

# Chapter Three

## Tax Basics

Form **1040**

US Department of the Treasury - INTERNAL REVENUE SERVICE  
Individual Income Tax Return

**1976**

FOR THE YEAR JANUARY 1 - DECEMBER 31, 1976, OR WHATEVER YOU GET AROUND TO IT

Name <b>JEFF MACNELLY</b>		Last Name <b>MACNELLY</b> Second-to-Last Initial		STARCH? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> CUFFS		FOR IRS USE ONLY	
Present Address of Addressee (must be filled out by Addressor or legal Guardian of Aforementioned (unless greater than Line B above)) <b>The RICHMOND News Leader</b>									
City, Town, Post office, STATE (NO ZIP)				IS YOUR ADDRESS GREATER THAN LINE 41 P? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes IF YES, WHY?		OCC - YOURS <input type="checkbox"/> PATRON <input type="checkbox"/> SPOUSE		YOU ARE HERE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Requested by DEPARTMENT OF AGRICULTURE		A. HOW MANY TALKING CHICKENS DO YOU OWN? 0.		DO YOU LIVE WITHIN 2 MILES OF A DECENT PIZZA PLACE? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> EXTRA CHEESE		D. Have you Rotated your Tires Lately? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		IF NO, FILE IRS Tire Rotation Schedule L	
B. NAMES		C. DO ANY OF THEM PLAY THE OBOE? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						E. Yes? <input type="checkbox"/> No <input checked="" type="checkbox"/> F. No? <input type="checkbox"/> Yes	
Filing Status		Exemptions		41 a REGULAR? <input type="checkbox"/> yourself? <input type="checkbox"/> Spouse <input type="checkbox"/>		b Names of Dependent children who lived with you Why?		ENTER NUMBER OF BOXES CHECKED	
1 <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Sacrifice Fly				c Just First names, Dummy . . . . .				CHECK NUMBER OF BOXES ENTERED	
2 <input type="checkbox"/> Married Filing Singly joint return (even if spouse is married SEPARATELY)				4 Do you weigh more than last year's tax form?				ENTER NUMBER OF CHECKED BOXES	
3 <input type="checkbox"/> Joint married singly separate spouse (but FILING DOUBLE JOINTED)				e Number of Parakeets subtracted from Gross Rotated Income (PLUS LINE 27 - UNLESS GREATER THAN TWELVE MILES)				DO NOTHING HERE	
4 <input type="checkbox"/> Head of Household filing separate but joint return (if UNMARRIED BUT JOINTLY SINGLE)				f How many inches in a liter?					
5 <input type="checkbox"/> Head of joint filing single file spouse's separately.				7 a Total Confusion (add lines 6e and f, g, fold in eggs, heat until firm) . . .					
6 <input type="checkbox"/> Widower(s) with separate dependent filing out of joint return singly									
8 Presidential Election Campaign Fund . . .		DO YOU WISH TO DESIGNATE \$1 OF YOUR TAXES TO THIS WORTHY CAUSE? . . . . .		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		ISN'T THIS A DUMB LAW? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		NOTE: IF YOU CHECKED YES WE WILL COME AND STEAL ALL YOUR HUBCAPS	
9 Wages, Salaries, Tips, Extortion		ATTACH W-2 FORMS TO YOUR FOREHEAD WITH HEAVY DUTY STAPLES		9.					
10 Remunerations . . . . .		[IF LESS THAN GROSS REIMBURSEMENTS THEN FILE SCHEDULE Q (See Page 14 of "Joy of Cooking")]		10.					
11 Gross Influx . . . . .				11.					
12 Money you made . . . . .		[IF 400 OR LESS, MORE OR LESS, LIST SCHEDULE B WITHOUT NOT FILING IN PART II AND R3. BUT MORE THAN LINE 8]		12.				Think of a number between 1 and 10	
13. What about all that cash you stashed in that jar under the garage?				14. SUBTRACT 13 FROM 14 . . . . .					
				15. (THE ANSWER TO 14 IS . . . . . 1)					
• HOW WOULD YOU LIKE A GOOD SOCK IN THE FACE, FELLA? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
• IF LINE 15 IS BIGGER THAN A BREADBOX OR MORE, GO TO LINE 43 TO FIGURE TAX									

TAX RATE SCHEDULE X, Y, OR 12  See Page 7 of INSTRUCTIONS CHECK HERE

Courtesy of www.jeff-macnelly.com

As the Pulitzer Prize-winning cartoon that opens this chapter suggests, our income tax system has become a running joke. Many Americans do not understand what determines their tax liability and why it may differ from their neighbors' tax bill. Few can understand why our tax returns require us to make the calculations that they do. Tax lawyers and scholars who testified at our meetings conceded even they do not understand the inner workings of the tax system. But understanding the mechanics of tax computation – under either our current system or other potential systems – is crucial to reforming the tax code. This chapter explains how to analyze the tax code – not just from the perspective of the government, but from the point of view of the taxpayer. It goes through the basic steps involved in calculating a tax bill (shown in Figure 3.1) to explain our current tax code and alternative tax systems. This brief tour will introduce important concepts used throughout the remainder of the report.

Designing a tax system involves choices. Defining the “tax base,” or what will be taxed, setting a rate structure, and deciding how taxes will be collected determines much more than how much an individual or family pays. These decisions have consequences

for how different economic activities are taxed or “what is taxed,” how the tax burden is distributed across taxpayers, what are the administrative and compliance costs of the system, and how our tax system interacts with our \$12 trillion economy.

## The Tax Base

The *tax base* is the pool of economic activity from which tax revenue is gathered. All else being equal, the broader the tax base, the more revenue a tax system will collect at a given tax rate.

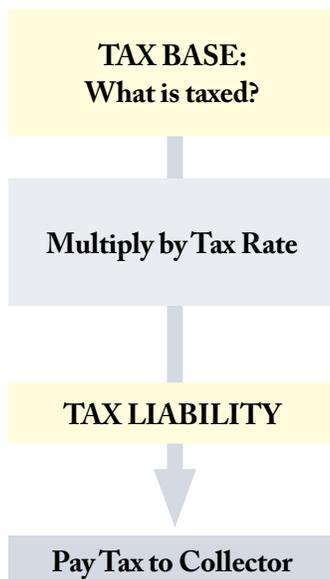
A *comprehensive income tax base*, which is perhaps the broadest tax base, would include all forms of income. Most people think of income strictly in terms of wages. But a comprehensive measure of income also includes anything that allows you to spend more, either now or in the future. Capital gains and losses, dividends, rental income, and royalties all represent income that does not come in the form of wages.

Income can also include noncash increases to wealth, such as health care insurance or other fringe benefits provided by an employer. Some components of income are accruals that do not involve any current cash flows. For example, a stock that has risen in value allows its owner to spend more in the future, and so the increase in value every year should be considered income even if the asset has not been sold. In a comprehensive income tax base, the increase in value of all assets, including homes, would be subject to taxation. In the case of housing, homeowners would also have to declare as income the value they receive by living in their houses rather than renting them out – something economists call “imputed rental income.” All expenses incurred in earning income would be subtracted from the base. Most agree that this construct – recognizing income not just as real but as potential – makes the comprehensive income tax base extremely difficult to implement in practice.

Comprehensive taxation of business income is similarly complex and difficult to implement. Businesses would include all sources of income (receipts from sales, returns on financial assets, etc.) and subtract all expenses incurred to earn income. While it is relatively easy to measure and subtract the cost of inputs that are used up during the year they are purchased, it is much more difficult to properly account for the cost of durable inputs, like machinery, that last for more than one tax period. A consistent definition of income would require that the business be allowed to subtract the decrease in economic value of machinery and other assets including “intangible” assets, such as advertising and copyrights. After all, this decrease in value, called *economic depreciation*, represents an economic cost to the firm. Measuring economic depreciation for different assets is extremely difficult and is one of many intractable complexities encountered when using income as a tax base.

