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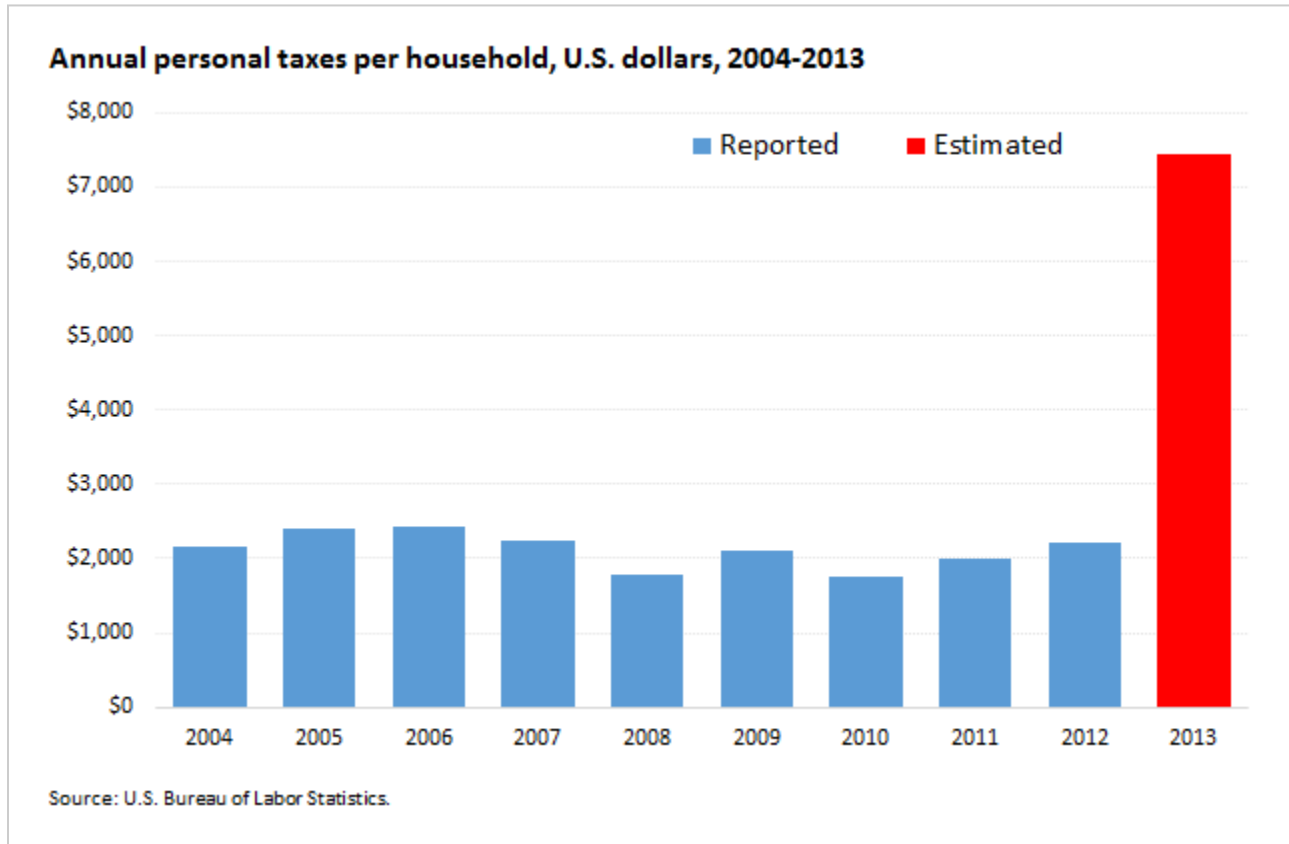
## New Estimates Of Personal Taxes In Consumer Expenditure Survey

**Aaron E. Cobet**

The [Consumer Expenditure Survey](#) provides information on the buying habits of American consumers, their income, and personal taxes. In 2013, the survey improved its personal tax data, which consist mainly of income taxes. The survey previously asked respondents how much they paid in taxes. Now the survey estimates taxes from a program developed by the National Bureau of Economic Research. This Spotlight on Statistics looks at these new tax estimates.

