# THE INDIVIDUAL <br> TAX BASE 

# CASES, PROBLEMS, AND POLICIES IN FEDERAL TAXATION 

Third Edition

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AMERICAN CASEBOOK SERIES® ${ }^{\circledR}$

## Part I

## Income Taxation of Individuals

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## Chapter 1

# Introduction to the Individual Tax Base 

"Taxes are what we pay for civilized society."—Justice Oliver Wendell Holmes ${ }^{1}$<br>"The power to tax involves the power to destroy. . . ."-Chief Justice John Marshall²<br>"The hardest thing in the world to understand is income taxes." -Albert Einstein"

## A. TAX BASES AND TAX RATES

The focus of this text is the Federal income tax imposed on individuals. ${ }^{4}$ However, the Federal tax base could (and currently does) consist of far more than simply a tax on individuals' incomes. In fact, the individual income tax only accounts for around half of the revenue the Federal government collects, ${ }^{5}$ and an even smaller portion of the revenue collected by state and local governments.

## 1. ALTERNATIVE TAX BASES

The tax base is the thing that is being taxed, so the individual tax base could consist of any individualized measure of tax liability. The individual tax base could be defined by how much a person saves, how much a person consumes, a person's wages (which may be different than a person's income), the particular benefits a person receives from the government, or even a person's height or age. ${ }^{6}$

The amount of any tax collected or owed is equal to the base multiplied by the rate:

$$
\text { Tax }=\text { Base } \times \text { Rate } .
$$

[^0]Consider a "head tax," also called a lump-sum tax by economists, which is a tax levied simply on account of existing as a human being. The base is heads (each person has one head). If the rate is $\$ 1,000$ per head, then for each person:

$$
\text { Tax Liability }=1 \text { head } \times \$ 1,000=\$ 1,000
$$

And for the government:

$$
\text { Tax Revenue }=\# \text { of heads } \times \$ 1,000
$$

In all cases, the total tax collected by the government and the tax owed by any taxpayer is a product of the rate and what is included in the base. For a familiar example, consider an income tax system that imposes a tax of $25 \%$ on all income. If an individual, Ella, has $\$ 100,000$ of income, the tax she owes is computed as:

$$
\operatorname{Tax}=\$ 100,000 \times 25 \%=\$ 25,000
$$

If the government decided to tax cigarettes (as, in fact, the Federal government and many state governments currently do), the base could be: cigarettes (based on number or weight, for example), packs of cigarettes, or volume of tobacco, or some other measure. The Federal government currently imposes a tax of $\$ 50.33$ per 1,000 cigarettes, which converts to $\$ 1.0066$ per pack (a pack has 20 cigarettes) or $\$ 10.066$ per carton (a carton has 10 packs). ${ }^{7}$ Thus, if Ella buys 40 cigarettes (2 packs) her tax is calculated as:

$$
\operatorname{Tax}=40 \text { cigarettes } \times \frac{\$ 50.33}{1,000}=\$ 2.01
$$

Students who are new to the study of tax law are often concerned about dealing with numbers. This is unnecessary angst-the exceedingly simple math above will largely be sufficient in your quest to understand the Federal tax system.

So why is taxation so notoriously complicated? A key challenge-one that occupies much of this text-is defining the tax base. For a head tax, defining the base is easy: each person is taxed equally. However, other tax bases can become more complicated-even the cigarette tax base is trickier than it might seem at first blush. 8

The income tax base has proven to be especially thorny in practice. The example above stipulated that Ella has $\$ 100,000$ of income. But how do we determine what is included in Ella's income? If Ella earns \$100,000 of wages paid to her by an employer in cash, and she earns nothing more, the task of describing Ella's income (and thus describing the income tax base)

[^1]seems fairly simple. What if Ella earns $\$ 90,000$ in wages and her employer spends an additional $\$ 10,000$ to purchase health insurance for her? What if she earns $\$ 90,000$ in wages and her employer rents an apartment for her to live in for $\$ 10,000$ ? What if she earns $\$ 90,000$ in wages from her employer, and she receives a gift of $\$ 10,000$ from her cousin? What if her cousin is also her employer? (These questions are addressed in Chapter 2.)

What if Ella borrows $\$ 100,000$ from her employer or from someone else? What if she sells land for $\$ 100,000$ ? What if she receives $\$ 90,000$ in wage income and $\$ 10,000$ worth of stock of her employer, but she is only permitted to keep the stock if she continues working for her employer for some number of years? (These questions are discussed in Chapter 3.) What if she earns $\$ 90,000$ of wages, and her employer places $\$ 10,000$ into a retirement account on her behalf? What if she receives an alimony payment of $\$ 100,000$ under a divorce agreement? (These questions are addressed in Chapter 8.)

You're probably starting to get the idea: there is a lot of complexity in defining the income tax base-even just determining what is included in income as between an employer and an employee. The issues described above and many more fill thousands of pages of the U.S. Federal tax code and tax regulations. In contrast, as you will see, tax rates are relatively straightforward.

## 2. THE FEDERAL TAX SYSTEM TODAY

The Federal income tax is imposed annually on the taxable income of every individual who is a resident or citizen of the United States. (The term taxable income is discussed in further detail later in this chapter.) Currently, the first dollars of taxable income are taxed at a $10 \%$ rate, and the rates are graduated, producing a progressive rate structure so that the last dollars may be taxed at a much higher rate. Under current law there are seven rate brackets: $10 \%, 12 \%, 22 \%, 24 \%, 32 \%, 35 \%$, and $37 \%$. § 1(j)(2). Everyone paying tax at the top rate also pays tax at all the other rates. Although the rate structure looks the same for all taxpayers, the ranges of income to which those rates apply varies based on filing status. ${ }^{9}$ For example, a single taxpayer will reach the highest bracket at a lower income than a taxpayer who files jointly or as a head of household.

[^2]
## Table 1: Individual Income Tax Brackets-201910

| Tax Rate | Single Individual <br> Brackets | Married Filing Jointly <br> Brackets |
| :---: | :---: | :---: |
| $\mathbf{1 0 \%}$ | $\$ 0$ to $\$ 9,700$ | $\$ 0$ to $\$ 19,400$ |
| $\mathbf{1 2 \%}$ | $\$ 9,701$ to $\$ 39,475$ | $\$ 19,401$ to $\$ 78,950$ |
| $\mathbf{2 2 \%}$ | $\$ 39,476$ to $\$ 84,200$ | $\$ 78,951$ to $\$ 168,400$ |
| $\mathbf{2 4 \%}$ | $\$ 84,201$ to $\$ 160,725$ | $\$ 168,401$ to $\$ 321,450$ |
| $\mathbf{3 2 \%}$ | $\$ 160,726$ to $\$ 204,100$ | $\$ 321,451$ to $\$ 408,200$ |
| $\mathbf{3 5 \%}$ | $\$ 204,101$ to $\$ 510,300$ | $\$ 408,201$ to $\$ 612,350$ |
| $\mathbf{3 7 \%}$ | $\$ 510,301$ or more | $\$ 612,351$ or more |

To illustrate how the rates apply, consider a married couple filing a joint return with a taxable income of $\$ 180,000$. Under the rates for 2019, their income tax liability is $\$ 31,549$. Their taxable income up to $\$ 19,400$ is taxed at a $10 \%$ rate. Their taxable income from $\$ 19,401$, to $\$ 78,950$ is taxed at a $12 \%$ rate, their income from $\$ 78,951$ to $\$ 168,400$ is taxed at a $22 \%$ rate, and their remaining $\$ 11,600$ of taxable income (the taxable income exceeding $\$ 168,400$ ) is taxed at a $24 \%$ rate. The average rate or effective rate of taxation applied to their aggregate taxable income is only $18 \%$ because they paid a total of $\$ 31,549$ in taxes on $\$ 180,000$ of taxable income. However, their marginal tax rate is $24 \%$. This means that their last dollar of income is subject to a $24 \%$ tax rate. Average rates are generally important when thinking about the burden of taxations on individuals, while marginal rates are generally important when thinking about the way that taxes affect people's behavior. The rate breaks are indexed for inflation and are published annually by the IRS. The current schedule of rates, established by legislation enacted at the end of $2017,{ }^{11}$ is set to sunset after 2025, meaning that in 2026 the rates will revert to: $10 \%, 15 \%, 25 \%, 28 \%$, $33 \%, 35 \%$, and $39.6 \%$. § 1(j)(1).

Before we delve further into the income tax, consider some additional tax bases-beyond the individual income tax and the cigarette tax-that are currently used to raise revenue in the United States. The Federal

[^3]government imposes a corporate income tax, ${ }^{12}$ employment taxes on employees' wages and on employers' compensation payments, ${ }^{13}$ an estate tax on the transfer of certain assets from a decedent to her beneficiaries, ${ }^{14}$ a gift tax on inter vivos transfers (i.e., transfers between living people), ${ }^{15}$ and a variety of excise taxes (which is the term for taxes, like the cigarette tax described above, imposed on a good or service, rather than a tax imposed directly on a person), ${ }^{16}$ as well as duties on imported goods. ${ }^{17}$

All together, these Federal taxes raise over $\$ 3.4$ trillion of revenue each year. ${ }^{18}$ While the individual income tax is the single largest source of Federal revenue, it nonetheless accounts for just $48.5 \%$ of the total-not even a majority of total Federal revenues. The second largest source of revenue, accounting for $33 \%$ of the total, is employment taxes that are specifically reserved to fund social insurance programs such as Social Security, unemployment insurance, and Medicare. The corporate income tax accounts for just under $10 \%$ of revenue, and the other taxes listed above combine to account for less than $8 \%$.

[^4]

Figure 1: Sources of Federal Revenue (2017). Source: IRS.
Combined Federal individual and corporate income taxes, employment taxes, and excise taxes averaged about $21 \%$ of total family income in 2014 (the most recent year for which the Congressional Budget Office has published data as of 2018). ${ }^{19}$ Individual income taxes alone averaged about $10 \%$ of income, and employment taxes averaged almost $8 \% .{ }^{20}$ The income tax-considered alone-is progressive (people with higher incomes pay income tax equal to a greater proportion of their incomes than do lower income individuals): the average individual income tax rate was $-11 \%$ for households in the lowest income quintile (i.e., the lowest-earning $20 \%$ of households), meaning those households receive a net payment from the income tax system. The average income tax rate was $-2 \%$ for those in the second quintile, $3 \%$ for the middle quintile, $6 \%$ for the fourth quintile, and $16 \%$ for the top quintile. The top $1 \%$ of households in the income distribution paid an average of $24 \%$ of their income in Federal income tax. People earning over $\$ 100,000$ pay $65.1 \%$ of all Federal income taxes, and people earning over $\$ 1$ million pay $26.3 \%$ of all income taxes. ${ }^{21}$ In contrast,

[^5]approximately $45 \%$ of households are expected to owe no income tax liability in 2018. ${ }^{22}$

However, more than two-thirds of families paid more in employment payroll taxes than in Federal income taxes. ${ }^{23}$ Employment taxes are regressive as to income: people with higher incomes spend a smaller proportion of their incomes to pay employment taxes than do people with lower incomes. Around $75 \%$ of families with incomes of $\$ 30,000$ to $\$ 100,000$ pay more employment taxes than income taxes, and the only group of taxpayers in which a majority pays more income tax than payroll taxes is those making over $\$ 200,000 .{ }^{24}$ In 2018, the average employment tax rate for people earning $\$ 30,000$ to $\$ 40,000$ was $8.4 \%$, while the average employment tax rate for people earning over $\$ 1$ million was just $2 \% .^{.{ }^{25}}$ Taking all taxes into account, the system is progressive, but every group makes a net contribution to the Federal government. For the lowest quintile, the average tax liability is $2 \%$ of income, while for the top $1 \%$ it is $34 \% .{ }^{26}$

State and local governments impose some of the same taxes as the Federal government does, and tax other things as well. Many states and some cities impose individual income taxes, and many states and cities impose sales tax that is added to the price of goods at the time of payment. Local governments often rely on property taxes imposed on the assessed value of real property, and some jurisdictions tax personal property (for example, cars) as well. State and local governments raise approximately $\$ 1.3$ trillion in annual revenue in total, $40 \%$ from property taxes (most of which is raised by local governments, not states), $29 \%$ from individual income taxes, $27 \%$ from sales taxes, and $4 \%$ from corporate income taxes. ${ }^{27}$

[^6]

Figure 2: Sources of State and Local Revenues (2017). Source: U.S. Census Bureau.

