Order Code RL33786

CRS Report for Congress

Individual Tax Rates and Tax Burdens: Changes Since 1960

January 8, 2007

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Prepared for Members and
Committees of Congress

Congressional
Research
Service

Individual Tax Rates and Tax Burdens: Changes Since 1960

Summary

Since 2000, Congress has passed a major tax bill almost every year, beginning with the Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16) and up through the Tax Relief and Health Care Act of 2006 (P.L. 109-432). For a variety of reasons, tax issues are likely to be high on the agenda of the 110th Congress. First, while fundamental tax reform is unlikely to occur in the near-term, Treasury officials suggest that incremental changes may be made to the tax code. Second, fixing the long-term Social Security and Medicare financial shortfalls will involve benefit reductions, revenues increases, or a combination of the two. And third, a revenue neutral fix of the alternative minimum tax (AMT) will involve either expenditure reductions or revenue increases.

Federal income and social insurance taxes are just two of the many taxes individuals pay. An understanding of all the major taxes individual taxpayers face is important since a change in one tax may affect taxpayer behavior and, thus, affect revenues received by other levels of government. To provide this perspective, this report examines the changes in tax rates and tax burdens on individuals, focusing primarily on income and social insurance taxes.

The federal personal income tax is the largest single source of combined federal, state, and local tax revenue accounting for 27% of the total in 2005. The next largest single source is federal social insurance contributions accounting for 25% of the 2005 total. Overall, direct taxes on personal income (that is, the federal income tax, state and local income taxes, and social insurance contributions) account for 60% of total federal, state, and local tax revenues.

The average federal income tax rate has fluctuated since 1960, but fluctuated around a constant rate of about 9.3%. Currently, the average tax rate is below its 45-year average, but has been increasing over the past two years. The average tax rates for both federal social insurance taxes, and state and local income taxes have been steadily increasing since 1960. By 2005, the combined tax burden of social insurance taxes, and state and local income taxes was greater than that of federal income taxes.

The distribution of the tax burden across income categories differs dramatically among the various types of taxes. Overall, federal taxes are progressive, in that higher income taxpayers pay a larger proportion of their income in taxes than lower income taxpayers. At the state and local level, however, the tax burden of the combination of income, property, sales, and excise taxes is highly regressive—lower income taxpayers pay a higher share of their income in state and local taxes than higher income taxpayers.

This report will be updated as further information becomes available.

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Since 2000, Congress has passed a major tax bill almost every year, beginning with the Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16) and up through the Tax Relief and Health Care Act of 2006 (P.L. 109-432). And for a variety of reasons, tax issues are likely to be on the agenda of the 110th Congress. First, while fundamental tax reform is unlikely to occur in the near-term, Treasury officials suggest that incremental changes may be made to the tax code.[1] Second, fixing the long-term Social Security and Medicare financial shortfalls will involve benefit reductions, revenues increases, or a combination of the two. Third, a revenue neutral fix of the alternative minimum tax (AMT) will involve either expenditure reductions or revenue increases.

Federal income and social insurance taxes are just two of many taxes individuals pay. An understanding of all the major taxes individual taxpayers face is important since a change in one tax may affect taxpayer behavior and, thus, affect revenues received by other levels of government. To provide this needed perspective, this report examines the changes in tax rates and tax burdens on individuals. Not only are federal individual income taxes considered, but also social insurance contributions and state and local taxes. The evolution of these taxes since 1960 is analyzed to track changes in the overall level and distribution of the tax burden.

The primary focus will be on the major income taxes paid by individuals directly to the government, because changes in these taxes affect not only tax avoidance and tax evasion behavior, but also individuals' work behavior. Corporate income taxes are also considered because the burden may ultimately be borne by individuals through either higher prices on goods and services, or lower income from work and investment. Corporate income taxes, however, probably do not significantly affect work behavior. Other taxes such as sales, excise, and property taxes, which are paid by individuals, are not based on income and do not directly affect work effort. Consequently, changes in these taxes do not significantly affect tax revenues received by other levels of government.