## New method triples estimates of personal income taxes in 2013

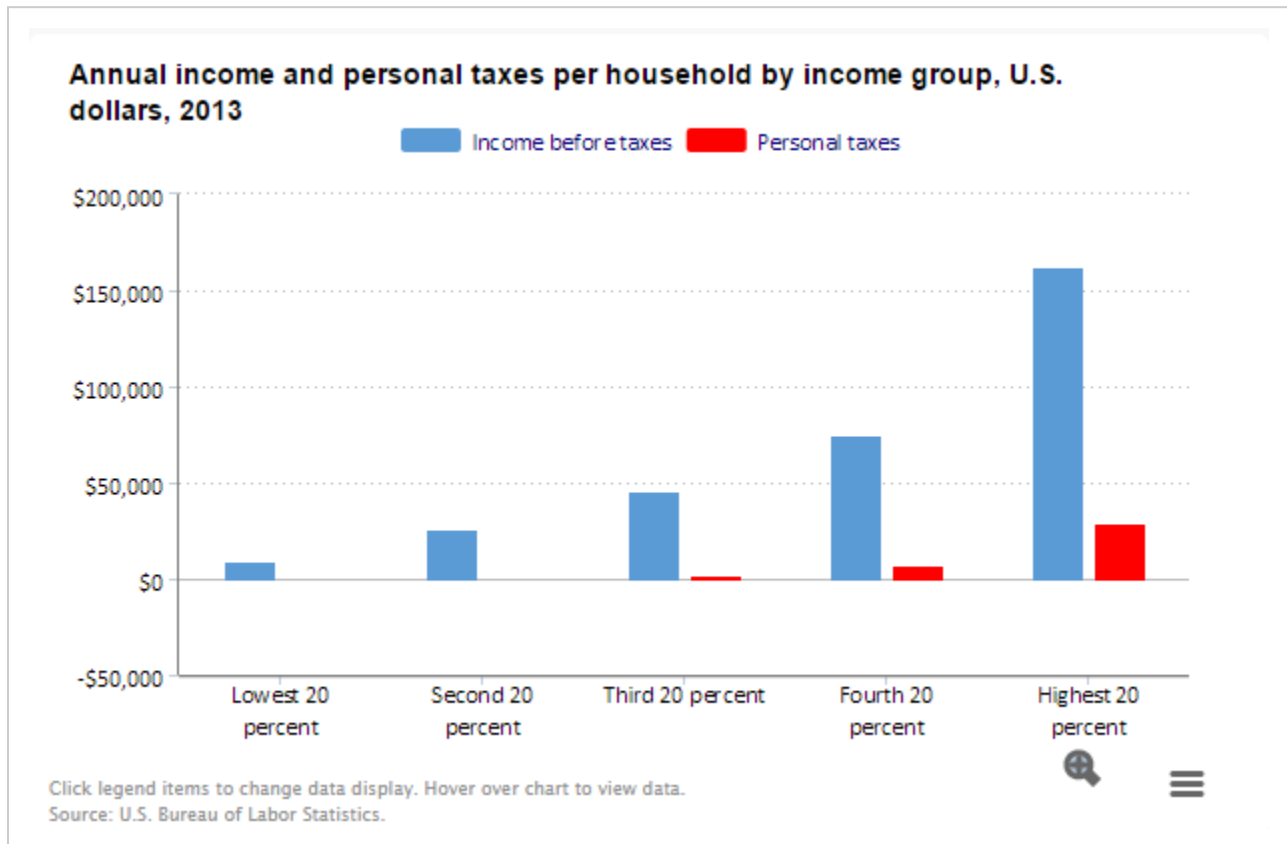
National estimates of taxes for 2013 are about triple the 2012 survey responses. The new estimates are more accurate than the answers from the survey because respondents may answer mistakenly or may not answer some questions.



## Households in the top 20 percent of income pay more income taxes than the other 80 percent

A household may include a family, a single consumer, or a group of individuals who share one budget. We divide households into five equally sized groups arranged from lowest to highest according to their pretax income.

