2 | 6.2 | 6.4 | 6.4 | 6.6 |
| \$200,000 and Over | 33.8 | 37.1 | 39.4 | 42.2 | 44.6 |
| All Categories | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of Tax Returns (Thousands) |  |  |  |  |  |
| \$0 to \$10,000 | 26,435 | 26,950 | 26,439 | 25,832 | 26,560 |
| \$10,000 to \$20,000 | 23,486 | 23,962 | 24,061 | 24,189 | 24,105 |
| \$20,000 to \$30,000 | 17,706 | 17,617 | 17,819 | 18,336 | 18,392 |
| \$30,000 to \$50,000 | 21,912 | 22,285 | 22,894 | 23,088 | 23,357 |
| \$50,000 to \$75,000 | 14,822 | 15,124 | 15,518 | 16,209 | 16,585 |
| \$75,000 to \$100,000 | 6,452 | 6,462 | 6,957 | 7,441 | 7,840 |
| \$100,000 to \$150,000 | 3,939 | 4,187 | 4,573 | 5,119 | 5,388 |
| \$150,000 to \$200,000 | 1,139 | 1,228 | 1,397 | 1,507 | 1,697 |
| \$200,000 and Over | 1,488 | 1,690 | 1,931 | 2,172 | 2,420 |
| All Categories | 118,221 | 120,353 | 122,422 | 124,771 | 127,668 |

SOURCE: Congressional Budget Office based on data from the Internal Revenue Service's Statistics of Income (1995 through 1998) and its master file (1999).

NOTE: Returns with negative AGI are excluded from the lowest income category but are included in totals.

# Appendix K <br> Estimates of Total Effective Tax Rates Using Alternative Measures of Income 

Table K-1.
Total Effective Federal Tax Rates, by Income Quintile, Using Alternative Measures of Income, 1979-1997 (In percent)