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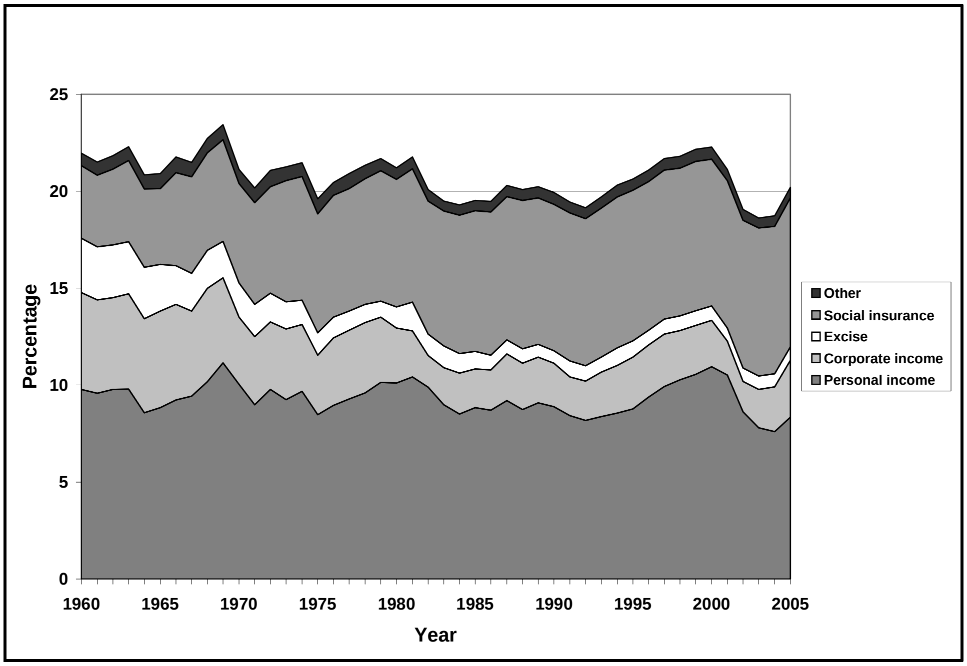
[1] See BNA Daily Report for Executives, Nov. 11, 2006, p. G-1.

Economic Significance of Taxes

Americans are taxed by the federal, state, and local governments. Federal tax revenues as a percentage of aggregate personal income are displayed in **Figure 1**.[2] Tax revenues are expressed as a percentage of personal income to show their importance relative to the economy. Overall, total federal tax rates have fluctuated around 21% of personal income since 1960. The 45-year average annual growth rate of the ratio of federal tax revenues to personal income is -0.2%.[3]

Figure 1. Federal Tax Revenues as a Percentage of Aggregate Personal Income, 1960-2005



Source: Bureau of Economic Analysis, National Income and Product Accounts, various tables.

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[2] The concept of aggregate personal income used in this report is the sum of personal income as defined in the National Income and Product Accounts (NIPA) and contributions to government social insurance. Personal income in the NIPA includes income received by persons from all sources minus social insurance contributions. Persons includes individuals, nonprofit institutions that primarily serve households, private noninsured welfare funds, and private trust funds. This income measure includes wage and salary disbursements, the employer contribution for employee pension and insurance funds, the employer contribution for social insurance, asset income, and government transfers, among others. This concept of income can be thought of aggregate income that households can use for spending, saving, or paying taxes.

[3] The growth rate of this ratio indicates how tax revenues have changed relative to aggregate personal income. A negative growth rate indicates that the growth in tax revenues have not been keeping up with economic growth. A positive growth rate indicates that tax revenues have been growing faster than the economy. The average annual growth rate is the geometric average of the growth rate over this period. The geometric average growth rate is the annualized cumulative growth rate.

Federal personal income taxes (the bottom area in **Figure 1**) have averaged about 9% of aggregate personal income between 1960 and 2005. Personal or individual income tax revenues have grown at a lower rate than the economy; the average growth rate was -0.3%.[4] Corporate income taxes have steadily declined relative to aggregate personal income over the past 45 years. In 1960, corporate income taxes amounted to 5% of aggregate personal income; by 2005, they were less than 3% of aggregate personal income. The economic significance of excise taxes has also steadily declined, falling from 2.8% of aggregate personal income in 1960 to 0.7% of aggregate personal income in 2005. Social insurance taxes as a percentage of aggregate personal income have more than doubled over the past 45 years, increasing from 3.7% in 1960 to 7.7% by 2005.[5] Other tax receipts have remained fairly small at about 0.6% of aggregate personal income.[6] The overall burden of federal taxes has remained fairly steady over the past 45 years because the dramatic increase in social insurance taxes was offset by decreases in corporate income taxes and excise taxes.

Figure 2 reports state and local tax receipts as a percentage of aggregate personal income. Unlike federal tax receipts, state and local taxes have increased relative to aggregate personal income over the past 45 years—growing from about 9% in 1960 to almost 11% by 2005. The two largest sources of state and local tax revenues—sales and property taxes—grew at annual rates of 0.5% and -0.4% relative to aggregate personal income. Of the various state and local taxes, personal income taxes grew at the highest rate, growing at a rate 3.0 percentage points faster than the personal income. Corporate income tax revenues grew slightly faster than personal income, while other taxes grew at a rate slightly less than personal income.

The federal personal income tax is the largest single source of combined federal, state, and local tax revenue accounting for 27% of the total in 2005. The next largest single source is federal social insurance contributions accounting for 25% of the 2005 total. Overall, direct taxes on personal income (that is, the federal income tax, state and local income taxes, and social insurance contributions) account for 60% of total federal, state, and local tax revenues. Consequently, these taxes can have a significant effect on the provision of government services, the fiscal health of governments, and the economy.