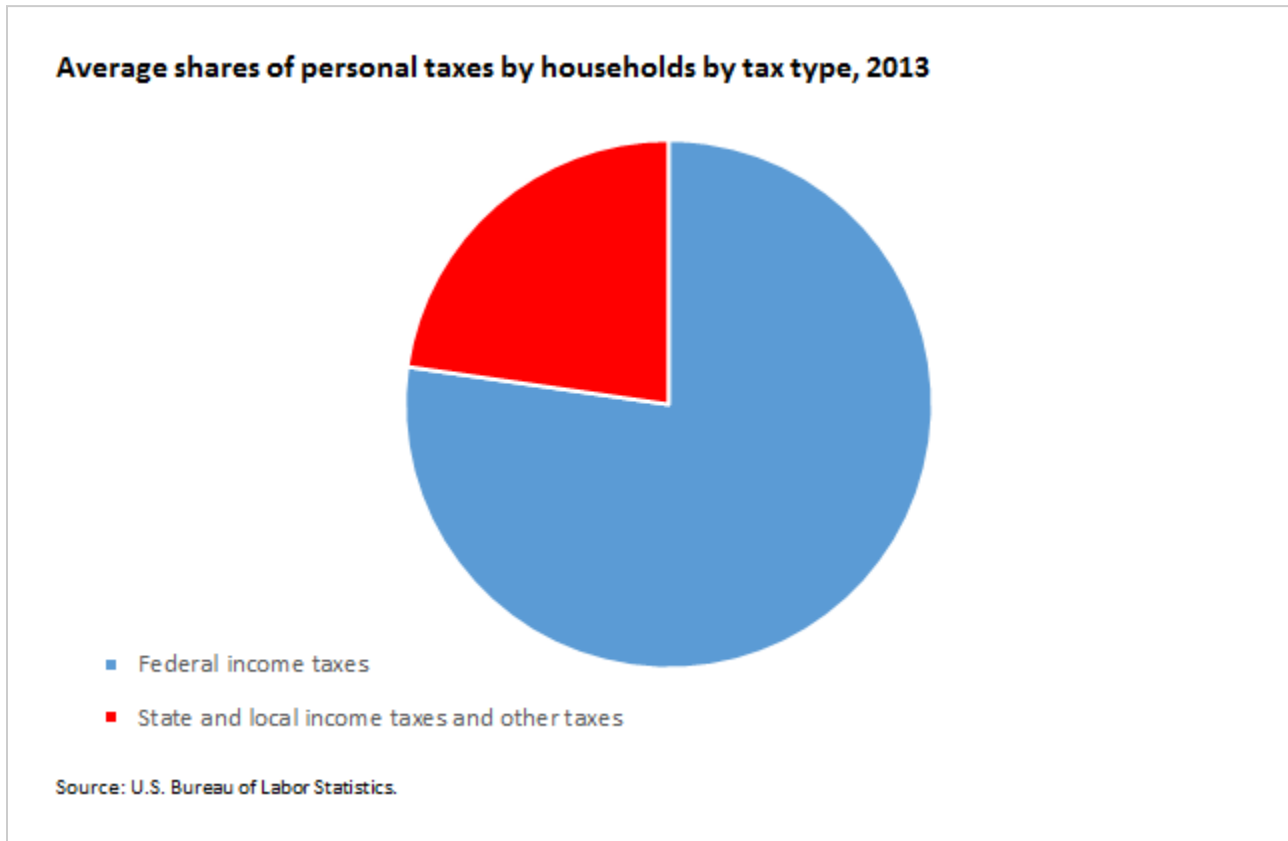
In 2013, households with the highest 20 percent of income earned more than the other 80 percent of households combined. The households with the highest income also paid more personal taxes than households in the other four income groups combined. In contrast, households in the lowest two income groups received more tax credits than they paid in personal taxes. (Tax credits are money that taxpayers can subtract from any taxes they owe.)



## Federal income taxes account for 77 percent of all personal taxes

Federal income taxes accounted for 77.3 percent of all personal taxes that households paid in 2013. Federal income taxes averaged more than \$5,700 per household. The remaining 22.7 percent of personal taxes that households paid include state and local income taxes, personal property taxes, vehicle taxes, and other small taxes and refunds.

Data shown here do not include state and local sales taxes, which are paid by residents in most states and are a major share of state and local government revenue.