All together the Federal, state and local governments collect tax revenue of approximately $\$ 4.6$ trillion each year. This is around $26 \%$ of the country's gross domestic product (GDP-this is the total value of all of the goods and services produced in the country each year). ${ }^{28}$ For comparison, the average ratio of tax revenue to GDP among developed democratic countries is $34 \%$, ranging from a low of $17.2 \%$ (Mexico), to a high of over 45\% (France and Denmark). In short, even as the U.S. collects enormous sums of money as tax revenue each year, the tax burden in comparison to the size of the economy is lower than many other developed countries.

## PRoblem

Jake has taxable income of $\$ 10,000$, Deebo has taxable income of $\$ 100,000$, and A'ja has taxable income of $\$ 1,000,000$. Each files an individual tax return, and none qualify for any credits (and you do not need to consider deductions).
(a) Determine each person's Federal income tax liability based on the appropriate rate tables.

[^7](b) For each of Jake, Deebo and A'ja determine the marginal tax rate, and the average (effective) tax rate. What incentive effects might these different rates have on each person?
(c) What additional Federal tax liability might Jake, Deebo and A'ja have beyond the Federal income tax?

## B. HISTORY AND CONSTITUTIONAL FRAMEWORK OF THE FEDERAL INCOME TAX

Constitutional Power to Tax. The taxing power of Congress is based on Article I, Section 8, clause 1 of the Constitution, which provides that:

The Congress shall have Power to lay and collect Taxes, Duties, Imposts, and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts, and Excises shall be uniform throughout the United States.
Article I of the Constitution further specifies that any "direct" Federal tax must be apportioned among the states according to population. ${ }^{29}$ When the Constitution was drafted, indirect taxes were understood to mean taxes that were not paid to the government directly by individuals. Examples of indirect taxes under that definition include sales taxes, excise taxes like the tax on cigarettes, and import duties. Direct taxes included some-but perhaps not all-taxes paid directly by individuals, such as a head tax, property taxes, and income taxes. The distinction between direct and indirect taxes is no longer considered to be meaningful in practice (see the discussion of incidence later in this chapter) although the term may nonetheless limit the authority of Congress to impose certain taxes other than the income tax which is expressly permitted by the Sixteenth Amendment to the Constitution. ${ }^{30}$

The apportionment requirement found in Article I for direct taxes means that the total amount paid by each state must be proportional to its population. For example, New York has around $6 \%$ of the U.S. population

[^8]and South Carolina has around $1.5 \%$ of the population. A direct tax that is properly apportioned would collect $6 \%$ of revenue from New York, and $1.5 \%$ from South Carolina.

But this requirement makes direct taxes impractical. Consider what this apportionment requirement would mean for an income tax. Because New Yorkers have higher incomes than South Carolinians (\$60,991 per person per year for New York as compared to around $\$ 40,421$ per person per year for South Carolina, as of 2017), a tax on individual income would have to be imposed at different rates in order to satisfy the apportionment requirement. For example, if the whole country were subject to a $25 \%$ income tax rate, the total tax collected would be $\$ 4.1$ trillion (around 325 million people, with average income of $\$ 50,392$ ). But New York would pay approximately $\$ 15,247$ per person (the $\$ 60,991$ average income multiplied by the $25 \%$ rate), which constitutes $7.3 \%$ of the total ( $\$ 302.6$ billion); and South Carolina would pay approximately $\$ 10,105$ per person, which constitutes $1.2 \%$ of the total ( $\$ 50.7$ billion). Thus, New York would overpay in relation to the state's share of the population, and South Carolina would underpay, so the tax would not satisfy the apportionment requirement of Article 1, Section 9. ${ }^{31}$ To collect $\$ 4.1$ trillion through an income tax with proper apportionment, taxpayers in New York would need to pay a lower rate so that New York revenue was proportionate to its $6 \%$ share of the population, and, conversely, South Carolina taxpayers would need to pay a higher rate.

Early Federal Tax Policy. From the time the Constitution was ratified in 1789 until the beginning of the Civil War in 1861, the Federal government primarily relied upon customs revenues to finance its activities. Taxes imposed on imports were considered to be "external" revenue, because the revenue was raised from sources outside of the country. During the time period, the Federal government occasionally found that regular customs revenues were insufficient, and turned to "internal" revenue sources-i.e., excise taxes on goods produced within the U.S., as well as other taxes imposed on U.S. persons. This included occasional and sporadic excise taxes on tobacco and liquor, as well as direct taxes imposed on the value of real property and for each enslaved person "at the rate each of them is worth in money." ${ }^{3} 2$

[^9]Early Federal Income Tax Statutes. During the Civil War, customs revenues were once again insufficient, and in 1861 the Federal government first undertook to tax income. ${ }^{33}$ From 1861 through 1870, Congress enacted a series of laws imposing early versions of the Federal income tax, with the final Act expiring in $1872 .{ }^{34}$

The Act of 1864 was the first income tax statute to come under constitutional challenge. In Springer v. United States, ${ }^{35}$ the Supreme Court upheld the constitutionality of the law against the argument that the tax was invalid because it was a direct tax that was not apportioned. Instead, the Court viewed the Federal income tax imposed by the Act of 1864 as an indirect tax. ${ }^{36}$

The Pollock Decision. In 1894, Congress once again enacted a Federal income tax. The tax was to be imposed from 1895 through 1900, at a $2 \%$ rate on individual incomes in excess of $\$ 4,000 .{ }^{37}$

However, in Pollock v. Farmers' Loan \& Trust Co., ${ }^{38}$ the Supreme Court reversed its own holding in Springer and found the Act of 1894 to be unconstitutional under Article 1, Section 9. Initially, the Court held that the tax was unconstitutional only as it applied to income derived from municipal bonds and real estate. On rehearing, the Supreme Court overturned the entire tax on a finding that the tax, which was on the income derived from property, was a direct tax on the property itself, and therefore holding that it must be apportioned among the states. Since it was not apportioned, it was unconstitutional.

New Revenue Needs. At the beginning of the twentieth century, import taxes were failing to keep up with the Federal government's revenue needs, and elected officials from both major parties were increasingly supportive of renewing the Federal income tax. ${ }^{39}$ In 1909, Republicans attempted to enact a new tariff bill; they were unable to corral sufficient votes, so turned to the idea of an inheritance tax, but it soon became clear that the most politically feasible source of new revenue would be an individual income

[^10]tax. In a compromise, members of Congress agreed to propose an amendment to the Constitution to allow for taxation based on individual income, and, to raise revenue in the meantime, to enact a corporation excise tax measured by income (i.e., essentially a corporate income tax). ${ }^{40}$ The corporate tax was calculated as $1 \%$ of net income over $\$ 5,000 .{ }^{41}$ In Flint v. Stone Tracy Co., ${ }^{22}$ the Supreme Court upheld the 1909 corporation income tax, concluding that it was an excise tax on the privilege of doing business, not a direct tax on property, which would have borne the apportionment requirement.

The Sixteenth Amendment and the 1913 Act. In February 1913, four years after it was proposed, the Sixteenth Amendment was ratified to become part of the United States Constitution. The Amendment specifically grants Congress the power "to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration." Thus, Congress was freed from the need for per capita apportionment when levying an income tax.

Congress quickly passed the Revenue Act of 1913, which reduced tax rates on imports and provided for a $1 \%$ tax on incomes over $\$ 3,000$ for single persons and over $\$ 4,000$ for married persons. ${ }^{43}$ Shortly thereafter, in Brushaber v. Union Pacific Railroad Co., ${ }^{44}$ the Supreme Court upheld this income tax, explaining that Congress's taxing power "is exhaustive and embraces every conceivable power of taxation." ${ }^{45}$

In 1916, Congress enacted a tax on estates, and in 1924 Congress enacted a tax on gifts (which was repealed in 1926 and reinstated in 1932). These taxes were upheld by the Supreme Court and are the predecessors of today's estate and gift taxes. ${ }^{46}$ From 1913 to 1938, Congress enacted revenue acts approximately every other year, altering or reenacting the income tax each time. In 1939, the then-operative internal revenue laws (scattered throughout the many volumes of the Statutes at Large) were enacted as the Internal Revenue Code of 1939, and were codified for the first time as Title 26 of the U.S. Code. ${ }^{47}$ "The Code" (as it is referred to

[^11]colloquially among tax attorneys) was re-codified (i.e., reenacted by Congress in whole, instead of simply amending a small portion) again in 1954, with Congress substantially rewriting and rearranging existing law.

Although significant changes were enacted in the 1960s and 1970s, the next major reform did not come until 1986. That law, the Tax Reform Act of 1986, renamed the Code as the Internal Revenue Code of 1986. The 1986 Code consists of the provisions of the 1954 Code (as in effect immediately prior to the enactment of the Tax Reform Act of 1986) together with the amendments made by the Tax Reform Act of 1986.

The Congress has, of course, subsequently amended the 1986 Code, including significant changes in 1988, 1991, 1993, 1998, 2001, 2003, 2009, 2013, and 2017.48

## C. INTRODUCTION TO TAX POLICY

A functioning government must be sufficiently funded, and the primary goal of taxation is to raise revenue in order to provide that funding. Governments in the United States generally must be funded by taxation because in the United States' capitalist economy, the means of production are generally in private control and are carried out for private profit. Taxation is the means by which a government converts private resources to public uses.

The government can borrow money-which the Federal government is currently doing in large amounts-but borrowed amounts need to be paid back eventually. If the government spent less, then it could also tax less: there is a fundamental link between the taxing and spending functions of government that cannot be ignored in formulating tax policy. ${ }^{49}$ The central tax policy questions are: who should pay, and how much?

Tax policy is often evaluated in terms of efficiency and equity. It is impossible to evaluate the desirability of any tax system, or even any individual tax provision, without understanding a bit of economics and without defining equity (or fairness) in taxation. Related considerations include administrability, which addresses how complex or simple it is to understand, comply with, and enforce a tax, and political economy, which encompasses the institutions and interests that determine and implement tax policy.

## 1. EFFICIENCY

In deciding whether a tax is efficient, tax policy analysts focus on whether the tax affects people's behavior. As elaborated below, a tax that

[^12]changes people's behavior in a bad way might be deemed inefficient, whereas a tax that has no effect on behavior is said to be neutral.

## a. Neutrality

If the government were to impose a head tax, it may well be neutral because it could not easily affect taxpayer behavior: it is levied simply on account of existing as a human being, and most people would agree that the consequences of avoiding the tax are probably not worth the cost. On the other hand, if the government were to impose a tax on oranges and people curtailed their consumption of oranges in favor of, say, apples, the tax would be non-neutral because it would discourage the consumption of oranges.