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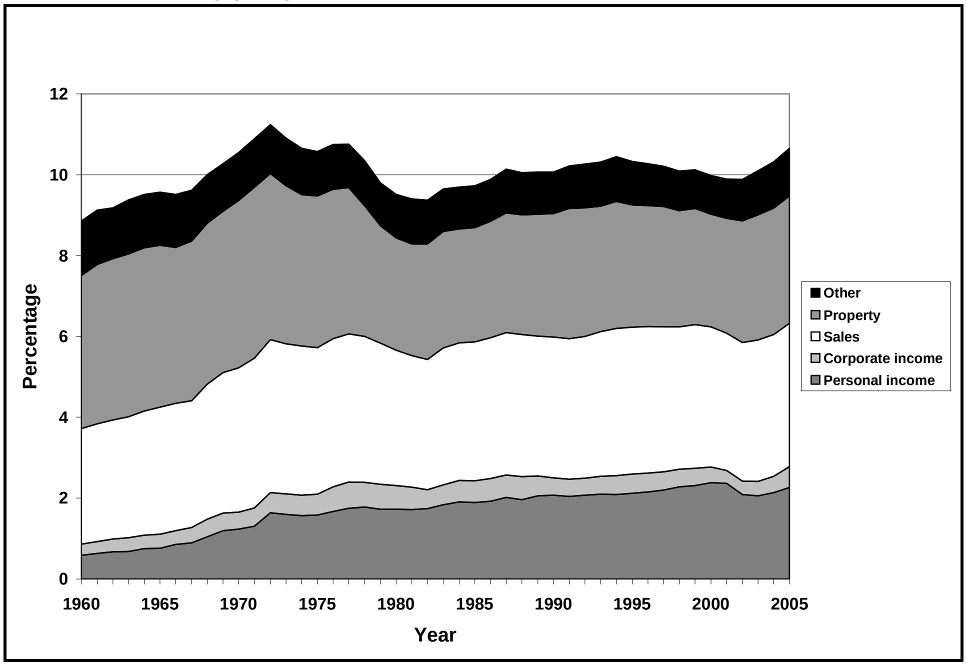
[4] The terms personal income tax and individual income tax are used interchangeably.

[5] The social insurance taxes primarily fund Social Security, Medicare, and Unemployment Insurance.

[6] Estate and gift taxes have typically accounted for less than 0.5% of personal income since 1960 and are combined into the "other" category.

Figure 2. State and Local Tax Revenues as a Percentage of Aggregate Personal Income, 1960-2005



Source: Bureau of Economic Analysis, National Income and Product Accounts, various tables.

Individual Income Tax Rates

American taxpayers face a variety of taxes on income. First, the graduated federal income tax is a progressive tax on income.[7] Second, federal social insurance contributions or taxes are levied on wages and salaries.[8] Third, most state and local governments tax income. **Figure 3** shows tax receipts from these various sources as a percentage of aggregate personal income; the numbers can be thought of as average tax rates.[9]

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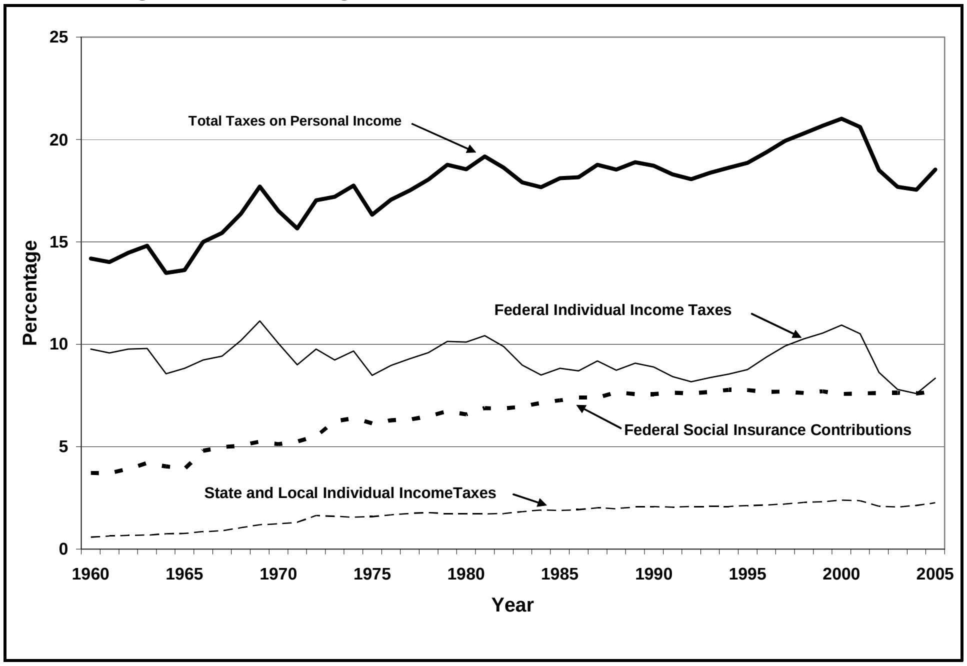
[7] A progressive tax is a tax in which the share of income paid in taxes increases with income. The reverse is true for a regressive tax.