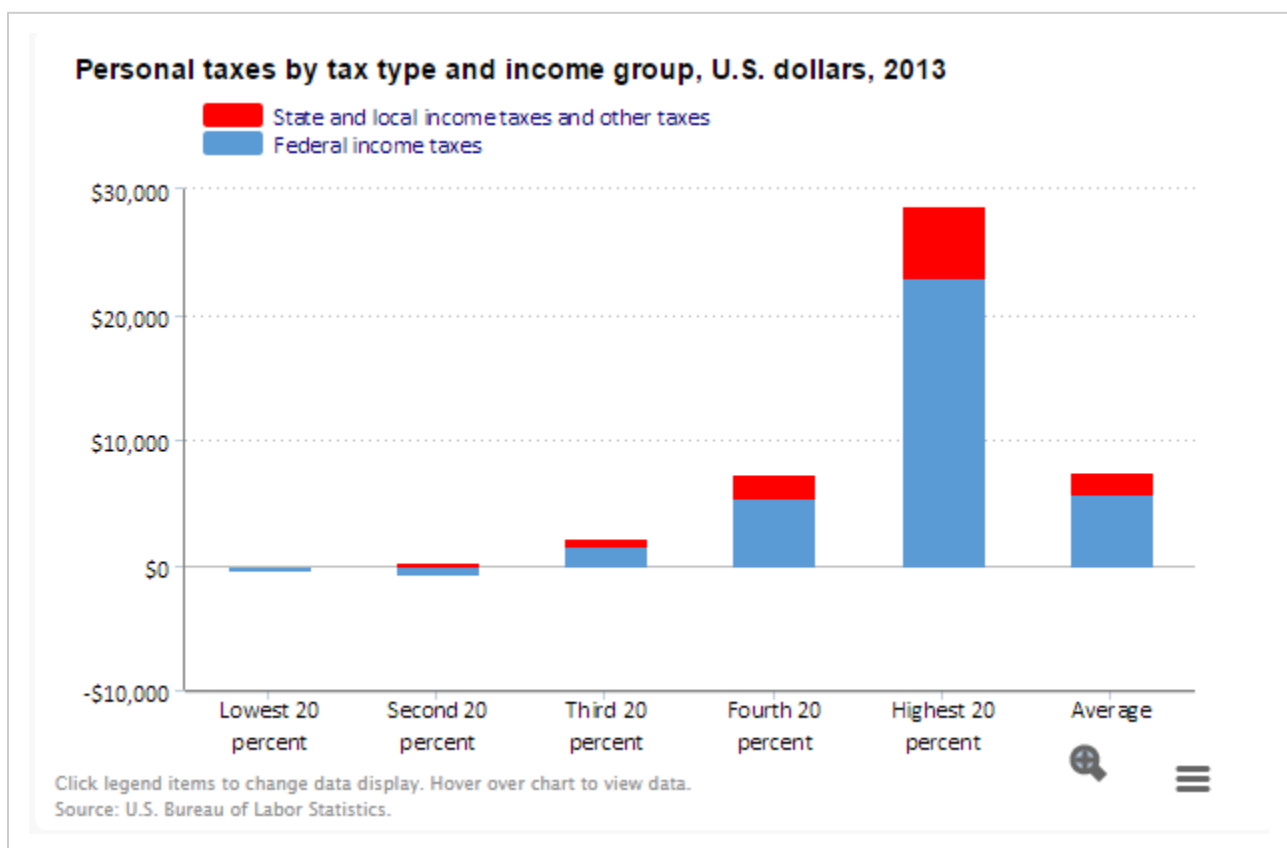


## Households in highest income group paid an average of \$29,000 in personal taxes

Households with the highest 20 percent of income paid about three quarters of personal taxes, almost \$29,000 per household in 2013. Of that total, 80.2 percent was for federal income taxes.

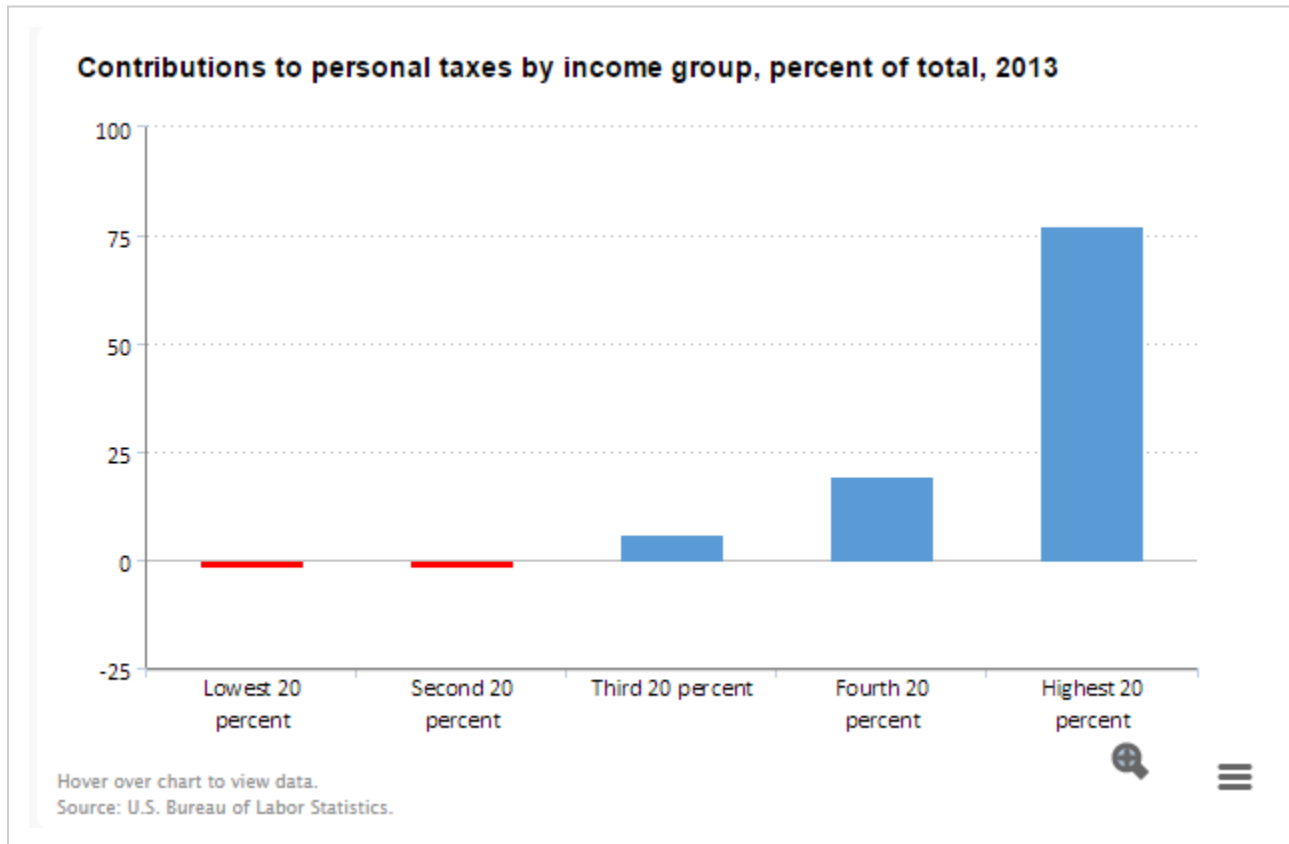
Households in the third, or middle, income group paid slightly more than \$2,200 in personal taxes in 2013; 64.8 percent of that amount was for federal income taxes.

