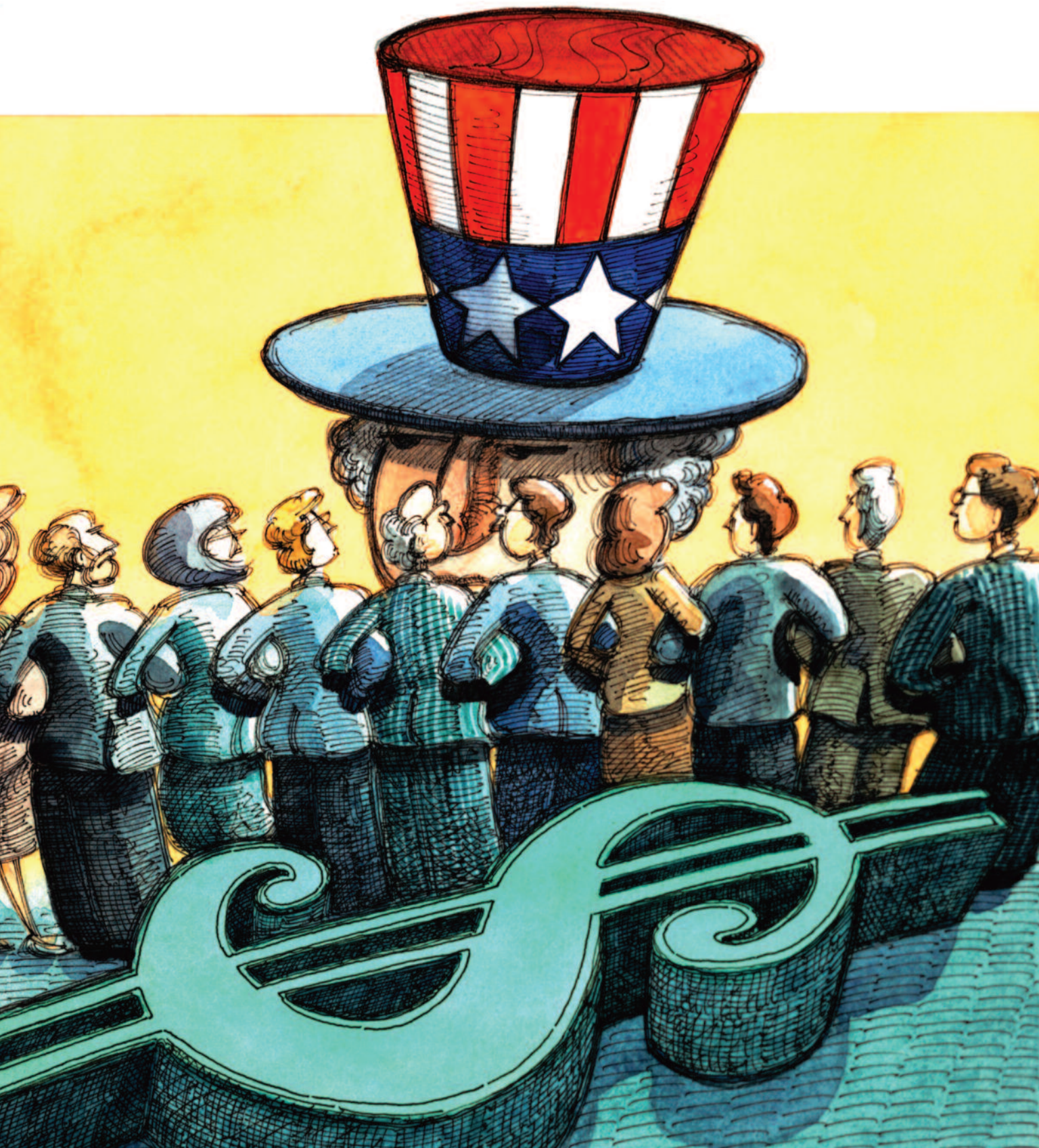


In
Focus



Simulating a Flat Tax Model

What Are the Likely Outcomes?

By Brita Boudreau and Thomas M Dalton

IF A LIST OF FREQUENTLY ASKED QUESTIONS FOR CPAs EXISTED, the flat tax would be among the subjects. Millions of Americans have strong opinions about this concept, but most do not know how a flat tax would operate or would affect their own tax situation. For many, the idea of a flat tax conjures up thoughts of simplification and fairness, but most rarely think about the practical implications of reaching these goals. Reducing tax brackets to a single percentage contributes only partially to simplification; the real work lies in redefining allowable deductions.