[8] Social insurance contributions are taxes used primarily to pay for Social Security, Medicare, and Unemployment Insurance. The taxes are often levied on both the employee and the employer, but most economists agree that the employer's share is borne by the employee through lower earnings.

[9] The average tax rate shows the share of income paid in taxes.

Figure 3. Average Individual Tax Rates, 1960-2005



Source: Bureau of Economic Analysis, National Income and Product Accounts, various tables.

The top bold line in **Figure 3** shows the proportion of income paid in total individual income and payroll taxes to federal, state, and local governments. Three features of the trend since 1960 stand out. First, the overall average tax rate has been steadily increasing. In 1960, the average tax rate was under 15%; by 2005, it had climbed to almost 20%. Second, the average tax rate displays a strong cyclical pattern—falling during recessions and rising during the subsequent recovery. Third, the largest absolute decrease in the average tax rate occurred between 2000 and 2004, falling from almost 21% to less than 18%. The 45-year trends of each of the components of the overall average income tax rate are discussed, in turn.

Federal Individual Income Taxes

The federal individual income tax rate (the second line from the top in **Figure 3**), while quite variable over the past 45 years, has fluctuated around a constant 9.3% over this period. The average annual growth of the federal income tax rate has been -0.35% since 1960—the federal individual income tax rate was slightly lower in 2005 than in 1960. Since 1960, the average tax rate topped 10.5% in 4 years and fell below 8.5% in 8 years. The highest rate was 11.2% in 2000 and the lowest was 7.6% in 2004.

Average federal income tax rates fell in each of the seven recessions the U.S. economy has experienced since 1960.[10] Most of the cyclic variation in the overall tax rate is due to the cyclic variation in the federal income tax rate. Income tax revenues

[10] The recession years are: 1960-1961, 1969-1970, 1973-1975, 1980, 1981-1982, 1990-1991, and 2001.

fall during recessions because workers who lose their jobs either pay no income tax or pay reduced income tax because of the reduction in income and being pushed into a lower tax bracket. Conversely, income tax revenue and average tax rates increase during the subsequent economic recoveries as unemployed workers find jobs, and earnings rise.

In addition to the business cycle, tax legislation has increased or reduced taxes. Taxes were cut in the early 1960s, as the Kennedy and Johnson Administrations adopted explicit Keynesian policies to boost the economy. Taxes were also reduced in 1981, at the urging of the Reagan Administration. The Bush Administration proposed and Congress enacted tax cuts in 2001-2003. Over this 45-year period, taxes were also raised to help reduce budget deficits: taxes were raised in the mid-1980s and the early 1990s.

Tax revenues can increase in the absence of tax law changes due to "bracket creep." Before 1985, the tax brackets, personal exemptions, and standard deduction did not change as prices changed. Consequently, the inflation-adjusted income cut-off for each tax bracket got smaller over time and the inflation-adjusted amount of income exempt from taxes fell over time. Individuals whose inflation-adjusted income remained constant or grew over time would pay a larger proportion of their income in taxes. The Economic Recovery Tax Act of 1981 was enacted to index the tax brackets, exemptions, and standard deduction for inflation. This legislation was effective for tax years after 1984. For many individuals, however, income typically grows faster than prices during economic expansions and, thus, inflation-adjusted income increases over time. Less income, therefore, is exempt from taxes, and, in addition, some individuals may be pushed into a higher tax bracket. Bracket creep partially explains the extended periods of rising tax rates in the 1960s, the 1970s, and the 1990s.

While the average tax rate has fluctuated around 9.3% since 1960, the highest statutory marginal tax rate has fallen dramatically.[11] The highest statutory marginal tax rate was 91% in the early 1960s. It fell to 70% in the late 1960s and remained there until 1980. The 1981 tax cut reduced it to 50%, and it was further reduced to 28% by the Tax Reform Act of 1986. The highest marginal tax rate was increased to 39.6% in the early 1990s and was then reduced to 35% in 2003. Income from different sources may be subject to different statutory marginal tax rates. For example, during the 1970s, maximum statutory marginal tax rate for earned income was 50% and was 70% for other income.

Federal Social Insurance Contributions

The 45-year trend in average tax rates for social insurance programs is shown in **Figure 3** (the third line from the top). Payroll taxes are levied on workers and their employers to fund these programs.[12] Most economists agree that the workers

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[11] The marginal tax rate is the proportion of the last dollar of income paid in taxes. The average tax rate is the proportion of income paid in taxes.

[12] Currently, the combined payroll tax rate for Social Security and Medicare is 15.3% of (continued...)

bear the full burden of these taxes as employers pass the cost of these taxes to their workers through reduced wages. The primary social insurance programs include Social Security (accounting for three-quarters of all social insurance contributions), Medicare (established in 1966 and accounting for over one-fifth of contributions), and unemployment insurance.