However, just because a tax makes certain choices more expensive than others does not necessarily mean that people will alter their choices. Whether a person actually responds to a tax by changing her behavior depends upon the elasticity of her response. If a small tax would lead to a large change in behavior, her response to the tax is highly elastic. If even a large tax would not affect her decision to engage in that behavior, her response is highly inelastic. For example, an addict's demand for methamphetamine is highly inelastic-he believes that he needs the methamphetamine, regardless of the price-and therefore, an addict would buy methamphetamine even if a tax made it very expensive. While a tax on inelastic goods is a neutral tax because it does not change taxpayer behavior, inelastic demand often arises with goods we nonetheless might not want to tax, for example life-saving medicines or basic necessities.

A tax on income might encourage a person to work less than she otherwise would, in order to avoid the tax or because the tax makes the work not worthwhile. An individual might be willing to serve ice cream cones at the local Dairy Queen for $\$ 10$ per hour, and Dairy Queen might be willing to pay $\$ 12$ per hour. If this is the case, Dairy Queen can hire the individual for something between $\$ 10$ and $\$ 12$ per hour, in which case everyone wins. But if an income tax of $25 \%$ is imposed on the wages, then the employee's take-home income for a wage of $\$ 12$ per hour would only be $\$ 9$ per hour-less than she is willing to work for. As a result, she may insist on a higher paying job someplace other than Dairy Queen, or she may not work at all. This is the substitution effect: if people substitute non-taxed leisure for work, then they can pay less tax by earning less. On the other hand, an income tax might encourage people to work more than they otherwise would have, in order to have the same amount of money left after tax that they would have had if there had been no tax. If the Dairy Queen employee wanted to make $\$ 400$ per week- $\$ 10$ per hour for 40 hours-the $25 \%$ tax might cause her to work 44.5 hours at the after-tax rate of $\$ 9$ per hour, yielding just over $\$ 400$. This is referred to as the income effect, under which a tax causes people to opt for more work at the expense of leisure time.

The substitution effect and the income effect of a tax on wages therefore counteract each other in affecting an individual's decision to earn income-the substitution effect discourages work while the income effect encourages work. Whether an income tax encourages or discourages work overall depends upon whether the income effect or the substitution effect dominates. A tax may be non-neutral along many other margins as well. It might affect how hard a person works, what type of work a person does, how one structures the timing and type of compensation, what kind of consumption a person engages in, and whether a person engages in tax avoidance (legal behavior to organize one's affairs to minimize tax liability) or evasion (illegal behavior to escape tax owed). ${ }^{50}$

If a tax changes behavior in a bad way, it can be described as reducing efficiency. A tax on wages that discourages people from working would presumably be a bad change in behavior. On the other hand, if a tax changes behavior in a good way, it can be described as increasing efficiency. For example, a tax on toxic chemicals might discourage the discharge of pollution. This would be a good change in behavior because pollution creates negative externalities, that is, pollution has tangential effects that are harmful. Increasing the price of pollution through a tax causes the producers of toxic chemicals to internalize the costs they are imposing on society, which increases efficiency-the polluters will only pollute to the extent that it is worthwhile even taking into account the cost imposed on others, as approximated by the pollution tax. ${ }^{51}$

## b. Incidence

Since tax policy is concerned with who should pay tax, it is crucial that we know who really bears the burden of a tax, not just who remits payment (i.e., writes the check) to the government. The real incidence of a tax falls on the person who bears the burden, while the nominal incidence falls on the one who pays the bill.

For many taxes, the government has a choice of whom to collect from. To impose a consumption tax, the government could levy a tax on retailers, who would raise their prices by the amount of the tax and charge their customers accordingly. Alternatively, the government could levy the same tax directly on individuals by requiring them to keep track of all their purchases and write a check at year-end based on how much they have spent. Even though the retailers nominally pay the tax in the first scheme, the real incidence of the consumption tax largely rests on the consumers in both examples. Because the tax increases prices, the consumers must forgo

[^13]purchases of goods and services, or must reduce their savings on account of the tax.

Sometimes, it is easy to determine who bears the real burden of the tax. For example, if a $10 \%$ sales tax is imposed on oranges, and the price of oranges rises from $\$ 2$ to $\$ 2.20$ (with the orange seller remitting the extra $\$ 0.20$ to the government), then it appears that the consumer is bearing the burden of the tax. ${ }^{52}$ In that case, the merchant-the nominal taxpayerhas shifted the burden to the consumer. However, if the price fails to rise by the full amount of the tax, then the consumer does not bear the entire burden of the tax. The $10 \%$ orange tax might result in oranges selling for $\$ 2.10$ if the seller determines that orange purchasers will not pay more than $\$ 2.10$. In that case, the buyers and sellers are sharing the burdenbuyers pay $\$ 0.10$ more, and sellers charge $\$ 0.09$ less. ${ }^{53}$

Often, it is difficult to determine on whom the real incidence of a tax falls. The classic example of a tax with an indeterminate incidence is the corporate income tax. While it is clear that only humans can feel the pain of the burden of a tax, corporations nominally pay tax on their income, and economists disagree about which humans actually suffer for it-corporate shareholders, employees of corporations, or consumers who purchase the goods and services corporations produce. ${ }^{54}$ While there might be political advantages in adopting a tax whose incidence is unknown, it is impossible to analyze the fairness of the distribution of the tax burden if we cannot determine on whom that burden truly falls.

## c. Capitalization

Because the burden of a tax can be shifted by way of the price of the object of the tax, market transactions affect who really bears the burden of a tax. For example, if an annual real property tax is introduced (or increased), the current owner of real property may bear the burden of all the real property tax that will be paid by subsequent purchasers of the property, in addition to the real property tax that she will pay herself. This is because the value of the property might fall on account of the tax-a purchaser might not be willing to pay as much for the property because of the increased future tax liability associated with the property. Consider the sale of a personal residence: a would-be purchaser might save money for a down payment, and might budget a set amount that she can afford to pay each month. That monthly payment amount will go towards mortgage

[^14]principal, mortgage interest, and property taxes. If the tax amount goes up, the amount of money the purchaser will be willing to pay towards the mortgage will go down, and she will demand a lower price for the purchase.

If the value of the property falls by the present value of all future tax liability, ${ }^{55}$ then the tax will have been fully capitalized into the price of the property. This means that the current owner will bear the entire burden of all the tax that will be paid on account of the property, even after she disposes of it. Tax capitalization is the mechanism by which the market responds to differing tax treatments of economically identical transactions. For example, the market will bid up the price of a bond if the interest on the bond ${ }^{56}$ is tax-free so that the after-tax returns are equal on otherwise economically equivalent taxable and tax-free bonds, even if the pre-tax return differs. (Interest payments on debt are discussed in Chapter 7.) If taxable and tax-free bonds with the same terms and the same risk of default are both paying $10 \%$ interest, the price of the tax-free bond will rise in the market so that the rate of return on the bond goes down. If interest income is taxed at $40 \%$, full capitalization would mean that the price of the tax-free bond would rise until the return on the tax-free bond is $6 \%$, the same as the after-tax return on the taxable bond paying $10 \%$ interest.

Once a tax preference is fully capitalized into the price of an asset, no economic advantage exists in owning the tax-preferred asset-the after-tax return to the asset is the same as the after-tax return to other assets. For this reason, the extent to which the market has capitalized a tax benefit is important in determining whether some taxpayers are enjoying advantages not available to others. If the market has erased any advantage in owning the tax-favored asset, then Congressional repeal of the tax provision providing an apparent benefit would not operate to equalize taxpayers. Repealing tax preferences that have been capitalized away in the market penalizes those taxpayers who purchased assets at prices dependent on their favorable tax treatment. For example, if Congress repeals the home mortgage interest deduction, the value of owner-occupied housing would likely go down because the market for housing has adjusted for the fact that mortgage interest is tax-favored.

## d. Deadweight Loss

Taxation represents the transfer of resources from private hands into public coffers, reducing individual spending power and facilitating public spending. As long as a dollar of tax produces a dollar of public goods, the decision to tax turns on whether the dollar is better spent by individuals or

[^15]government. But a tax could reduce individual welfare more than it increases public welfare-even if the government spends the money wisely.

A hidden cost of any tax includes the loss in welfare caused by the changes in behavior of people who avoid the tax. Recall the taxes on oranges described in the prior pages. Some people like oranges enough to keep eating them even if the price rises. If people purchase oranges at a higher price due to a tax, then they bear the burden of the tax. The taxed amount is transferred from the orange eaters to the government for use on government programs. The orange eaters are worse off for having to pay the tax, but presumably they (or other people) are better off by the government's provision of goods and services using the tax revenue.

However, there are undoubtedly going to be some people who decide not to eat oranges because the tax wedge makes the products cost more than they are willing to pay for them. The people who choose not to buy oranges also bear a burden, even though they do not pay any tax. The loss to would-be orange eaters is in forgoing the sweet and juicy fruit that they would have enjoyed but for the tax. Sellers lose as well: they sell fewer oranges than they otherwise would have, because the tax wedge makes their price too high for some purchasers. Because these losses by the purchasers and sellers do not translate into tax paid, the government gets no revenue, resulting in an overall loss, rather than a transfer from one pocket to another. This is known as deadweight loss or excess burden. Individuals are worse off, but the public is no better off as a result of it.

## Supply and Demand for Oranges with Tax



Figure 3: Supply and Demand for Oranges with Tax. ${ }^{57}$
Figure 3 shows a supply and demand for oranges. As the market price increases, the supply increases-more orange growers will produce more oranges if orange prices are high. At the same time, as the market price

[^16]increases, the demand for oranges decreases-more people want to consume oranges if they are cheap versus if they are expensive. The meeting point of the demand and supply lines is the market equilibrium. Thus, initially, in Figure 3 at $\mathrm{P}_{\mathrm{i}}$ consumers will purchase and producers will supply $\mathrm{Q}_{\mathrm{i}}$ oranges. But a $10 \%$ orange tax will throw off this equilibrium. The tax will affect supply or demand or both, increasing the price consumers must pay, or decreasing the price received by suppliers (depending on the incidence, as described above). The new price with tax results in suppliers receiving $\mathrm{P}_{\mathrm{s}}$ for each orange, and buyers paying $\mathrm{P}_{\mathrm{b}}$, with production of oranges decreasing from $\mathrm{Q}_{\mathrm{i}}$ to $\mathrm{Q}_{\mathrm{t}}$. The box between $\mathrm{P}_{\mathrm{b}}, \mathrm{P}_{\mathrm{s}}$, and the intersections of the supply and demand lines with $Q_{t}$ represents revenue to the government: for each orange that the consumer pays $\mathrm{P}_{\mathrm{b}}$ for, the producer receives $\mathrm{P}_{\mathrm{s}}$ and the government receives the difference. The large triangles are consumer surplus (on the top) and producer surplus (on the bottom): this shows the extent to which consumers would have happily purchased oranges at a higher price, and producers would have produced at a lower price. The shaded area represents the deadweight loss: because people who would happily produce and sell additional oranges at $\mathrm{P}_{\mathrm{i}}$ do not, and because consumers who would happily purchase oranges at $P_{i}$ do not, some people are worse off, and because these transactions do not happen, there is no tax revenue collected-no one wins.

An efficient tax system must minimize deadweight loss. As a tax becomes more onerous, it can produce deadweight loss at the expense of revenue. In an extreme case, an inefficiently designed tax might produce only deadweight loss and no revenue by encouraging everyone to substitute something nontaxable for the taxable good, service, or activity. As long as revenue remains the primary goal of taxation, policymakers must consider whether the deadweight loss produced by a particular tax is worth the revenue collected. At the same time, the government might choose to tax an undesirable activity heavily with the express purpose of making the activity prohibitively expensive, subordinating revenue considerations to other goals.