*Is income the only possible tax base?* Income is only one way to define a tax base. Another approach is to tax the value of goods and services that individuals purchase or consume. This approach is referred to as using a *comprehensive consumption tax base*. The major distinction between a consumption tax base and an income tax base is the treatment of savings. Under the comprehensive consumption tax base, people are not taxed until they spend. Under the comprehensive income tax base, they are

Figure 3.1. Calculating the Taxpayer's Bill



taxed from the moment they earn anything – including the returns on saving and investment. As a result, many experts view the comprehensive consumption tax base as better for saving and capital formation, a key determinant of labor productivity and future living standards.

Some proponents of the comprehensive consumption tax base call it a “neutral tax system” because it treats a dollar spent today the *same* as a dollar saved and spent tomorrow. An individual who earns a dollar today, pays taxes on those wages, and then consumes the after-tax proceeds will not pay any further taxes. The earnings would be taxed only once under the consumption tax. In contrast, under an income tax, someone who earns the same amount today and pays the same taxes on wage income, but then decides to save the after-tax proceeds will be subject to a future tax on the investment income generated by this saving.

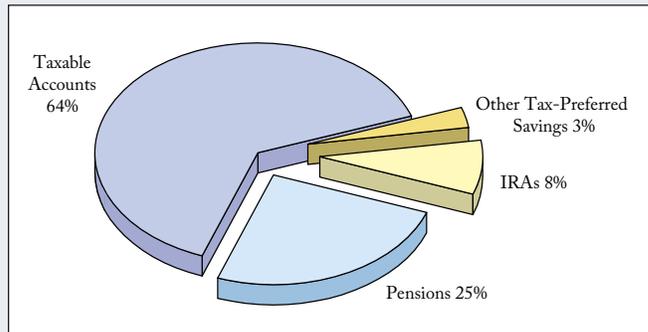
Under a consumption tax, businesses would subtract the cost of all purchases from other businesses, including an immediate write-off, known as “expensing,” for all business assets. Similar to an individual’s treatment under a consumption tax base, businesses would not include returns on financial assets, nor would they deduct their financing costs. As is explained later in this chapter, this is one way, but not the only way to tax consumption.

*What tax base does the U.S. system use?* Our tax base does not follow either model. As illustrated in Chapter One, it most closely resembles an income tax base system, but does not include certain forms of both cash and noncash income that would be part of a comprehensive income tax base. For example, employer contributions to health plans are not taxed in our current system. These *exclusions* significantly narrow the base. For example, the value of all noncash employee benefits in 2002 was approximately \$1.1 trillion – equal to about 10 percent of the total size of the economy. Only a small fraction of that amount was subject to tax.

The current system also deviates from a pure income tax by excluding significant amounts of investment income through tax preferences for savings. This feature of our tax system resembles, or moves it towards, a consumption tax. In fact, over one-third of the proceeds from household savings are effectively exempt from taxation – meaning that these financial assets receive the equivalent of consumption tax treatment (see Box 3.1). The other two-thirds of household savings are taxed as they would be under an income tax. Several economists who testified before the Panel said that the current tax system is based on neither a pure income nor a pure consumption tax, but is really a *hybrid tax system* – a tax system with both income tax and consumption tax features.

### Box 3.1. Taxes and the Return on Household Financial Assets

Relative to a pure income tax, the current U.S. tax system reduces the tax on the return to saving through tax-preferred savings accounts (e.g., IRAs, pensions, and college savings accounts), faster write-off of investment (e.g., expensing and accelerated depreciation), and lower tax rates on dividends and capital gains. As shown below, over one-third of the return on household financial assets is effectively exempt from taxation (excluding the effects of the corporate tax).

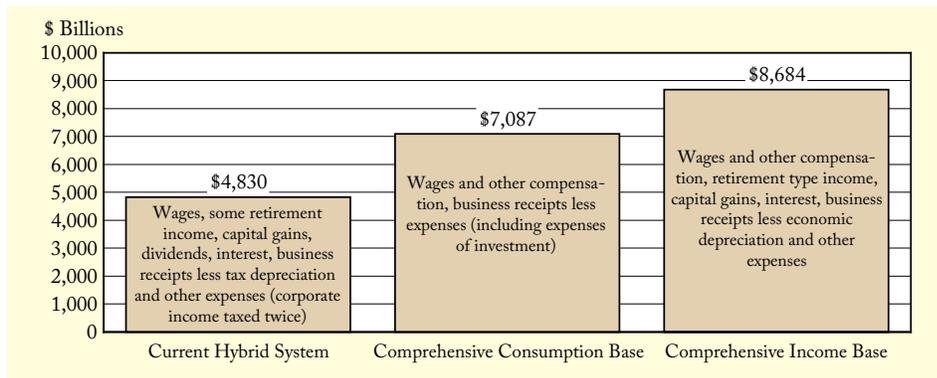


Source: Department of the Treasury, Office of Tax Analysis.

There are also some features of the current tax system that are inconsistent with both an income tax and a consumption tax. The lack of taxation on the implicit rental value of owner-occupied housing is an example. This tax provision is consistent with neither income nor consumption taxation. The double taxation of corporate profits - once when earned at the corporate level and again at the individual level when received by shareholders - is another example.

As summarized in Figure 3.2, our hybrid tax system has a much smaller tax base than it would under either a comprehensive income tax or a comprehensive consumption tax. Various exclusions, deductions, and credits leave the current hybrid tax base about half as large as a broadly defined income tax base. Our tax system also relies on depreciation rules that generally provide a more rapid, or accelerated, write-off of investment than on rules that try to replicate economic depreciation.

