

# THE DISTRIBUTION OF FEDERAL TAXES, 2009–12

Rachel M. Johnson and Jeffrey Rohaly

August 2009

Urban-Brookings Tax Policy Center

The Urban Institute 2100 M Street, NW, Washington, DC 20037

The Brookings Institution 1775 Massachusetts Avenue, N.W. Washington, DC 20036

### Acknowledgments

Funding for the general operations of the Tax Policy Center is provided by a generous consortium of donors, including the Annie E. Casey Foundation, Brodie Price Fund at the Jewish Community Foundation of San Diego, Charles Stewart Mott Foundation, Ford Foundation, George Gund Foundation, John D. and Catherine T. MacArthur Foundation, Rockefeller Foundation, Sandler Foundation, Stoneman Family Foundation, and private donors.

## The Distribution of Federal Taxes, 2009-12

Overall, the federal tax system is progressive. On average, households with higher incomes pay taxes that are a larger share of their income. But barring legislative action, the numerous sunsets and phase-ins that Congress has written into the tax code will result in a tax system that is in a state of flux over the next few years. As a result, current law dictates significant changes in the degree of progressivity in the federal tax system between now and 2012. Almost all of the provisions included in the 2001 and 2003 tax cuts passed during the Bush administration are set to expire at the end of 2010, resulting in large scheduled increases in effective tax rates across the income spectrum. Because the Bush tax cuts were regressive, the largest increases will occur at the top of the income distribution and so the tax system will become more progressive in 2011 unless Congress acts. The stimulus legislation passed by Congress in the early months of the Obama administration contains several measures that reduce effective tax rates for low-income households making the system slightly more progressive. Those measures, including the Making Work Pay (MWP) tax credit, are in effect for 2009 and 2010 only, although the Obama administration proposes to make them permanent. If they are allowed to expire—as scheduled under current law—lower-income households will face large increases in their effective tax rates in 2011.

There are also significant changes set to occur between 2009 and 2010. Relative to this year, effective rates will fall for high-income households in 2010 as phased-in repeal of the estate tax and the limitations on itemized deductions and personal exemptions become complete. In addition, the problem of the alternative minimum tax (AMT) remains unresolved. Congress "patched" the AMT for 2009—limiting its reach to only about 4 million taxpayers this year—but failed to enact a permanent solution. Barring legislative action, the AMT's reach will expand in 2010 to more than 27 million taxpayers. It will become the *de facto* tax system for those in the 80th to 99th percentiles of the income distribution, raising their effective tax rates significantly.

Congress and the administration are highly unlikely to allow all of this to play out as currently scheduled. Virtually no one expects that Congress will let all of the Bush tax cuts expire or the AMT to go unpatched. It is virtually certain that Congress will not allow the estate tax to disappear for one year—in 2010—only to return in full force the following year. President Obama continues to state his administration's policy not to raise taxes on families making less than \$250,000. Given these political realities, we examine the distribution of federal taxes in 2012 under three scenarios: (1) current law with the expiration of the Bush tax cuts; (2) the administration baseline, or "current policy," which would extend all the Bush individual income tax cuts, the AMT patch, and 2009 estate tax law; and (3) the tax proposals proposed by the Obama administration in its fiscal year 2010 budget.

This paper summarizes the Tax Policy Center's latest estimates of the distribution of federal taxes for 2009 through 2012. We do not include state or local taxes in the analysis. All estimates come from the Tax Policy Center (TPC) Microsimulation model of the federal tax system. The model is based on the 2004 Public Use File of tax return information released by the Statistics of Income Division of the Internal Revenue Service. Additional tables showing the distribution of federal taxes are available at http://www.taxpolicycenter.org/numbers/index.cfm.

Johnson is a research assistant for the Urban-Brookings Tax Policy Center (TPC). Rohaly is a senior research methodologist at the Urban Institute and director of tax modeling for the TPC. Views expressed are those of the

### 1. Current-Law Distribution in 2009

In 2009, taxpayers will incur an average effective federal tax rate—federal taxes paid as a percentage of cash income—of 18.2 percent.<sup>2</sup> The effective tax rate (ETR) will increase with income, from -0.9 percent for households in the bottom quintile (the 20 percent of the population with the lowest incomes) to 22.9 percent for those in the top quintile (table 1).<sup>3</sup> Within the top quintile, ETRs will climb sharply from 19.4 percent for households in the 80th to 90th percentiles to 26.1 percent for those in the top 1 percent of the population.<sup>4</sup> The top 0.1 percent—the richest 1 in 1,000—will pay an average ETR of 27.9 percent.

The overall ETR for the individual income tax will be 7.9 percent in 2009. This tax is the most progressive of the major revenue sources. Refundable credits such as the Earned Income Tax Credit (EITC), the refundable child tax credit (CTC), and the new Making Work Pay (MWP) credit will lead to negative average effective rates for the bottom two quintiles. The bottom quintile, for example, will receive an average income tax subsidy from the federal government equal to 10 percent of their pretax income. Rates will increase from 2.3 to 13.4 percent for the top three quintiles and to 17.9 percent for the top 1 percent of income earners.

The overall ETR for the corporate income tax is about one-quarter that of the individual income tax—1.8 percent in 2009. Economists disagree about who bears the burden of the corporate income tax. We follow the Congressional Budget Office (CBO) and assume that the corporate tax falls entirely on all capital. Thus, we assign corporate tax to individual taxpayers in proportion to their capital income (interest, dividends, capital gains, and rents). The progressive distribution of capital income therefore translates into a progressive corporate income tax. In 2009, the lowest four income quintiles will all face roughly the same ETR of about 0.6 percent. The top quintile—which gets much more of its income from capital—will incur a 2.8 percent rate. Effective corporate tax rates will be even higher within the top quintile: 5.7 percent for the top 1 percent and 8 percent for the richest 1 in 1,000 individuals.

authors and should not be attributed to the Urban Institute, its trustees, or its funders. The authors thank Bob Williams for helpful comments and suggestions.

<sup>&</sup>lt;sup>1</sup> We derive our estimates from Version 0509-2 of the TPC Microsimulation Model, which incorporates the economic assumptions released by the Congressional Budget Office (CBO) in March 2009. Appendix A describes the tax model. See Rohaly, Carasso, and Saleem (2005) for a more complete description of an earlier version of the

<sup>&</sup>lt;sup>2</sup> We calculate average ETRs by dividing total taxes by total income for the group in question.

<sup>&</sup>lt;sup>3</sup> We include four federal taxes: individual and corporate income tax; payroll taxes for Social Security and Medicare; and the estate tax. We exclude customs and excise duties, which accounted for less than 5 percent of total federal revenue in fiscal 2008. We are currently expanding the TPC microsimulation model to include the burden of excise taxes. Appendix B describes our incidence assumptions.

<sup>&</sup>lt;sup>4</sup> For 2009 the second quintile begins at cash income of \$17,983; the middle quintile at \$35,188; the fourth quintile at \$63,156; the 80th percentile at \$104,403; the 90th percentile at \$163,838; the 95th percentile at \$207,739; the 99th percentile at \$524,199; and the 99.9th percentile at \$2,083,934. All values are in 2009 dollars. Quintiles contain equal numbers of people, not tax units.

<sup>5</sup> We project that people in the bottom four quintiles will get about 5 percent of their 2008 cash income from capital,

compared with 20 percent for the top quintile and more than 59 percent for the top 0.1 percent.

Table 1
Average Effective Tax Rates Under Current Law, By Cash Income Percentile, 2009

		Aver	age Effective Tax	Rate	
Cash Income Percentile <sup>a</sup>	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	-10.2	8.8	0.5	0.0	-0.9
<b>Second Quintile</b>	-4.1	10.1	0.6	0.0	6.6
Middle Quintile	2.3	10.6	0.6	0.0	13.4
<b>Fourth Quintile</b>	5.7	10.8	0.7	0.0	17.2
<b>Top Quintile</b>	13.4	6.6	2.8	0.2	22.9
All	7.9	8.4	1.8	0.1	18.2
Addendum					
80-90	8.0	10.3	1.1	0.0	19.4
90-95	11.4	9.5	1.0	0.0	22.0
95-99	15.0	6.1	2.2	0.2	23.5
Top 1 Percent	17.9	1.9	5.7	0.6	26.1
Top 0.1 Percent	18.3	0.9	8.0	0.8	27.9

Notes: Data are for calendar year 2009.

- b. After tax credits (including refundable portion of earned income and child tax credits).
- c. Includes both the employee and employer portion of Social Security and Medicare tax.
- d. Excludes customs duties and excise taxes.

The estate tax is also very progressive. But since only about 1 percent of taxpayers die each year and since the \$3.5 million exemption ensures that the vast majority of those who die have no estate tax liability, the tax raises only about 1.2 percent of federal revenue and thus its effective rates are low. The overall ETR for the estate tax will be 0.1 percent in 2009. Virtually all of the estate tax is borne by the top quintile, which will face an ETR of 0.2 percent in 2009. The top 0.1 percent of individuals will incur a rate four times as high—0.8 percent.

Because of the sharp drop in projected individual income tax revenue in 2009, Social Security and Medicare payroll taxes will have the highest overall ETR. In 2009, taxpayers will pay an average of 8.4 percent of their income in payroll taxes. In sharp contrast to other federal taxes, payroll taxes for Social Security and Medicare are regressive. The ETR will range from 8.8 percent for the bottom quintile to 10.8 percent for the fourth quintile. The rate is lower for the

<sup>6</sup> We calculated this value using historical tables 1.1 and 2.5 that accompany the Obama administration's fiscal year 2010 budget at http://www.whitehouse.gov/omb/budget/Historicals/. The figure is an estimate for fiscal year 2009.