| Income Measure | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under Under <br> 19972000 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | Law | Law |
| All Quintiles |  |  |  |  |  |  |  |  |  |  |  |
| Family Cash Income | 25.2 | 25.1 | 22.5 | 23.2 | 24.2 | 24.3 | 24.2 | 25.6 | 27.0 | 26.5 | 25.9 |
| Household Cash Income | 25.2 | 25.1 | 22.5 | 23.2 | 24.2 | 24.4 | 24.2 | 25.7 | 27.0 | 26.5 | 25.9 |
| Household Cash Income Plus |  |  |  |  |  |  |  |  |  |  |  |
| Taxes Paid by Businesses and |  |  |  |  |  |  |  |  |  |  |  |
| Employee Contributions to 401(k) |  |  |  |  |  |  |  |  |  |  |  |
| Retirement Plans | 23.4 | 23.5 | 21.2 | 21.7 | 22.5 | 22.6 | 22.4 | 23.6 | 24.6 | 24.3 | 23.7 |
| Household Cash Income Plus Taxes |  |  |  |  |  |  |  |  |  |  |  |
| Paid by Businesses, Employee |  |  |  |  |  |  |  |  |  |  |  |
| Contributions to 401(k) Retirement |  |  |  |  |  |  |  |  |  |  |  |
| Plans, and Nonhealth In-Kind Benefits | 23.3 | 23.4 | 21.1 | 21.5 | 22.4 | 22.4 | 22.3 | 23.4 | 24.5 | 24.2 | 23.6 |
| Comprehensive Household Income | 22.3 | 22.4 | 20.2 | 20.6 | 21.3 | 21.3 | 21.1 | 22.0 | 22.9 | 22.8 | 22.3 |
| Adjusted Comprehensive Household Income |  |  |  |  |  |  |  |  |  |  |  |
| Based on federal poverty thresholds ${ }^{\text {a }}$ | 22.3 | 22.4 | 20.2 | 20.6 | 21.3 | 21.3 | 21.1 | 22.0 | 22.9 | 22.8 | 22.3 |
| Based on household size ${ }^{\text {b }}$ | 22.3 | 22.4 | 20.2 | 20.6 | 21.3 | 21.3 | 21.1 | 22.0 | 22.9 | 22.8 | 22.3 |
| Historic CBO Measure | 23.4 | 23.5 | 21.2 | 21.8 | 22.6 | 22.8 | 22.6 | 23.8 | 24.9 | 24.6 | 24.0 |
|  | Lowest Quintile |  |  |  |  |  |  |  |  |  |  |
| Family Cash Income | 11.2 | 10.2 | 9.9 | 11.6 | 11.8 | 11.3 | 11.1 | 10.2 | 9.3 | 9.4 | 9.3 |
| Household Cash Income | 11.4 | 10.5 | 10.0 | 11.8 | 11.7 | 11.5 | 11.2 | 10.6 | 9.8 | 9.8 | 9.6 |
| Household Cash Income Plus |  |  |  |  |  |  |  |  |  |  |  |
| Taxes Paid by Businesses and |  |  |  |  |  |  |  |  |  |  |  |
| Employee Contributions to 401(k) |  |  |  |  |  |  |  |  |  |  |  |
| Retirement Plans | 10.4 | 9.7 | 9.2 | 11.1 | 10.8 | 10.4 | 10.3 | 9.6 | 8.8 | 8.9 | 8.8 |
| Household Cash Income Plus Taxes |  |  |  |  |  |  |  |  |  |  |  |