Furthermore, fairness rests in the eye of the beholder. Assuming that total tax revenue must remain constant in order for the government to pay its debts (i.e., it is revenue neutral), any change in tax policy means that the tax burden will simply shift from one group to another. But most individuals who ask a tax advisor about the flat tax probably wonder how a flat tax would affect them personally. CPAs can enhance their credibility and further aid their clients by answering such questions clearly and within an analytical framework. The simulated examples discussed below provide a starting point for answering such questions.

Overview

The term “flat tax” can—and does—include an almost infinite number of variations to the basic concept of a single tax rate for everyone. Robert Hall and Alvin Rabushka at Stanford University’s Hoover Institution are generally considered to have started the current flat tax policy discussions with their book *The Flat Tax* (McGraw Hill, 1983). Several flat tax variables have developed from the book’s basic concept, including the number of actual tax rates, the size of these tax rates, and the breadth of the taxable income base.

It is certainly possible to alter only one of these variables in implementing what most people envision a flat tax to be; however, economists seem to agree that the best

tax system should combine low rates and a broad base. Presumably, the tax base would broaden by eliminating special interest deductions, thereby reducing political distortions in economic decisions. A broader tax base would increase total tax revenue. Many economists also believe that reducing tax rates would stimulate economic growth (although lower rates have the opposite effect of a broadened tax base and decrease total tax revenue, all other things being equal.) Finally, many people believe that fairness is achieved by having only one tax rate for all.

These three objectives could be balanced in order to create a broad-based, lower single-rate tax system that is revenue neutral—in other words, tax more income, but

tax it at a lower, single tax rate. It is often argued that a single rate (as opposed to progressive tax rates) is inherently regressive, forcing lower-income individuals to pay a greater percentage of their nondiscretionary income for taxes than wealthy individuals. Most flat tax proposals attempt to reduce the regressive nature of a single tax rate by providing a large standard deduction, which protects a substantial percentage of income from taxation for lower-income families. It effectively creates a two-rate tax system by taxing income within the large standard deduction (and any personal exemptions) at 0% and all other income at the flat rate.

Furthermore, many economists believe that a flat rate consumption tax (e.g., a value-

EXHIBIT 1
Percentage of Tax Filers by Income Level and Filing Status

Adjusted Gross Income (AGI)*	Total	Married Filing Jointly	Married Filing Separately	Head of Household	Surviving Spouse	Single
\$1–\$4,999	7.572%	0.618%	0.113%	0.545%	0.002%	6.294%
\$5,000–\$9,999	8.856%	0.898%	0.140%	1.485%	0.003%	6.331%
\$10,000–\$14,999	9.019%	1.385%	0.134%	2.235%	0.005%	5.260%
\$15,000–\$19,999	8.262%	1.505%	0.141%	2.131%	0.004%	4.482%
\$20,000–\$24,999	7.272%	1.697%	0.147%	1.908%	0.005%	3.515%
\$25,000–\$29,999	6.278%	1.631%	0.140%	1.549%	0.005%	2.952%
\$30,000–\$39,999	10.416%	3.174%	0.279%	2.142%	0.008%	4.812%
\$40,000–\$49,999	7.824%	2.964%	0.209%	1.257%	0.002%	3.391%
\$50,000–\$74,999	13.549%	7.481%	0.262%	1.387%	0.009%	4.409%
\$75,000–\$99,999	8.308%	6.202%	0.104%	0.461%	0.002%	1.538%
\$100,000–\$199,999	9.800%	8.224%	0.076%	0.336%	0.003%	1.160%
\$200,000–\$499,999	2.320%	2.013%	0.025%	0.050%	0.001%	0.231%
\$500,000–\$999,999	0.353%	0.306%	0.000%	0.008%	0.000%	0.039%
\$1,000,000–\$1,499,999	0.078%	0.066%	0.002%	0.002%	0.000%	0.009%
\$1,500,000–\$1,999,999	0.032%	0.027%	0.001%	0.001%	0.000%	0.004%
\$2,000,000–\$4,999,999	0.045%	0.037%	0.001%	0.001%	0.000%	0.006%
\$5,000,000–\$9,999,999	0.011%	0.008%	0.000%	0.000%	0.000%	0.001%
\$10,000,000 or more	0.006%	0.005%	0.000%	0.000%	0.000%	0.001%
Totals	100.000%	38.242%	1.776%	15.499%	0.049%	44.435%