Figure 3.2. Alternative Tax Bases, 2001

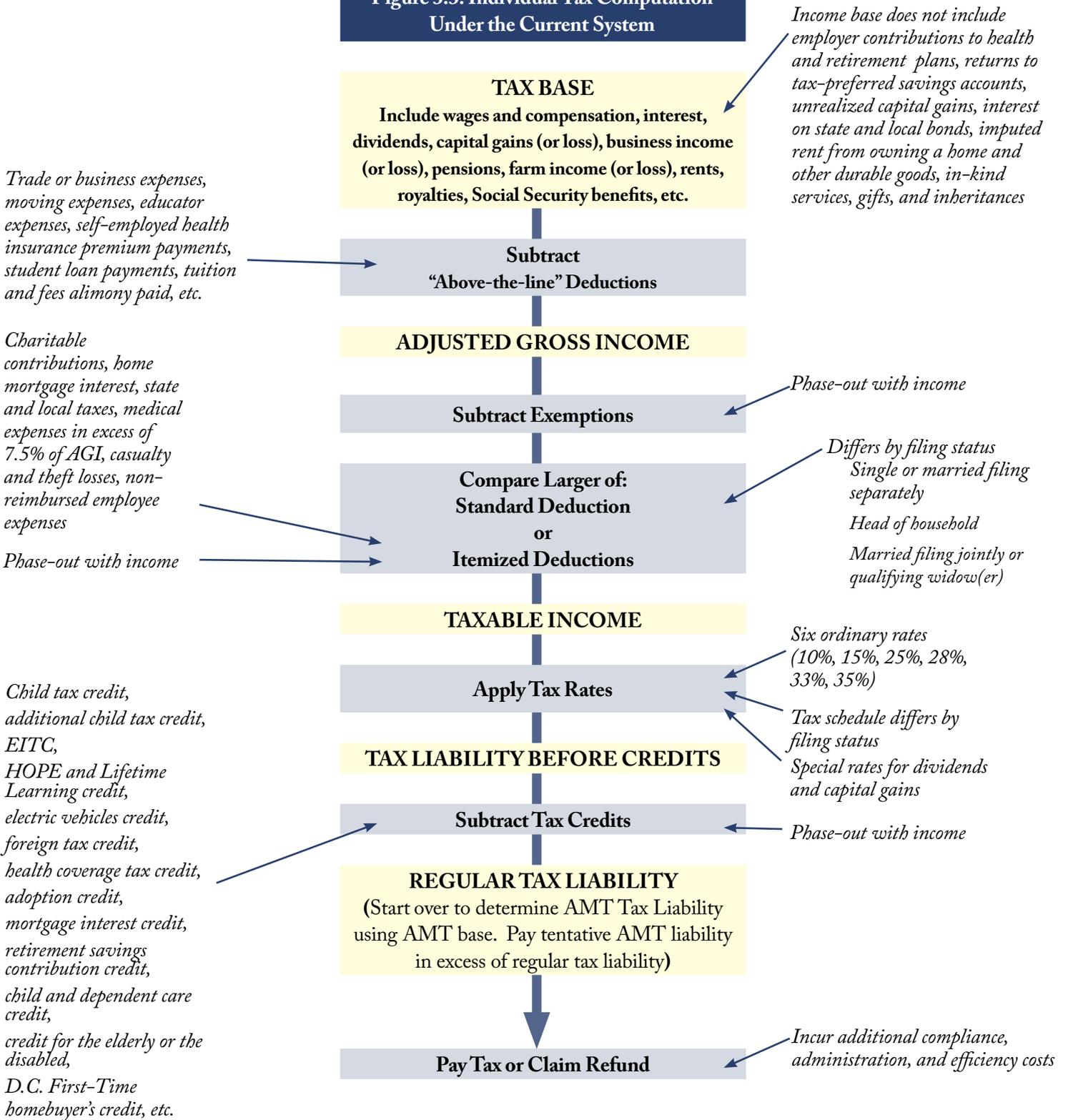


Source: Department of the Treasury, Office of Tax Analysis.

### Calculating Tax Liability in Our Current System

As the history of our tax code suggests, calculating tax liability in our current system is not as simple as the four-box diagram shown in Figure 3.1. Figure 3.3 is a more accurate representation of the many steps involved in calculating taxes owed under the current personal income tax system. Taxpayers start by adding up their taxable income from different sources: wages and salaries, taxable dividends, taxable interest, rents, royalties, capital gains, business income (or losses), taxable pensions and annuities, taxable Social Security benefits, etc. This income, called *gross income*, is the starting point for the tax calculation. Arriving at each of these components often involves its own set of calculations. Under current law, taxpayers are allowed to deduct certain expenses, such as the costs of moving for a new job or their contributions to individual retirement accounts, from gross income. After taking into account these adjustments, sometimes called “above-the-line” deductions, the taxpayer takes the resulting amount, called *adjusted gross income (AGI)*, and applies further adjustments to calculate taxable income.

**Figure 3.3. Individual Tax Computation Under the Current System**



*How is taxable income determined?* **Taxable income**, in mathematical terms, equals AGI minus applicable exemptions and deductions. Exemptions and deductions remove a further amount of income from the tax base. In certain cases, these tax provisions, or **tax preferences**, are in place to encourage certain kinds of economic activity, such as the purchase of homes. In other cases, these preferences are in place to generate a certain kind of social good, such as charitable giving. In still other cases, these preferences are in place to provide assistance to low or moderate-income Americans, especially those with children, by lowering their taxes. Finally, some tax preferences, like the personal exemption discussed in the next paragraph, are designed to reflect a taxpayer's ability to pay taxes. Tax preferences have varying effects and success in achieving their goals.

*What is an exemption?* Most taxpayers in our system are eligible to exclude a certain amount of income from taxes. This **exemption** depends on family size. For example, a single taxpayer claims one exemption and married taxpayers with two children (or other dependents) claim four exemptions. Not every taxpayer is allowed to claim an exemption. Personal exemptions are phased out for higher income taxpayers with AGI in excess of certain amounts. The personal exemption is an example of a tax preference designed to adjust tax liabilities for family size that, for revenue reasons, is not available to higher-income taxpayers.

*What are deductions?* **Deductions**, like exemptions, are subtracted from AGI to determine taxable income. Taxpayers are allowed to choose whether to subtract a **standard deduction** amount determined by filing status – such as single or married – or to subtract the total of their **itemized deductions**. It is up to taxpayers to calculate their itemized deductions and claim them if the total is greater than their standard deduction.

Only specific expenditures may be claimed as itemized deductions. Many of the most prominent tax preferences, including deductions for charitable contributions, home mortgage interest, and state and local taxes, come in the form of itemized deductions.

The benefits of these deductions are not spread evenly among taxpayers for several reasons. First, most taxpayers do not itemize their deductions, and those who do tend to have higher incomes than those who do not. The Internal Revenue Service reports that only 34 percent of taxpayers claimed itemized deductions in 2003. Among the taxpayers who did so, over 60 percent had AGI of more than \$50,000. By comparison, only 12 percent of taxpayers claiming the standard deduction had AGI of more than \$50,000 in 2003.

Second, the value of a deduction (or exclusion) is worth more to a taxpayer in a higher tax bracket than to a taxpayer in a lower tax bracket. The reason is simple: A \$1,000 deduction reduces taxes owed to the government by \$350 for someone in the top 35 percent tax rate bracket; but it reduces taxes by only \$150 for a taxpayer in the 15 percent tax bracket.

Although deductions are worth more to taxpayers in higher tax brackets, the tax code has been written to phase out most deductions when a taxpayer reaches a certain income level. These trigger points are typically at different levels of income and vary based on filing status. Phase-outs add a significant amount of complexity to the process of filling out tax returns and lead to the very complicated and unpredictable set of marginal tax rates depicted in Chapter One, Figure 1.2.

## Setting the Tax Brackets

Some low-income taxpayers have zero taxable income after subtracting exemptions and deductions from their adjusted gross income. Nevertheless, these taxpayers must complete the tax form to determine if they are eligible for benefits from several refundable tax credits (as explained later in this chapter). For taxpayers with positive taxable income (that is, positive income after subtracting exemptions and deductions), tax is imposed by applying a tax rate schedule with six tax rate brackets that range from 10 percent to 35 percent. The applicable rate depends on the taxpayer's family filing status. Table 3.1 summarizes the 2005 tax rates for single and married taxpayers.

<b>Tax Rate</b>	<b>Single</b>	<b>Married Filing Jointly</b>
10%	Up to \$7,300	Up to \$14,600
15%	\$7,300 - \$29,700	\$14,600 - \$59,400
25%	\$29,700 - \$71,950	\$59,400 - \$119,950
28%	\$71,950 - \$150,150	\$119,950 - \$182,800
33%	\$150,150 - \$326,450	\$182,800 - \$326,450
35%	\$326,450 or more	\$326,450 or more

Applying the relevant tax rates to taxable income produces the taxpayer's liability. However, certain portions of a taxpayer's income, such as dividends and capital gains, are taxed at special rates that may be lower than the rate that would be paid on an additional dollar of ordinary income – requiring yet another set of calculations.

*What is a tax credit?* Like deductions, exemptions, and exclusions, **tax credits** provide taxpayers with a tax benefit. However, tax credits are applied after the taxpayer's tax liability is calculated; they are subtracted, just like a coupon at the supermarket.

Depending on how a tax preference is designed – as a deduction, exemption, or credit – it can have different impacts on taxpayers at different income levels. For example, we have already seen how tax deductions and exemptions are more valuable to higher-income taxpayers. Since tax credits provide a dollar-for-dollar decrease in tax liability for all taxpayers who pay tax, they provide an equal benefit to taxpayers at all income levels. Tax credits can also be made refundable. A refundable tax credit is like a gift certificate that can be exchanged for cash. Even if a taxpayer has too little income to actually owe income taxes, he or she may be able to claim a refund equal to the amount of the tax credit that exceeds tax liability. The earned income tax credit (EITC) and the child tax credit are two examples of refundable credits.