URBAN-BROOKINGS TAX POLICY CENTER

-5-

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

<sup>&</sup>lt;sup>7</sup> Individual income tax revenue falls more sharply than payroll tax revenue because non-wage income—including capital gains and dividends—and earnings of those above the Social Security wage cap are projected to fall more than earnings subject to the payroll tax.

<sup>&</sup>lt;sup>8</sup> The net progressivity of Social Security is uncertain. The benefit formula is progressive and may outweigh the regressive aspect of the taxes that fund the program.

top fifth of the income distribution, however, because of the cap on earnings subject to the Social Security tax (\$106,800 in 2009). In addition, the richest households get a larger share of their income from nonwage sources that are not subject to payroll taxes. ETRs in 2009 will range from 6.6 percent for the top quintile down to 1.9 percent for the top 1 percent and just 0.9 percent for the richest 1 in 1,000 individuals.

Table 2
Share of Federal Taxes Under Current Law, By Cash Income Percentile, 2009

			Share o	of Total		
Cash Income Percentile <sup>a</sup>	Cash Income	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	3.7	-4.9	3.9	1.1	0.1	-0.2
Second Quintile	8.6	-4.4	10.3	2.8	0.2	3.1
Middle Quintile	14.2	4.1	17.9	4.4	0.4	10.5
<b>Fourth Quintile</b>	20.3	14.7	26.1	7.6	2.4	19.2
Top Quintile	53.4	90.5	41.6	83.0	96.2	67.2
All	100.0	100.0	100.0	100.0	100.0	100.0
Addendum						
80-90	14.3	14.5	17.4	8.7	2.0	15.2
90-95	9.7	14.1	10.9	5.7	1.3	11.7
95-99	13.5	25.7	9.7	17.0	20.8	17.4
Top 1 Percent	16.0	36.3	3.5	51.5	72.0	22.9
Top 0.1 Percent	7.1	16.4	0.7	31.9	42.1	10.8

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-2).

Notes: Data are for calendar year 2009.

The share of federal taxes paid by households at the top of the income scale exceeds their share of total income. The top quintile, for example, will earn just over half of total cash income in 2009 but will pay two-thirds of all federal taxes (table 2). The top 1 percent of taxpayers will earn 16 percent of total income and pay 23 percent of total taxes. In contrast, households in the middle quintile earn just over 14 percent of total income but pay less than 11 percent of taxes. Because it faces a negative effective tax rate, the bottom quintile will pay a negative share of taxes.

The difference between the tax and income shares is even more striking when looking at the individual income tax in isolation. The top quintile will pay 91 percent of the tax from their 53 percent share of total income, and the top 1 percent's 36 percent share will more than double the 16 percent of income they will get. In contrast, the bottom two quintiles will collect a net subsidy of almost 10 percent of individual income tax revenue. The new Making Work Pay credit explains part of the difference; the new refundable tax credit primarily benefits lower- and

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. After tax credits (including refundable portion of earned income and child tax credits).

c. Includes both the employee and employer portion of Social Security and Medicare tax.

d. Excludes customs duties and excise taxes.

<sup>&</sup>lt;sup>9</sup> The Medicare tax equals 1.45 percent of all wage and salary income for both employers and employees. The Social Security tax is 6.2 percent of wage and salary income below the cap, also for both employers and employees.

moderate-income earners.<sup>10</sup> But even without the MWP credit, the top quintile would pay 86 percent of individual income taxes in 2009 and the bottom two quintiles would receive a 6 percent net subsidy (not shown in the table).

The top 1 percent of the income distribution (with 16 percent of total income) will pay more than half of the corporate income tax and nearly three-fourths of the federal estate tax, but less than 4 percent of payroll taxes. In contrast, the bottom three quintiles—with just over one-quarter of total cash income—will incur just 8 percent of the corporate income tax and less than 1 percent of the estate tax, but almost one-third of total payroll taxes.

### 2. Current-Law Distribution in 2010

The distribution of federal taxes will change between 2009 and 2010 for several reasons: (1) expiration of the 2009 AMT patch; (2) completion of the phased-in repeal of the estate tax and limitations on itemized deductions and personal exemptions; <sup>11</sup> (3) expiration of several provisions affecting low- and moderate-income households; and (4) the assumption of improved economic activity incorporated in the CBO assumptions underlying our tax model.

The average effective federal tax rate for all households will increase to 19.4 percent in 2010 from 18.2 percent in 2009 (table 3 and figure 1). ETRs will rise throughout the income distribution except for the top 1 percent, whose tax rates will dip slightly with the complete phaseout of the estate tax and limitations on itemized deductions and personal exemptions. Expiration of the 2009 AMT patch explains much of the rise for households between the 80th and 99th percentiles. The rise for households in the bottom four quintiles occurs because of the expiration of several tax provisions at or before the end of 2009 including the: (1) exclusion of \$2,400 in unemployment benefits from adjusted gross income; (2) additional standard deduction for property taxes; (3) homebuyer's credit; (4) state and local sales tax deduction; and (5) the above-the-line deduction for tuition and education expenses.

\_

<sup>&</sup>lt;sup>10</sup> MWP is a refundable tax credit equal to 6.2 percent of earnings up to a maximum credit of \$400 for individuals (\$800 for couples). Couples may claim the full \$800 credit, even if only one spouse works. The credit phases out at a rate of 2 percent of adjusted gross income over \$150,000 for married couples filing joint returns and \$75,000 for others. Therefore, couples with income up to \$190,000 and others with income up to \$95,000 are eligible to receive at least a partial credit.

<sup>&</sup>lt;sup>11</sup> The scheduled full repeal of the limitations on itemized deductions and personal exemptions is complete in 2010, but in 2009, one-third of the pre-EGTRRA limitations are still in place. In addition, the 2009 estate tax rate is 45 percent of an estate's value in excess of an effective exemption of \$3.5 million.

<sup>12</sup> For 2010 the second quintile begins at cash income of \$17,849; the middle quintile at \$34,849; the fourth quintile

<sup>&</sup>lt;sup>12</sup> For 2010 the second quintile begins at cash income of \$17,849; the middle quintile at \$34,849; the fourth quintile at \$63,582; the 80th percentile at \$104,505; the 90th percentile at 166,867; the 95th percentile at \$209,667; the 99th percentile at \$533,880; and the 99.9th percentile at \$2,213,059. All figures are in 2009 dollars. As for 2009, quintiles contain equal numbers of people, not tax units.

<sup>&</sup>lt;sup>13</sup> We also treat the one-time 2009 payment to Social Security recipients in lieu of the MWP credit as a refundable tax credit. This payment is not scheduled to occur again in 2010. For a list of expiring tax provisions see JCT (2009).

Table 3
Effective Federal Tax Rates Under Current Law, By Cash Income Percentile, 2010

		Aver	age Effective Tax	Rate	
Cash Income Percentile <sup>a</sup>	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	-9.5	8.8	0.6	N/A	0.0
Second Quintile	-3.3	10.0	0.7	N/A	7.3
Middle Quintile	2.9	10.5	0.6	N/A	14.1
<b>Fourth Quintile</b>	6.8	10.8	0.7	N/A	18.4
<b>Top Quintile</b>	14.6	6.4	3.2	N/A	24.2
All	9.1	8.3	2.1	N/A	19.4
Addendum					
80-90	9.9	10.2	1.2	N/A	21.4
90-95	13.5	9.4	1.2	N/A	24.2
95-99	16.5	5.9	2.6	N/A	25.0
Top 1 Percent	17.6	1.8	6.6	N/A	26.0
Top 0.1 Percent	18.1	0.8	8.8	N/A	27.7

Notes: Data are for calendar year 2009.

The alternative minimum tax (AMT) will raise ETRs for many households in the top quintile. <sup>14</sup> Under current law, the AMT will affect just 4 million taxpayers in 2009 but will hit more than 27 million in 2010 with the expiration of the 2009 patch. AMT revenue will triple from \$33.5 billion to \$102.2 billion. Primarily because of the AMT, taxpayers in the 80th to 90th percentiles will see their ETR for the individual income tax jump from 8.0 percent in 2009 to 9.9 percent in 2010 (table 3 and figure 2). Those in the 90th to 95th percentiles will see an increase from 11.4 to 13.5 percent. The AMT typically does not affect taxpayers at the very top of the income distribution because their regular tax liability generally exceeds what they would owe in AMT.

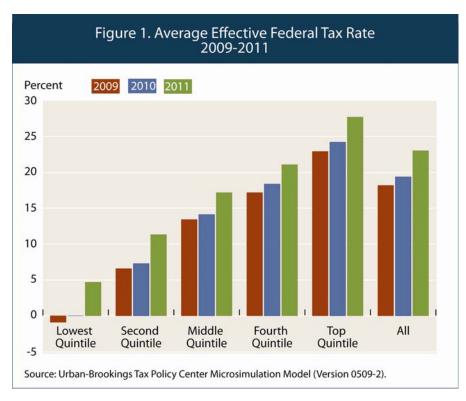
a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

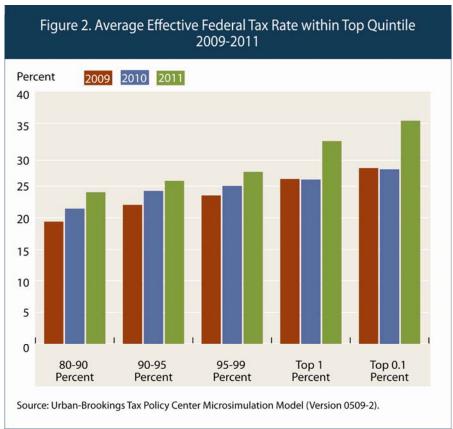
b. After tax credits (including refundable portion of earned income and child tax credits).

c. Includes both the employee and employer portion of Social Security and Medicare tax.

d. Excludes customs duties and excise taxes.