* Only includes returns with positive AGI

Source: IRS 2009 Statistics of Income, Table 1.2, <http://www.irs.gov/uac/SOI-Tax-Stats---Individual-Statistical-Tables-by-Size-of-Adjusted-Gross-Income>

added tax [VAT], a retail sales tax, a business transfer tax) would promote efficiency and equality by taxing consumption instead of work, production, and savings, as in the current income tax system. The possible combinations that result from altering the tax rates, the size of the tax base, and the nature of the tax base (income or consumption) are extensive. This article's simulation of a flat tax examines a revenue-neutral, single income tax rate system that replaces all individual itemized deductions with an enhanced standard deduction; however, the authors ignore many variables that will inevitably complicate a real-life flat tax.

Simulating a Flat Tax

In order to shed light on how a flat tax might affect individual taxpayers differently, the authors created a simulation to compare the tax burden of a hypothetical flat tax with the current tax system. The first issue is to identify a likely flat tax scheme. Senator Rand Paul (R-Ky.) announced a flat tax proposal in February 2012 that, with a few assumptions, can be used as a model for simulating the effects of a flat tax (<http://www.paul.senate.gov>). This simulation does not estimate or demonstrate the overall effect of Paul's proposal on the U.S. income tax system; instead, it simply uses that proposal as a framework to illustrate the trends that might develop if a flat tax were to 1) replace individual itemized deductions with a larger standard deduction, and 2) replace the current graduated income tax rates with one revenue-neutral tax rate.

As previously mentioned, this simulation ignores many real-life complications, such as tax credits—other than the child tax credit (CTC) and the earned income tax credit (EITC), which have a significant impact at the lower income levels. (For the 2009 tax rate calculations, the authors' estimate the effect of these two credits on the average tax return within an income level, as well as the frequency of the credits within the income level; it is assumed that these credits would be eliminated in a flat tax scenario.)

In addition, this simulation does not consider the alternative minimum tax (AMT), changes in the tax base, and the retention of specific itemized deductions (e.g., charitable contributions, mortgage interest). Furthermore, it ignores any potential changes to business profits (revenues, deductions, consumption taxes). Paul's pro-

posal and other flat tax proposals suggest either keeping, eliminating, or modifying these items. This simulation only looks at the general direction of the tax burden upon replacement of all itemized deductions with a large standard deduction and adoption of a revenue-neutral flat tax rate.

In Paul's proposal, current itemized deductions are replaced with the following standard deductions and exemptions:

Married filing jointly	\$30,320
Single	\$15,160
Head of household	\$19,350
Married filing separately	\$15,160

Surviving spouse	\$30,320
Personal exemptions	\$6,530

These amounts are used in this simulation. To increase comparability between the current tax paradigm and a hypothetical flat tax paradigm, the average number of exemptions for each filing status at each income level in the 2009 IRS Statistics of Income (SOI) data is used in the calculations.

Exhibit 1 presents the percentage of tax filers by income level and filing status, according to the 2009 IRS SOI data. These data are used to create a simulated population for comparison. Of the 200 million tax