The average tax rate for social insurance contributions increased between 1960 and 2005. The average annual growth rate in the average tax rate was 1.7% over this period. The growth in the average tax rate closely follows changes in financing for Social Security and Medicare. Between 1960 and 1990, the legislated tax rate on Social Security taxable earnings increased from 6% to 15.3%. It has, however, been constant at 15.3% since 1990. The average tax rate jumped between 1965 and 1966 when the Medicare tax was established and the proportion of Social Security covered earnings subject to tax was increased.[13] The average tax rate jumped again between 1972 and 1974 as the proportion of covered earnings subject to tax was again increased.

State and Local Income Taxes

The bottom line in **Figure 3** shows the 45-year trend in the average state and local income tax rate. The average tax rate has followed an upward trend growing at about a 3% annual rate. The fluctuations in the tax rate somewhat follow the federal income tax rate since most states tie their income tax base to the federal income tax base.[14]

Distribution of Tax Burdens

The distribution of the tax burden can be progressive, regressive, or proportional. A progressive tax is a tax in which the share of income paid in taxes increases as income rises—the average tax rate rises with income. Conversely, with a regressive tax, the share of income paid in taxes falls as income rises—the average tax rate falls with income. Finally, a proportional tax is a tax in which the share of income paid in taxes or the average tax rate is constant across the income distribution.

Changes in the tax code and in the economy not only affects overall level of taxes but also the distribution of the tax burden. Furthermore, different taxes have different distributional impacts. While economic analysis cannot offer guidance on

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[12] (...continued)
which 12.4% is for Social Security and 2.9% is for Medicare. The employee and employer each pay 7.65% while the self-employed pay 15.3%.

[13] Covered earnings are wages and salaries earned in employment covered by the Social Security program. Only the portion of covered earnings below the taxable maximum limit, however, are taxed. The taxable maximum limit used to be changed only through legislation, but is now indexed to keep pace with average earnings growth.

[14] Seven states, however, do not have an income tax.

how the tax burden should be distributed, 65% of survey respondents said higher-income people should pay a much larger share or a larger share of income in taxes than lower-income people—there appears to be public support for progressive taxes.[15]

Federal Taxes

The federal individual income tax is a graduated tax with progressively higher tax rates for each successive tax bracket. This suggests that, in theory at least, the federal income tax is a progressive tax. But, because of various tax preferences and the lower tax rates on capital gains and dividends, the tax rates published in the tax tables may be a poor guide to the actual tax burden faced by each income category.[16]

Figure 4 shows the average tax for various income categories for selected years.[17] The first set of bars in the figure display the average tax rates for all taxpayers for 1979, 1987, 1996, and 2004.[18] The average tax rate was between 10% and 11% in 1979, 1987, and 1996. Primarily as a consequence of the 2001 tax cuts, the average tax rate fell to 8.7% by 2004.

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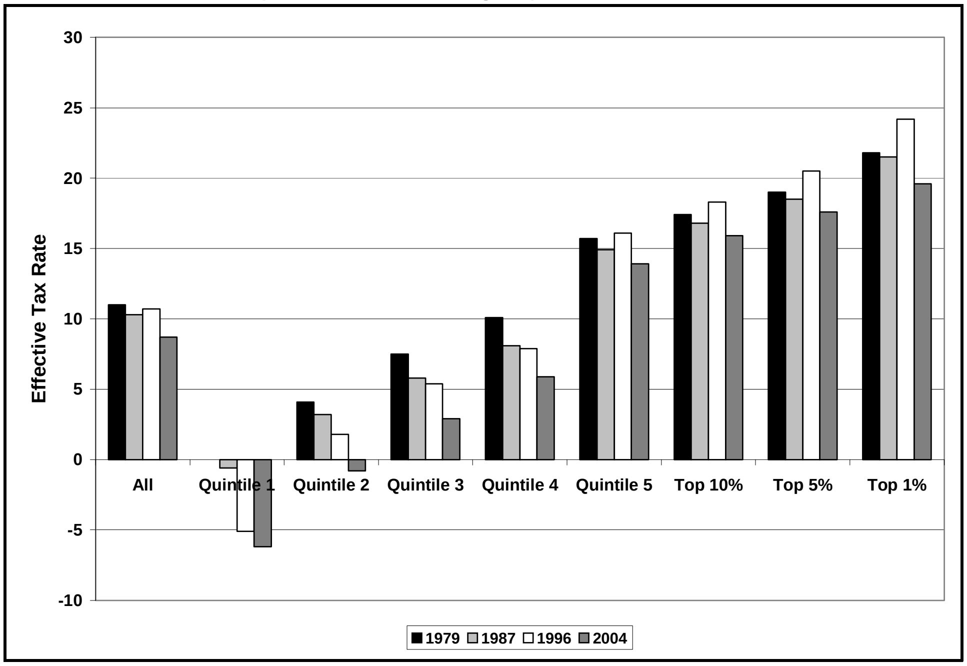
[15] Author's tabulation of the General Social Survey, 1972-2004, National Opinion Research Center. Also see CRS Report RL32693, *Distribution of the Tax Burden Across Individuals*, by Jane G. Gravelle and Maxim Shvedov for a more in-depth discussion and analysis of the economic issues concerning the distribution of the tax burden.