Households in the two lowest income groups received more in tax credits than they paid in personal taxes. These tax credits came mainly from federal tax credits.



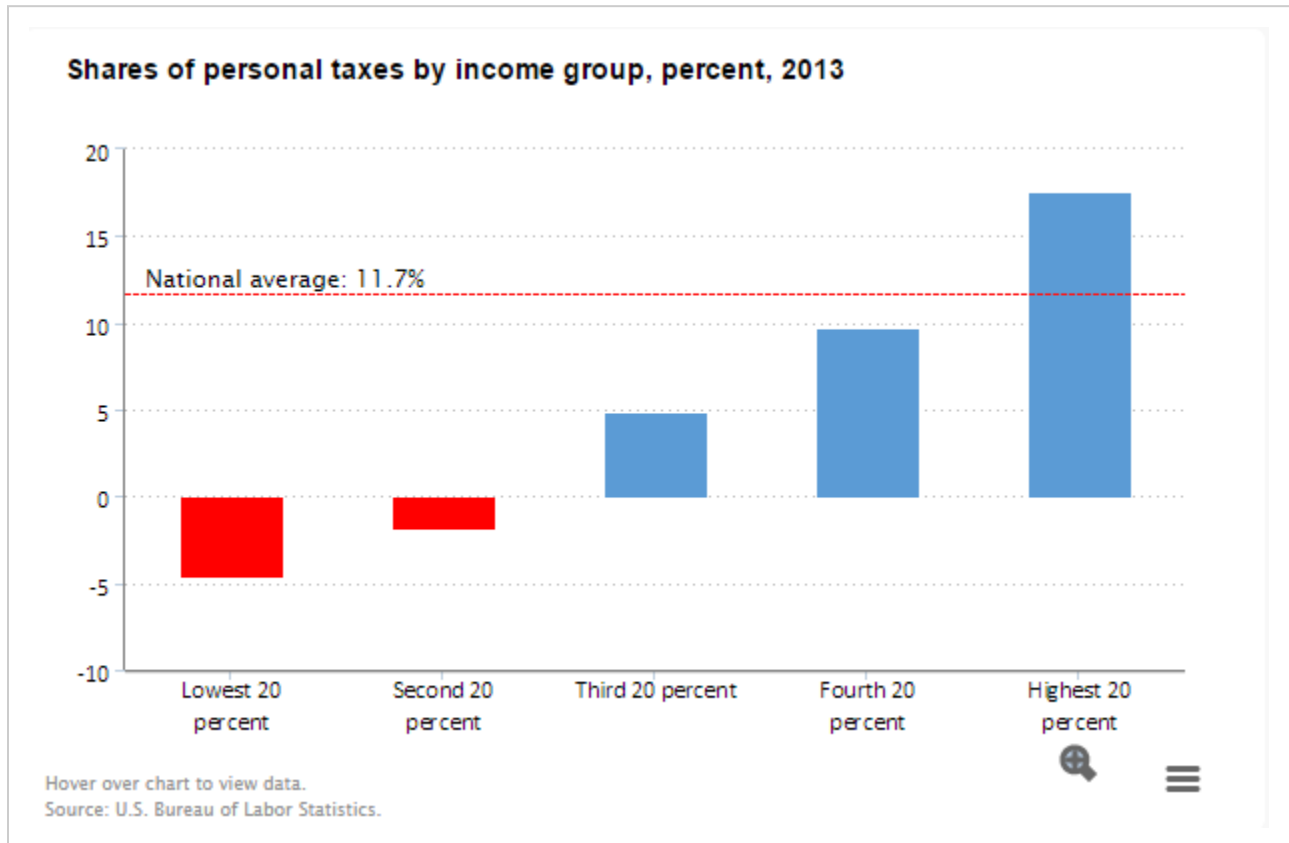
## The highest income group paid more than three-fourths of all personal taxes

In 2013, the highest income group paid 77.1 percent of all personal taxes. The third and fourth income groups paid 25.4 percent. Some members of the two lowest income groups received refundable tax credits, such as the earned income tax credit and the child tax credit; the tax credits these groups received exceeded the taxes the groups paid.