In recent years, lawmakers have enacted rules that phase out some tax credits for higher-income taxpayers. This limits the cost of tax credits, but also raises the marginal tax rate, or the tax paid on a taxpayer’s last dollar of income, above the rate normally paid by the taxpayer. Consider, for example, a taxpayer in the 28 percent bracket who claims credits that begin to phase out at a rate of \$5 for every extra \$100 earned. By this measure, each additional \$100 earned by the taxpayer increases tax liability by \$28, but *decreases* the value of tax credits by \$5. The tax on the additional \$100 of earnings is not \$28, but \$33, and the taxpayer’s marginal tax rate (the rate applied to the last dollar earned by the taxpayer) is not 28 percent (\$28/\$100), but 33 percent (\$33/\$100).

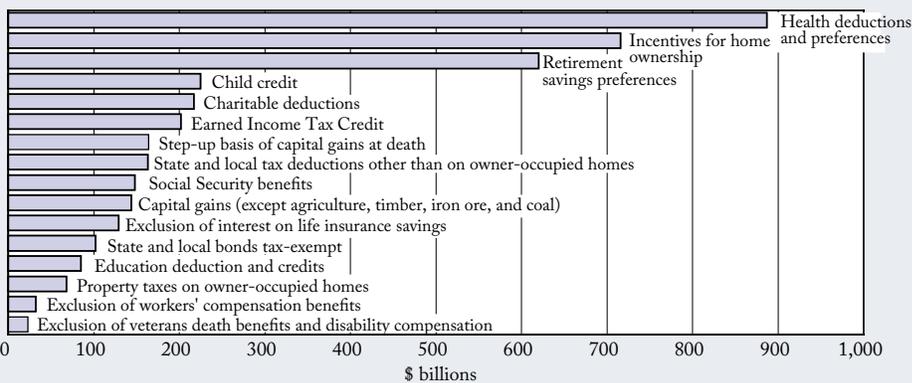
Phase-outs are so pervasive in our system that one recent study found that more than one out of every five taxpayers faced actual marginal tax rates (called “effective marginal tax rates”) higher than their statutory rates in 2003. This was even more common among higher-income households: More than half of taxpayers with AGI of \$100,000 or above faced effective marginal tax rates greater than the statutory rate.

**Box 32. The Cost of Tax Preferences**

Because of the rising use of special tax provisions, policymakers maintain a “tax expenditure budget” to track tax preferences, whether in the form of credits, deductions, exclusions, or exemptions. The tax expenditure budget lists the subsidy cost of tax preferences – what the government would collect in revenue if any given tax preference did not exist. There does not appear to be any institutional process to evaluate on a regular basis the effectiveness of these tax preferences.

The most recent budget lists 146 tax expenditures, most of which relate to the individual income tax system. The largest tax expenditures, grouped by major category, are the exclusion from income for employer-provided health insurance, incentives for home ownership, tax-preferred retirement savings, the deduction for charitable contributions, the child tax credit, the EITC, the step-up in basis of capital gains upon death, and state and local tax deductions.

**Largest Individual Tax Expenditures (FY 2006–2010)**



Note: Incentives for home ownership category does not include the exclusion of net imputed rental income on owner-occupied homes of \$185.2 billion.  
 Source: Department of the Treasury, Office of Tax Analysis.

*Double-checking: Does the Alternative Minimum Tax apply?* After all these calculations, a taxpayer arrives at the moment of truth: the final tax bill. However, many taxpayers still need to consider whether they owe more taxes under the AMT. As explained in Chapter One, the AMT uses a different definition of the tax base, a higher level for exemptions, and fewer tax preferences than the regular income tax. And because the threshold for paying the AMT has never been indexed to inflation, more and more Americans are forced to consider whether they face a higher tax bill under this secondary tax system.

## Paying the Tax

Because of exclusions, exemptions, deductions, and credits, a large percentage of income is never taxed, and most low-income families pay little, if any, income taxes. In some cases, refundable credits provide these families with an additional amount of money that helps offset other federal taxes paid, such as payroll taxes. As detailed in Table 3.2, a typical family of four will pay no income tax in 2005 on the first \$41,000 of income it earns. The amount of income at which a family starts to pay tax is sometimes called the *tax threshold* and has important implications for how the burden of the tax is distributed and how people participate in the tax system and support the federal government.

Table 3.2. Components of Income Tax Thresholds for 2005			
	Single, no children	Single, two children	Married, two children
Standard deduction	\$5,000	\$7,300	\$10,000
Personal exemptions	\$3,200	\$9,600	\$12,800
Income not subject to tax before credits	\$8,200	\$16,900	\$22,800
<b>Tax threshold:</b> Income not subject to tax after earned income and child tax credits	\$9,737	\$34,620	\$41,000

Source: Department of the Treasury, Office of Tax Analysis.

In 2002, over 30 percent of taxpayers who filed a tax return – 39 million of 130 million returns filed – either owed no tax or received a refundable credit. An additional 15 million taxpayers earned less income than the total of the standard deduction and personal exemption and, therefore, were not required to file a return. In all, approximately 40 percent of families paid no income tax directly.

It is worth noting that taxpayers do not stay permanently in the status of having a negative, zero, or positive tax liability. As their family and income circumstances change, even from year to year, taxpayers can move in and out of these negative, zero, or positive tax situations. A Department of the Treasury study that followed taxpayers over multiple years suggests that about two-thirds of taxpayers in the bottom (zero rate) bracket in the first year had moved to a higher bracket after 10 years, the vast majority moving to either the 10 or 15 percent tax brackets. This fluidity is important because simply taking people “off the rolls” may not take them out of the system for any significant length of time.

*Who really pays the tax?* When the calculation is complete and the tax owed (or the refund due) is finally determined, the taxpayer signs the tax form and sends it to the Internal Revenue Service (either electronically or through the mail). In the case of the income tax, the amount of tax owed is paid directly to the federal government. Not all taxes imposed on individuals are remitted directly from individuals to the government, however.

One of the most important concepts in understanding how taxes work is that who remits the tax has no relevance on who bears the ultimate burden of the tax or how the tax affects the economy. For example, the legal burden of the payroll tax (Social Security, Medicare, and unemployment insurance) is shared between employers and employees. Economists have found, however, that the burden of the employer’s portion of the payroll tax is largely passed on to employees in the form of lower wages. The *economic incidence* is on workers even though the *legal incidence* of the payroll tax is shared. Box 3.3 explains how market forces, and not who is legally responsible for remitting the tax, determine who bears the economic burden of any tax.



### Box 3.3. Determining Who Bears the Burden of a Tax

Imagine that the government imposed a special tax on ice cream sold from ice cream trucks. If the ice cream truck drivers are able to pass on the tax to their customers in the form of higher prices, the economic incidence of the tax would be on their customers. In this case, the price of ice cream sold from trucks would increase by exactly the amount of the tax. If customers resisted the price increase by buying their ice cream in stores to avoid the tax, and ultimately the only way the truck driver could sell ice cream was by matching the retail price at the store, then the truck driver would bear the economic burden of the tax. In this case, the legal incidence and economic incidence of the tax would be identical.

Understanding the difference between the economic and legal incidence of taxes is important in analyzing both taxes and subsidies. Take the example of tax credits for low-income housing that could be claimed by low-income taxpayers. If the price of low-income housing increases by the amount of the credit, the credit would provide no benefit whatsoever to the low-income household, but enormous value to builders of low-income housing. In this case, market forces would have passed the full benefit of the credit to builders.