[16] See CRS Report RL33641, *Tax Expenditures: Trends and Critiques*, by Thomas L. Hungerford for an analysis and discussion of how the benefits of selected tax preferences are distributed across the income distribution.

[17] The Congressional Budget Office (CBO) defines the average or effective tax rate as total taxes paid divided by total pretax income. CBO's effective tax rate data is available only back to 1979. See U.S. Congressional Budget Office, *Historical Effective Federal Tax Rates: 1979 to 2004*, Dec. 2006.

[18] The years 1979 and 2004 are the first and last year for which full data are available. The year 1987 is the year after the enactment of the Tax Reform Act of 1986, which reduced tax rates and eliminated many loopholes. The year 1996 was chosen because it is after the tax increases in the early 1990s and is in the middle of the economic expansion of the mid-1990s.

Figure 4. Average Tax Rates of the Federal Individual Income Tax by Income Category, Selected Years



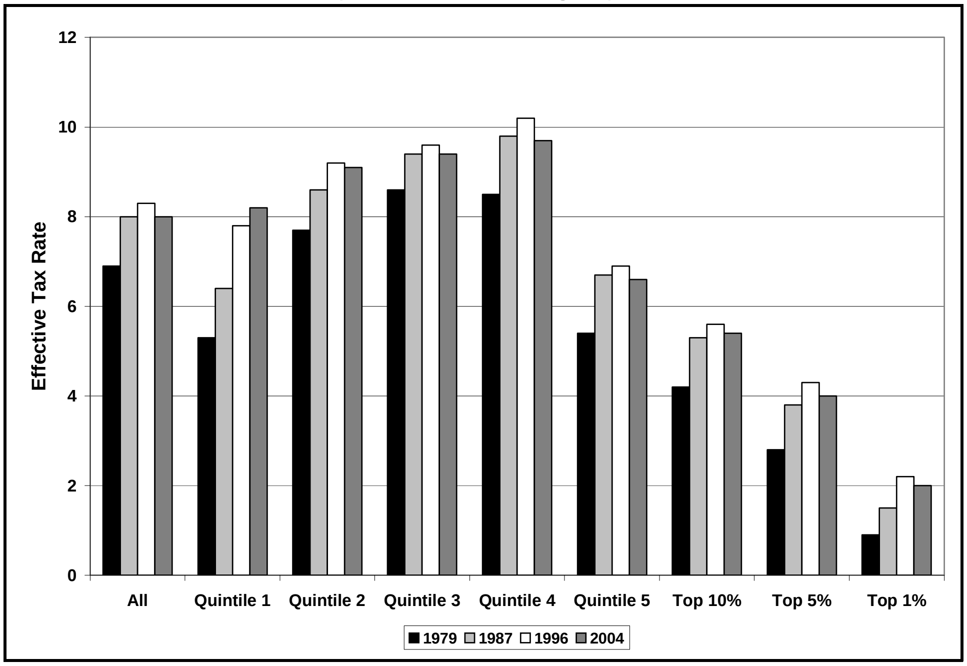
Source: Congressional Budget Office.

The next five sets of bars report the average tax rates for the five income quintiles. The set of bars labeled quintile 1 reports the tax rates for the poorest 20% of taxpayers while the set marked quintile 5 is for the richest 20% of taxpayers. The final three sets of bars in the figure show the tax rates for increasingly smaller subsets of the richest individual taxpayers: the richest 10%, the richest 5%, and the richest 1%.

The figure shows that average tax rates have been falling since 1979 for the bottom 80% of the income distribution (quintile 1 to quintile 4). By 2004, the average rate for the bottom 40% was negative because of the refundable tax credits—the earned income credit and the child tax credit. Furthermore, with the exception of 1996, the richest 20% of taxpayers have seen gradually falling average rate rates since 1979. The spike in 1996 reflects the effects of the tax increases in the early 1990s, which were targeted toward higher income taxpayers. The results in the figure suggest that the federal income tax was slightly less progressive in 2004 than in 1996.

The federal social insurance average tax rates are reported in **Figure 5** for the four selected years. Two features stand out. First, unlike the income tax rate, social insurance average tax rates have been steadily increasing for almost all income categories. Furthermore, the increase in the average rate has been largest, in absolute and relative terms, for the poorest income quintile.

Figure 5. Average Tax Rates of Federal Social Insurance Contributions by Income Category, Selected Years



Source: Congressional Budget Office.