 $<sup>^{\</sup>rm 14}$  Burman et al (2007) and Leiserson and Rohaly (2008a) discuss the AMT in detail.





Because the AMT is unlikely to affect them, the highest-income taxpayers will see their average ETR fall with the full repeal of the limitations on itemized deductions and personal

exemptions. The average effective individual income tax rate for those in the top 1 percent will dip from 17.9 percent in 2009 to 17.6 percent in 2010. That predicted fall would be larger, however, if we did not assume that average income for those taxpayers will grow substantially between 2009 and 2010; higher average incomes tend to raise the average effective rate under a progressive tax system. <sup>15</sup> The overall ETR for the top 1 percent is essentially unchanged in 2010, at 26.0 percent, because higher projected corporate tax revenue in 2010 results in an increase in the effective corporate tax rate from 5.7 to 6.6 percent, offsetting the repeal of the estate tax and the slight drop in the effective rate for the individual income tax. <sup>16</sup>

The shares of the federal tax burden paid by various income classes will change somewhat between 2009 and 2010 but growth in incomes at the top of the distribution and an increase in total revenues collected complicate any interpretation of the observed shifts.

Table 4
Share of Federal Taxes Under Current Law, By Cash Income Percentile, 2010

			Share o	of Total		
Cash Income Percentile <sup>a</sup>	Cash Income	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	3.6	-3.8	3.9	1.0	N/A	0.0
Second Quintile	8.3	-3.1	10.0	2.6	N/A	3.1
Middle Quintile	13.8	4.4	17.6	4.3	N/A	10.0
Fourth Quintile	20.0	15.0	26.3	6.9	N/A	18.9
Top Quintile	54.4	87.5	42.0	84.4	N/A	67.8
All	100.0	100.0	100.0	100.0	N/A	100.0
Addendum						
80-90	14.3	15.6	17.6	8.3	N/A	15.7
90-95	9.6	14.3	11.0	5.5	N/A	11.9
95-99	13.6	24.7	9.8	17.1	N/A	17.6
Top 1 Percent	17.0	32.9	3.6	53.5	N/A	22.7
Top 0.1 Percent	7.9	15.7	0.8	33.2	N/A	11.3

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-2).

Notes: Data are for calendar year 2009.

In any case, the shifts are not large: overall, the top quintile will continue to earn just over half of total cash income and pay about two-thirds of total federal taxes (table 4 and figure 3). Similarly, households in the middle fifth of the income distribution will still earn about 14 percent of total income and pay about one-tenth of total federal taxes.

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. After tax credits (including refundable portion of earned income and child tax credits).

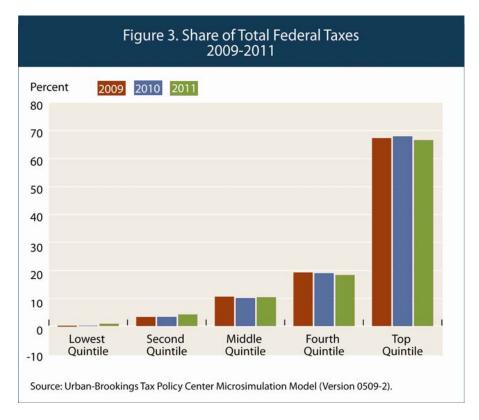
c. Includes both the employee and employer portion of Social Security and Medicare tax.

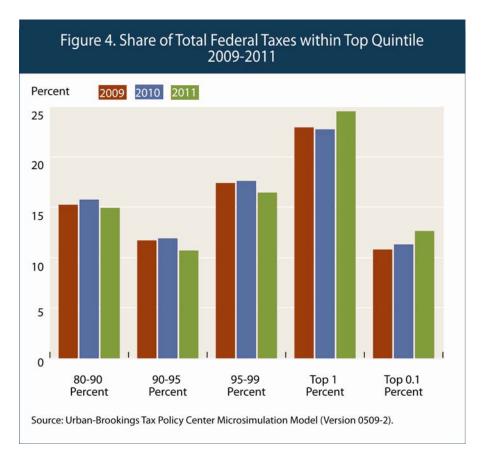
d. Excludes customs duties and excise taxes.

<sup>&</sup>lt;sup>15</sup> Based on CBO forecasts for gross domestic product, wages and salaries, and other forms of income—including capital gains—our model projects a 9.8 percent increase in average cash income for the top 1 percent between 2009 and 2010.

<sup>&</sup>lt;sup>16</sup> Our model bases its assumptions about income growth on CBO's forecast, which predicts a 24 percent increase in corporate revenues between 2009 and 2010.

At the very top of the income distribution, the increase in the share of total income going to the top 1/10 of 1 percent of households from 7.1 percent in 2009 to 7.9 percent in 2010 more than offsets the impact of repealing the estate tax and the limitations on itemized deductions and personal exemptions. The net effect is an increase in that group's share of all taxes from 10.8 to 11.3 percent (table 4 and figure 4).





#### 3. Current-Law Distribution in 2011

Under current law, virtually all individual income and estate tax provisions of the 2001-06 tax cuts will expire at the end of 2010 along with all remaining tax credits in the 2009 stimulus act. <sup>17</sup> In 2011, the individual income tax will essentially revert to the system that existed in 2000 and the estate tax will return with a \$1 million exemption and a 55 percent top statutory rate. As a result, the ETR for all tax units will jump from 19.4 percent in 2010 to 23 percent in 2011 (table 5 and figure 1). <sup>18</sup> ETRs will rise across the income distribution but the increase will be proportionately greater for those at the very top and very bottom.

For the bottom quintile, the ETR will be 4.7 percent in 2011, up from 0 in 2010. That increase is driven primarily by a rise in the effective individual income tax rate to -5.0 percent from -9.5 percent, which results from the expiration of three tax provisions in EGTRRA and the 2009 stimulus act: the refundable portion of the child tax credit, the EITC expansion for married couples, and the Making Work Pay credit. <sup>19</sup>

<sup>17</sup> Provisions relating to select retirement savings incentives were made permanent by the Pension Protection Act of 2006 (P.L. 109-280).

<sup>&</sup>lt;sup>18</sup> For 2011 the second quintile begins at cash income of \$17,769; the middle quintile at \$34,786; the fourth quintile at \$64,064; the 80th percentile at \$104,744; the 90th percentile at \$167,715; the 95th percentile at \$210,968; the 99th percentile at \$556,929; and the 99.9th percentile at \$2,359,664. All figures are in 2009 dollars. Again, quintiles contain equal numbers of people, not tax units.

<sup>&</sup>lt;sup>19</sup> After 2010, certain families with three or more children will still be eligible for the partially refundable child tax credit that was in place before EGTRRA was passed. This provision affects relatively few families, however.

Table 5
Effective Federal Tax Rates Under Current Law, By Cash Income Percentile, 2011

		Aver	age Effective Tax	Rate	
Cash Income Percentile <sup>a</sup>	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	-5.0	9.0	0.7	0.0	4.7
<b>Second Quintile</b>	0.7	9.8	0.8	0.0	11.3
Middle Quintile	5.8	10.5	0.8	0.1	17.2
<b>Fourth Quintile</b>	9.3	10.8	0.9	0.1	21.1
<b>Top Quintile</b>	16.9	6.2	4.1	0.5	27.7
All	11.9	8.2	2.6	0.3	23.0
Addendum					
80-90	12.2	10.1	1.4	0.2	24.0
90-95	14.7	9.3	1.6	0.1	25.8
95-99	17.7	5.8	3.4	0.5	27.3
Top 1 Percent	21.5	1.7	8.2	0.8	32.2
Top 0.1 Percent	22.5	0.8	11.2	0.9	35.4

Notes: Data are for calendar year 2009.

The 2011 ETR for the middle quintile will be 17.2 percent, substantially higher than the 14.1 percent average for 2010. Again, this is driven by an increase in the effective individual income tax rate from 2.9 percent in 2010 to 5.8 percent in 2011. Those in the middle quintile are most affected by the elimination of the 10 percent income tax bracket and EGTRRA's marriage-penalty relief, along with the halving of the per-child amount for the CTC from \$1,000 to \$500.

The top 1 percent of the income distribution will see their ETR jump by more than a fifth from 26 percent in 2010 to 32.2 percent in 2011 (table 5 and figure 2). In addition to the impact from the statutory rate increase for the top bracket from 35 to 39.6 percent, upper-income tax units will be hit hard by the increase in the capital gains tax rate from 15 to 20 percent and by the leap in the rate on qualified dividends from 15 percent to as high as 39.6 percent.

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. After tax credits (including refundable portion of earned income and child tax credits).

c. Includes both the employee and employer portion of Social Security and Medicare tax.

d. Excludes customs duties and excise taxes.