| Paid by Businesses, Employee |  |  |  |  |  |  |  |  |  |  |  |
| Contributions to 401(k) Retirement |  |  |  |  |  |  |  |  |  |  |  |
| Plans, and Nonhealth In-Kind Benefits | 10.2 | 9.6 | 8.9 | 10.6 | 10.3 | 10.1 | 9.8 | 9.5 | 8.7 | 8.6 | 8.5 |
| Comprehensive Household Income | 10.0 | 9.6 | 8.9 | 10.4 | 10.2 | 10.0 | 9.8 | 9.6 | 8.6 | 8.6 | 8.4 |
| Adjusted Comprehensive Household Income |  |  |  |  |  |  |  |  |  |  |  |
| Based on federal poverty thresholds ${ }^{\text {a }}$ | 8.3 | 8.5 | 8.2 | 9.8 | 9.0 | 8.6 | 8.0 | 7.8 | 6.0 | 5.7 | 5.3 |
| Based on household size ${ }^{\text {b }}$ | 8.1 | 8.3 | 8.1 | 9.7 | 8.9 | 8.5 | 7.9 | 7.6 | 6.0 | 5.6 | 5.3 |
| Historic CBO Measure | 8.6 | 8.5 | 8.4 | 10.2 | 9.5 | 8.7 | 8.0 | 7.8 | 5.2 | 5.1 | 4.9 |
|  | Second Quintile |  |  |  |  |  |  |  |  |  |  |
| Family Cash Income | 18.3 | 18.2 | 16.3 | 18.0 | 17.5 | 17.9 | 17.5 | 17.4 | 17.5 | 17.2 | 16.5 |
| Household Cash Income | 18.5 | 18.4 | 16.6 | 18.2 | 17.8 | 18.1 | 17.8 | 17.9 | 18.1 | 18.1 | 17.4 |
| Household Cash Income Plus |  |  |  |  |  |  |  |  |  |  |  |
| Taxes Paid by Businesses and |  |  |  |  |  |  |  |  |  |  |  |
| Employee Contributions to 401(k) |  |  |  |  |  |  |  |  |  |  |  |
| Retirement Plans | 17.3 | 17.3 | 15.6 | 17.0 | 16.6 | 16.8 | 16.5 | 16.4 | 16.6 | 16.5 | 15.8 |
| Household Cash Income Plus Taxes |  |  |  |  |  |  |  |  |  |  |  |
| Paid by Businesses, Employee |  |  |  |  |  |  |  |  |  |  |  |
| Contributions to 401(k) Retirement |  |  |  |  |  |  |  |  |  |  |  |
| Plans, and Nonhealth In-Kind Benefits | 17.2 | 17.1 | 15.5 | 16.8 | 16.5 | 16.7 | 16.4 | 16.2 | 16.4 | 16.4 | 15.7 |
| Comprehensive Household Income | 16.1 | 16.1 | 14.5 | 15.8 | 15.3 | 15.4 | 15.3 | 14.8 | 15.0 | 15.0 | 14.4 |
| Adjusted Comprehensive Household Income |  |  |  |  |  |  |  |  |  |  |  |
| Based on federal poverty thresholds ${ }^{\text {a }}$ | 14.0 | 14.3 | 13.2 | 14.6 | 14.3 | 14.4 | 14.2 | 13.6 | 13.6 | 13.9 | 12.8 |
| Based on household size ${ }^{\text {b }}$ | 14.0 | 14.2 | 13.0 | 14.5 | 14.3 | 14.3 | 14.2 | 13.5 | 13.6 | 13.9 | 12.8 |
| Historic CBO Measure | 14.9 | 15.1 | 14.0 | 15.6 | 15.3 | 15.4 | 15.1 | 14.3 | 14.6 | 14.6 | 13.3 |