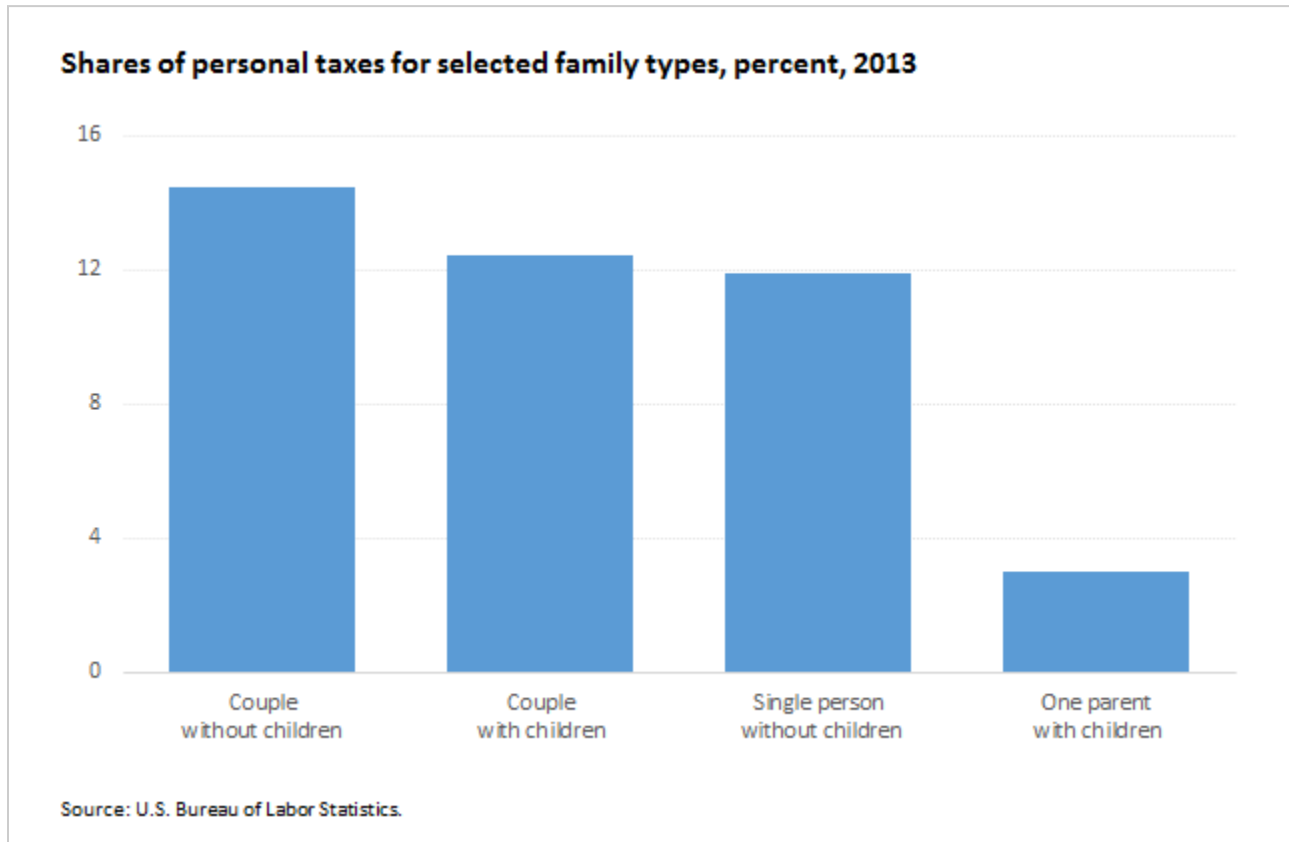
## Households paid an average of 11.7 percent of their income in personal taxes in 2013

On average in 2013, households paid 11.7 percent of their income in personal taxes. The highest income group paid an average of 17.6 percent of their income in taxes. The next-highest income group paid 9.7 percent of their income in taxes. The third, or middle, income group paid 4.9 percent. Because of tax credits, the two lowest income groups had higher after-tax income than pretax income.