Table 6
Share of Federal Taxes Under Current Law, By Cash Income Percentile, 2011

			Share o	of Total		
Cash Income Percentile <sup>a</sup>	Cash Income	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	3.5	-1.5	3.9	0.9	0.3	0.7
<b>Second Quintile</b>	8.2	0.5	9.9	2.4	1.0	4.0
Middle Quintile	13.7	6.7	17.6	4.0	5.7	10.3
Fourth Quintile	19.9	15.6	26.3	6.6	7.7	18.3
<b>Top Quintile</b>	55.1	78.7	42.1	85.4	85.0	66.5
All	100.0	100.0	100.0	100.0	100.0	100.0
Addendum						
80-90	14.3	14.7	17.7	7.6	8.5	14.9
90-95	9.6	11.9	10.9	5.9	4.6	10.7
95-99	13.8	20.5	9.8	17.6	24.2	16.4
Top 1 Percent	17.5	31.6	3.7	54.3	47.8	24.5
Top 0.1 Percent	8.2	15.5	0.8	34.6	22.7	12.6

Notes: Data are for calendar year 2009.

Despite the dramatic increase in effective rates, the expiration of the tax cuts will have relatively little impact on the shares of the federal tax burden paid by various income classes. The share of federal taxes paid by the top quintile will dip slightly from 67.8 percent in 2010 to 66.5 percent in 2011, while that paid by the top 1 percent will increase from 22.7 to 24.5 percent (table 6, figures 3 and 4). For both groups, a drop in the share of individual income taxes paid will be offset by the larger share of federal revenue coming from the individual income tax and the resurrection of the estate tax.

### 4. Adjusting for Family Size

Determining who bears the burden of federal taxes and assessing the progressivity of the federal tax system require ranking households by some measure of their economic status. The foregoing analysis ranks tax units by cash income, which includes all income reported on tax returns plus some nontaxable transfers such as welfare, child support, and food stamps. That measure ignores other factors such as size, composition, or cost of living that could affect economic status, defined as a household's ability to consume or to save. One important factor is the

<sup>20</sup> To assess cash income on a pre-tax basis, the measure also includes the employer portion of payroll taxes and imputed corporate tax liability. For a complete definition of cash income, see <a href="http://www.taxpolicycenter.org/numbers/displayatab.cfm?DocID=574">http://www.taxpolicycenter.org/numbers/displayatab.cfm?DocID=574</a>.

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. After tax credits (including refundable portion of earned income and child tax credits).

c. Includes both the employee and employer portion of Social Security and Medicare tax.

d. Excludes customs duties and excise taxes.

Although we tend to use the terms "tax unit" and "household" interchangeably, they are not the same concept. A tax unit is an individual or a married couple who either file a tax return or would have to file a tax return if their income were high enough, along with all dependents of that individual or married couple. A tax unit therefore

number of people living in the household. A family of four earning \$50,000 is less well off than a single individual with the same income. The larger family needs more food, a larger—and thus presumably more expensive—place to live, and more of the other necessities of life. Put differently, the family of four needs more income than the single individual to reach the same level of economic wellbeing.

The following distribution tables classify tax units on the basis of income adjusted for size using the methodology employed by the Congressional Budget Office: divide cash income by the square root of the number of members of the tax unit. That measure recognizes both the additional needs of larger households and the economies of scale they may realize. Thus, a family of four with \$100,000 in cash income has an adjusted income of \$50,000 and is classified in the same percentile category as a single individual with a cash income of \$50,000. The family-size adjusted income level is used only to sort tax units into income categories; unadjusted cash income is still used to calculate effective tax rates and income shares.

An examination of the distribution of tax burdens in 2010—when all EGTRRA provisions are fully phased in—shows the impact of the adjustment for family size.<sup>24</sup>

Table 7

Effective Federal Tax Rates Under Current Law

By Unadjusted Cash Income and by Cash Income Adjusted for Family Size, 2010

				Average Effe	ctive Tax Rate			
Cash Income	Individual I	ncome Tax <sup>b</sup>	Payrol	l Tax <sup>c</sup>	Corporate I	ncome Tax	All Federal Tax <sup>d</sup>	
Percentile <sup>a</sup>	Unadjusted Income	Adjusted Income	Unadjusted Income	Adjusted Income	Unadjusted Income	Adjusted Income	Unadjusted Income	Adjusted Income
Lowest Quintile	-9.5	-16.3	8.8	10.3	0.6	0.5	0.0	-5.5
Second Quintile	-3.3	-5.1	10.0	9.9	0.7	0.5	7.3	5.3
Middle Quintile	2.9	1.8	10.5	10.7	0.6	0.6	14.1	13.1
Fourth Quintile	6.8	6.1	10.8	10.8	0.7	0.6	18.4	17.6
Top Quintile	14.6	14.5	6.4	6.5	3.2	3.1	24.2	24.1
All	9.1	9.1	8.3	8.3	2.1	2.1	19.4	19.4
Addendum								
80-90	9.9	10.5	10.2	10.6	1.2	0.9	21.4	21.9
90-95	13.5	12.7	9.4	9.3	1.2	1.4	24.2	23.4
95-99	16.5	16.2	5.9	6.1	2.6	2.6	25.0	24.8
Top 1 Percent	17.6	17.5	1.8	1.8	6.6	6.5	26.0	25.8
Top 0.1 Percent	18.1	17.9	0.8	0.8	8.8	8.8	27.7	27.6

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-2).

Notes: Data are for calendar year 2009.

differs from a family or a household in certain situations. For example, a cohabiting couple constitutes one household but, if not legally married, would file separate tax returns and thus be considered two tax units.

<sup>22</sup> Some costs increase roughly proportionately with household size: each person needs her own clothing, for example. Other costs are shared and increase less than proportionately: a two-bedroom apartment typically costs less than a one-bedroom unit. CBO's adjustment recognizes both effects and falls between a measure that ignores

URBAN-BROOKINGS TAX POLICY CENTER

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals.

Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a

 $description\ of\ cash\ income,\ see\ http://www.taxpolicycenter.org/TaxModel/income.cfm$ 

b. After tax credits (including refundable portion of earned income and child tax credits).
 c. Includes both the employee and employer portion of Social Security and Medicare tax.

d. Excludes customs duties and excise taxes.

differences in household size and a per-capita measure. <sup>23</sup> See CBO (2001) for a description of their methodology.

<sup>&</sup>lt;sup>24</sup> Appendix Tables 1 through 4 provide comparable information for 2009 and 2011.

Adjusting for family size does not change the general pattern of progressivity but does affect the actual values of effective rates among quintiles. Effective tax rates rise steadily with income in the adjusted and unadjusted cases (table 7). <sup>25</sup> But adjustment lowers ETRs significantly for the bottom four quintiles. The bottom quintile, for example, faces an average ETR of 0 percent in the unadjusted case compared with -5.5 percent—a net tax subsidy—when we adjust income for household size.

The individual income tax accounts for most of this difference in overall ETRs; the distributions of payroll taxes and the corporate income tax change little. Adjusting for family size moves larger families—typically married couples with children but also heads of household—into lower quintiles, pushing more single individuals without dependents into higher quintiles. Larger families typically benefit from more individual income tax breaks—the child tax credit, dependent exemptions, and wider tax brackets—and they carry their lower ETRs with them as the adjustment for family size moves them into lower quintiles. For example, households in the second income-adjusted quintile face an effective individual income tax rate of -5.1 percent, compared with -3.3 percent for the unadjusted second quintile. This difference leads to an effective overall federal tax rate of 5.3 percent for the second quintile in the family-size-adjusted table compared to 7.3 percent in the unadjusted table.<sup>26</sup>

### 5. Differences among Demographic Groups

Average effective tax rates differ among demographic groups for two primary reasons: (1) the tax code provides targeted benefits to certain groups such as taxpayers with children; and (2) different demographic groups have different income profiles, which face different tax rates under a progressive tax system.

Among the three primary filing statuses, heads of household face the lowest average effective tax rate—11.2 percent (table 8). Single filers and married couples filing jointly pay average rates of 18.7 percent and 20.7 percent, respectively.

Married couples filing jointly face lower ETRs than singles in all but the top quintile and, on average, actually receive net subsidies in the bottom quintile.<sup>27</sup> The overall average for married

15 1

<sup>&</sup>lt;sup>25</sup> For 2010 the second adjusted quintile begins at adjusted cash income of \$12,079; the middle quintile at \$23,010; the fourth quintile at \$39,419; the 80th percentile at \$66,001; the 90th percentile at \$95,446; the 95th percentile at \$133,234; the 99th percentile at \$133,234; and the 99.9th percentile at \$1,357,565. All figures are in 2009 dollars. Quintiles contain equal numbers of people, not tax units. These adjusted thresholds effectively differ for different-sized households. For example, the second quintile begins at \$12,079 for people living alone, at \$17,082 for two-person households, at \$20,921 for three-person units, at \$24,158 for four people, and so forth. Each value equals the adjusted threshold times the square root of the number of people in the household.

<sup>&</sup>lt;sup>26</sup> Note that adjusting for family size lowers the effective federal tax rate for all five quintiles. This is a consequence of defining quintiles to contain equal numbers of people rather than equal numbers of tax units. The size adjustment moves larger families—who face lower tax rates because of multiple exemptions, the child credit, and other tax benefits—down the income scale, where they displace multiple smaller families with lower unadjusted income. Some smaller families consequently move into higher quintiles, bringing with them their ETRs that are less than other, similar families in the new quintile. As a result, the ETR for the higher quintile falls. Similarly, the larger family that moved down to a lower quintile brings its low ETR and lowers the average ETR for its new quintile. Thus, adjusting incomes for family size results in lower effective tax rates for all quintiles as tax units move differentially up and down the income distribution.

<sup>&</sup>lt;sup>27</sup> Note that we define quintiles for the population as a whole, not for individual subgroups. Thus, for example, the bottom quintile for single individuals includes singles in the bottom twenty percent of the entire population, not the bottom twenty percent of single individuals.

couples exceeds that for singles because relatively more couples fall into higher quintiles and thus face higher tax rates. Heads of household have the lowest overall average ETR and—because of the refundable credits aimed at those with children—receive a subsidy averaging 16 percent of income in the bottom quintile.