EXHIBIT 2 Tax Burden with 2009 Tax Law and a Simulated Flat Tax at 22.43%

Adjusted Gross Income (AGI)	Tax Burden: 2009 Rates	Tax Burden: 22.43% Flat Tax (\$30,320 Std. Deduction)	Estimated Change in Average Tax Per Return	
			Dollars	Percentage
\$1–\$4,999	0.09%	0.00%	(\$77)	(100%)
\$5,000–\$9,999	(0.10%)	0.00%	\$73	100%
\$10,000–\$14,999	(0.45%)	0.00%	\$329	100%
\$15,000–\$19,999	(0.20%)	0.00%	\$162	100%
\$20,000–\$24,999	0.16%	0.00%	(\$148)	(98%)
\$25,000–\$29,999	0.62%	0.55%	(\$75)	(11%)
\$30,000–\$39,999	2.31%	2.14%	(\$106)	(7%)
\$40,000–\$49,999	3.06%	3.09%	\$20	1%
\$50,000–\$74,999	9.76%	10.24%	\$235	5%
\$75,000–\$99,999	9.89%	11.93%	\$1,642	21%
\$100,000–\$199,999	23.96%	28.60%	\$3,160	19%
\$200,000–\$499,999	18.60%	18.64%	\$119	0%
\$500,000–\$999,999	9.08%	7.50%	(\$29,726)	(17%)
\$1,000,000–\$1,499,999	3.94%	3.07%	(\$74,147)	(22%)
\$1,500,000–\$1,999,999	2.38%	1.82%	(\$117,435)	(24%)
\$2,000,000–\$4,999,999	5.89%	4.41%	(\$219,762)	(25%)
\$5,000,000–\$9,999,999	3.38%	2.32%	(\$673,160)	(31%)
\$10,000,000 or more	7.62%	5.69%	(\$2,219,418)	(25%)
Total	100.00%	100.00%		

This exhibit compares the tax burden at different income levels calculated 1) under 2009 tax rates, and 2) under a simulated flat tax that replaces itemized deductions and exemptions with a single standard deduction. Simulated flat tax standard deductions are: married filing jointly, \$30,320; single, \$15,160; head of household, \$19,350; married filing separately, \$15,160; and surviving spouse, \$30,320. The revenue-neutral flat tax rate is 22.43%. The tax burden is calculated as the percentage of tax paid for an AGI level of the total tax calculated for the sample population. For example, the simulated population generated \$919 million in total tax, using 2009 tax rates. The sample of taxpayers with \$10 million or more in AGI generated \$70 million—approximately 7.6%—of the total. Under the flat tax, taxpayers with \$10 million or more in AGI generated \$52 million—approximately 5.7%—of the total.

returns processed each year, the SOI program randomly samples approximately 500,000. The SOI sample creates a proportionate picture of how Americans typically file individual tax returns. The 2009 statistics were the most recent available at the time of the simulation; thus, they were used to compare 1) the relative tax burden between adjusted

gross income (AGI) levels, using 2009 tax rates and average itemized deductions and exemptions within the SOI sample AGI levels, with 2) the relative tax burden between AGI levels under the authors' hypothetical flat tax. Again, calculations using 2009 rates and a simulated flat tax ignored all credits (except the CTC and EITC), the AMT, and

other complicating factors and focused on tax rates and taxable income. Exhibit 1 presents the percentage of taxpayers who filed at different income levels and filing status, according to the 2009 SOI sample. Tax burden (in this comparison) means the percentage of the total estimated tax within the simulated population for each AGI level.

EXHIBIT 3
Graphical Representation of Tax Burden with 2009 Tax Law and a Simulated Flat Tax at 22.43%