## Single parents paid the lowest share of income in personal taxes

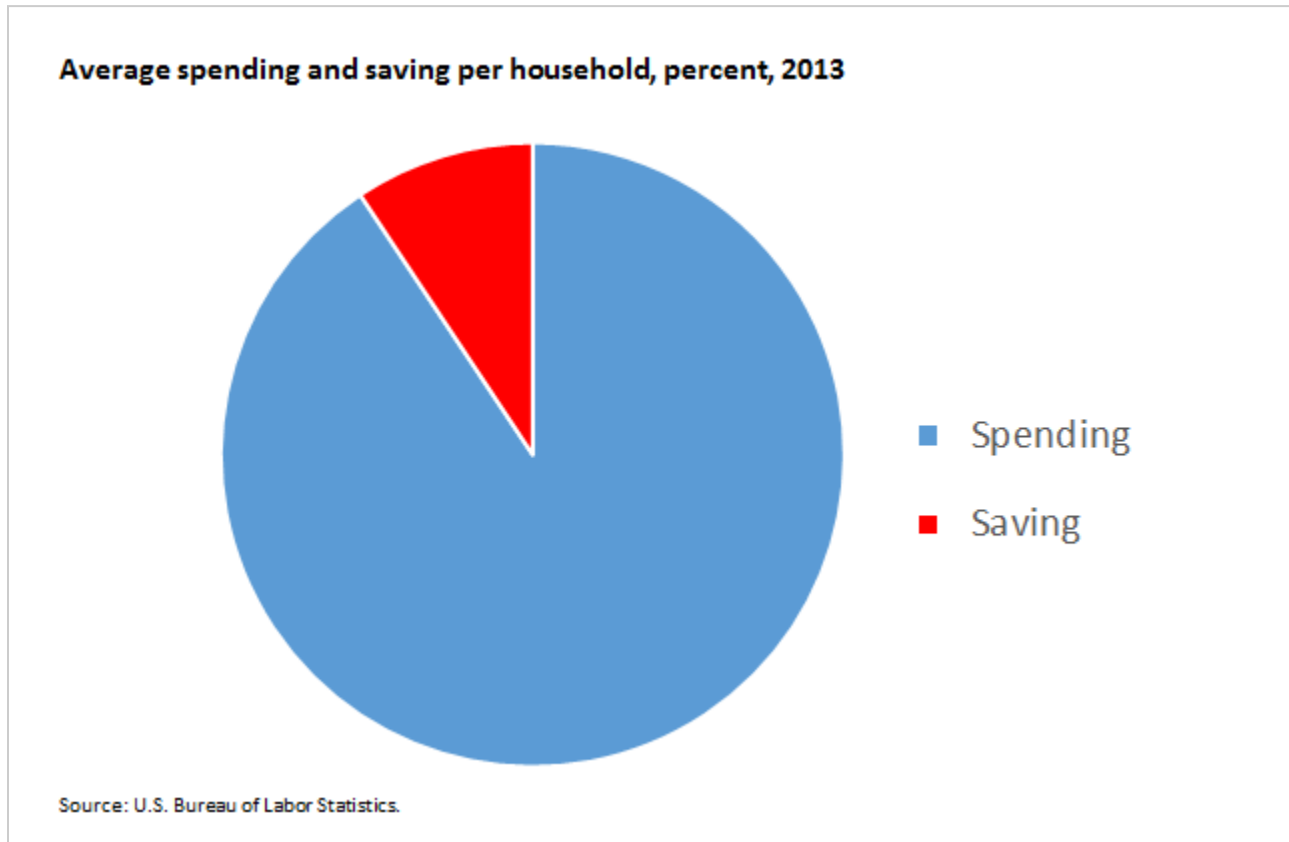
In 2013, single parents paid the smallest share of their income in personal taxes, 3.0 percent. Married couples without children paid the highest share of their income in taxes, 14.5 percent. Married couples with children and single people without children each paid about 12 percent of their income in personal taxes.





## U.S. households saved 9 percent of after-tax income in 2013

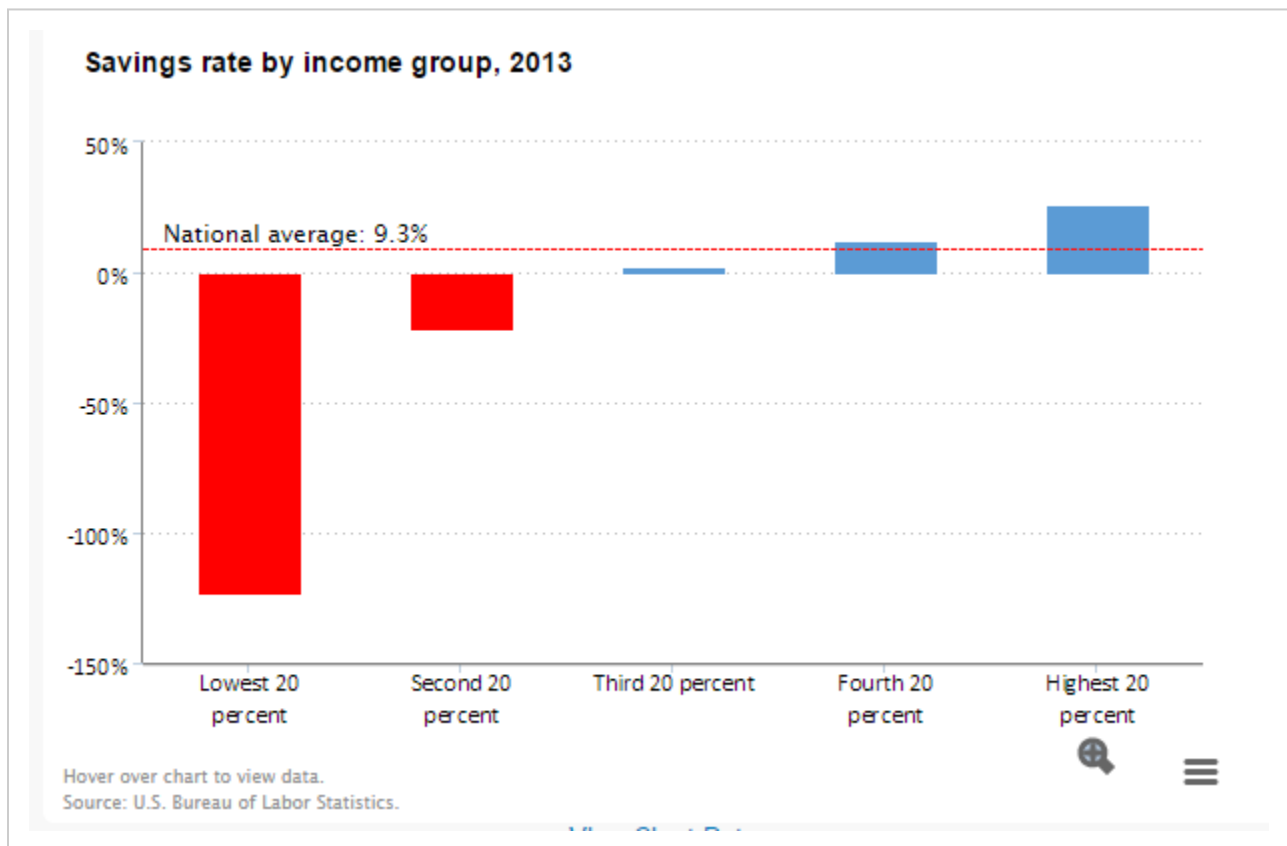
Households can do three things with their income: spend it on goods and services, pay taxes, and save for the future. In 2013, households saved 9.3 percent of their after-tax income. We define savings here as after-tax income minus spending for goods and services.