Table 8

Effective Current-Law Federal Tax Rates For Various Demographic Groups

By Cash Income Adjusted for Family Size, 2010

			Average Effective l	Federal Tax Ra	te <sup>c</sup>	
Cash Income Percentile <sup>a,b</sup>	All Tax Units	Single Individuals	Married Couples Filing Jointly	Heads of Household	Tax Units with Children <sup>d</sup>	<b>Elderly</b> <sup>e</sup>
Lowest Quintile	-5.5	2.6	-6.0	-16.0	-18.8	1.3
Second Quintile	5.3	8.5	4.1	2.1	1.3	2.8
Middle Quintile	13.1	15.0	11.5	13.3	13.4	4.3
Fourth Quintile	17.6	19.0	16.7	19.2	18.6	9.5
<b>Top Quintile</b>	24.1	23.3	24.3	23.7	25.8	20.1
All	19.4	18.7	20.7	11.2	19.5	14.8
Addendum						
80-90	21.9	22.4	21.6	22.5	23.7	14.5
90-95	23.4	22.7	23.5	24.9	25.0	17.5
95-99	24.8	23.1	25.4	22.4	26.8	20.5
Top 1 Percent	25.8	25.0	25.9	26.1	27.6	23.6
Top 0.1 Percent	27.6	27.2	27.6	27.7	28.7	25.8

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-2).

Notes: Data are for calendar year 2009.

Similar patterns hold when looking at the individual income tax in isolation. Overall, head of household tax units receive a net individual income tax subsidy—their average ETR is -0.7 percent (table 9). In contrast, married couples pay an average individual income tax rate of 10.6 percent. Much of the aggregate difference derives from the fact that married couples tend to have much higher incomes than do heads of household. For 2010, we project that median cash income for married couples filing jointly will be \$74,600 in 2009 dollars; for heads of household it will be only \$27,700.

Single individuals and head of household tax units have roughly similar median 2010 cash incomes (\$23,500 for singles in 2009 dollars) but effective individual income tax rates differ substantially: 8.2 percent for singles vs. -0.7 percent for heads of household. That difference primarily reflects the targeted tax breaks that head-of-household families are more likely to receive, particularly the EITC and the child tax credit. It also reflects the larger number of dependent exemptions heads of household may claim and their wider individual income tax brackets.

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. Quintiles are defined for the population as a whole, not the various subgroups.

c. Excludes customs duties and excise taxes.

d. Children are defined as exemptions taken for children living at, or away from, home.

e. Elderly tax units are those in which the head (or spouse, if applicable) is age 65 or older.

Overall, tax units with children face an effective individual income tax rate (8.3 percent) that is lower than that for the population as a whole (9.1 percent), despite their higher median income (\$50,600 in 2009 dollars vs. \$36,800 for the entire population) and consequent higher tax brackets. The latter effect is more than offset by individual income tax breaks aimed at low- and middle-income households with children. Tax units with children in the bottom two quintiles receive large net individual income tax subsidies of 31.8 percent and 11.9 percent of cash income, respectively. Even those in the middle quintile pay individual income taxes that average just 0.3 percent of cash income.

Table 9

Effective Current-Law Individual Income Tax Rates For Various Demographic Groups

By Cash Income Adjusted for Family Size, 2010

		Avera	age Effective Indivi	dual Income Ta	x Rate <sup>c</sup>	
Cash Income Percentile <sup>a,b</sup>	All Tax Units	Single Individuals	Married Couples Filing Jointly	Heads of Household	Tax Units with Children <sup>d</sup>	Elderly <sup>e</sup>
Lowest Quintile	-16.3	-7.1	-17.6	-27.8	-31.8	-1.6
Second Quintile	-5.1	-0.1	-6.5	-10.5	-11.9	0.0
Middle Quintile	1.8	4.0	0.4	0.9	0.3	0.9
Fourth Quintile	6.1	7.6	5.4	6.8	5.6	5.0
Top Quintile	14.5	13.1	14.8	13.9	16.1	12.1
All	9.1	8.2	10.6	-0.7	8.3	8.4
Addendum						
80-90	10.5	10.9	10.3	10.7	11.6	8.7
90-95	12.7	11.8	12.9	14.4	13.9	11.0
95-99	16.2	13.7	16.9	14.7	18.8	12.7
Top 1 Percent	17.5	16.0	17.8	18.1	19.8	13.7
Top 0.1 Percent	17.9	16.7	18.1	18.6	19.4	14.7

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-2).

Notes: Data are for calendar year 2009.

Elderly tax units face an average effective individual income tax rate of 8.4 percent, 0.7 percentage points lower than that for the entire population. The elderly typically have no children or other dependents and thus generally receive none of the targeted tax breaks aimed at those segments of the population. Seniors do receive some individual income tax benefits, however. Those near the bottom of the income scale benefit from the full or partial exclusion of Social Security benefits from adjusted gross income. Upper-income seniors benefit from the lower tax rates on capital gains and dividends relative to wages and salaries; their effective tax rates are consequently lower than those of working people. ETRs are higher for the poorest seniors than the population as a whole because seniors generally cannot claim refundable credits for children (CTC) or working (EITC and MWP). Seniors in the second quintile, for example, have an

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. Quintiles are defined for the population as a whole, not the various subgroups.

c. Excludes customs duties and excise taxes.

d. Children are defined as exemptions taken for children living at, or away from, home.

e. Elderly tax units are those in which the head (or spouse, if applicable) is age 65 or older.

average effective individual income tax rate of 0 percent, compared with a net subsidy of 5.1 percent for the population as a whole.

#### **6. Distribution in 2012 Under Various Baselines**

The foregoing analysis has focused on the distribution of federal taxes under current law. That focus has the advantages that current law (a) represents what will happen to taxes if Congress enacts no further legislation; (b) requires no guesswork as to when, how, and which proposals Congress might choose to extend; and (3) is the official baseline against which budget analysts measure the impact of any new tax policy proposals. The disadvantage is that virtually no one actually expects Congress to sit back and let current law play out unchanged over the next few years. In addition, the Obama administration's 2010 budget would make permanent some but not all of the Bush tax cuts along with some of the administration's own tax proposals enacted in 2009 (such as the Making Work Pay and American Opportunity tax credits). Finally, many analysts—although not the official estimators at either CBO or JCT—have assessed policy proposals against a current policy baseline that assumes extension of tax measures scheduled to expire under current law, on the argument that no one expects Congress to allow those provisions to disappear.

We therefore examine the distribution of federal taxes in 2012 under three scenarios: (a) current law; (b) the administration baseline, which some analysts refer to as "current policy", and which involves permanent extension of all the Bush individual income tax cuts, as well as extending and indexing both the AMT "patch" and 2009 estate tax law; and (c) tax proposals in the Obama administration's 2010 budget. We choose 2012 because (a) all provisions are fully phased in by that year; and (b) our model assumes that incomes in 2012 are back to trend after the current economic downturn. Note that because the three scenarios use the same assumptions about payroll and corporate income taxes, ETRs for those two sources of revenue do not differ across scenarios. Furthermore, because the estate tax affects only households at the top of the income distribution, most of the difference in ETRs across scenarios results from alternative assumptions about the individual income tax.

### A. Current Law

The 2012 distribution under current law will closely resemble that in 2011. The combination of real bracket creep, an expanding AMT, and rising incomes recovering from the current economic downturn will result in an average effective tax rate for 2012 of 23.4 percent, slightly higher than the 23.0 percent in 2011 (table 10). Effective tax rates will range from 5.2 percent for the bottom quintile to 28.2 percent for the top quintile. For the bottom four quintiles, the payroll tax burden will outweigh that of the individual income tax. For example, the middle quintile will face an average individual income tax ETR of 6.6 percent, four percentage points lower than the average payroll tax ETR of 10.6 percent. In marked contrast, the top quintile will face an average payroll ETR of just 6.1 percent, far lower than the 17.3 percent under the individual income tax.

\_

<sup>&</sup>lt;sup>28</sup> We analyze only effective tax rates. Comparing the share of the federal tax burden by income groups does not provide a meaningful measure of the distributional difference between these scenarios because the overall tax burden is significantly different in each. Appendix tables 5, 6, and 7 show tax shares under each of the scenarios. <sup>29</sup> For 2012 the second quintile begins at cash income of \$19,429; the middle quintile at \$37,634; the fourth quintile at \$65,903; the 80th percentile at \$112,079; the 90th percentile at \$162,348; the 95th percentile at \$227,254; the 99th percentile at \$601,435; and the 99.9th percentile at \$2,737,383. All figures are in 2009 dollars. Again, quintiles contain equal numbers of people, not tax units.

Table 10
Effective Federal Tax Rates Under Current Law, By Cash Income Percentile, 2012

		Aver	age Effective Tax	Rate	
Cash Income Percentile <sup>a</sup>	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	-4.2	8.6	0.8	0.0	5.2
<b>Second Quintile</b>	1.6	9.8	0.9	0.0	12.3
Middle Quintile	6.6	10.6	0.8	0.1	18.2
<b>Fourth Quintile</b>	9.8	10.6	1.0	0.1	21.5
<b>Top Quintile</b>	17.3	6.1	4.4	0.5	28.2
All	12.3	8.0	2.8	0.3	23.4
Addendum					
80-90	12.6	10.4	1.4	0.2	24.6
90-95	14.5	9.0	2.0	0.2	25.7
95-99	17.9	5.7	3.5	0.5	27.7
Top 1 Percent	21.8	1.6	8.4	0.8	32.7
Top 0.1 Percent	22.8	0.8	11.2	0.8	35.6

Notes: Data are for calendar year 2009.