Table K-1.
Continued

| Income Measure | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 | Under 2000 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Middle Quintile |  |  |  |  |  |  |  |  |  |  |  |
| Family Cash Income | 22.5 | 22.6 | 20.4 | 21.1 | 21.4 | 21.6 | 21.3 | 21.7 | 22.5 | 22.3 | 21.5 |
| Household Cash Income | 22.6 | 22.7 | 20.5 | 21.2 | 21.4 | 21.9 | 21.6 | 22.0 | 22.8 | 22.6 | 21.7 |
| Household Cash Income Plus |  |  |  |  |  |  |  |  |  |  |  |
| Taxes Paid by Businesses and |  |  |  |  |  |  |  |  |  |  |  |
| Employee Contributions to 401(k) |  |  |  |  |  |  |  |  |  |  |  |
| Retirement Plans | 21.0 | 21.4 | 19.4 | 19.8 | 19.9 | 20.4 | 20.0 | 20.4 | 20.9 | 20.6 | 19.8 |
| Household Cash Income Plus Taxes |  |  |  |  |  |  |  |  |  |  |  |
| Paid by Businesses, Employee |  |  |  |  |  |  |  |  |  |  |  |
| Contributions to 401(k) Retirement |  |  |  |  |  |  |  |  |  |  |  |
| Plans, and Nonhealth In-Kind Benefits | 20.9 | 21.3 | 19.3 | 19.8 | 19.9 | 20.3 | 20.0 | 20.3 | 20.8 | 20.6 | 19.8 |
| Comprehensive Household Income | 19.9 | 20.2 | 18.2 | 18.7 | 18.5 | 18.9 | 18.4 | 18.5 | 18.9 | 18.8 | 18.1 |
| Adjusted Comprehensive Household Income |  |  |  |  |  |  |  |  |  |  |  |
| Based on federal poverty thresholds ${ }^{\text {a }}$ | 18.1 | 18.5 | 17.0 | 17.7 | 17.2 | 17.6 | 17.4 | 17.3 | 17.7 | 17.6 | 16.7 |
| Based on household size ${ }^{\text {b }}$ | 18.2 | 18.7 | 17.1 | 17.7 | 17.3 | 17.6 | 17.3 | 17.3 | 17.6 | 17.5 | 16.7 |
| Historic CBO Measure | 19.1 | 19.6 | 18.0 | 18.8 | 18.5 | 19.0 | 18.9 | 19.1 | 19.8 | 19.6 | 18.6 |
|  | Fourth Quintile |  |  |  |  |  |  |  |  |  |  |
| Family Cash Income | 24.6 | 25.4 | 23.1 | 23.6 | 23.7 | 24.1 | 24.1 | 24.7 | 25.6 | 25.3 | 24.5 |
| Household Cash Income | 24.7 | 25.4 | 23.2 | 23.7 | 23.9 | 24.3 | 24.2 | 24.9 | 25.7 | 25.3 | 24.5 |
| Household Cash Income Plus |  |  |  |  |  |  |  |  |  |  |  |
| Taxes Paid by Businesses and |  |  |  |  |  |  |  |  |  |  |  |
| Retirement Plans | 23.0 | 23.9 | 21.8 | 22.1 | 22.1 | 22.4 | 22.5 | 22.9 | 23.5 | 23.0 | 22.3 |
| Household Cash Income Plus Taxes |  |  |  |  |  |  |  |  |  |  |  |
| Paid by Businesses, Employee |  |  |  |  |  |  |  |  |  |  |  |
| Contributions to 401(k) Retirement |  |  |  |  |  |  |  |  |  |  |  |
| Plans, and Nonhealth In-Kind Benefits | 23.0 | 23.8 | 21.7 | 22.1 | 22.1 | 22.4 | 22.5 | 22.8 | 23.5 | 23.0 | 22.3 |
| Comprehensive Household Income | 22.0 | 22.9 | 20.7 | 21.1 | 21.0 | 21.2 | 21.1 | 21.2 | 21.8 | 21.5 | 20.8 |
| Adjusted Comprehensive Household Income |  |  |  |  |  |  |  |  |  |  |  |
| Based on federal poverty thresholds ${ }^{\text {a }}$ | 21.0 | 21.7 | 19.7 | 20.0 | 20.0 | 20.2 | 20.0 | 20.2 | 20.6 | 20.3 | 19.8 |
| Based on household size ${ }^{\text {b }}$ | 21.2 | 21.9 | 19.9 | 20.2 | 20.0 | 20.3 | 20.2 | 20.4 | 20.8 | 20.5 | 20.0 |
| Historic CBO Measure | 22.0 | 22.8 | 20.8 | 21.3 | 21.3 | 21.6 | 21.6 | 22.1 | 22.7 | 22.4 | 21.8 |
|  | Highest Quintile |  |  |  |  |  |  |  |  |  |  |
| Family Cash Income | 30.9 | 29.6 | 25.9 | 26.0 | 28.4 | 28.0 | 28.2 | 30.6 | 32.8 | 31.5 | 31.0 |
| Household Cash Income | 30.9 | 29.6 | 25.8 | 25.9 | 28.3 | 28.0 | 28.1 | 30.6 | 32.8 | 31.5 | 31.1 |
| Household Cash Income Plus |  |  |  |  |  |  |  |  |  |  |  |
| Taxes Paid by Businesses and |  |  |  |  |  |  |  |  |  |  |  |
| Employee Contributions to 401(k) |  |  |  |  |  |  |  |  |  |  |  |
| Retirement Plans | 28.5 | 27.7 | 24.4 | 24.3 | 26.2 | 25.9 | 26.0 | 28.0 | 29.7 | 28.8 | 28.4 |
| Household Cash Income Plus Taxes |  |  |  |  |  |  |  |  |  |  |  |
| Paid by Businesses, Employee |  |  |  |  |  |  |  |  |  |  |  |
| Contributions to 401(k) Retirement |  |  |  |  |  |  |  |  |  |  |  |
| Plans, and Nonhealth In-Kind Benefits | 28.5 | 27.7 | 24.4 | 24.3 | 26.2 | 25.9 | 26.0 | 28.0 | 29.7 | 28.8 | 28.4 |
| Comprehensive Household Income | 27.7 | 27.0 | 23.7 | 23.6 | 25.5 | 25.1 | 25.2 | 27.0 | 28.5 | 27.9 | 27.5 |
| Adjusted Comprehensive Household Income |  |  |  |  |  |  |  |  |  |  |  |
| Based on federal poverty thresholds ${ }^{\text {a }}$ | 27.7 | 27.0 | 23.7 | 23.6 | 25.4 | 25.1 | 25.1 | 26.7 | 28.3 | 27.7 | 27.4 |
| Based on household size ${ }^{\text {b }}$ | 27.8 | 27.1 | 23.7 | 23.7 | 25.4 | 25.1 | 25.2 | 26.8 | 28.3 | 27.7 | 27.4 |
| Historic CBO Measure | 28.5 | 27.8 | 24.4 | 24.5 | 26.4 | 26.2 | 26.3 | 28.1 | 29.9 | 29.0 | 28.7 |