## e. Complexity (and Simplicity)

Complexity and simplicity are related to efficiency-complex tax rules can cause people to change their behavior. Complexity can manifest in various ways. Rule complexity addresses how difficult a tax is to understand. For example, the regime for taxing businesses organized as partnerships, known among tax geeks as Subchapter K because that is where the rules appear in the Code, requires each partnership and each partner in a partnership to track and split gains, losses, deductions, and other tax items. Taxpayers have difficulty understanding these rules (most do not!). As a result, taxpayers must hire accountants and tax attorneys to handle these issues (and many of those experts do not understand the rules either!). Compliance complexity can arise if rules are so intricate that even
once they are understood, they are difficult to follow. For example, the IRS often has difficulty determining if partnerships have complied with the Subchapter K rules, making audits and enforcement expensive and time consuming. Another type of complexity is transactional complexity, which results when rules allow or encourage taxpayers to undertake elaborate tax planning. For example, the realization rule-which generally requires a sale or disposition in order for a taxpayer to include gains or losses from property in income (see the discussions later in this chapter and in Chapter 3)-gives people great latitude to time their transactions to minimize their tax liability, resulting in tangled transactions that are motivated by tax consequences.

Complexity has a number of damaging effects for the tax system as a whole. It increases the costs of enforcement (for the government) and compliance (for taxpayers). The IRS estimates that Americans spend more than 6 billion hours each year complying with Federal tax rules-an astounding number. Complexity can create the perception that the system is unfair-if you do not understand why you owe the amount you owe, you may think you are getting a bad deal, and you may suspect that others are better taking advantage of the rules to reduce their own tax liability. Thus, complexity can undermine confidence in the system. (Complexity is discussed further in Chapter 2, in relation to fringe benefits.) Complexity is most obviously unacceptable if (1) a tax system's enforcement and/or compliance costs are greater than the revenues collected; (2) taxpayers cannot understand the law and comply even if they want to; (3) lots of smart attorneys and accountants spend time figuring out the law and finding ways to take advantage of the rules. Query: do these conditions accurately describe our current Federal tax system?

## 2. EQUITY (FAIRNESS)

The prior discussion of efficiency should make it clear that efficiency and equity are related: we cannot decide whether the tax burden is fairly distributed until we determine who actually bears the burden of the tax. At the same time, there are situations in which the dictates of efficiency and fairness seem to conflict so that an efficient tax may not be a particularly desirable one.

## a. Theories of Distributive Justice

While most people agree that any tax system should be fair, people have vastly different ideas of what fairness is and what constitutes an equitable tax system. Some people believe that a fair tax should be based on an individual's ability to pay, so that all people with equivalent abilities to pay should pay the same amount of tax. A fairness ideal based on ability to pay underlies the graduated income tax, whereby individuals with higher income pay a higher percentage of their income in tax. Others believe that a fair tax should be based on an individual's standard of living
so that people with equivalent spending should pay the same amount of tax, and those who consume more should pay more tax. A fairness ideal based on standard of living underlies consumption taxes (discussed further in Chapter 2). Still another approach to tax fairness is taxation based on benefits received. For example, a tax on gasoline might be justified as a mechanisms to make motorists pay for the roads they drive on-those who drive more, benefitting more from spending on road infrastructure, purchase more gas and pay more tax.

Even among those who agree on a single ideal, there is room for much disagreement. How should society measure one's ability to pay-income, wealth, earnings potential, or some other standard? What about standard of living-should that consider all consumption, all market-based consumption (i.e., items purchased or bartered, but not self-created items), only consumption beyond necessities, or some other metric? How could we measure the benefits of taxation-should we look only at specific services received, which entails disregarding public goods like national defense and other functions of government that produce social value shared broadly across the population?

If we are to choose a tax based on ability to pay, how do we compare the relative abilities of people in different situations? What is relevant in determining one's ability to pay? John Stuart Mill, in discussing Adam Smith's tenets of good taxation, suggested that a fair tax should require equal sacrifice from all those subject to it. ${ }^{58}$ Equal sacrifice is one way to interpret ability to pay, but we must still decide what constitutes equal sacrifice for people with different incomes, wealth, personal needs, and prospects. Should we base equal sacrifice purely on money, or should we try to extract equal sacrifices based on welfare so that reductions in wellbeing on account of tax are uniform among individuals?

For a long time (and many would argue still today) utilitarianism served as the dominant theory underlying discussions of tax policy. Utilitarianism is a form of consequentialism, which involves evaluating whether rules will produce desirable (or undesirable) consequences. A utilitarian approach focuses on maximizing utility, which is variously described as well-being, happiness, and preference satisfaction. Utilitarians argue that the goal of the state should be to provide the "greatest good for the greatest number," with each person's utility counting equally in determining society's overall level of utility. ${ }^{59}$

In matters of taxation, the utilitarian principle of declining marginal utility of income-that people derive less utility from each dollar as they

[^17]have more dollars-provides the theoretical justification for progressivity. As we have previously noted, a progressive tax is one in which taxpayers pay a greater proportion in tax as the tax base (such as income, consumption, or wealth) increases. A proportionate tax is one in which the percentage of the base paid in tax stays constant even as the base varies. For example, in a proportionate income tax system, all income might be taxed at $25 \%$, regardless of whether a person earns $\$ 1$ or $\$ 1,000,000$. A regressive tax is one in which the percentage of the base that is paid in tax decreases as the base increases. The system of graduated rates contained in $\S 1$ of the Code, in which the rate of tax increases as income increases, constitutes one mechanism for achieving progressivity. (Recall Table 1 earlier in this chapter.) But a graduated rate system like the Federal one is not the only way to achieve progressivity. For example, progressivity can be achieved with the combination of a single rate of tax, a flat tax and an exemption. If all income is taxed at $25 \%$, but the first $\$ 10,000$ of income is exempt from tax, then a person who earns $\$ 10,000$ pays $0 \%$, a person who earns $\$ 20,000$ pays $12.5 \%$, and a person who earns $\$ 100,000$ pays $22.5 \% .{ }^{60}$ Another mechanism for achieving progressivity is a uniform payment from the government, known as a demogrant. If there is a flat rate of $25 \%$ and each taxpayer receives a demogrant of $\$ 2,500$, the results are the same as with a $\$ 10,000$ exemption. ${ }^{61}$

Utilitarians can reasonably disagree about which tax base is most consistent with utilitarianism, and whether progressive, proportionate, or regressive systems of taxation will produce the greatest societal utility. However, a greater challenge for utilitarian-based justifications comes from the rejection of utilitarianism. Some critics of utilitarianism reject utility maximization as a legitimate societal goal. Others question utilitarianism's attempt to reduce all social values into a single metric or doubt that there really is declining marginal utility of income. Even people sympathetic to utilitarianism may wonder whether utility can readily be translated into money, or whether there are generalizations about utility curves that can be made for the population as a whole, both of which would be necessary to transform utilitarianism into practical guidance for taxation.

[^18]There are other theories about what constitutes a fair society that do not depend on utilitarian assumptions and aspirations. People who subscribe to the ideals of fairness espoused by these other political theories are likely to have different criteria than utilitarians do for determining what makes a tax system fair. For example, John Rawls argues in his book, A Theory of Justice, that economic justice requires improving the situation of the least well-off group in society. People who subscribe to the Rawlsian view might favor a tax system that significantly redistributes resources from the rich to the poor, even if that redistribution produces a loss in overall societal utility and reduces the well-being of the rich compared to no redistribution. Conversely, some people believe that economic justice is about rights and obligations, rather than consequences or welfare. Robert Nozick's Anarchy, State and Utopia defines distributive justice by focusing on historical entitlement and free choice for individuals in the market. In this libertarian approach, the only basis for redistribution is unjust acquisition of resources; other conceptions of fairness cannot justify redistribution.

For students of taxation, there is an important lesson to be learned from the various theories of distributive justice. Many competing conceptions of fairness may underlie a system of taxation. These competing conceptions often explain why people favor different tax systems. Logical arguments cannot persuade everyone to believe in the same theory of distributive justice-one notable tax economist has explained his preferences by stating, "that's what my mother taught me." Therefore, our tax system may need to contain compromises reflecting a variety of fundamental attitudes about the state's role in distributing economic resources. If we all agreed on a theory of distributive justice, then the tax writers' task would be merely to implement it. Unfortunately, the job is made much more difficult by the need to accommodate conflicting goals.

## b. Horizontal and Vertical Equity

Traditional tax policy literature often discusses fairness in terms of horizontal and vertical equity. Vertical equity is about the differences in tax burdens imposed on people in different strata of the tax base. The above discussion of theories of distributive justice illustrates how one might think about questions of vertical equity: whether the rich should be required to pay for redistribution to the poor depends on a theory of justice in taxation, for which there is no simple answer or general consensus. For example, Rawls' conception of fairness might dictate that people with higher incomes should pay more tax than people with lower incomes, while Nozick's conception could require that they pay the same or perhaps less. Vertical equity depends on a belief about what justifies greater or lesser taxation of individuals. In the Federal income tax as it exists today, the progressive rate regime suggests that vertical equity is satisfied when people earning
more income have higher tax liability and those with less income have lower tax liability.

Horizontal equity follows from vertical equity. Horizontal equity demands that we consider whether two taxpayers are the same in some relevant respect and should therefore be taxed the same. That is, once we determine the criteria allowing the state to extract a greater (or lesser) tax from some rather than others, then it follows that people who are similarly situated according to the relevant criteria, should pay the same amount of tax. For this reason, some have argued that horizontal equity has no independent meaning apart from vertical equity. 62 Nevertheless, horizontal equity serves as a useful tool for policymakers in drawing lines between taxpayers and defining legislative categories. Even if we are unable to agree about the questions of distributive justice that would allow us to achieve vertical equity, we can still use the goal of horizontal equity as a more limited way to approach fairness in taxation. At the very least, we can try to identify the reasons why two people are similarly or distinctly situated, according to whatever criteria of distributive justice that has been chosen. For example, if, based on some broader vision of societal fairness, we decide to tax based on standard of living so that people with equal levels of consumption pay the same tax, then we must determine what constitutes consumption for that purpose, and apply it consistently to all taxpayers. Horizontal equity simply requires evenhandedness in application of the law.

## c. Tax Policy as Social and Economic Policy

Congress has long known that it can provide people with targeted benefits by reducing their tax bill. For example, if Congress wants to encourage people to purchase homes, they could provide a direct subsidy of, say, $\$ 100$ per year to anyone who owns a home. Alternatively, instead of paying a direct $\$ 100$ subsidy to a citizen, Congress can choose to reduce its tax liability by $\$ 100$ instead. If the requirements to qualify are the same, and if a taxpayer has sufficient tax liability, the taxpayer will be indifferent between receipt of a $\$ 100$ cash grant and a $\$ 100$ reduction in tax liability.

When the government chooses to "spend" through the Code in this manner-by providing exclusions, deductions, deferrals, or credits to taxpayers who incur certain expenses or engage in certain behavior-it is making a tax expenditure. The Congressional Budget Act of 1974 defines a "tax expenditure" as "revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability." ${ }^{63}$ In short, the government is directing

[^19]resources-forgone tax revenue-to achieve policy goals. This use of the tax code can be redistributive in that it shifts resources from one group of taxpayers to another; it can also be allocative, meaning that it alters how society's resources are used. In the housing subsidy example, a $\$ 100$ tax credit for home ownership enriches home owners (a redistributive effect) and encourages people to become homeowners (an allocative effect).