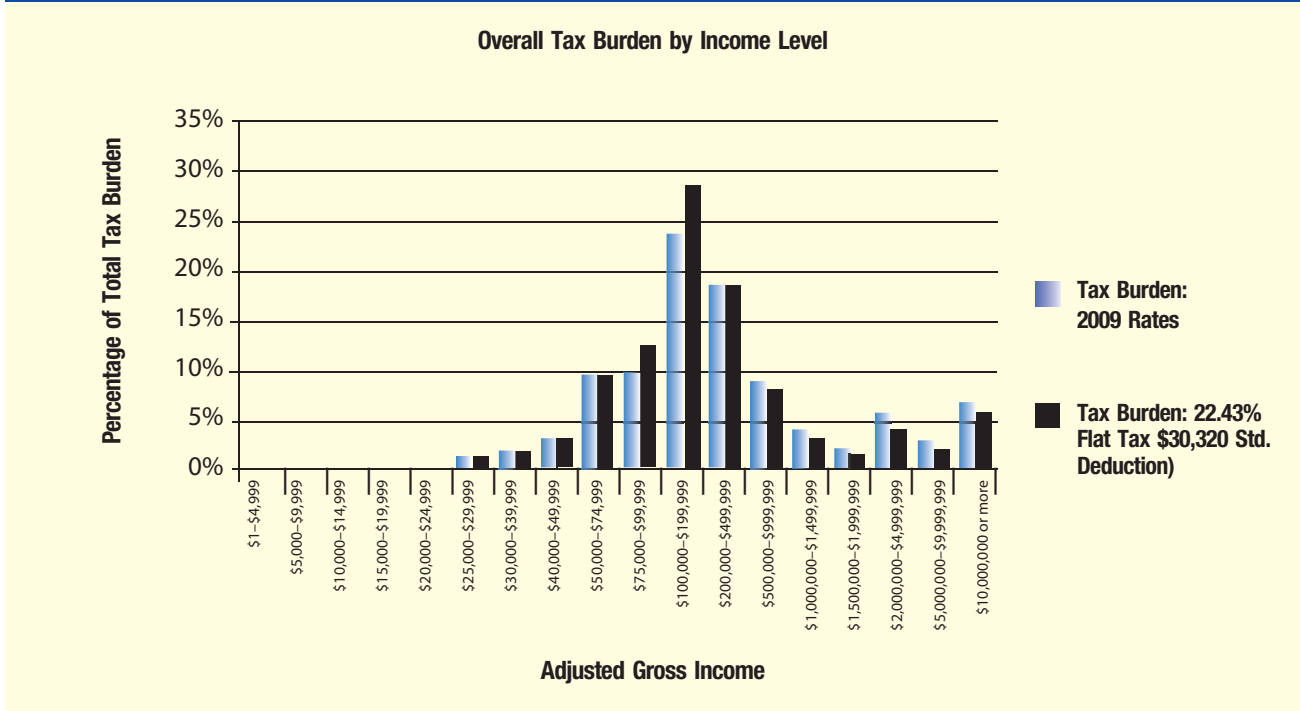
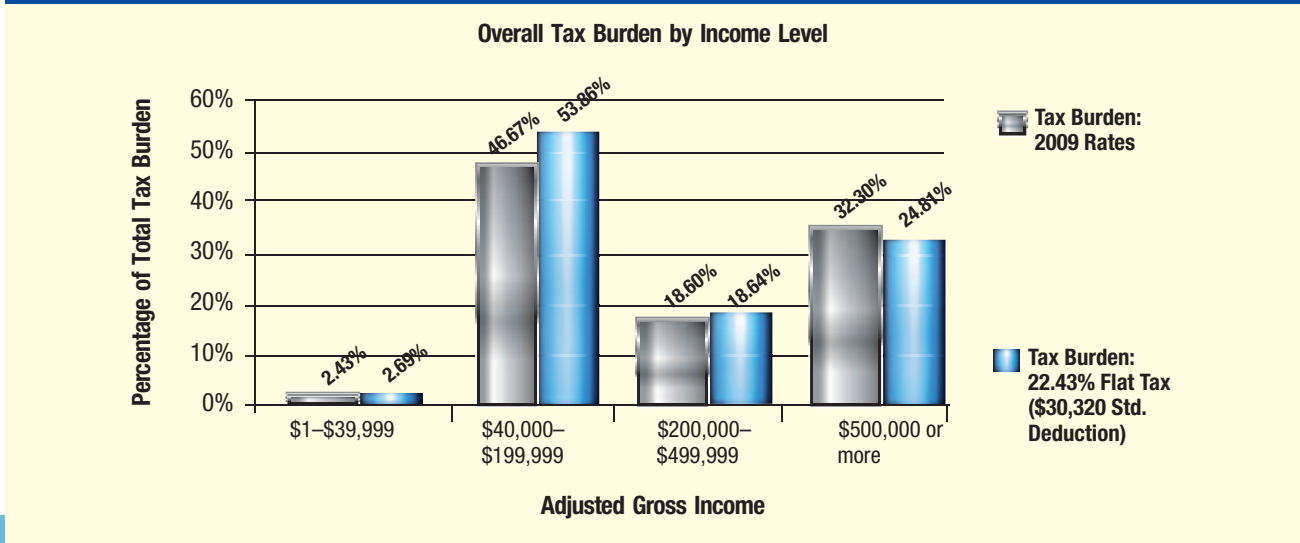


EXHIBIT 4
The Shift in Tax Burden from the 2009 Rates to a 22.43% Flat Tax (Revenue Neutral)



Using the simulated population and 2009 tax rates, the authors estimated the total tax revenue produced. (Only groups with positive income were used.) Next, the authors estimated the percentage of this total tax paid by each income level within the simulated population. This simulated flat tax scheme required a flat rate of 22.43% to be revenue neutral. This rate is different from many other suggested flat tax rates—for example, Paul’s proposal suggested a 17% flat tax rate. This difference is due to differences in specific assumptions (e.g., tax credits, deductions, exemptions) between the simulations and other flat tax proposals.