Table K-1. Continued

| Income Measure | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | Under 1997 Law | Under 2000 <br> Law |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Memorandum: |  |  |  |  |  |  |  |  |  |  |  |
| Federal Poverty Thresholds, by Number of Family Members (Dollars) |  |  |  |  |  |  |  |  |  |  |  |
| One | 3,460 | 4,213 | 4,658 | 5,029 | 5,313 | 5,797 | 6,368 | 6,760 | 7,125 | 7,504 | n.a. |
| Two | 4,427 | 5,392 | 5,960 | 6,435 | 6,798 | 7,419 | 8,149 | 8,651 | 9,118 | 9,602 | n.a. |
| Three | 5,419 | 6,599 | 7,295 | 7,876 | 8,321 | 9,080 | 9,974 | 10,589 | 11,160 | 11,753 | n.a. |
| Four | 6,948 | 8,462 | 9,354 | 10,099 | 10,670 | 11,643 | 12,789 | 13,577 | 14,310 | 15,071 | n.a. |
| Five | 8,218 | 10,007 | 11,063 | 11,944 | 12,619 | 13,770 | 15,125 | 16,057 | 16,924 | 17,823 | n.a. |
| Six | 9,276 | 11,296 | 12,488 | 13,483 | 14,244 | 15,544 | 17,073 | 18,126 | 19,104 | 20,119 | n.a. |
| Seven | 10,505 | 12,793 | 14,142 | 15,268 | 16,131 | 17,602 | 19,334 | 20,526 | 21,634 | 22,784 | n.a. |
| Eight | 11,692 | 14,239 | 15,740 | 16,994 | 17,954 | 19,592 | 21,520 | 22,847 | 24,079 | 25,359 | n.a. |
| Nine or more | 13,968 | 17,010 | 18,804 | 20,302 | 21,449 | 23,406 | 25,709 | 27,294 | 28,767 | 30,296 | n.a. |

SOURCE: Congressional Budget Office.
NOTES: Families are people related by blood, marriage, or adoption who live together. Households are people who share a single housing unit, regardless of the relationships among them.

Cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Families or households with negative income are excluded from the lowest income category but are included in totals.

Taxes paid by businesses include corporate income taxes and the employer's share of Social Security, Medicare, and federal unemployment insurance payroll taxes.

Nonhealth in-kind benefits include food stamps, school lunches and breakfasts, housing assistance, and energy assistance.
Comprehensive household income equals pretax cash income plus income from other sources. Pretax cash income is the sum of cash income plus taxes paid by businesses and employee contributions to $401(\mathrm{k})$ retirement plans. Other sources of income include health-related in-kind benefits (Medicare, Medicaid, and employer-paid health insurance premiums) and nonhealth in-kind benefits.

The historic CBO measure equals family cash income plus taxes paid by businesses, divided by the federal poverty threshold appropriate for the family's size.

Individual income taxes are distributed directly to households paying those taxes. Payroll taxes are distributed to households paying those taxes directly or paying them indirectly through their employers. Federal excise taxes are distributed to households according to their consumption of the taxed good or service. Corporate income taxes are distributed to households according to their share of capital income.
n.a. $=$ not applicable.
a. For purposes of ranking, the income for each household is divided by the federal poverty threshold appropriate for the household's size.
b. For purposes of ranking, the income for each household is divided by the square root of the household's size.