Second, social insurance taxes are progressive for the bottom 80% of the income distribution and then highly regressive after that—the average tax rate for the richest 1% of individual taxpayers is about one-quarter of that for the poorest 20% of taxpayers. The primary reason for this pattern is the Social Security payroll tax, which accounts for the major part of social insurance taxes. The Social Security payroll tax is a proportional tax, taxing wages and salaries only up to the maximum taxable limit, which is $97,500 for 2007. Earnings above this limit are not subject to the Social Security payroll tax.[19] In addition, higher income taxpayers tend to derive a smaller proportion of their income from wages and salaries than lower income taxpayers. Consequently, a smaller share of income is taxed as earnings rise above the maximum taxable limit.[20]

In addition to income and social insurance taxes, individual taxpayers pay federal excise taxes and some pay corporate income taxes.[21] Both of these taxes are

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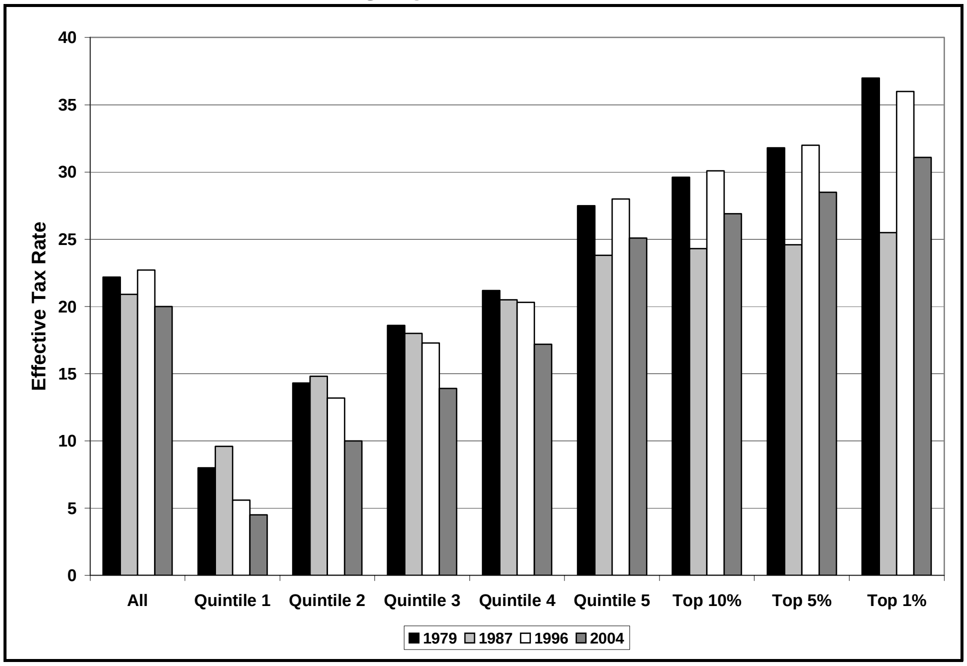
[19] However, earnings above the maximum taxable limit have been subject to the Medicare payroll tax since 1993. Between 1991 and 1993, the taxable maximum for Medicare was higher than for Social Security. The taxable maximum income limit for Medicare was eliminated after 1993.

[20] While the Social Security payroll tax is regressive at the upper income levels, if both benefits and taxes are considered, the Social Security program is progressive. See U.S. Congressional Budget Office, *Is Social Security Progressive?* Economic and Budget Issue Brief, Dec. 15, 2006.

[21] Excise taxes are regressive, while corporate income taxes allocated to individuals are (continued...)

minor compared to income and social insurance taxes, but do affect the progressivity of the federal tax system. **Figure 6** displays the combined average federal tax rates for all federal taxes. The distribution of the tax burdens has changed dramatically since 1979 while the overall average tax rate (the first set of bars in the figure) has only fluctuated between about 20% and 22%. For the combined federal taxes, taxes are now more progressive than in 1987 but less progressive than in 1996. Overall, the burden of federal taxes is fairly progressive, with the progressivity of the individual income tax offsetting the regressivity of social insurance taxes at the higher income levels. Recent research shows that the federal tax system, while progressive, has become less progressive at the top of the income distribution since 1960.[22]

Figure 6. Average Tax Rates of Federal Taxes by Income Category, Selected Years



Source: Congressional Budget Office.