Exhibit 2 compares the tax burden at different income levels using 2009 tax rates with the simulated flat tax of 22.43%; *Exhibit 3* displays the results graphically. Note that this analysis is “static” because it assumes no change in individual tax planning if a flat tax were enacted. In fact, taxpayers are likely to significantly alter their behavior if the current tax system were to change. (The 2009 tax burden distribution in this simulation is very similar to that calculated annually by the Tax Foundation.) The shift in tax burden becomes more apparent when the results are divided into four AGI levels: less than \$40,000, \$40,000–\$200,000, \$200,000–\$500,000, and greater than \$500,000.

Winners and Losers

It is clear from *Exhibit 2*, *Exhibit 3*, and *Exhibit 4* that shifting from a graduated tax rate system with credits and itemized deductions to this hypothetical flat tax would create both winners and losers.

Taxpayers with AGI less than \$40,000 would, on average, pay about the same under the flat tax. The loss of itemized deductions, the CTC, and the EITC under current law would be offset by the larger standard deduction and higher exemption credit under the hypothetical flat tax. Low-income taxpayers pay a small percentage of the total tax burden in either scenario. Taxpayers with an AGI of \$40,000–\$200,000 would, on average, pay more under the flat tax. This makes sense because, under the current law, these taxpayers tend to have more itemized deductions, which would be lost to a flat tax. Furthermore, they would lose the benefit of the 10% and 15% brackets, with all income exposed to a higher, single tax rate (22.43% in this simulation). Taxpayers with an AGI of \$200,000–\$500,000 would, on average, pay about the same under the flat tax as

current law. This is the income level at which the benefits of the flat tax rate begin to take effect. Taxpayers with AGI greater than \$500,000 would pay substantially less under the flat tax, because much of their income would be taxed under the lower flat tax rate than the current higher marginal rates.

Generally, the simulation indicates that, under the flat tax structure used in this simulation, the tax burden would shift from the wealthy to the upper middle class. Modifying tax credits, business income and deductions, and other current aspects of taxable income, however,

EXHIBIT 5
Tax Burden with 2009 Tax Law and a Simulated Flat Tax at 28.97%

Adjusted Gross Income (AGI)	Tax Burden: 2009 Rates	Tax Burden: 28.97% Flat Tax (\$60,640 Std. Deduction)	Estimated Change in Average Tax Per Return	
			Dollars	Percentage
\$1–\$4,999	0.09%	0.00%	(\$77)	(100%)
\$5,000–\$9,999	(0.10%)	0.00%	\$73	(100%)
\$10,000–\$14,999	(0.45%)	0.00%	\$329	(100%)
\$15,000–\$19,999	(0.20%)	0.00%	\$162	(100%)
\$20,000–\$24,999	0.16%	0.00%	(\$147)	(98%)
\$25,000–\$29,999	0.62%	0.68%	\$70	11%
\$30,000–\$39,999	2.31%	2.64%	\$211	14%
\$40,000–\$49,999	3.06%	3.39%	\$278	11%
\$50,000–\$74,999	9.76%	7.94%	(\$894)	(19%)
\$75,000–\$99,999	9.89%	6.78%	(\$2,492)	(31%)
\$100,000–\$199,999	23.96%	25.77%	\$1,231	8%
\$200,000–\$499,999	18.60%	21.36%	\$7,935	15%
\$500,000–\$999,999	9.08%	9.28%	\$3,870	2%
\$1,000,000–\$1,499,999	3.94%	3.87%	(\$5,670)	(2%)
\$1,500,000–\$1,999,999	2.38%	2.31%	(\$15,176)	(3%)
\$2,000,000–\$4,999,999	5.89%	5.64%	(\$36,607)	(4%)
\$5,000,000–\$9,999,999	3.38%	2.98%	(\$252,926)	(12%)
\$10,000,000 or more	7.62%	7.34%	(\$325,014)	(4%)
Total	100.00%	100.00%		