Within the top quintile, average overall ETRs will range from 24.6 percent for households in the 80th to 90th percentile to 35.6 percent for those in the top 0.1 percent. For those at the very top—who receive a large fraction of their income from investments—almost one-third of that effective tax rate comes from the burden of the corporate tax. In contrast, households in the fourth quintile face an average ETR of 21.5 percent, with only 1 percentage point of that coming from the corporate tax.

### B. The Administration Baseline or "Current Policy"

The administration baseline differs from current law in three important ways. It assumes permanent extension of: (1) all the Bush individual income tax cuts; (2) the AMT patch (i.e., higher AMT exemptions indexed—along with the AMT tax bracket threshold and exemption phaseout thresholds—for inflation); and (3) 2009 estate tax law (i.e., a 45 percent rate and a \$3.5 million exemption) indexed for inflation.<sup>30</sup>

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. After tax credits (including refundable portion of earned income and child tax credits).

c. Includes both the employee and employer portion of Social Security and Medicare tax.

d. Excludes customs duties and excise taxes.

<sup>&</sup>lt;sup>30</sup> We refer to this as the "administration baseline" because the Obama administration's 2010 budget uses these policies to define the baseline against which it measures the impact of any new tax proposals.

Table 11

Effective Federal Tax Rates Under Administration's Baseline
By Cash Income Percentile, 2012

		Aver	age Effective Tax	Rate	
Cash Income Percentile <sup>a</sup>	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	-4.8	8.6	0.8	0.0	4.6
Second Quintile	-0.4	9.8	0.9	0.0	10.3
Middle Quintile	4.8	10.6	0.8	0.0	16.3
<b>Fourth Quintile</b>	7.5	10.6	1.0	0.0	19.1
<b>Top Quintile</b>	14.3	6.1	4.4	0.3	25.0
All	9.7	8.0	2.8	0.1	20.7
Addendum					
80-90	9.9	10.4	1.4	0.0	21.7
90-95	11.9	9.0	2.0	0.0	22.9
95-99	15.4	5.7	3.5	0.2	24.9
Top 1 Percent	18.0	1.6	8.4	0.6	28.7
Top 0.1 Percent	18.4	0.8	11.2	0.7	31.1

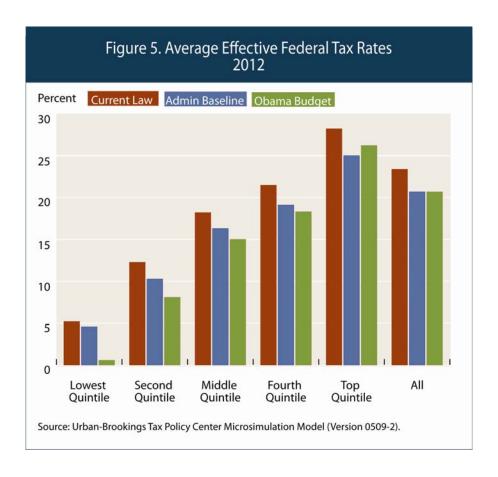
*Notes*: Data are for calendar year 2009.

- b. After tax credits (including refundable portion of earned income and child tax credits).
- c. Includes both the employee and employer portion of Social Security and Medicare tax.
- d. Excludes customs duties and excise taxes.

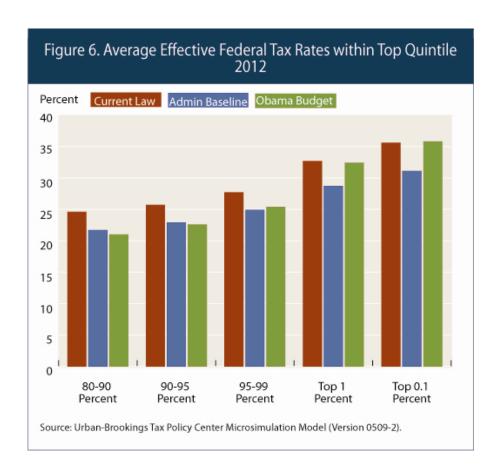
The overall average ETR under the administration baseline in 2012 would be 20.7 percent, down substantially from the 23.4 percent under current law (table 11 and figure 5). Relative to current law, extending the Bush administration tax cuts would provide the largest percentage increase in after-tax income to those at the top of the income scale and thus dramatically reduce effective tax rates for high-earning households. For example, the ETR for the top 1 percent of households would be 28.7 percent under the administration baseline, down 4 percentage points from the 32.7 percent average under current law (table 11 and figure 6). Extending the AMT patch would most benefit taxpayers in the 80th to 99th percentiles, whose average ETRs would range from 21.7 to 24.9 percent, down from 24.6 to 27.7 under current law.

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see <a href="http://www.taxpolicycenter.org/TaxModel/income.cfm">http://www.taxpolicycenter.org/TaxModel/income.cfm</a>

<sup>&</sup>lt;sup>31</sup> For a complete analysis of the distributional effects of the Bush tax cuts see Leiserson and Rohaly (2008b).



Households in the middle quintile would benefit from extension of many of the provisions in the Bush administration tax cuts including: the 10-percent bracket; the \$1,000 child tax credit (CTC); and some of the marriage-penalty provisions such as the higher standard deduction for joint filers. As a result, the average ETR for the middle quintile would be 16.3 percent under the administration baseline, down from 18.2 percent under current law. Those at the very bottom of the income scale would benefit from extension of the refundability of the CTC and expansion of the EITC for married couples. As a result, the bottom quintile would face an average ETR of 4.6 percent under the administration baseline compared with 5.2 percent under current law.



# C. The Obama Administration's Fiscal Year 2010 Budget Proposals

Relative to the administration baseline, President Obama's 2010 budget proposes to undo some of the Bush individual income tax cuts targeted to upper-income households and to extend some of the provisions first enacted in the 2009 stimulus legislation such as the MWP credit, the enhancement of the refundable CTC, and the new education credit (the American Opportunity Tax Credit, or AOTC) that are currently set to expire at the end of 2010.<sup>32</sup>

Overall, relative to the 23.4 percent under current law, the Obama budget would result in a significantly lower average ETR of 20.7 percent, the same as under the administration baseline (table 12 and figure 5). Among quintiles, however, average ETRs would differ significantly between the Obama budget and the administration baseline.

\_

 $<sup>^{32}</sup>$  Altshuler et al. (2009) discusses the budget proposals in more detail.

Table 12
Effective Federal Tax Rates Under President Obama's Budget
By Cash Income Percentile, 2012

		Aver	age Effective Tax	Rate	
Cash Income Percentile <sup>a</sup>	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	-8.8	8.6	0.8	0.0	0.6
<b>Second Quintile</b>	-2.5	9.8	0.9	0.0	8.1
Middle Quintile	3.5	10.6	0.8	0.0	15.0
<b>Fourth Quintile</b>	6.7	10.6	1.0	0.0	18.3
<b>Top Quintile</b>	15.5	6.1	4.4	0.3	26.2
All	9.7	8.0	2.8	0.1	20.7
Addendum					
80-90	9.2	10.4	1.4	0.0	21.0
90-95	11.6	9.0	2.0	0.0	22.6
95-99	16.0	5.7	3.5	0.2	25.4
Top 1 Percent	21.7	1.6	8.4	0.6	32.4
Top 0.1 Percent	23.0	0.8	11.2	0.7	35.8

Notes: Data are for calendar year 2009.

- b. After tax credits (including refundable portion of earned income and child tax credits).
- c. Includes both the employee and employer portion of Social Security and Medicare tax.
- d. Excludes customs duties and excise taxes.

Starting from the administration baseline, President Obama's budget would raise taxes on high-income households, defined as married couples with income greater than \$250,000 and singles with income greater than \$200,000. Specifically, the budget would raise the top two tax rates back to their pre-2001 levels of 36 and 39.6 percent, change the income threshold for the next-to-highest rate, reinstate the personal exemption phaseout and the limitation on itemized deductions, impose a 20-percent rate on long-term capital gains and qualifying dividends, and further limit the value of itemized deductions to 28 percent.<sup>33</sup>

All of these provisions would boost effective tax rates for households at the top of the income distribution well above ETRs under the administration baseline. Households in the top 1 percent would face an average ETR of 32.4 percent under the budget proposals, up from 28.7 percent under the administration baseline (table 12 and figure 6). Nonetheless the 32.4 percent rate

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

<sup>&</sup>lt;sup>33</sup> The threshold for the 36 percent rate would be set at taxable income of \$250,000 minus the sum of the standard deduction and two personal exemptions for married couples filing jointly and at \$200,000 minus the sum of the standard deduction and one personal exemption for singles (and presumably for heads of household). The 20-percent rate on capital gains and dividends would apply to taxpayers in the top two tax brackets. Values are in 2009 dollars.

would represent a slight reduction relative to current law for two reasons: (a) current law would tax dividends as ordinary income whereas they would face preferential rates of 15 and 20 percent under the Obama budget; and (2) the thresholds for the 36 percent rate and the limitations on deductions and exemptions would be slightly higher under the Obama budget proposal than they are under current law.

Because the budget proposes to extend the MWP credit and other measures directed at lowerand moderate-income households, ETRs for the bottom two quintiles would average 0.6 percent and 8.1 percent compared with 4.6 percent and 10.3 percent under the administration baseline. Households in the middle fifth of the distribution—that also benefit from the MWP credit as well as the expanded education credit—would face an average ETR of 15.0 percent, down from 16.3 percent under the administration baseline.