The list of existing tax expenditures is long-the Treasury counted 167 separate tax expenditure provisions in a recent study. ${ }^{64}$ These tax expenditures include, for example, the deduction for interest paid on mortgages for personal residences, which costs around $\$ 35$ billion per year; the exclusion from income of employer-provided health insurance, which costs around $\$ 150$ billion per year (ever wonder why we rely on employers for health insurance?); and the deferral of taxation of income saved for retirement, such as through a $401(\mathrm{k})$ plan or a pension plan, which costs around $\$ 200$ billion per year. ${ }^{65}$ For comparison, the total budget for the Department of Housing and Urban Development-i.e., for all of the government's direct subsidies for housing, among other programs-is around $\$ 50$ billion, and the Federal budget for Medicaid is around $\$ 400$ billion each year.

Tax expenditures have become popular political and rhetorical tools and have proliferated over the years. Chapter 5 addresses tax expenditures in further detail. For now, appreciate that the Code can be used for much more than simply raising revenue. Through tax expenditures, the government can encourage or discourage specific behaviors and can fundamentally shape or reshape vast portions of the economy.

## d. Democratic Fairness

While measures of equity have typically focused on relative economic position as described in the preceding subsections, fairness can also include other dimensions that are important considerations in evaluating and designing tax policy. One way to justify taxation is that it provides the means for society to guarantee basic liberties to its members and to provide democratic equality among them. ${ }^{66}$ Thus, the way that revenue is spent has implications for democratic values, and so does the way that it is raised. For example, if the tax system is designed to favor certain activities or certain people, the tax system is endorsing and promoting specific social values. And, indeed, the Federal tax system favors activities like energy

[^20]exploration, investments in real estate, and contributions to religious organizations, and it favors people such as families with children.

At times, the courts have stepped in to hold that the Federal tax system has violated specific constitutional dictates. For example, in Bob Jones University v. United States, ${ }^{67}$ the Supreme Court held that racially discriminatory admission standards preclude qualification for tax exemption for an educational institution, opining that such standards are "contrary to established public policy." 68 Tax exemption is a form of subsidy-it allows earnings of a qualifying organization to go untaxed, and allows contributions to such an organization to reduce the taxable income of the contributor-and the Court was affirming the Service's position that such a tax-based subsidy is inappropriate for organizations that are undermining the fundamental democratic value of racial equality. But the Supreme Court has refused to extend this logic very far: in Allen v. Wright, the year after its decision in Bob Jones, the Court held that African American children did not suffer an injury sufficiently connected to government policy to allow their parents to challenge the tax exemptions provided to racially discriminatory private secondary schools. ${ }^{69}$ While the tax system has the reach and power to promote or thwart democratic values, the machinations of tax policy are mostly determined through the political process-which, of course, is subject to various distortions based on the influence of money, entrenched interests, and so on.

The Federal tax system is also an important democratic institution because it acts as an interface between the government and its subjects. For many people, filing tax returns constitutes the sole or most frequent contact they have with their government, which means that tax rules can take on importance beyond the mechanical aspect of allocating resources. This was illustrated poignantly in the recent case in which the Supreme Court held that it is unconstitutional for the government to discriminate against same-sex couples. United States $v$. Windsor was, in fact, a tax case: the taxpayer, Edith Windsor, sued the Federal government for a refund when the Service denied her right to file a joint tax return with her samesex spouse. ${ }^{70}$ The litigant was objecting to the Defense of Marriage Act, and her experience with the requirements of that law consisted of filing annual tax returns. The Court's holding striking down the law prompted same-sex couples to celebrate in the streets in front of the Supreme Court and across the country. The case and the reactions that followed the Court's decision

[^21]underscore the power of the tax system to affect peoples' feelings about "identity, autonomy, and citizenship." 71 These are important and sometimes deeply personal issues-not the sort of clinically tedious concerns that tax law is often reputed to address.

## Questions

1. Assume that Congress adopts a provision that allows taxpayers who use recycled plastic in their business to deduct twice the cost of that plastic in computing their taxable income. Businesses using all other materials can deduct only the actual cost of their materials. Why might Congress adopt such a provision? Who would benefit and who would suffer from its adoption? How might the market respond? Is it a good idea for Congress to adopt such a provision?
2. What are the fairness and efficiency arguments for or against the following:
(a) a sales tax on cigarettes;
(b) a tax on the market appreciation, prior to sale, in the value of shares of publicly traded securities held by investors;
(c) an exclusion for all income earned by law students;
(d) a poll tax imposed annually on election day at the polling place?

## D. SOURCES OF FEDERAL INCOME TAX LAW AND OPERATION OF THE TAX SYSTEM

Legislative Materials. The Code, enacted by Congress and codified as title 26 of the U.S. Code, ${ }^{72}$ constitutes the basic statutory source of tax law, which is often the only relevant source. Although Congress frequently amends the Code, the general structure of the tax law, and many individual provisions, has been part of the law since 1913.73

Take a look at the table of contents of the Code. The basic building blocks of the Code are sections-§ 1, for example, provides the rates for individuals; $\S 61$ defines income. There are thousands of Code sections. To help with organization, the Code is divided into various smaller pieces, starting with Subtitles. For example, Subtitle A, which includes sections 1 through 1563, covers the income tax; Subtitle B, which includes sections 2001 through 2801, covers estate and gift taxes. Subtitles are divided into Chapters, which are numbered continuously across Subtitles. ${ }^{74}$ Each

[^22]Chapter may be divided into Subchapters, Parts, and Subparts. ${ }^{75}$ These divisions help with organization; they are also important in understanding various Code sections, because the text of a Code section may make reference to these subdivisions. ${ }^{76}$

Under the Constitution, tax legislation must originate in the House of Representatives rather than the Senate. 77 Nevertheless, members of the House and Senate, as well as the Treasury Department, are always considering tax legislation. Before a bill becomes law, the Ways and Means Committee, which is responsible for tax bills in the House, holds hearings, does a mark-up of (i.e., drafts) the proposed legislation, and prepares a report on the bill. If the House votes to approve the bill, then the Senate Finance Committee undertakes a similar procedure: hearings, mark-up and vote. Often, the bill approved by the House differs considerably from the one approved by the Senate, and a Conference Committee with representatives from the House and the Senate must then be convened to work out a compromise for the full Congress to vote on. Only after both houses of Congress have approved the same legislative language does the proposed legislation go to the President to be signed into law.

Over the past two decades, tax legislation has often been enacted by Congress as part of the budget reconciliation process. Rather than following the traditional path described above for standalone tax legislation, Congress amends the Code under special procedures that make the legislative process move more quickly. Budget reconciliation legislation is subject to limited debate in the Senate (whereas other legislation can be delayed indefinitely with unlimited debate and filibuster procedures). ${ }^{78}$ Recent examples of significant changes to the Code enacted through the budget reconciliation process include the tax cuts signed into law by President Trump at the end of 2017, new tax provisions related to the Affordable Care Act signed by President Obama in 2010, as well as tax cut bills signed by President George W. Bush in 2001 and 2003.

The documents produced in the legislative process constitute legislative history, and may provide assistance in interpreting provisions of the Code. These documents include drafts of prior bills, records of hearings held before the committees, and reports produced for the legislating committees. Congress employs a special staff of lawyers, economists, and

[^23]other experts who provide analysis to members or Congress on tax legislation. These experts are the staff of the Joint Committee on Taxation (JCT), a special bicameral committee of Congress made up of members of the tax-writing committees from both houses.

Although some judges and commentators believe that legislative history should have no bearing on judicial interpretation, many courts and taxpayers use tax legislative history to argue that a conclusion is in accordance with Congressional intent and/or the understandings of members of Congress at the time legislation was enacted. Tax practitioners often rely on reports and other information produced by the JCT to inform their understanding of the meaning and application of tax laws. Conference Committee reports, which JCT staff helps to produce, because they discuss the provisions actually voted for by both houses of Congress, are one of the strongest indications of that understanding or intent. In addition to the documents produced in the process of adopting a tax bill, the staff of the JCT sometimes publishes an explanation (referred to as the blue book) after the enactment of a major tax act. While often helpful, these explanations are generally considered less important than the committee reports as legislative history because they are published after the passage of the bill.

Administrative Materials. When Congress enacts tax legislation to change the Code, it is often just the beginning of the process for changing how the tax law actually works in practice. Often, the law alone does not address all of the questions taxpayers will have, nor does it explain all of the situations to which the tax law might apply. Administrative materials-additional guidance and explanations produced by the Internal Revenue Service and the Department of Treasury-are critically important to make the tax system function.

Administrative materials include a range of different types of publications, with varying degrees of formality and precedential value. Most important are Treasury Regulations (which is the terminology for regulations issued under the Code). These are promulgated by the Treasury Department and constitute the most formal and authoritative administrative interpretation of the Code. Under § 7805(a) the Secretary of the Treasury is authorized to "prescribe all needful rules and regulations for the enforcement" of the internal revenue laws. The Secretary of the Treasury has delegated authority to issue regulations to the Commissioner of Internal Revenue, subject to the approval of the Assistant Secretary of the Treasury for Tax Policy. Thus, Treasury Regulations are jointly produced by personnel at the IRS and at Treasury.

Treasury Regulations can carry the force of law, meaning that the rules laid out in regulations are legally binding such that taxpayers must comply with these regulations and can be subject to penalties for failing to
comply. 79 The Administrative Procedure Act requires that regulations be subject to notice and comment, whereby the public is given a chance to review and formally react to proposed regulations before they are made final. 80 Thus, in order to be valid and to carry the force of law, Treasury Regulations must go through notice and comment, and, in adopting the final rule, Treasury must consider any comments submitted.

In the past, Treasury Regulations issued under the general authority of $\S 7805(\mathrm{a})$ were given less deference than those issued under a specific grant of authority. ${ }^{81}$ But in Mayo Foundation for Medical Education and Research v. United States, ${ }^{82}$ the Supreme Court ruled that deference does not turn on whether the delegation of rulemaking authority is general or specific. The Court ruled that tax regulations, like other administrative rules, are to be examined under the two-part test of Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc. ${ }^{83}$ : (1) Did Congress directly address the precise issue at hand, or is there an ambiguity in the text?; (2) If there is such an ambiguity, then the agency's rule-in our case the IRSwill receive great deference, if it is a reasonable construction of the statute. The Mayo Court stated that neither the regulation's longevity nor the fact that it was issued contemporaneously with the statute is relevant.

In Altera Corp. v. Commissioner, ${ }^{84}$ a reviewed, unanimous opinion, the Tax Court expanded Mayo's rejection of the notion that tax regulations are excepted from general administrative law requirements. The court held that Treasury regulations under § 482, issued pursuant to the general authority of §7805(a), carry the force of law, and were invalid because the Treasury did not engage in "reasoned decision making" in formulating the regulations. The "reasoned decision making" standard stems from the Supreme Court's decision in Motor Vehicle Manufacturers Association of the United States v. State Farm Mutual Auto Insurance Co., ${ }^{85}$ decided under the Administrative Procedure Act. In Altera, the court stated that it was immaterial whether the standard of review is supplied by Chevron or State Farm, because step number two of the Chevron analysis incorporates the "reasoned decision making" standard of State Farm. This approach to

[^24]Chevron remains contested, although the Supreme Court has subscribed to it in several recent opinions. ${ }^{86}$

In addition to regulations, the IRS also produces other types of guidance and directives that elaborate on the Code. These documents include revenue rulings, revenue procedures, private letter rulings, and technical advice memoranda.