## Paying a “Fair Share”

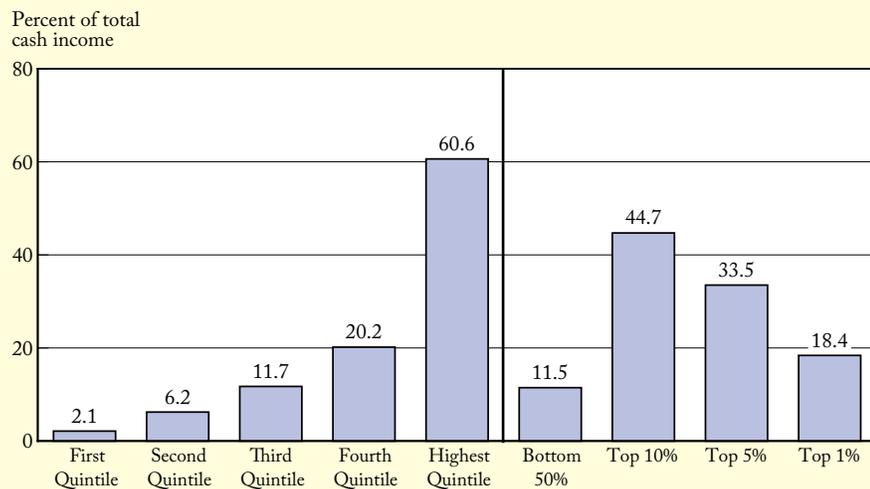
How a tax system is designed determines how the tax burden is distributed. In a progressive tax system, the household's tax burden, measured as tax liability divided by household income, increases as household income rises. Graduated tax rates, exemptions, the standard deduction, and refundable credits all contribute to the progressivity of our tax system.

Another measure of how the burden of our tax system is distributed involves calculating how much of total tax revenue is collected from different income groups. This type of analysis is produced routinely by government organizations, nonprofit organizations, academics, and other groups.

There are many assumptions involved in tax burden analysis and, not surprisingly, different organizations use different methodologies. All analyses start by ranking taxpayers according to a measure of economic well-being intended to approximate “ability to pay.” The Treasury Department uses a measure called “cash income,” based on the income of each household. Cash income consists of wages and salaries, business or farm net income, taxable and tax-exempt interest, dividends, rental income, realized capital gains, cash transfers from the government, and retirement benefits. Employer contributions for payroll taxes and the federal corporate income tax are also added to cash income calculations.

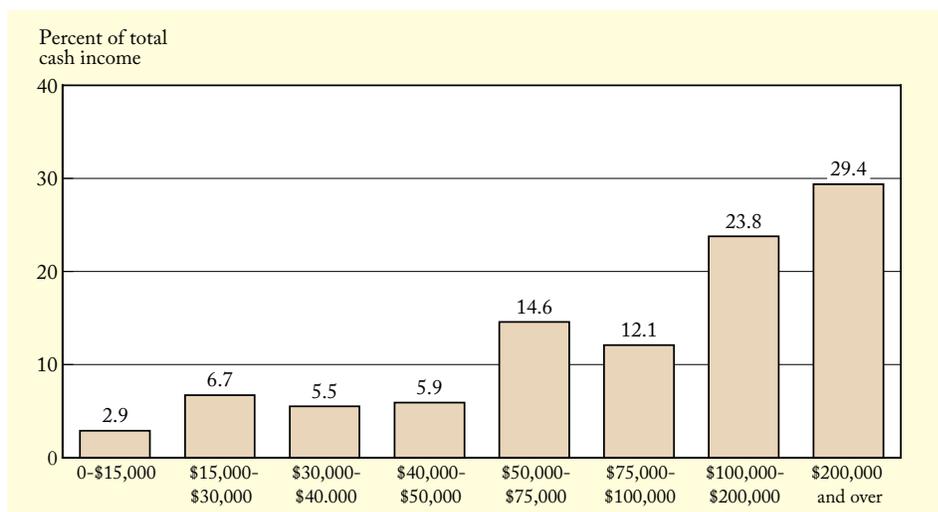
The Treasury Department constructs distribution tables by dividing the entire population of households into income quintiles or cash income levels. Taxes paid are then calculated for each group. The distribution of cash income across quintiles (and the top 10 percent, 5 percent, and 1 percent of taxpayers, as well as the bottom 50 percent of taxpayers) and across cash income levels is shown in Figures 3.4 and 3.5. Figure 3.4 shows that the top 20 percent of households earn about 60 percent of all income and the bottom 20 percent of all households earn about 2 percent of all income.

**Figure 3.4. Distribution of Cash Income Under Current Law by Income Percentile**



Note: Estimates of 2006 cash income levels. Quintiles begin at cash income of; Second \$12,910; Third \$27,461; Fourth \$48,345; Highest \$84,124; Top 10% \$123,706; Top 5% \$169,521; Top 1% \$407,709; Bottom 50% below \$36,738. Source: Department of the Treasury, Office of Tax Analysis.

**Figure 3.5. Distribution of Cash Income Under Current Law by Income Level**



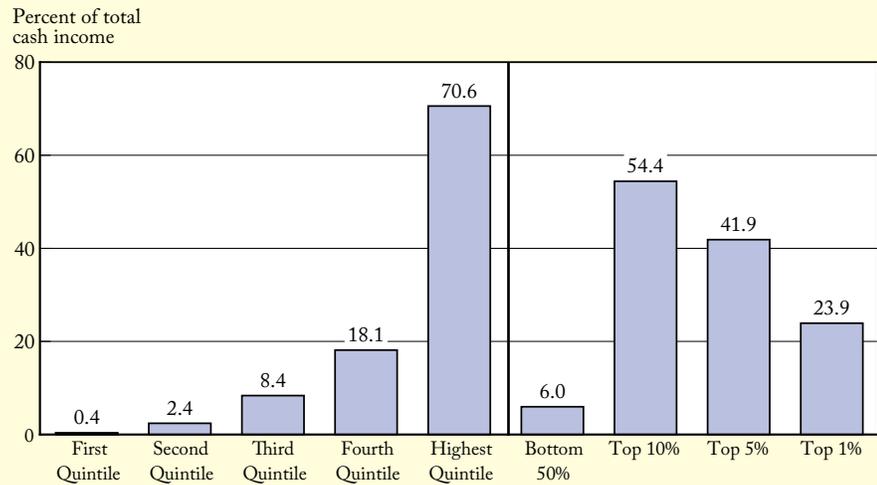
Note: Estimates of 2006 cash income levels.  
Source: Department of the Treasury, Office of Tax Analysis.

The Treasury Department's quintile analysis showing the distribution of all current federal taxes (individual and corporate income taxes, payroll taxes, excise taxes, customs duties, and estate and gift taxes) across cash income quintiles is shown in Figure 3.6. Not surprisingly, given the progressive nature of our tax system, most federal taxes are paid by upper-income taxpayers. Taxpayers in the top 20 percent of the distribution pay 70.6 percent of all federal taxes, while taxpayers in the bottom 20 percent pay 0.4 percent. More than half of federal taxes are paid by taxpayers in the top 10 percent of the distribution. Figure 3.7 provides detail on the distribution of all federal taxes across cash income groups.

The Panel has considered reforms to two important components of the federal tax system: the individual income tax and the corporate income tax. The distribution of these taxes alone is shown in Figures 3.8 and 3.9. Taxpayers in the lowest two quintiles actually receive more in refunds from the federal government than they pay in income taxes and, as a result, have negative tax income burdens. Those taxpayers in the third and fourth quintile pay a relatively small share of the income taxes, 3.8 percent and 13.4 percent, respectively, while those in the top quintile pay over 84 percent of federal income taxes.

As mentioned previously, a number of assumptions are required to produce these estimates. For example, one must make an assumption about how the employer portion of the payroll tax is distributed and how corporate taxes are distributed. The note under Figure 3.6 describes the incidence assumptions used by the Treasury Department. The following discussion focuses on the assumption for the incidence of the corporate income tax since it may have an important effect on the analysis of the Panel's reform plans.