#### 7. Conclusion

Barring legislative action, the numerous sunsets and phase-ins that Congress has written into the tax code will result in a tax system that is in a state of flux over the next few years. In 2009, the average effective tax rate will be 18.2 percent overall and will range from -1 percent for households in the bottom quintile of the income distribution to more than 26 percent for those in the top 1 percent. If both the 2001 and 2003 tax cuts and the tax provisions in the 2009 stimulus legislation expire as scheduled at the end of 2010, effective tax rates will increase dramatically across the income spectrum. In 2011, the average ETR will rise to 23 percent, about 5 percentage points higher than in 2009. Effective tax rates will range from an average of 5 percent for the bottom fifth of households to 32 percent for the top 1 percent, compared with a range of -1 percent to 26 percent in 2009.

Congress and the administration are highly unlikely to let current law play out as scheduled. Virtually no one expects that Congress will allow the AMT to expand to hit 27 million taxpayers in 2010 or let the estate tax disappear for one year, only to return in full force the next. President Obama's 2010 budget started from a baseline that assumes the 2001 and 2003 individual income tax cuts, the annual AMT patch, and 2009 estate tax law all become permanent with adjustments for inflation. Under that baseline, the average ETR in 2012 would drop to 20.7 percent, significantly lower than the current law 23.4 percent. Starting from that baseline, the budget would then increase individual income taxes on upper-income households and extend several provisions—including the Making Work Pay credit—that benefit those with more modest incomes. Those changes would yield the same 20.7 percent average ETR overall but would shift the tax burden significantly across income classes. The average ETR for taxpayers in the top 1 percent would jump nearly 4 percentage points from 28.7 percent under the administration's baseline to 32.4 percent. In marked contrast, the average ETR for households in the bottom fifth would decline sharply to 0.6 percent, down from 4.6 percent under the baseline.

#### References

Altshuler, Rosanne, Leonard E. Burman, Howard Gleckman, Dan Halperin, and Roberton Williams. 2009. "Tax Proposals in the 2010 Budget." Washington DC: The Urban Institute. http://www.urban.org/url.cfm?ID=411849.

Burman, Leonard E., William G. Gale, Greg Leiserson, and Jeffrey Rohaly. 2007. "The AMT: What's Wrong and How to Fix It." <u>National Tax Journal</u> 60 (3) pp. 385-405. (September).

Congressional Budget Office. 2001. "Effective Federal Tax Rates, 1979 to 1997." Washington, DC: Congressional Budget Office.

Joint Committee on Taxation. 2009. "List of Expiring Federal Tax Provisions, 2008-2020." JCX-20-09. Washington, DC: Joint Committee on Taxation. http://www.jct.gov/publications.html?func=startdown&id=1464

Leiserson, Greg and Jeffrey Rohaly. 2008a. "The AMT: Historical Data and Projections, Updated June 2008." Washington, DC: The Urban Institute. http://www.urban.org/url.cfm?ID=411703.

Leiserson, Greg and Jeffrey Rohaly. 2008b. "Distribution of the 2001-2006 Tax Cuts: Updated Projections, July 2008." Washington, DC: The Urban Institute. http://www.urban.org/url.cfm?ID=4111739.

Rohaly, Jeffrey, Adam Carasso, and Mohammed Adeel Saleem. 2005. "The Urban-Brookings Tax Policy Center Microsimulation Model: Documentation and Methodology for Version 0304." Washington, DC: The Urban Institute. http://www.urban.org/url.cfm?ID=411136.

### **Appendix A: Description of TPC Microsimulation Model**

A large-scale microsimulation model of the U.S. federal tax system produces the Tax Policy Center's revenue and distribution estimates. The model we have developed is similar to those used by the Congressional Budget Office (CBO), the Joint Committee on Taxation (JCT), and the Treasury's Office of Tax Analysis (OTA).

The model is based on data from the 2004 public-use file (PUF) produced by the Statistics of Income (SOI) Division of the Internal Revenue Service (IRS). The PUF contains detailed information from 150,047 federal individual income tax returns filed in the 2004 calendar year. We add information on demographics and sources of income that are not reported on tax returns using a constrained statistical match of the public-use file with the March 2005 Current Population Survey (CPS) of the U.S. Census Bureau. The statistical match with the CPS also generates a sample of individuals who do not file income tax returns ("nonfilers"). Combining the dataset of filers from the PUF (augmented by demographic and other information from the CPS) with the dataset of nonfilers generated by the statistical match with the CPS allows us to conduct distributional analysis for the entire population rather than just the segment that files individual income tax returns.

The tax model consists of two components: a statistical routine that "ages" or extrapolates the 2004 data to create a representative sample of both filers and nonfilers for future years; and a detailed tax calculator that computes the individual income tax liability for all filers in the sample under current law and under alternative policy proposals. The calculator also computes the employee and employer shares of payroll taxes for Social Security and Medicare.

### **Aging and Extrapolation Process**

For the years from 2005 to 2019, we "age" the 2004 data based on Congressional Budget Office (CBO) forecasts and projections for the growth in various types of income, IRS projections of the growth in the number of tax returns, and Bureau of the Census data on the composition of the population. We use actual 2005 through 2006 data when they are available. A two-step process produces a representative sample of the filing and nonfiling population in years beyond 2004. First, we first inflate the dollar amounts for income, adjustments, deductions, and credits on each record by their appropriate per capita forecasted growth rates. We use the CBO's forecast for per capita growth in major income sources such as wages, capital gains, and nonwage income (interest, dividends, social security income and others). Most other items are assumed to grow at CBO's projected growth rate for per capita personal income. In the second stage of the extrapolation, we adjust the weights on each record using a linear programming algorithm to ensure that the major income items, adjustments, and deductions match aggregate targets. For years beyond 2004, we do not target distributions for any item; wages and salaries, for example, grow at the same per capita rate for tax units at every income level.

### **Tax Calculator**

We can simulate policy options using the extrapolated data set and a detailed tax calculator that captures most features of the federal individual income tax system, including the alternative minimum tax (AMT). The model reflects major income tax legislation enacted through early 2009, including the American Recovery and Reinvestment Tax Act of 2009 (the "stimulus bill"). We also calculate payroll taxes for Social Security and Medicare, impute corporate income tax to

records based on their share of capital income (interest, dividends, capital gains, and rents), and calculate expected estate tax liability for each record based on mortality rates and imputations of wealth.

#### **Recent Model Enhancements**

In early 2008, the Tax Policy Center completed a major update of its microsimulation model to use more recent data and to expand the model's capabilities. We shifted the database underlying the model from the 2001 public-use file (PUF) of tax returns produced by the IRS to the 2004 file. At the same time, we performed a new statistical match with the March 2005 Current Population Survey. We updated the tax model's estate tax module to incorporate the latest IRS data on estate tax filers. We expanded the retirement module to model the revenue and distributional implications of implementing automatic enrollment in IRAs and 401(k) retirement plans and updated the module to incorporate 2004 data. We also refined the model's imputations of itemized deductions, such as charitable contributions and home mortgage interest, for "non-itemizers" (i.e., those who claim only the standard deduction on their tax return). These imputations allow us to model the distribution and revenue implications of proposals to replace certain credits with deductions.

In May of 2009 we updated the model to incorporate the latest economic projections from CBO that reflect the most up-to-date knowledge about the current economic downturn.

The updated microsimulation model also incorporates a completely overhauled and expanded education module. Using data from the October 2003 and October 2004 CPS, as well as the National Postsecondary Student Aid Study (NPSAS), we impute student status, characteristics, and education expenditures on to the tax model database. This allows us to model current tax incentives for education, such as the HOPE and Lifetime Learning Credits and the deduction for higher education expenses, as well as to examine the revenue and distributional implications of combining or modifying these tax programs. We can also model current spending programs such as Pell Grants, and examine the revenue and distributional effects of changes to program rules.

### **Appendix B: Incidence Assumptions**

A key insight from economics is that taxes are not always borne by the individual or business that writes the check to the IRS. Sometimes taxes are shifted. For example, most economists believe that the employer portion of payroll taxes translates into lower wages and is thus ultimately borne by workers. There is no consensus, however, on the economic incidence of other taxes, such as the corporate income tax.

The Tax Policy Center's incidence assumptions follow those adopted by the Congressional Budget Office and the Department of the Treasury. In particular, our tables assume the following: (1) the individual income tax is borne directly by individual income taxpayers; (2) both the employee and employer share of payroll taxes are borne by the employee; (3) the corporate income tax is borne by recipients of capital income (interest, dividends, capital gains, and rents) in proportion to the amount of capital income they receive; and (4) the estate tax is borne by decedents.

Appendix Table 1

Effective Current-Law Federal Tax Rates For Various Demographic Groups

By Cash Income Adjusted for Family Size, 2009

Cash Income Percentile <sup>a,b</sup>	Average Effective Federal Tax Rate <sup>c</sup>							
	All Tax Units	Single Individuals	Married Couples Filing Jointly	Heads of Household	Tax Units with Children <sup>d</sup>	Elderly		
Lowest Quintile	-6.4	1.5	-7.3	-16.6	-19.5	-0.7		
Second Quintile	4.5	7.8	3.3	1.3	0.4	1.6		
Middle Quintile	12.4	14.5	10.8	12.4	12.3	3.4		
Fourth Quintile	16.4	18.3	15.3	17.7	16.8	8.5		
Top Quintile	22.9	23.3	22.8	22.6	24.0	19.6		
All	18.2	18.2	19.2	10.0	17.8	13.9		
Addendum								
80-90	20.0	21.6	19.4	20.8	20.7	13.2		
90-95	21.7	22.3	21.5	23.6	22.6	15.8		
95-99	23.2	22.2	23.5	21.6	25.2	18.9		
Top 1 Percent	26.0	27.6	25.6	26.3	27.4	24.9		
Top 0.1 Percent	27.9	30.9	27.2	28.1	28.4	27.7		

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. Quintiles are defined for the population as a whole, not the various subgroups.

c. Excludes customs duties and excise taxes.

d. Children are defined as exemptions taken for children living at, or away from, home.

e. Elderly tax units are those in which the head (or spouse, if applicable) is age 65 or older.