- Revenue rulings address substantive tax issues and reflect the Commissioner's official interpretation of the tax law. While generally binding on IRS officials, revenue rulings are usually given less weight by the courts than are regulations, since rulings are often viewed as merely reflecting the Commissioner's opinion. The Service states that taxpayers in substantially similar situations may rely on published rulings, although the Service has authority to amend or revoke a ruling.
- Revenue procedures are statements of procedure affecting the rights or duties of taxpayers and usually provides guidance to taxpayers for dealings with the Service. For example, there are revenue procedures that provide calculations of the inflation-adjusted amounts of items like tax brackets and the standard deduction amount, 87 and revenue procedures that provide guidance to taxpayers as to how to file requests for written advice from the IRS such as private letter rulings, discussed below. ${ }^{88}$
- Private letter rulings are written statements issued to a taxpayer or her authorized representative by the National Office of the Internal Revenue Service interpreting and applying the tax laws to the taxpayer's specific set of facts. Taxpayers usually request a letter ruling in order to be sure of the tax consequences of planned transactions. A taxpayer requesting a private letter ruling is charged a user fee. There are certain specific issues on which the Service will not issue a ruling or will not ordinarily issue a ruling; a list of specific "no-ruling" topics is published each year as a revenue procedure. ${ }^{89}$ In addition, the Service refuses to give rulings on: "inherently factual" matters prior to a taxpayer filing a return, any issues in litigation, and matters to be addressed in future rule-making regulations. Information on areas or

[^25]issues on which the Service will not rule is published in revenue procedures.

- Technical advice memorandums are interpretations of the proper application of the tax laws and regulations furnished by the National Office of the IRS on the request of a District Office of the IRS in connection with an examination of a taxpayer's return or claim for refund or credit. Unlike revenue rulings and revenue procedures, private letter rulings and technical advice memoranda technically have no precedential effect and may only be relied upon by the taxpayer who requested the ruling or advice. In addition, a taxpayer may rely on a private letter ruling only to the extent that the taxpayer accurately states all material facts in the ruling request and to the extent that the law remains unchanged after the Service grants the ruling.
- Notices and Announcements are less formal, less technical types of guidance that the IRS regularly releases to inform taxpayers about specific issues. Notices may include substantive interpretations of the law, and often presage the release of proposed regulations or other more formal types of guidance. Announcements can be similar to notices but generally have only short-term utility. The Service also occasionally publishes "FAQs" on its website that prescribe procedures for interacting with IRS personnel in specific types of situations, and that describe how the IRS will deal with specific issues.

Revenue rulings, revenue procedures, notices, and announcements are published weekly in the Internal Revenue Bulletin. ${ }^{90}$ One additional, important IRS publication is the Internal Revenue Manual (IRM). The IRM directs IRS personnel on how to perform their duties and functions. Although it is intended to be used internally by the IRS, it is publicly available and can be useful to understand and anticipate how the IRS will address particular issues. ${ }^{91}$

Treatment of Tax Returns. Before moving on to the judicial sources of the tax law, consider the administrative treatment given tax returns. Taxpayers required to file an income tax return must do so annually. § 6072. Returns submitted by the taxpayer to the IRS may or may not be audited. If a return is audited, the examining officer may find a deficiency (too little tax paid) or an overpayment (too much tax paid). The general statute of limitations on the Service is three years, so that the Service must

[^26]assess a deficiency within three years after the return is filed. The statute of limitations is extended in cases where the taxpayer omitted from gross income more than $25 \%$ of the amount reported on a return (6 years), failed to file a return (no limit), or filed a false or fraudulent return (no limit). § 6501(a), (c) and (e)(1).

If the IRS concludes an audit by proposing an adjustment to the tax return as filed (meaning that the taxpayer and the examining agent cannot reach an agreement on the alleged deficiency amount), the taxpayer may appeal to the Regional Appeals Office of the IRS. An Appeals Officer, who is new to the case (i.e., has not been involved in the audit), will review the case and propose a final resolution, taking into account potential hazards for the government of litigating the case. Where agreement has not been reached, the Service may issue a Notice of Deficiency (also known as a 90day letter or, perhaps mockingly, the "ticket to Tax Court"). ${ }^{92}$

The Judicial Function and Judicial Materials. The taxpayer may contest the deficiency notice without paying it by filing a petition in the Tax Court within 90 days, or can pay the deficiency and (eventually) sue for a refund in Federal district court or the Court of Federal Claims.

If a taxpayer chooses to file a petition in the United States Tax Court, the case will be tried without a jury before one of the judges of the Tax Court. Although there is only one Tax Court, the judges serving on the Tax Court sit in a number of cities throughout the United States. The Federal Rules of Evidence apply in Tax Court proceedings, although discovery is generally conducted informally with the Tax Court requiring the government and the taxpayer to hold a pre-discovery conference and exchange relevant documents. ${ }^{93}$ Nonetheless, trials proceed very differently than in Federal District Court because the tax rules require the parties to agree to and submit extensive stipulations of fact in advance of trial. ${ }^{94}$ These stipulations are intended to minimize the factfinding role of the Court, and to focus the court on specific areas of dispute. The burden of proof in Tax Court proceedings is a preponderance of the evidence-more than $50 \%$-which must be carried by the taxpayer in most cases (i.e., the Notice of Deficiency is presumed to be sufficient for the government to prevail).

For taxpayers with small proposed tax deficiencies (i.e., the amount of the tax deficiency is $\$ 50,000$ or less for any one taxable year), the Tax Court offers informal procedures designed to expedite the resolution of and reduce the expense of tax litigation. If a taxpayer elects this informal small case procedure, the outcome of the case cannot be appealed by either the

[^27]taxpayer or the Service, and the opinion produced by the Tax Court judge does not have precedential value. § 7463(a) and (b).

Section 7459(a) requires the Tax Court judge who hears a case to issue a report (i.e., a draft opinion) and a decision in all Tax Court proceedings "as quickly as practicable." Section 7459(b) requires that the report include findings of fact and a proposed Tax Court opinion ("T.C. opinion") or a Tax Court memorandum opinion ("T.C. Mem."). This report is submitted to the Chief Judge of the Tax Court who then either accepts the draft opinion, resulting in a "decision of the Tax Court," or sends the report to the entire court for review before coming to a final decision. A few factors weigh on the Chief Judge's decision as to whether to submit the report for full court review. These factors include: (1) whether an issue of first impression is presented by the case; (2) whether a recurring issue of fact having broad interest is presented by the case; or (3) whether the proposed opinion will be overruling a prior decision made by the Tax Court. Once decided upon, T.C. opinions are published in the official reports of the Tax Court. § 7460(b). Memorandum opinions, on the other hand, are not published officially, but may be available in some commercially published reporters, and are generally cases that involve settled law or results that are factually driven. However, these cases are still often cited in Tax Court proceedings and are weighed strongly by the Tax Court.

Should a taxpayer fail to file a petition with the Tax Court within the time permitted, §6213(c), or lose in the Tax Court, various collection procedures are available to the IRS. These include distraint (seizure and sale of a taxpayer's personal and real property) and the imposition of liens. If the Service believes that the collection of a deficiency may be jeopardized by delay, it may demand immediate payment of a tax without reference to the time limitations and restrictions generally in effect. § 6861.

Instead of litigating in the Tax Court, the taxpayer may pay the full amount of the tax or additional tax proposed by the Service, and thereafter file an administrative claim for a refund for the overpayment of taxes. If the IRS does not respond to the refund claim within six months of the date it is filed, or if the claim is disallowed, the taxpayer may then file a suit for a refund in a Federal district court in the district in which the taxpayer resides or in the United States Court of Federal Claims. §§ 6532(a), 7422(a). In Federal District Court either the taxpayer or the government may demand a jury trial. A Court of Federal Claims case is tried without a jury.

Decisions by the Tax Court (except small claims procedures) or a Federal district court are appealable by right by either party to a United States Court of Appeals for the circuit in which the taxpayer lives. Decisions in the Court of Federal Claims are appealable by right by either party to the United States Court of Appeals for the Federal Circuit. The

United States Supreme Court occasionally (but not often) ventures into the tax field to review decisions of an appellate court.

Nonacquiescence in Decisions. It may startle some students to learn that when the taxpayer wins a case in the Tax Court that the IRS believes to be based on an erroneous legal concept, the Service may announce, whether or not it appeals the decision, that it does not acquiesce in the decision. Nonacquiescence puts other taxpayers on notice of a disputed issue and indicates that the Service may litigate the same issue when it arises again. The decision, unless reversed on appeal, is binding as to the Service in the case itself. On the other hand, if the Service does acquiesce in a determination adverse to the government, the Service indicates that it will not continue to contest the issue when it arises in other cases. In its published revenue rulings, the Service may also announce whether or not it will follow a decision of a Federal district court, the United States Court of Federal Claims, or a court of appeals. Acquiescences and nonacquiescences indicate the Service's views. They are given some weight but may be rejected by a court. Sometimes the Service will announce that it has changed its mind, by substituting an acquiescence for a nonacquiescence or vice versa.

## Questions

1. If there is a conflict among the circuits on a complex issue relevant to your client's tax liability, what are the factors you should consider in deciding whether to pay the deficiency and sue for a refund or litigate in the Tax Court?
2. What are the advantages and disadvantages of a system that allows taxpayers access to the Tax Court, the Claims Court or the district courts? What reforms would address the problems of the present system? What new problems would those reforms introduce?
3. The government is always a party to the litigation in every tax controversy. In what way does that make tax litigation different from other civil litigation? What institutional needs does that create and how does the tax controversy process accommodate those needs?

## E. INTRODUCTION TO TAX TERMS AND CONCEPTS

This section provides an introduction to some of the key terms used in the Code and the basic concepts underlying the income tax system, which we will study more closely in later chapters. It also provides a brief outline of how the Federal income tax of a particular individual is computed.

The touchstone of the income tax is gross income. Section 61 defines the term "gross income" broadly as "all income from whatever source derived." Section 61 includes a nonexclusive list of items included in gross income, but does not define gross income. In fact (surprisingly!) there is no
definition of income in the Code. A handful of Code sections (§§ 71-91) specifically include certain items in gross income. On the other hand, certain benefits received by a taxpayer are not included in gross income and, therefore, are never taxed. Many of these items are specifically excluded by $\S \S 101$ to 139 G (and are thus called exclusions). Excluded items narrow the statutory concept of gross income and do not enter into the computation of tax. Because the Code itself provides little guidance on the meaning of income, the judicial and administrative materials described earlier in this chapter make an important contribution to the law defining income.

A taxpayer includes certain items in gross income only if they are both realized and recognized for tax purposes. The realization concept seeks to distinguish events that create economic income (i.e., increase a person's net worth) from those that trigger potential tax consequences to the income recipient. For example, a taxpayer is economically better off when property she holds appreciates in value, but not every increase in the taxpayer's net worth is subject to tax. Generally, gain from property must be realized before it constitutes income. See §61(a)(3). Realization usually does not occur until the taxpayer sells or otherwise disposes of the property. See § 1001(a).

Basis is a fundamental tax concept. In its simplest form, the basis of property is the initial cost of the property, § 1012, understood as the amount paid for or invested in the property. Instead of a cost basis, a taxpayer may have a carryover basis, which is established by referring to someone else's basis. A multitude of situations having tax significance, discussed elsewhere in this book, affect the basis of property. The original basis plus additions or subtractions constitute the adjusted basis of the property. See §§ 1011 and 1016.