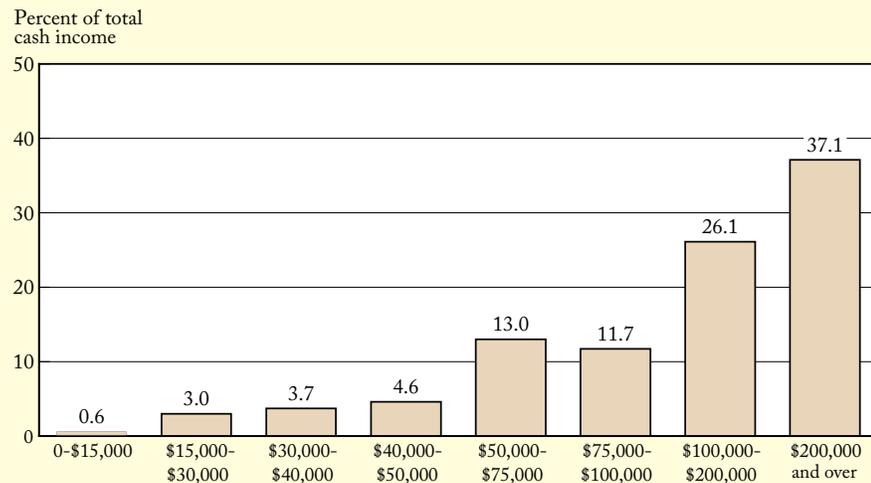
**Figure 3.6. Distribution of Total Federal Tax Burden Under Current Law by Income Percentile**



Note: The Treasury Department methodology assumes the individual income tax is borne by payers, the corporate income tax is borne by capital income generally, payroll taxes (employer and employee shares) are borne by labor, excise taxes on purchases by individuals are borne in proportion to relative consumption of the taxed good and proportionately by labor and capital income, and excise taxes on purchases by businesses and customs duties are borne proportionately by labor and capital income. The estate and gift tax is assumed to be borne by decedents. Estimates of 2006 law at 2006 cash income levels. Quintiles begin at cash income of; Second \$12,910; Third \$27,461; Fourth \$48,345; Highest \$84,124; Top 10% \$123,706; Top 5% \$169,521; Top 1% \$407,709; Bottom 50% below \$36,738.

Source: Department of the Treasury, Office of Tax Analysis.

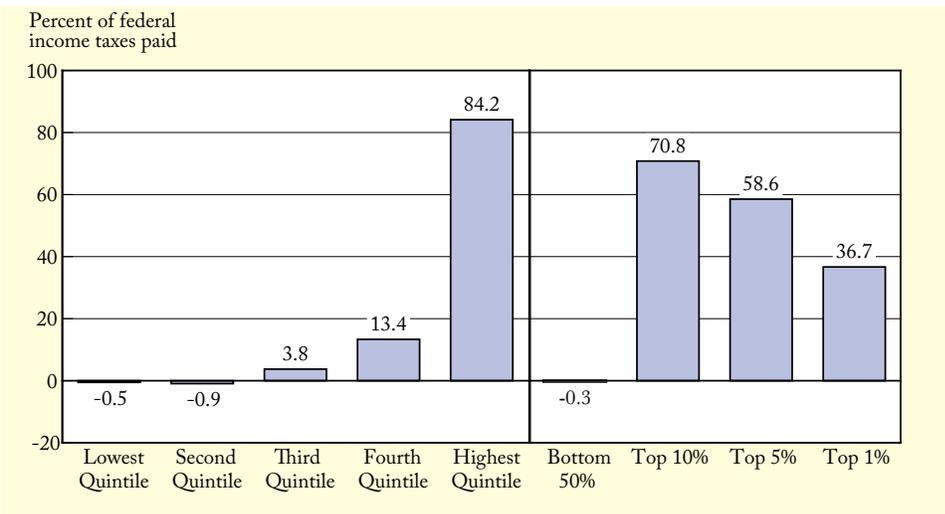
**Figure 3.7. Distribution of Total Federal Tax Burden Under Current Law by Income Level**



Note: Estimates of 2006 law at 2006 cash income levels.

Source: Department of the Treasury, Office of Tax Analysis.

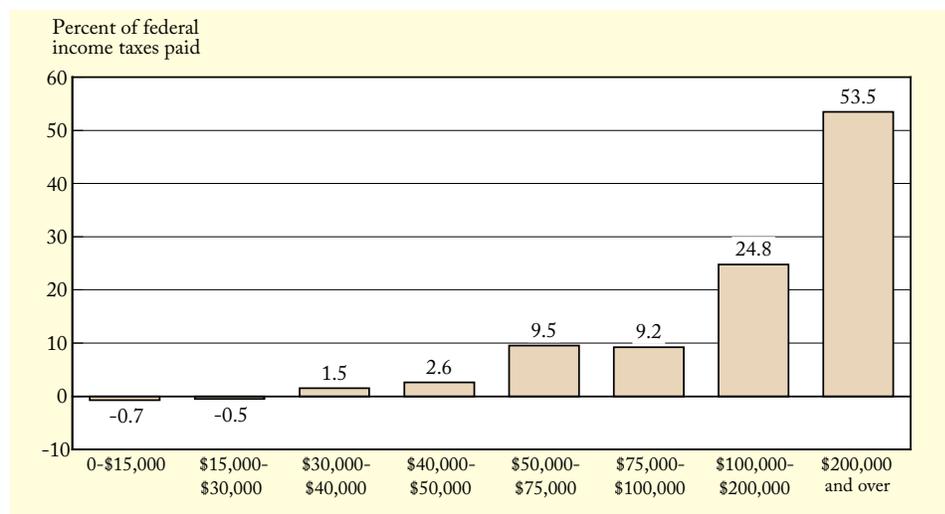
**Figure 3.8. Distribution of Federal Income Tax Burden Under Current Law by Income Percentile**



Note: Estimates of 2006 law at 2006 cash income levels. Quintiles begin at cash income of; Second \$12,910; Third \$27,461; Fourth \$48,345; Highest \$84,124; Top 10% \$123,706; Top 5% \$169,521; Top 1% \$407,709; Bottom 50% below \$36,738.

Source: Department of the Treasury, Office of Tax Analysis.

**Figure 3.9. Distribution of Federal Income Tax Burden Under Current Law by Income Level**



Note: Estimates of 2006 law at 2006 cash income levels.

Source: Department of the Treasury, Office of Tax Analysis.

Only people can bear the burden of taxation. While corporations do remit tax payments to the federal government, the economic burden of the corporate income tax can fall only on people – specifically, shareholders, employees, or customers. The question for those who are trying to analyze the distribution of the corporate income tax is how this burden is divided. Economists at both the Treasury Department and the Congressional Budget Office assume that the burden of the corporate income tax is borne entirely by owners of capital. This means that all individuals who earn capital income (dividends, interest, rents, and capital gains) from both corporate and noncorporate sources are assumed to pay part of the corporate income tax. While this assumption may be reasonable in the short run, the implication is that most of the corporate income tax burden will be borne by high-income households because they are the ones who earn most capital income.

Over time, however, some of the burden of corporate taxes is likely to be shifted to workers and consumers. Because capital owners can choose to invest in the United States or in other nations, when the U.S. raises tax burdens on capital, some investment is likely to flow elsewhere. As the stock of capital in the United States contracts, the return on that capital rises. The smaller stock of capital leads to reduced productivity, however, and lower real wages and correspondingly higher prices. A 1998 survey asked public finance economists from the leading economics departments in the United States what percent of the burden of the corporate tax falls on capital and what percent falls on labor. Although responses varied considerably, the median response was that only 40 percent of the corporate tax is borne by capital owners and the remaining 60 percent is borne by labor.

### **Three Burdens of the Tax System**

The vast majority of taxpayers either hire a paid tax preparer (about 60 percent in 2003) or buy software (more than 25 percent in 2003) to help them complete their tax return on their computer. These costs are examples of one of three types of burdens beyond the cost of the tax itself that a tax system imposes on taxpayers, the government, and the economy as a whole. Taxes create administrative costs for the government, compliance costs for taxpayers, and efficiency costs for the national economy.

*What are administrative costs?* **Administrative costs** are perhaps the easiest costs to understand because they represent the direct costs incurred by the government to manage and administer the income tax system. These costs include the budget of the Internal Revenue Service and other parts of the Treasury Department that help maintain the income tax system, as well as relevant expenses incurred by other government agencies. These costs total more than \$10 billion per year.