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[^0]:    1. Table G-1a in Appendix G shows total effective federal tax rates for each quintile and for subdivisions of the highest quintile.
[^1]:    2. Economists use the concept of progressivity in different ways. On the one hand, progressivity of taxes indicates that effective rates rise as income increases. On the other hand, progressivity can also mean that taxes narrow the income gap between households at the
[^2]:    1. U.S. Department of the Treasury, Office of Tax Analysis, Household Income Mobility During the 1980s: A Statistical Assessment Based on Tax Return Data (June 1, 1992). Limiting the analysis to people filing tax returns in all 10 years excluded people with the lowest incomes because they are not required to file tax returns.
[^3]:    2. W. Michael Cox and Richard Alm, By Our Own Bootstraps: Economic Opportunity and the Dynamics of Income Distribution, Federal Reserve Bank of Dallas (1995). Because it excluded people who reported being out of the labor force in any year, the study omitted many people with the greatest income volatility.
    3. Isabel V. Sawhill and Mark Condon, "Is U.S. Income Inequality Really Growing?" Policy Bites, Urban Institute (June 1992), pp. 1-4.
[^4]:    7. The new, lower rate applies to gains realized after May 6, 1997. TRA-97 also established a 10 percent tax rate on gains realized by taxpayers in the 15 percent bracket, as well as lower rates after 2000 for gains on assets held for at least five years.
[^5]:    8. Many factors affect the share of income from capital gains. Its growth in recent years, for example, came in large part from rapid increases in the prices of common stocks. The large fall in the share in 1987 came directly as a result of the increase in the tax rate on capital gains that was enacted as part of TRA-86.
[^6]:    9. The Congressional Budget Office allocates corporate taxes and the employer's share of social insurance taxes to individuals using generally accepted assumptions about the incidence of taxes. For further discussion, see Chapter 2.
[^7]:    10. Taxes for Old-Age, Survivors, and Disability Insurance are levied on earnings up to a maximum amount, which is set at $\$ 80,400$ in 2001. Earnings above that limit are subject only to the Medicare payroll tax.
[^8]:    11. Social insurance taxes finance specific transfer programs. It is therefore difficult to evaluate those taxes without considering the distribution of the benefits they pay for. That sort of evaluation, however, is beyond the scope of this study.
    12. Table G-1a shows the effective corporate tax rate by income quintile for the 1979-1997 period.
    13. Table G-1a shows the effective federal excise tax rate by income quintile for the 1979-1997 period.
[^9]:    14. If the child tax credits and other changes that were part of TRA-97 had been in effect in 1997, they would have reversed some of that rise in the effective tax rate for households with children. Even with the 1997 tax reductions, however, the effective tax rate in 1997 would have exceeded the rate in 1979.
[^10]:    15. Table G-2a shows effective rates for each revenue source faced by each quintile of households with children.
[^11]:    16. In the federal tax system, only the EITC was refundable during the two decades under consideration.
    17. Table G-3a shows effective rates for each revenue source faced by each quintile of elderly childless households.
[^12]:    18. Table G-4a shows effective rates for each revenue source faced by each quintile of nonelderly childless households.
[^13]:    6. See, for example, Jane G. Gravelle and Kent Smetters, Who Bears the Burden of the Corporate Tax (and Why)?: The Open Economy Case, Technical Paper 1998-1 (August 1998), available from CBO's Tax Analysis Division or at www.cbo.gov/tech.html. The Office of Tax Analysis at the Department of the Treasury assumes that the full burden of the corporate income tax falls on owners of capital. The Joint Committee on Taxation has recently discontinued measuring the distribution of the tax because of uncertainty about its incidence. See Julie-Anne Cronin, U.S. Treasury Distributional Analysis Methodology, Working Paper 85 (U.S. Treasury, Office of Tax Analysis, September 1999), pp. 25-26.
    7. See, for example, Daniel S. Hamermesh, Labor Demand (Princeton, N.J.: Princeton University Press, 1993), especially pp. 172-173.
    8. Both the Treasury's Office of Tax Analysis and the Joint Committee on Taxation use the same assumption-that workers bear the full burden of payroll taxes (see Appendix C).
    9. Government spending finances a broad range of activities that benefit households. However, consideration of the full range of that spending is beyond the scope of this study.
[^14]:    10. A full description of the methods used to value noncash benefits is provided in Appendix B of Bureau of the Census, Measuring the Effect of Benefits and Taxes on Income and Poverty: 1992, Current Population Reports, Series P60, No. 186RD (September 1993), pp. viii-ix and B-1 to B-5.
[^15]:    11. A detailed discussion of fungible value may be found in Bureau of the Census, Measuring the Effect of Benefits and Taxes, p. viii.
    12. Firms may have the additional advantage of obtaining health insurance for their workers at the reduced rates available only for group coverage, an added incentive to offer the benefit.
[^16]:    13. Owner-occupied housing is perhaps the most significant form of imputed income. The Office of Tax Analysis estimates that it amounts to approximately 0.5 percent of total household income. See Cronin, U.S. Treasury Distributional Analysis Methodology, p. 11.
[^17]:    14. An alternative approach, used by the Office of Tax Analysis (OTA), would use retained corporate earnings as the basis for measuring accrued capital gains in the corporate sector. OTA assumes that real capital gains derive entirely from retained earnings. Its measure of income thus allocates retained earnings to households (with adjustments for accelerated tax-cost recovery and inflation) and subtracts realized capital gains. See Cronin, U.S. Treasury Distributional Analysis Methodology, p. 10. Data limitations led CBO to reject that approach.
[^18]:    15. See, for example, Patricia Ruggles, Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy (Washington, D.C.: Urban Institute Press, 1990), pp. 75-78.
    16. Roberton Williams, David Weiner, and Frank Sammartino, Equivalence Scales, the Income Distribution, and Federal Taxes, Technical Paper 1999-2 (October 1998), available from CBO's Tax Analysis Division or at www.cbo.gov/tech.html.
[^19]:    17. This study focuses on the four major federal taxes: individual income, corporate income, social insurance, and excise. It excludes estate and gift taxes and customs duties, primarily because of limitations in the data. The omitted taxes make up less than 10 percent of all federal revenues.
    18. Taxes may, however, affect the form of compensation offered. Workers may prefer noncash benefits that are exempt from tax in place of taxable cash wages.
[^20]:    19. See Congressional Budget Office, Perspectives on the Ownership of Capital Assets and the Realization of Capital Gains, CBO Paper (May 1997).
[^21]:    o Households versus families as the unit of analysis;
    o Alternative measures of income; and
    o Unadjusted income versus income adjusted for household size.