This exhibit compares the tax burden at different income levels calculated 1) under 2009 tax law and rates, and 2) under a simulated flat tax that replaces itemized deductions and exemptions with a single standard deduction. Simulated flat tax standard deductions are married filing jointly, \$60,640; single \$30,320; head of household, \$38,700; married filing separately, \$30,320; and surviving spouse, \$60,640. The revenue-neutral flat tax rate is 28.97%. The tax burden is calculated as the percentage of tax paid for an AGI level of the total tax calculated for the sample population. For example, the simulated population generated \$919 million in total tax, using 2009 tax rates. The sample of taxpayers with \$10 million or more in AGI generated \$70 million—approximately 7.6%—of the total. Under the flat tax, taxpayers with \$10 million or more in AGI generated \$67 million—approximately 7.3%—of the total.

could substantially change this general trend.

Increasing the Standard Deduction

It is frequently argued that the inequities resulting from a flat tax can be remedied by increasing the standard deduction. That might be true, but if a flat tax is to be revenue neutral (as would be in the government's interest), increasing the standard deduction also means increasing the flat tax rate and further shifting the tax burden from one group to another.

To see the effect of a higher flat tax standard deduction, the authors repeated the simulation by doubling the flat tax standard deductions:

Married filing jointly	\$60,640
Single	\$30,320
Head of household	\$38,700
Married filing separately	\$30,320
Surviving spouse	\$60,640

The revenue-neutral flat tax rate in this modified simulation is 28.97%. *Exhibit 5* compares the tax burden at different income levels with 2009 tax law and rates with the simulated flat tax rate of 28.97%. *Exhibit 6* compares the tax burden between a 22.43% flat tax with lower standard deductions and a 28.97% flat tax with higher standard deductions. It demonstrates that higher standard deductions shift the tax burden away from the middle class and more toward the wealthy.

Examples. Because the simulation estimates the effect of a flat tax on large groups of taxpayers, it might be helpful to look at specific individual examples. *Exhibit 7* compares the tax liability of several taxpayers under both 2009 tax law and the simulated flat tax of 22.43% (with no itemized deductions and a large standard deduction).

A different picture emerges within specific examples. Whereas the *average* tax burden under the simulated flat tax shifts to the \$40,000–\$200,000 and \$200,000–\$500,000 income ranges, the *specific* tax burden for four examples of taxpayers in this range, shown in *Exhibit 7*, is *lower* under the flat tax. This illustrates the need to examine each taxpayer's situation individually when evaluating the effect of a flat tax.

Recent Changes

It is important to note that many tax law changes have occurred since 2009—the base year used for this simulation's calculations—and subsequent data could alter this analysis. For example, several provisions of the American Taxpayer Relief Act of 2012 (ATRA) increase taxes for high-income taxpayers above pre-2012 levels. The top marginal rate for high-income taxpayers increases to 39.6% at certain taxable income thresholds. The 39.6% rate applies to 1) married filing jointly (MFJ) and surviving spouse taxable income

greater than \$450,000, 2) head of household taxable income greater than \$425,000, 3) single taxable income greater than \$400,000, and 4) married filing separately (MFS) taxable income greater than \$225,000.

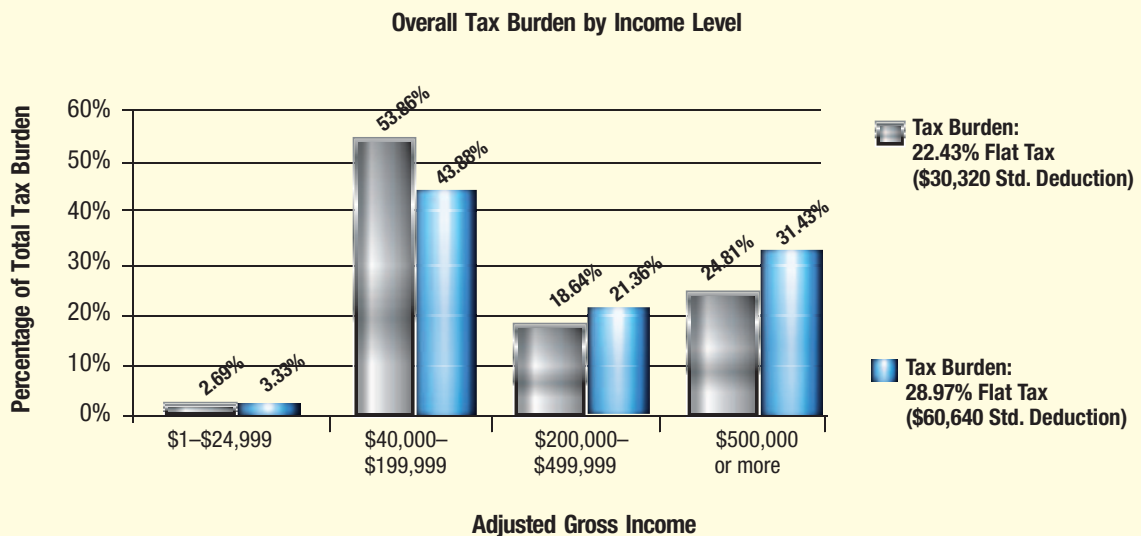
The top tax rate for long-term capital gains and qualified dividends increases to 20% at the same thresholds. The total number of exemptions claimed by taxpayers whose AGI exceeds certain thresholds is reduced by 2% for each \$2,500 (or portion thereof) by which the taxpayer's AGI exceeds the following thresholds: 1) MFJ and surviving spouses, \$300,000; 2) head of household, \$275,000; 3) single, \$250,000; and 4) MFS, \$150,000.