### Box 3.4. The Tax Gap

Included in the taxes Americans pay is the hidden cost of noncompliance. On average, the “tax gap” – a term used to describe the difference between the total tax that should have been paid and what taxpayers actually paid on time – costs honest and careful taxpayers an extra \$2,000 each year. In its most recent study, the IRS estimates that the gross tax gap for individual and self-employment taxes was between \$248 and \$290 billion in 2001. The IRS expects to eventually recoup less than \$55 billion of this amount through late payments and enforcement.

The overall noncompliance rate for the individual income tax is between 17.5 and 20.1 percent. Compliance rates are highest where there is third-party information reporting or withholding. For example, less than 1.5 percent of wages reported by employers to the IRS are misreported on individual tax returns. By contrast, individual compliance is lowest in the “cash economy,” where sources of income often are not reported to the IRS. For example, two-thirds of the individual tax gap is attributable to self-employed taxpayers where there is minimal information reporting. The net effect is a subsidy to some individuals and businesses at the expense of others. The subsidy, therefore, distorts the choice about whether to invest or work in the cash or noncash sector.

The IRS has not measured noncompliance among partnerships and corporations for many years, but estimates based on research from older studies suggest that the tax gap for corporations could be as large as \$32 billion, with an overall noncompliance rate of approximately 18 percent.

An important aspect of designing a tax system is how it is administered, because this affects the overall level of compliance. Noncompliance is an issue of fundamental fairness because it forces taxpayers who play by the rules to foot the bill for others who fail to pay. It also erodes confidence in the tax system and undermines voluntary compliance. The tax gap is caused by a variety of factors, such as inadvertent mistakes, technical tax shelters, and outright evasion. Although some cheating is inevitable, the complexity of our tax system is a large part of the problem. A less complicated tax code with more information reporting would reduce the tax gap by making it easier for taxpayers to understand and comply with their tax obligations and would improve the administration of the tax system.

*What are compliance costs?* **Compliance costs** represent the time and resources expended by taxpayers to interact with the income tax system. These costs include the value of individuals’ time spent learning about the tax law, maintaining records for tax purposes, completing and filing tax forms, and responding to any correspondence from the IRS or to an IRS audit. Compliance costs also include amounts paid to others to conduct any of these tasks on behalf of an individual or a business.

Individuals are estimated to spend a total of 3.5 billion hours each year complying with the income tax system. On average, individuals spend 26 hours annually on their taxes, and \$166 per return on out-of-pocket costs for the services of tax professionals, filing fees, and software purchases. Total yearly compliance costs are difficult to estimate, in part because estimating the value of the time people spend on their tax returns is difficult. Nevertheless, the Treasury Department estimates that total costs for complying with the individual income tax amount to

almost \$100 billion per year. In addition, businesses are estimated to spend over three billion hours complying with the tax system, at a total yearly cost of \$40 billion. This total cost of approximately \$140 billion means that one dollar is spent on compliance costs for every nine dollars collected in federal income taxes. Other estimates of total compliance costs are somewhere between \$100 billion to \$200 billion.

*What are efficiency costs?* Finally, the income tax imposes **efficiency costs** on the economy. These costs arise when high tax rates discourage work, savings, and investment; distort economic decisions of individuals and businesses; and divert resources from productive uses in our economy. Our tax code contains all kinds of incentives for taxpayers to favor activities or goods that are taxed less than others. Provisions for the taxation of wages, of gains on the sale of securities and homes, or of other economic activities influence how much people work and save. As one small business owner explained to the Panel, the tax code affects almost every business decision he makes: where to invest, when to invest, how much to invest, what kinds of machines and equipment to use in production, how to finance investment, etc.

When taxpayers change their behavior to minimize their tax liability, they often make inefficient choices that they would not make in the absence of tax considerations. These tax-motivated behaviors divert resources from their most productive use and reduce the productive capacity of our economy. Economic growth suffers as taxpayers respond to the tax laws rather than to underlying economic fundamentals. These distortions waste economic resources, reduce productivity, and, ultimately lower living standards for all.

These effects are profound. Recall the ice cream truck tax example in Box 3.3. If a higher ice cream tax results in higher ice cream prices at ice cream trucks, some consumers will pay that higher cost, but others will not. They will switch to other ways to get their frozen treats – like getting in their car and driving to an ice cream shop that does not have to charge the tax. That decision, and the loss of time spent driving to an ice cream store instead of having it served up in one's front yard, may seem trivial. But if multiplied millions of times throughout the economy, the effects on economic efficiency are enormous. Economists call this the “**excess burden**” of taxation. Its very name indicates that the true cost of a tax exceeds the tax bill people pay or the revenue that is collected.

Federal Reserve Board Chairman Alan Greenspan explained to the Panel that the excess burden, or cost, of the tax code grows more than proportionately as tax rates increase. In fact, economic theory suggests that if you double the tax rate, you quadruple the excess burden. This means that high tax rates have disproportionately high economic costs associated with them.

A recent study estimated that the excess burden associated with increasing the individual income tax by \$1.00 is between \$.30 and \$.50 cents, so the total cost of collecting \$1.00 in additional tax revenue is between \$1.30 and \$1.50, before taking into account compliance or administrative costs. All else being equal, a tax with a lower excess burden is preferable to one with a higher excess burden. The size of the economic pie will be larger, for example, if it costs only \$1.05 to raise a dollar of

revenue instead of \$1.30. To put this into perspective, some studies have suggested that a tax system that removes the penalty against savings by switching the current structure to a progressive consumption tax could potentially increase the size of the economic pie by between 3 and 7 percent.

It would be difficult, however, to imagine a tax system that has no excess burden. Excess burden arises from people adopting less efficient behavior. A tax that does not induce people to alter their behavior would be one that does not depend on behavior at all. For example, a tax imposed on anyone with green eyes would be impossible to avoid for someone with green eyes. A real-life example of this was the poll tax, or flat charge on all adults living in a jurisdiction, which was highly efficient in collecting revenue, but perceived as extremely unfair because it applied equally to all people, regardless of wealth. As a result, these types of taxes have been rejected as revenue raising devices.

For this reason, it is clear that that raising revenue through taxation requires some distortions in the economy. One goal of good tax policy is to minimize these distortions within a “fair” tax structure. The trade-off between fairness and efficiency in raising revenue is one of the central challenges of designing a tax system. Economic analysis can describe the efficiency cost of different taxes, but fairness is much more difficult to define and different policymakers may have different views of what constitutes tax fairness.

### **Is There Another Way?**

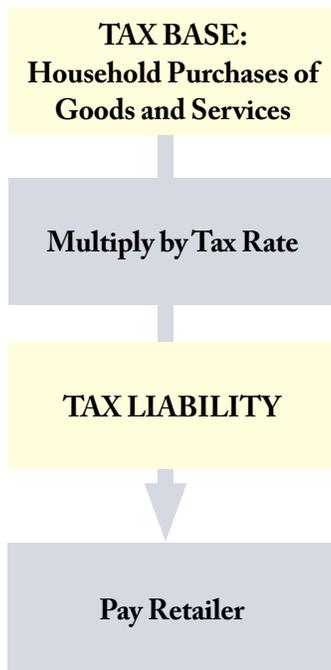
As discussed earlier, the design of a tax system begins with the choice of a tax base. Our current tax system includes a variety of provisions that exempt capital income from taxation and, as a result, move our tax system from a pure income tax base towards more of a hybrid approach. This section briefly explores tax systems that adopt a consumption tax base.

There are several different tax systems built around the taxation of spending or consumption: a retail sales tax, a value-added tax (VAT), a Flat Tax, and a “consumed income” tax. A retail sales tax would tax final sales of goods and services to consumers, with no tax imposed on sales to businesses. Retailers collect this tax and remit tax proceeds to the government. The VAT is a modification of a sales tax in which tax is collected from businesses at each stage of the production process. A Flat Tax is a two-part VAT in which tax is imposed at both the business and individual levels. Wages are deductible at the business level and taxed at the individual level. The consumed income tax is imposed at the household level only, by taxing only the income left after subtracting savings. A discussion of each of these consumption taxes follows.