The measurement of gain or loss on a sale or other disposition involves a comparison of the amount realized by a taxpayer with the taxpayer's adjusted basis for the property. § 1001(a). Under § 1001(b), the amount realized from the disposition of property equals "the sum of any money received plus the fair market value of [any] property (other than money) received." Taxable gain occurs when the amount realized exceeds adjusted basis. Similarly, loss occurs when the adjusted basis exceeds the amount realized. For example, if a taxpayer sells property for $\$ 950$ in cash (amount realized) for which he paid $\$ 50$ (basis) his gain or income is $\$ 900$. The same result holds if he sells the same property in exchange for $\$ 450$ in cash plus a painting with a fair market value of $\$ 500$ - the amount realized is $\$ 950$. In either version of the transaction, the $\$ 50$ cost basis is returned to the taxpayer free of tax liability, which is why we say that the basis concept permits a taxpayer to receive a tax-free return of invested capital, an appropriate concept, because the Code is a tax on income, not gross receipts.

As gains derived from dealings in property are included in the taxpayer's gross income under $\S 61(\mathrm{a})(3)$ some losses sustained by the taxpayer are deductible under $\S 165(\mathrm{a})$. An individual may deduct a loss sustained only if the loss is connected with a business or a transaction entered into for profit, § 165(c)(1) and (c)(2), or is occasioned by certain Federally declared disasters. § 165(c)(3) and (h)(5).

Recognized gain (or loss) is the amount of the realized gain (or loss) included in a taxpayer's gross income in the current year. As a general rule, the entire realized gain (or loss) is recognized for tax purposes. § 1001(c). However, the Code provides a number of exceptions to this general rule, which permit taxpayers to postpone-but not permanently exclude-the reporting of gain (or loss) to a later year. Many of these so-called nonrecognition provisions are grounded on the concept that the taxpayer has not changed her economic position and therefore, she has not, in substance, terminated her interest in a particular investment, so that tax consequences wait until the taxpayer "cashes out" (converts the investment back into cash). For example, a taxpayer who bought a parcel of investment real estate for $\$ 1,000$ and trades it for a different parcel worth $\$ 1,200$ has $\$ 200$ of realized gain, but $\S 1031$ may allow the trader to defer reporting that gain until that second parcel is sold for cash. Non-recognition provisions are narrowly defined and constitute the exception rather than the general rule.

After the taxpayer determines whether or not she has realized a gain (or loss) on the disposition of property and whether or not the gain (or loss) is recognized, the character of the gain or loss must be determined. A gain or loss is either capital or ordinary. In brief, the character of gain (or loss) turns on: the nature of the asset and what it is used for by the taxpayer, the taxpayer's holding period for the asset, and whether the taxpayer disposed of the asset in a sale or exchange transaction. Taxpayers prefer to characterize gains as capital because long-term capital gains are typically taxed at $20 \%$ compared with a top rate of $37 \%$ on ordinary income. § $1(\mathrm{~h})$. On the other hand, taxpayers usually prefer to characterize a loss as ordinary because deductibility of capital losses is limited. Each year, capital losses are deductible to the extent of an individual taxpayer's capital gains plus $\$ 3,000$ of other (ordinary) income. § 1211(b).

Not all of an individual's expenditures give rise to a deduction for tax purposes. Generally, an individual may deduct only those expenditures that arise out of the taxpayer's trade or business or the taxpayer's profit seeking transactions. Hence, § 162 permits deductions for the "ordinary and necessary expenses" of carrying on a "trade or business." (Deductions for business expenses are discussed in detail in Chapter 2.) Similarly, for individuals engaged in profit-oriented transactions which do not constitute the carrying on of a "trade or business," § 212 has in the past allowed the deduction of ordinary and necessary expenses for the "production or
collection of income," the "management, conservation, or maintenance of property held for the production of income," or the "determination, collection or refund of any tax." However, the § 212 deduction is suspended until 2026 under the 2017 Tax Act.

On the other hand, personal, living, or family expenses are generally nondeductible under $\S 262$. (The line between deductions for business and personal expenses is explored in Chapter 4.) There are exceptions to these general rules, so that certain personal expenditures, such as the cost of medical care (§ 213) and certain interest payments (§ 163) are deductible.

The process of determining tax liability involves multiple steps that can be illustrated by the following equation:

Gross Income (§ 61)

- "Above the Line" Deductions (§ 62)
= Adjusted Gross Income (AGI)
- Standard Deduction (§63) or - Itemized Deductions (§ 63(d))
$=$ Taxable Income
$\times$ Rate
$=$ Tentative Tax
- Credits
$=$ Tax Liability

The first step is to ascertain gross income, which is defined in $\S 61$. Subtracting certain deductions, mostly business or profit-related expenses, from gross income produces adjusted gross income (often referred to as "AGI"). Read §62, which lists the deductions that are allowed to be subtracted from gross income to determine AGI. Deductions allowed in arriving at adjusted gross income are often referred to as "above-the-line" deductions. Notice that $\S 62$ does not authorize a deduction for any expense-the operative provisions for deductions are found elsewhere in the Code.

Adjusted gross income is an intermediate computation that is relevant for various limitations in the Code, but the ultimate determination is taxable income, defined by $\S 63$. Deductions that reduce adjusted gross income to arrive at taxable income are referred to as "below-the-line" deductions. The individual's initial income tax liability is determined by applying the appropriate tax rate to taxable income. The tax rate depends upon taxable income and filing status. § 1.

Taxpayers may arrive at taxable income by one of two routes-by either itemizing deductions or not. For individuals who do not itemize their deductions, taxable income equals adjusted gross income less the standard deduction. § 63(b). The standard deduction has traditionally been set as a fixed amount that varies with a taxpayer's marital and filing status; as of 2019 it is set at $\$ 12,200$ for individuals and $\$ 24,400$ for married filers, amounts which are indexed to reflect inflation. ${ }^{95} \S 63(\mathrm{c})$. The standard deduction accomplishes a variety of purposes, including simplifying the tax return form and reducing recordkeeping by taxpayers. The standard deduction takes low-income individuals off the income tax rolls entirely: if you are single and earn less than $\$ 12,200$, your income tax rate is effectively $0 \%$ because of the standard deduction, although you may have payroll tax liability. The standard deduction may be justified as allowing for a minimum subsistence level of nontaxable income. For all taxpayers, the standard deduction creates a $0 \%$ bracket that applies to some gross income before the first (10\%) bracket kicks in (the $10 \%$ rate applies to the first dollars of taxable income only). Taxpayers can opt to take itemized deductions instead of the standard deduction. § 63(b). Itemized deductions reduce AGI by separately enumerated below-the-line deductions, including contributions to charity, and state and local tax payments up to $\$ 10,000$ each year. ${ }^{96}$

Once taxable income is determined, the appropriate tax rates found in the tax rate tables in § 1 (adjusted for inflation) are applied to determine the taxpayer's initial income tax liability as discussed earlier in this chapter. After determining an individual's initial tax liability, statutory credits directly reduce the amount of tax payable. A credit must be contrasted with a deduction. (Credits are discussed in more detail in Chapter 5.) A credit reduces a taxpayer's tax liability by the full amount of the allowable credit while a deduction may reduce the amount of income subject to tax. Therefore, while each dollar of a credit reduces tax liability by an equal dollar amount, the effect of a deduction is more convoluted; a deduction reduces the amount of tax owed by the amount of the deduction multiplied by the taxpayer's marginal tax rate. For example, if a taxpayer's marginal tax rate is $37 \%$, a $\$ 100$ deduction saves $\$ 37$, which is the amount of tax that would have been due on $\$ 100$ of gross income had that $\$ 100$ not been offset by the $\$ 100$ deduction. In contrast, a $\$ 100$ credit reduces the tax liability itself by $\$ 100$.

The Federal income tax system is based on an annual accounting of income for a given twelve-month period. The year for which the taxpayer's income is determined is either a calendar year or a fiscal year. A fiscal year

[^28]ends on the last day of any month except December. Individual taxpayers almost always report on a calendar year basis. The annual accounting concept was in existence and used by businesses well before the adoption of the Code. (Methods of accounting and other timing issues are addressed in Chapter 6.) Hence, annual accounting for the tax system is the most practical approach as it reflects how a business reports its financial results. However, annual reporting can be distortive, as tax liabilities are computed each year even though business transactions may cover more than a single annual period.

## PROBLEM

The taxpayers Logan and Rory are married. Logan works full time. Rory attends school and has a part time job. They have the receipts and expenditures set out below. Determine their gross income, $\S 61$, their adjusted gross income, § 62, and their taxable income, § 63. Because the taxpayers are married, they are eligible to file a joint return.

Receipts-
(1) \$165,000-Logan's salary
(2) 23,000—Rory's salary
(3) $1,800-\mathrm{proceed}$ from the sale of stock purchased two years earlier for $\$ 1,000$
(4) 12,000-damages received for personal injury

6,000-car loan
(6) 300-interest on bank savings account
(a) What is Logan and Rory's gross income? Besides § 61, look at §§ 104(a)(2) and 1001.

Expenditures-
(1) \$32,000-apartment rent, food, clothing, and entertainment
(2) 6,000-contribution to a health savings account
(3) 420-interest on car loan
(4) 17,500-Federal income taxes withheld from wages

9,000-charitable contribution
16,000-state and local taxes paid
(b) Which of these expenditures are deductible? Look at §§ 163(h), 164(a), (b)(6), 170, 223, 262, 275.
(c) Of the deductible expenditures, which, if any, are deductible in arriving at adjusted gross income? Look at § 62.
(d) Should Logan and Rory itemize their deductions or not, and what is Logan and Rory's taxable income? Look at §§ 63.
(e) What is their tentative tax liability? Assume that their capital gains rate under § 1(h) is $15 \%$.
(f) Do they owe any money to the Federal government or does the government owe them? How much? Look at § 31(a)(1).
(g) How would your analysis change if Logan and Rory were each single taxpayers, instead of married joint filers? Look at the rate tables and think about whether it matters if Logan earned all the income or if Logan and Rory each earned the same amount of income.

## F. DEFERRAL AND THE TIME VALUE OF MONEY

Would you rather have $\$ 100$ today, or $\$ 100$ a year from today? If you earn $\$ 100$, would you rather pay tax on that $\$ 100$ today, or a year from today? Timing is crucial in taxation. Deferring tax allows the taxpayer to invest her earnings, undiminished by tax, which, as explored in this part, can be extremely valuable.

For example, compare the tax results in the following example. Assume an income tax with a flat rate of $30 \%$, and a taxpayer earns $\$ 100$ in Year 1. The taxpayer would have only $\$ 70$ to invest after tax, because she pays $\$ 30$ of income tax in Year 1. What if she did not have to pay tax on that $\$ 100$ in Year 1? Then she would have the full $\$ 100$ to invest and grow. Under a cash flow consumption tax, the taxpayer is only taxed when she consumes (spends) the money. So if she saved the $\$ 100$, she would be able to invest the entire $\$ 100$ earned. If her investment vehicle (say, a mutual fund with a mix of assets) earned a $10 \%$ pre-tax rate of return, then in an income tax, she would earn $\$ 7$ on the $\$ 70$ investment by year 2 (investing $\$ 70$ and earning $10 \%$ ). On that $\$ 7$, she would owe $30 \%$ in tax ( $\$ 2.10$ ), leaving her with an after-tax return of $\$ 4.90$. That $\$ 4.90$ is a $7 \%$ rate of return on her $\$ 70$ investment. In a cash flow consumption tax, the $10 \%$ return on the invested $\$ 100$ would be $\$ 10$, undiminished by tax as long as she saved the amount earned rather than spent it on consumption.

| Table 2: Tax on Savings in  <br> Income Tax vs. Consumption Tax (30\% rate)  <br>  Income Tax |  |  |
| ---: | :---: | :---: |
| Consumption Tax |  |  |
| Year 1 Earnings | $\$ 100$ | $\$ 100$ |
| Year 1 Tax | $\$ 30$ | $\$ 0$ |
| Year 2 Earnings | $\$ 7(10 \%$ of $\$ 70)$ | $\$ 10(10 \%$ of $\$ 100)$ |
| Year 2 Tax | $\$ 2.10$ | $\$ 0$ |
| Cash After Year 2 | $\$ 74.90$ | $\$ 110$ |
| Consumption <br> Power After Year 2 | $\$ 74.90$ | $\$ 77$ |

Over the long run, small differences in the rate of return and the timing of tax can make a big difference. The pages that follow describe the mathematical operation for measuring these differences-and the math can get tricky. But fear not: Tables 3 and 4, at the end of this section, give you all the information you need to quickly calculate both the future value of money you have and invest now (Table 3, below) and the present value of money you will receive sometime in the future (Table 4, below). The key point is that money received now is more valuable than money received sometime in the future. Conversely, tax deferred (i.e., paid later, for example with a $401(\mathrm{k})$ account, as discussed in Chapter 8 ) is less costly to the taxpayer than tax paid currently (i.e., paid now). Why is this? Because when you have money, you can invest it and earn more money; when someone else has money, they can invest it and earn more money for themselves. That is why lenders charge interest.