Appendix Table 2

Effective Current-Law Individual Income Tax Rates For Various Demographic Groups

By Cash Income Adjusted for Family Size, 2009

Cash Income Percentile <sup>a,b</sup>	Average Effective Individual Income Tax Rate <sup>c</sup>							
	All Tax Units	Single Individuals	Married Couples Filing Jointly	Heads of Household	Tax Units with Children <sup>d</sup>	Elderly <sup>e</sup>		
Lowest Quintile	-17.1	-8.0	-18.8	-28.5	-32.4	-3.4		
Second Quintile	-6.0	-0.8	-7.4	-11.3	-12.8	-1.1		
Middle Quintile	1.1	3.5	-0.4	0.1	-0.7	0.2		
<b>Fourth Quintile</b>	5.0	6.9	4.0	5.3	3.9	4.2		
Top Quintile	13.3	12.6	13.5	12.8	14.5	11.3		
All	7.9	7.5	9.2	-1.9	6.6	7.5		
Addendum								
80-90	8.6	10.1	8.0	9.1	8.7	7.7		
90-95	11.1	11.3	10.9	13.1	11.6	9.4		
95-99	14.7	13.0	15.2	13.9	17.4	11.4		
Top 1 Percent	17.7	16.3	18.0	18.5	20.2	13.8		
Top 0.1 Percent	18.1	17.1	18.2	19.0	19.7	14.7		

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. Quintiles are defined for the population as a whole, not the various subgroups.

c. Excludes customs duties and excise taxes.

d. Children are defined as exemptions taken for children living at, or away from, home.

e. Elderly tax units are those in which the head (or spouse, if applicable) is age 65 or older.

Appendix Table 3

Effective Current-Law Federal Tax Rates For Various Demographic Groups

By Cash Income Adjusted for Family Size, 2011

Cash Income Percentile <sup>a,b</sup>	Average Effective Federal Tax Rate <sup>c</sup>							
	All Tax Units	Single Individuals	Married Couples Filing Jointly	Heads of Household	Tax Units with Children <sup>d</sup>	<b>Elderly</b> <sup>e</sup>		
Lowest Quintile	1.3	7.2	2.1	-7.3	-8.3	2.4		
Second Quintile	10.0	11.3	10.0	7.7	8.5	3.9		
Middle Quintile	16.3	17.6	15.1	16.7	17.5	6.3		
Fourth Quintile	20.1	21.2	19.4	21.2	21.4	12.1		
Top Quintile	27.6	28.3	27.4	26.0	28.5	26.2		
All	23.0	22.5	24.0	15.2	23.1	19.5		
Addendum								
80-90	24.1	8.8	23.7	23.9	25.2	18.3		
90-95	25.3	11.9	25.2	25.2	25.9	21.3		
95-99	27.2	18.6	27.2	24.1	28.5	25.2		
Top 1 Percent	32.1	25.6	31.5	32.0	33.5	32.5		
Top 0.1 Percent	35.3	26.9	34.6	34.9	35.8	36.1		

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. Quintiles are defined for the population as a whole, not the various subgroups.

c. Excludes customs duties and excise taxes.

d. Children are defined as exemptions taken for children living at, or away from, home.

e. Elderly tax units are those in which the head (or spouse, if applicable) is age 65 or older.

Appendix Table 4

Effective Current-Law Individual Income Tax Rates For Various Demographic Groups

By Cash Income Adjusted for Family Size, 2011

Cash Income Percentile <sup>a,b</sup>	Average Effective Individual Income Tax Rate <sup>c</sup>							
	All Tax Units	Single Individuals	Married Couples Filing Jointly	Heads of Household	Tax Units with Children <sup>d</sup>	<b>Elderly</b> <sup>e</sup>		
Lowest Quintile	-9.7	-2.9	-9.5	-19.2	-21.3	-0.7		
Second Quintile	-0.5	2.5	-0.7	-4.9	-4.7	0.9		
Middle Quintile	4.9	6.4	3.9	4.3	4.4	2.1		
Fourth Quintile	8.5	9.5	8.0	8.8	8.4	7.0		
<b>Top Quintile</b>	16.8	15.3	17.2	15.4	18.3	14.7		
All	11.9	10.6	13.4	3.2	11.5	10.7		
Addendum								
80-90	12.4	-2.9	12.2	12.0	13.0	11.1		
90-95	14.3	2.5	14.4	14.7	14.6	13.1		
95-99	17.6	6.4	18.2	15.5	20.1	14.7		
Top 1 Percent	21.1	13.6	21.5	22.0	24.2	17.1		
Top 0.1 Percent	22.2	15.3	22.5	22.9	24.0	18.9		

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. Quintiles are defined for the population as a whole, not the various subgroups.

c. Excludes customs duties and excise taxes.

d. Children are defined as exemptions taken for children living at, or away from, home.

e. Elderly tax units are those in which the head (or spouse, if applicable) is age 65 or older.

Appendix Table 5
Share of Federal Taxes Under Current Law, By Cash Income Percentile, 2012

Cash Income Percentile <sup>a</sup>		Share of Total						
	Cash Income	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>		
Lowest Quintile	3.7	-1.3	4.0	1.0	0.3	0.8		
Second Quintile	8.4	1.1	10.2	2.6	0.8	4.4		
Middle Quintile	13.9	7.5	18.3	4.1	5.2	10.8		
Fourth Quintile	19.8	15.7	26.0	7.2	9.5	18.2		
Top Quintile	54.5	76.9	41.3	84.3	83.7	65.7		
All	100.0	100.0	100.0	100.0	100.0	100.0		
Addendum								
80-90	13.5	13.9	17.5	6.7	8.8	14.2		
90-95	9.4	11.1	10.5	6.6	6.9	10.3		
95-99	13.4	19.6	9.6	16.7	21.7	15.9		
Top 1 Percent	18.1	32.2	3.7	54.3	46.3	25.3		
Top 0.1 Percent	8.4	15.6	0.8	33.5	21.5	12.7		

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. After tax credits (including refundable portion of earned income and child tax credits).

c. Includes both the employee and employer portion of Social Security and Medicare tax.

d. Excludes customs duties and excise taxes.

Appendix Table 6
Share of Federal Taxes Under Administration's Baseline, By Cash Income Percentile, 2012

Cash Income Percentile <sup>a</sup>			Share o	of Total		
	Cash Income	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>
Lowest Quintile	3.7	-1.8	4.0	1.0	0.0	0.8
<b>Second Quintile</b>	8.4	-0.3	10.2	2.6	0.0	4.2
Middle Quintile	13.9	6.9	18.3	4.1	0.5	10.9
Fourth Quintile	19.8	15.3	26.0	7.2	1.1	18.3
<b>Top Quintile</b>	54.5	80.0	41.3	84.3	97.8	65.7
All	100.0	100.0	100.0	100.0	100.0	100.0
Addendum						
80-90	13.5	13.7	17.5	6.7	2.1	14.2
90-95	9.4	11.5	10.5	6.6	2.4	10.4
95-99	13.4	21.3	9.6	16.7	16.8	16.1
Top 1 Percent	18.1	33.4	3.7	54.3	76.5	25.0
Top 0.1 Percent	8.4	15.8	0.8	33.5	41.6	12.6

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. After tax credits (including refundable portion of earned income and child tax credits).

c. Includes both the employee and employer portion of Social Security and Medicare tax.

d. Excludes customs duties and excise taxes.

Appendix Table 7
Share of Federal Taxes Under President Obama's Budget , By Cash Income Percentile, 2012

Cash Income Percentile <sup>a</sup>	Share of Total						
	Cash Income	Individual Income Tax <sup>b</sup>	Payroll Tax <sup>c</sup>	Corporate Income Tax	Estate Tax	All Federal Tax <sup>d</sup>	
Lowest Quintile	3.7	-3.4	4.0	1.0	0.0	0.1	
Second Quintile	8.4	-2.2	10.2	2.6	0.0	3.3	
Middle Quintile	13.9	5.1	18.3	4.1	0.5	10.1	
Fourth Quintile	19.8	13.7	26.0	7.2	1.1	17.5	
Top Quintile	54.5	86.9	41.3	84.3	97.8	68.9	
All	100.0	100.0	100.0	100.0	100.0	100.0	
Addendum							
80-90	13.5	12.9	17.5	6.7	2.1	13.8	
90-95	9.4	11.2	10.5	6.6	2.4	10.3	
95-99	13.4	22.1	9.6	16.7	16.8	16.5	
Top 1 Percent	18.1	40.6	3.7	54.3	76.5	28.4	
Top 0.1 Percent	8.4	19.9	0.8	33.5	41.6	14.5	

a. Tax units with negative cash income are excluded from the lowest quintile but are included in the totals. Includes both filing and non-filing units but excludes those that are dependents of other tax units. For a description of cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

b. After tax credits (including refundable portion of earned income and child tax credits).

c. Includes both the employee and employer portion of Social Security and Medicare tax.

d. Excludes customs duties and excise taxes.