## The lowest two income groups spent more than their income

Savings rates differed significantly across the five income groups. Households in the highest income group saved 26.0 percent of their after-tax income in 2013. The next-highest income group saved 12.5 percent of their after-tax income. The middle income group saved 2.5 percent. The lowest two income groups saved -123.2 percent.

The two lowest income groups did *not* save. In fact, they spent more than their income; households with the lowest income had a savings rate of -123.2 percent. Households can spend more than their income by taking on debt. Even without any debt, some households can draw on funds that the survey does not count as income, such as savings and personal retirement accounts.



## More information

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The Consumer Expenditure Survey annually conducts about 28,000 interview surveys and 14,000 diary surveys. The survey asks questions about income, spending, and demographic information. The Consumer Expenditure Survey provides estimates of personal taxes. These taxes include federal and state income taxes and other taxes. Other taxes consist of personal property taxes, vehicle taxes, and additional small taxes and refunds. The personal taxes do not include sales taxes and Social Security taxes. For 2013, the income tax data for more than 90 percent of the households were estimated using a program called TAXSIM, developed by the National Bureau of Economic Research. Tax information for the remaining households is still based on survey questions.

The TAXSIM program estimates federal, state, and local income taxes using sources of income and household characteristics reported in the Consumer Expenditure Survey. The survey staff uses four main steps to estimate income taxes. First, the staff divides households into tax units, which are families or individuals who prepare their own tax returns. Second, the staff prepares the income data for each tax unit. Third, the staff runs TAXSIM to estimate tax liabilities for tax units. Fourth, the staff sums taxes for tax units into taxes for households. For more information about how the program estimates taxes, see "[TAXSIM Related files at the NBER](#)."

In this Spotlight, households have been divided into five equally sized groups arranged from lowest to highest pretax income. For 2013, the lowest income group consists of households reporting a pretax income below \$17,883; the second group a pretax income from \$17,884 to \$34,957; the third group a pretax income from \$34,958 to \$57,967; the fourth group a pretax income from \$57,988 to \$95,335; and the highest group a pretax income above \$95,336.

Income thresholds for five income groups					
Group	Lowest	Second	Third	Fourth	Highest
Income	Below \$17,883	\$17,884 to \$34,957	\$34,958 to \$57,967	\$57,988 to \$95,335	Above \$95,336

BLS calculates an income group’s share of all personal taxes as the total personal taxes of the income group divided by the total personal taxes of all income groups. The average tax share differs from the marginal tax rate. The average tax share typically is lower than the marginal tax rate because the marginal tax rate is the rate paid on the last dollar earned. Tax shares are total taxes divided by the total income before taxes. Savings shares are savings divided by total income after taxes. We define savings here as after-tax income taxes minus total spending for goods and services. Contributions to personal pensions are counted as spending rather than savings.

For more information about the improvements in tax data from the Consumer Expenditure Survey, see the *Monthly Labor Review* article “[Estimating Taxes in the Consumer Expenditure Survey](#)” by Geoffrey Paulin and William Hawk.