[^22]:    1. The data required to examine periods longer than one year do not exist. Previous work by the Congressional Budget Office used alternative assumptions about the incidence of the corporate income tax. (See, for example, The Changing Distribution of Federal Taxes: 1975-1990, published in October 1987.) In more recent analyses, CBO has assumed that the tax falls entirely on capital.
    2. The Bureau of the Census defines people who are not living with relatives as unrelated individuals, whether they live alone or with others. The statistics cited in this paragraph count unrelated individuals as one-person families. Therefore, in this analysis, people living alone are considered both a family and a household.
[^23]:    3. The cited movements occur when the adjustment involves dividing household income by the square root of the number of household members. Using the federal poverty thresholds as the basis for adjustment would have shifted nearly half of all households into different quintiles. Upward movements would again predominate over downward shifts.
[^24]:    4. Table K-1 in Appendix K shows effective federal tax rates by income quintile for all eight measures of income.
[^25]:    5. Tables I-1a, I-2a, I-3a, I-4a, I-5a, I-6a, and I-7a show effective individual income, social insurance, corporate income, and excise tax rates by income quintile for seven of the eight measures of income. Appendix G provides comparable estimates for comprehensive household income adjusted on the basis of household size.
[^26]:    6. Tables I-1c, I-2c, I-3c, I-4c, I-5c, I-6c, and I-7c show average pretax and after-tax income under alternative measures of income for each income quintile.
[^27]:    1. The Treasury's methodology is described in detail in Julie-Anne Cronin, U.S. Treasury Distributional Analysis Methodology, OTA Paper 85 (Department of the Treasury, Office of Tax Analysis, September 1999). The JCT's methodology is outlined in Joint Committee on Taxation, Distribution of Certain Federal Tax Liabilities by Income Class for Calendar Year 2001, JCX-2-01 (February 27, 2001).
[^28]:    1. For more information about the March supplement to the CPS, see the section on 1999 methodology and documentation, available at www.bls.census.gov/cps/ads/1999/smethdoc.htm.
[^29]:    2. For more information about the SOI, see Internal Revenue Service, Statistics of Income, Individual Income Tax Returns 1997, IRS Pub. 1304 (December 1999).
[^30]:    3. For more information about the Consumer Expenditure Survey, see Bureau of Labor Statistics, Consumer Expenditure Survey, Interview Survey, 1997 (October 1999).
[^31]:    1. See Thae S. Park, "Comparison of BEA Estimates of Personal Income and IRS Estimates of Adjusted Gross Income," Survey of Current Business (Bureau of Economic Analysis, February 2000), available at www.bea.doc.gov/bea/pub/0200cont.htm.
[^32]:    2. For a comparison of all income measures in the Current Population Survey, or CPS, with the totals in the NIPAs, including transfer payments (which CBO takes directly from the CPS), see Mark Roemer, Assessing the Quality of March CPS and SIPP [Survey of Income and Program Participation] Income Estimates, 1990-1996 (Bureau of the Census, June 2000).
[^33]:    1. For a more complete discussion of the differences between the two agencies' measures, see Congressional Budget Office, Comparing CBO and Census Income Statistics, CBO Paper (June 1993).
    2. See Bureau of the Census, Money Income in the United States: 1999 (September 2000), Appendix A, for a discussion of the Census Bureau's definitions.
[^34]:    Household cash income is the sum of wages, salaries, self-employment income, rents, taxable and nontaxable interest, dividends, realized capital gains, cash transfer payments, and retirement benefits. Households with negative income are excluded from the lowest income category but are included in totals.