The four taxes can differ in many respects. They may have different impacts on the share of the tax burden borne by different groups, on the economy, and on compliance and administrative costs. The timing of tax collection differs across the types of taxes. The Flat Tax and consumed income tax operate on a “pre-pay” basis, so that the tax is collected when wages are earned but no further tax is due at the time of consumption. The VAT and retail sales tax, in contrast, operate on a “post-pay” basis so that tax is

paid when money is spent. Although there are some differences, all four consumption taxes share a common feature: As explained in more detail in Chapter Seven, all consumption taxes exempt from taxation what economists refer to as “normal returns” from saving and investment. As a result, consumption taxes do not discourage saving and investment, nor do they distort saving and investment decisions.

**Figure 3.10. How a Retail Sales Tax Works**



### **The Retail Sales Tax**

A retail sales tax is imposed when households purchase goods or services from businesses. This form of consumption tax is familiar to most Americans since many state and local governments raise revenue through retail sales taxes. In a well-functioning retail sales tax system, purchases by businesses are not taxed because these purchases are “inputs”: goods or services used to produce other goods or services for sale to households. In terms of our simple box diagram, the tax base consists of taxable goods and services, the tax rate is the applicable sales tax rate, and the tax collector is the retailer. Although the retailer pays the tax directly to the government, the burden is borne by individuals. And, just as with our current income tax system, there are administrative and compliance costs, as well as distributional consequences to consider when evaluating the desirability of this tax. These issues are discussed further in Chapters Eight and Nine.

### **The Value-Added Tax**

A commonly used variation of a retail sales tax is the value-added tax (VAT). More than 120 countries use VATs to raise a portion of total national government tax revenues. The United States is the only major industrialized country that does not impose a VAT.

The VAT can be thought of as a retail sales tax that is collected in small increments throughout the production process. The tax is calculated at each stage of production: Each business’s tax base is calculated from its sales minus its purchases from other businesses. Wages are not deducted. It is easiest to understand the VAT, and its relationship to a retail sales tax, through an example.

A boot maker makes and sells custom-made cowboy boots. He buys leather and other supplies enough for one pair from a leather shop at a cost of \$200 before taxes. The boot maker then sells each pair of boots he makes for \$500 before taxes.

If a 10 percent retail sales tax were in place, the boot maker would add on the tax to the cost of the \$500 pair of boots, and the consumer would pay \$550 per pair. In the meantime, the leather shop would not have imposed a retail sales tax on its sale to the boot maker because such a business-to-business transaction would not be treated as a retail sale.

Under a VAT, the tax calculation works differently. Because the VAT is charged on all sales of goods and services, and not just sales to consumers, the leather shop would collect a VAT of 10 percent, or \$20 on the \$200 of supplies purchased by the boot maker. The boot maker would pay the leather shop \$220, and the leather shop would

send the \$20 to the government. When the boot maker sells the boots, he computes the VAT as \$50, and charges the shoe buyer \$550 for the boots. However, instead of sending \$50 to the government, the boot maker would subtract the \$20 of VAT already paid to the leather shop and remit \$30 to the government. The government would receive \$50 total: \$20 from the leather shop and \$30 from the boot maker. The government receives the same revenue under a VAT and a retail sales tax, and from the boot buyer's perspective the taxes look identical.

There is also an alternative method of calculating the VAT. Under the "subtraction method," the boot maker and the leather shop would pay the 10 percent VAT on the difference between their pretax sales and purchases. The boot maker would pay \$30 (10 percent of the difference between the \$500 of sales and \$200 of purchases), and the leather shop owner would pay \$20 (10 percent of the difference between sales and purchases). In practice, the subtraction method may be less reliable because it is harder to verify the amount of tax paid on purchases.

Administrative and compliance costs, as well as the progressivity of VATs are discussed in Chapter Seven.

### The Flat Tax

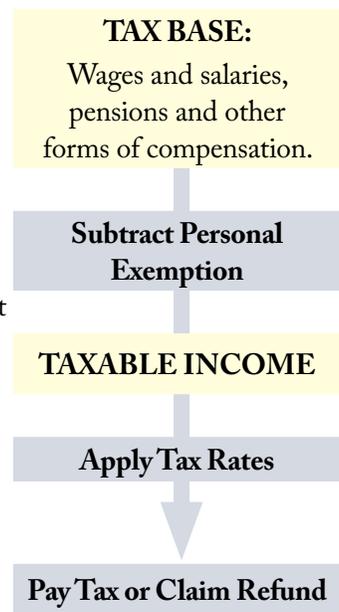
The Flat Tax collects part of the consumption tax directly from workers. As is the case with a VAT, businesses take the total value of their sales and then subtract the total value of purchases from other businesses. However, under a Flat Tax, businesses also subtract the wages and other compensation paid to workers. Thus, the tax base is total revenues from sales minus purchases from businesses and compensation to employees. Employees pay a separate tax on their wages (and other forms of compensation) at the household level.

Consider the boot maker in the VAT example above. Assume that the boot maker pays a worker \$200 per pair of boots. Recall that under the VAT, the boot maker's tax liability was \$30, since the difference between sales and purchases from other businesses equals \$300 and the VAT rate was 10 percent. Under the Flat Tax, the boot maker's tax liability would be only \$10, since both purchases from businesses (\$200) and compensation to employees (\$200) are subtracted from pretax sales (\$500). The worker would pay tax at the individual level on his compensation. If there were no personal exemptions, the worker would have a Flat Tax liability of \$20.

As the example demonstrates, unlike the VAT, the Flat Tax uses a structure that is similar to the one we have today and, therefore, is familiar to Americans. Workers fill out an annual return as an accounting matter, and the same payroll withholding of our current system is used to collect government revenues throughout the year. Businesses also file annual returns.

As one of the main proponents of the Flat Tax has commented, the Flat Tax "name is brilliant marketing, but it fails to convey the central feature of the idea relative to a VAT – the Flat Tax is progressive." The Flat Tax is progressive because the individual tax applies only above an exemption amount. Low-income workers, therefore, do

**Figure 3.11.**  
Individual Tax  
Computation Under A  
Flat Tax



not pay tax on their compensation to the extent it falls below the exemption amount. The Flat Tax is most commonly proposed using a single tax rate that applies to both businesses and workers above the exemption level. However, the Flat Tax can be made even more progressive by using multiple graduated rates at the individual level. Economists refer to one proposal that incorporates a progressive rate structure as an X-tax system. The basic X-tax system, developed by the Treasury Department in the late 1970s, works exactly like a Flat Tax at the business level. The only difference occurs at the individual level where there is a progressive tax bracket structure with a top rate equal to the business tax rate.

### **The Consumed Income Tax**

The consumed income tax is collected directly from households. But the tax is collected only from a base of the household's spending. To calculate consumption, a household would add up wages and other forms of labor compensation, investment proceeds that are spent, and net borrowing. To calculate savings, which would not be taxed, a household would add up the net increase in bank accounts, the purchase of financial assets such as stocks and bonds, the purchase of business assets, and the purchase of owner-occupied housing. Generally, a consumed income tax base would exempt a certain level of consumption and use a graduated tax rate schedule to promote progressivity. There is no need for a corporate tax under a consumed income tax – retained corporate earnings would be a form of saving, and dividends would be taxable to shareholders unless saved.

### **Conclusion**

This chapter described the major elements of any given tax system, as found in both our current tax code and some well-known alternatives. Understanding these elements is a critical step in reforming the current tax system. It may be possible to reform some current tax provisions in a way that enhances the objectives of simplicity, efficiency, and fairness. In other cases, changes to a particular provision may promote only one or two of these objectives. The goal of the Panel's work is to identify proposals that taken together will advance all three objectives.

It is simply not enough to use this knowledge to create a tax system that remedies the shortcomings of our current system. Any reform proposal must take into account the expected revenue collected by our current tax system, as well as the way the code has shaped our economy. Chapter Four explores the constraints the Panel faced, both in terms of the President's Executive Order and the realities of our \$12 trillion economy.