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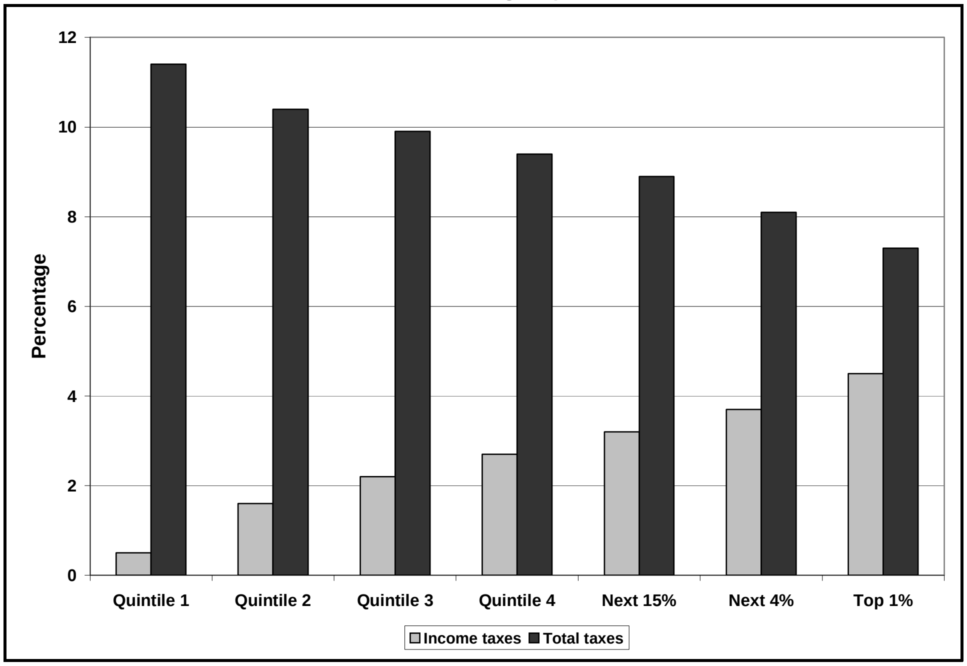
[21] (...continued)
progressive.

[22] Thomas Piketty and Emmanuel Saez, *How Progressive is the U.S. Federal Tax System? A Historical and International Perspective*, National Bureau of Economic Research, Working Paper no. 12404, July 2006.

State and Local Taxes

At the state and local level, individuals pay income taxes, property taxes, excise taxes, and sales taxes.[23] Both property taxes and sales taxes as a percentage of personal income have fluctuated from year to year, but both have been within the range of 3% to 4.5%.[24] The distribution of the tax burden for state and local individual income taxes and all state and local taxes in 2002 is reported in **Figure 7**.[25]

Figure 7. Average Tax Rate of State and Local Taxes by Income Category, 2002



Source: Institute on Taxation and Economic Policy.

The gray bars in the figure show the tax burden of state and local individual income taxes across the lowest four income quintiles and across increasingly richer slices of the richest 20% of taxpayers. The income tax rate (share of income paid in taxes) steadily increases, moving from the poorest quintile to the richest 1% of taxpayers. As with the federal individual income tax, state and local individual

[23] Not all states have an income tax or a sales tax.

[24] These tax rates include taxes paid by corporations and, thus, overstate the percentage paid by individual taxpayers.

[25] See Institute on Taxation and Economic Policy, *State and Local Taxes Hit Poor and Middle Class Far Harder than the Wealthy*, Jan. 7, 2003. These estimates of the tax burden may not necessarily be directly comparable to the Congressional Budget Office's estimates of the federal tax burden because of different incidence assumptions and a different economic model.

income taxes are progressive.[26] Overall, the poorest 20% of taxpayers pay about 0.5% of their income in state and local income taxes while the richest 1% pay about 4.5% of their income in state and local income taxes.

The black bars in **Figure 7** show the distribution of the total tax burden of state and local taxes. Not only does this include state and local income taxes, but also local property taxes, and state and local sales taxes and excise taxes. In contrast to income taxes, the overall state and local tax burden is highly regressive. Those in the poorest income quintile pay over 11% of their income in state and local taxes while the richest 1% pay less than 8%. The progressive individual income tax is overwhelmed by the regressive nature of the property tax, sales tax, and excise tax.

Conclusions

American taxpayers face a variety of taxes at both the federal level and the state and local level. The most important and visible tax they pay is the federal individual income tax. The average federal income tax rate has fluctuated since 1960, but fluctuated around a constant rate of about 9.3%. Currently, the average tax rate is below its 45-year average, but has been increasing over the past two years. The average tax rates for both federal social insurance taxes and state and local income taxes have been steadily increasing since 1960. By 2005, the combined tax burden of social insurance taxes and state and local income taxes was greater than that of federal income taxes.

The distribution of the tax burden across income categories differs dramatically among the various types of taxes. Overall, federal taxes are progressive in that higher income taxpayers pay a larger proportion of their income in taxes than lower income taxpayers. At the state and local level, however, the tax burden of the combination of income, property, sales, and excise taxes is highly regressive—lower income taxpayers pay a higher share of their income in state and local taxes than higher income taxpayers.

The U.S. tax code appears to be in a perpetual state of flux. Future changes to the income tax code—whether it is fundamental tax reform, incremental tax reform, elimination of some tax preferences, or extension of the 2001-2003 tax cuts—need not be made in isolation. Given that a change in one tax could affect the behavior of taxpayers (for example, tax avoidance, tax evasion, or work effort), policymakers may consider the overall burden of all federal, state, and local taxes when making changes to federal individual income taxes.

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[26] The is only true at the aggregate level. Seven states do not have an income tax, and other states levy a proportional income tax.