The limitation on itemized deductions is reinstated for high-income taxpayers at the same thresholds. The net effect of these and similar changes appears to increase the tax burden for high-income taxpayers.

Looking to the Future

The flat tax concept has enjoyed political popularity recently, increasing the prospects that it might actually be implemented. Taxpayers look to CPAs for expert opinions regarding tax issues and naturally expect tax professionals to advise them on which tax proposals will be beneficial to their interests. Therefore, CPAs should have informed opinions about the flat tax and other relevant tax policy issues.

EXHIBIT 6
Comparison of the Tax Burden between a 22.43% Flat Tax and a 28.97% Flat Tax with a Larger Standard Deduction



But forming opinions is difficult because most flat tax proposals are vague—and even if they were not, it is unlikely that any particular proposal would survive the legislative process unchanged. It is possible, though, to make a reasonable guess as to the general outline of a flat tax. Recent proposals provide an indication for how a flat tax might eventually emerge, and they point to a flat tax that would likely eliminate (or substantially reduce)

itemized deductions for individual taxpayers and replace them with a single standard deduction, or a series of standard deductions.

This simulation uses such a model to estimate the resulting shift in the tax burden, assuming that the flat tax was designed to be revenue neutral. Generally, the burden appears to shift from the wealthy to the middle class; however, each taxpayer is different and what might be true

for the average taxpayer within a filing status and income category might not be true for any specific taxpayer. □

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EXHIBIT 7
Specific Examples

	Tax under 2009 Rates	Flat Tax at 22.43%	Increase (Decrease)
Status: Married Filing Jointly (MFJ) Gross income: \$350,000 2009 exemptions (4): \$14,600 Flat tax exemptions: \$26,120 Itemized deductions: \$50,848 Flat tax standard deduction: \$30,320	\$71,723	\$65,846	(\$5,877)
Status: MFJ Gross income: \$150,000 2009 exemptions (4): \$14,600 Flat tax exemptions: \$26,120 Itemized deductions: \$29,519 Flat tax standard deduction: \$30,320	\$18,845	\$20,986	\$2,141
Status: MFJ Gross income: \$50,000 2009 exemptions (4): \$14,600 Flat tax exemptions: \$26,120 Standard deduction: \$11,400 Child tax credit: \$2,000 Flat tax standard deduction: \$30,320	\$765	\$0	(\$765)
Status: Single Gross income: \$350,000 2009 exemption (1): \$3,650 Flat tax exemption: \$6,530 Itemized deductions: \$52,595 Flat tax standard deduction: \$15,160	\$82,082	\$73,640	(\$8,442)
Status: Single Gross income: \$150,000 2009 exemption (1): \$3,650 Flat tax exemption: \$6,530 Itemized deductions: \$25,568 Flat tax standard deduction: \$15,160	\$27,539	\$28,780	\$1,241
Status: Single Gross income: \$50,000 2009 exemption (1): \$3,650 Flat tax exemption: \$6,530 Standard deduction: \$5,700 Flat tax standard deduction: \$15,160	\$6,351	\$6,350	(\$1)

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