## 1. FUTURE VALUE

Returning to the example above, the difference in the rate of return$7 \%$ under an income tax versus $10 \%$ under a consumption tax-becomes more and more significant over time because of compound interest. The longer you keep your money invested, the more interest will accrue. Interest will accrue on the original investment ( $\$ 70$ under the income tax or $\$ 100$ under the consumption tax) plus the previously accrued but unpaid interest ( $\$ 7$ or $\$ 10$ ). In addition, the more frequently the interest is added to the invested amount, the faster the interest will accumulate. If your dollar is deposited in an interest-bearing account earning $10 \%$ annually, then after a year, you would have $\$ 1.10$ to spend, rather than just a dollar. And if you waited two years to spend your dollar, it will have grown to $\$ 1.21$ in the interest-bearing account because in the second year, the $\$ 1.10$ invested earns interest at $10 \%$, earning 11 cents of interest in the second year, a penny more than in the first.

The calculation of future value is based on the amount of money originally invested, the interest rate (rate of return), the compounding period (how often interest is added to the invested amount, e.g., yearly or monthly), and the future date on which that money will be paid out. The calculation is summarized as:

$$
\text { Future Value }=\text { Current Value } \times(1+r)^{t}
$$

where $r$ is the interest rate or rate of return on investment, and $t$ is the number of periods of time. One dollar now will grow into $\$ 1$ multiplied by $(1+r)^{t}$ at $t$ point of time in the future. Note that in regular conversation, interest rates are most often referred to on an annual basis-you may have seen references in student loan promotions, for example, to the "APR," which means the annual percentage rate. An annual compounding interest rate could also be expressed as a monthly or even daily rate (e.g., $12 \%$ interest compounding annually is the same as $1 \%$ per month).

Building on the example above, assume the starting amount of money is $\$ 100$, the time period is 30 years in both cases, and the rate of return is $7 \%$ in an income tax (because the market return of $10 \%$ is taxed at a $30 \%$ rate) or $10 \%$ in a consumption tax (because investment returns are not taxed in a consumption tax unless or until the funds are spent on consumption). Therefore:
under the income tax, after 30 years, $\$ 100 \times(1+.07)^{30}=\underline{\$ 761.22}$;
and
under the consumption tax, after 30 years, $\$ 100 \times(1+.10)^{30}=\$ 1,744.94$.
Thus, assuming that taxpayer Ella left all her after-tax earnings in the investment until her retirement in year 30, at retirement she would have a total of $\$ 761.22$ under an income tax and $\$ 1,744.94$ under a consumption tax.

Note (again) that you do not need to be deterred by the math: the future value of $\$ \mathrm{x}$ in a future year can be determined using the multipliers provided in Table 3 below. Look at how the values calculated above correspond to the numbers provided in Table 3. A 7\% return after 30 years yields a value of 7.61 ; multiply this number by the original $\$ 100$ investment, and you get the result above. Similarly, Table 3 shows a value of 17.44 for a $10 \%$ return over 30 years-again, simple multiplication gets you to the correct result.

Comparing an income tax to the consumption tax described above, which is called a cash-flow consumption tax, the above calculations demonstrate how a dollar received today will grow to a date in the future. The more you invest today, the more you will have available to spend in the future. Under the consumption tax, she would pay $30 \%$ at the time of consumption, leaving her with $\$ 1,221.46$ of after-tax consuming power in year 30. Under an income tax, although she would face no further tax
liability at the time of consumption, she would still only have $\$ 761.22$ to spend in 30 years. ${ }^{97}$

## 2. PRESENT VALUE

The flip side of the future value calculation is present value-the value of a future stream of payments expressed in terms of cash today. The present value calculation answers the following question: would you rather receive a dollar today or sometime in the future. When a person has a choice of two possible investments, each promising different schedules of payments in return, the way to compare those two investments is to reduce each one to its present value.

For example, what if Christopher is given the choice between (1) a payment of $\$ 1$ per year in each of the next five years and (2) a single payment of $\$ 6$ in year five? Without considering the effect of timing, you might think that $\$ 6$ later is worth more than $\$ 5$ spread over time but received sooner. Each alternative can be reduced to its present value to determine which one is a better choice. Determining present value is a mathematical calculation requiring the same variables as future value:
(1) Amount: the value of payments.
(2) Timing: when the payments will be made.
(3) Discount Rate: the rate, like an interest rate, for determining the value of controlling money now versus later.

Sometimes the discount rate is simply an interest rate that reflects the value of having money now in an interest-bearing account, as considered in the future value calculation above. The discount rate can vary, though, based on many considerations, including opportunity costs of an investment, prevailing interest rates (and thus economic outlook), and so on. Putting this all together,

$$
\begin{gathered}
\text { Present Value }=\mathrm{P}_{0}+\frac{\mathrm{P}_{1}}{1+\mathrm{r}_{1}}+\frac{\mathrm{P}_{2}}{\left(1+\mathrm{r}_{1}\right)\left(1+\mathrm{r}_{2}\right)}+\frac{\mathrm{P}_{3}}{\left(1+\mathrm{r}_{1}\right)\left(1+\mathrm{r}_{2}\right)\left(1+\mathrm{r}_{3}\right)} \\
\text { or }
\end{gathered}
$$

$$
\text { Present Value }=\text { the sum of } \quad \mathrm{P}_{\mathrm{t}} \quad \text { for each year } \mathrm{t} .
$$

$$
(1+r)^{t}
$$

$P_{0}$ is the starting amount, $P_{1}$ is the amount in Year 1 , and so on; $r_{1}$ is the discount (interest) rate in Year 1, $r_{2}$ is the rate in Year 2, and so on.

[^29]In the choice given to Christopher, if he knows that he can invest money now and earn $10 \%$ each year, then the appropriate discount rate is $10 \%$. The stream of payments over the course of five years in alternative (1) is called an annuity, and the present value of the five payments is equal to the sum of the present value of each of the payments. The present value can be determined by adding up the present value of each payment-the $\$ 1$ in one year, plus the $\$ 1$ another year later, and so on. This can be calculated as $\$ 1$ divided by 1.10 , plus $\$ 1$ divided by $1.10^{2}$, plus $\$ 1$ divided by $1.10^{3}$, and so on, or from the appropriate column of the Table 4 below ( $\$ 0.909$ for Year 1, $\$ 0.826$ for year $2, \$ 0.751$ for year 3, and so on). The total present value of the stream of payments, discounted at $10 \%$ is $\$ 3.79$.

The present value of Christopher's second option, $\$ 6$ paid in year five, is calculated as follows:

$$
\mathrm{PV}=\frac{\$ 6}{(1+.10)^{5}}=\$ 3.72
$$

The $\$ 6$ in year 5 thus has a present value of $\$ 3.72$ today. Note again that the present value of $\$ x$ paid some years in the future can be determined using the multipliers provided in Table 4: $\$ 6$ multiplied by 0.62 yields the same $\$ 3.72$.

Therefore, for Christopher the option of payments totaling $\$ 5$ but starting much sooner, is a more lucrative choice than receiving $\$ 6$ in year five, even though on first glance it appears to be less valuable.

## 3. THE VALUE OF DEFERRAL

If these differences are underwhelming, add some zeroes and consider a longer time horizon. Would you rather receive $\$ 5,000,000$ in 40 years, when you retire, or receive $\$ 100,000$ per year each year for the next 40 years? The basic math, ignoring the time value of money, shows that 40 years $\times \$ 100,000=\$ 4,000,000$, which is less than $\$ 5,000,000$. But what is your discount rate? If you assume an interest rate of $3 \%$ and use that as your discount rate, then the $\$ 5,000,000$ has a present value of just $\$ 1,533,740 .{ }^{98}$ That may be plenty for you to retire on (depending on what you have in mind) but it is far short of the $\$ 5$ million face value. In contrast, the $\$ 100,000$ per year alternative has a present value of $\$ 2,311,470.99$ That

98 Present Value of funds received in 40 years with a discount rate of $3 \%=$

$$
\frac{\$ 5,000,000}{(1+.03)^{40}}
$$

99 Present Value of $\$ 100,000$ per year for 40 years with a $3 \%$ discount rate $=$ the sum of: $\frac{\$ 100,000}{(1+.03)^{1}}+\frac{\$ 100,000}{(1+.03)^{2}}+\cdots \frac{\$ 100,000}{(1+.03)^{40}}$
is more than $50 \%$ more for your retirement as compared to the lump sum future payment.

The time value of money is important in income taxation because the timing of income and deductions can affect the present value of the tax imposed. Taxpayers generally prefer to delay (or defer) income and accelerate deductions so that they minimize the present value of the tax paid. Consider for example a transaction that occurs in Year 1 and causes a tax liability of $\$ 1,000$ and assume a $10 \%$ prevailing interest rate. Taxpayers would generally prefer to defer that $\$ 1,000$ liability to Year 2, because the present value of an obligation to pay $\$ 1,000$ in Year 2, discounted at $10 \%$, is only $\$ 909$. This means that the taxpayer could save $\$ 91$ by paying one year later. If the taxpayer plans in Year 1 for the payment to be made in Year 2, she can put $\$ 909$ into a $10 \%$ interest-bearing account, and the account will grow to $\$ 1,000$ by Year 2, enough to satisfy the liability.

Deferral of tax can be characterized as an interest-free loan from the Federal government. The taxpayer who is able to postpone the payment of $\$ 1,000$ in taxes has the use of $\$ 1,000$ for the deferral period, at no interest charge. If the taxpayer facing a $\$ 1,000$ tax liability placed $\$ 1,000$ in the $10 \%$ interest-bearing account in Year 1, then she could keep the $\$ 100$ interest earned during the year and pay only the $\$ 1,000$ to the government in Year 2. On the other hand, if the government had collected the tax in Year 1, then it would have been able to earn the $10 \%$ itself.

Deferral of tax can also be described as a reduction in tax rate. If the $\$ 1,000$ tax liability arose on income of $\$ 3,000$, then the rate of tax is $1000 / 3000$ or $33.3 \%$. If, however, that liability is satisfied with only $\$ 909$, then the rate of tax is reduced to $909 / 3000$ or $30.3 \%$. The longer the payment of tax is deferred, the less the taxpayer needs to put away today to fund the future tax liability, and the lower the effective rate of tax on income. Congress can choose to deliberately defer tax liability on current income as a way to lower the effective tax rate on income from activities that it wants to encourage.

The interest-free loan principle is also helpful in determining which taxpayer in a multi-party transaction has how much income or deduction. For example, if a supplier sells goods on credit to a purchaser, then the payment made by the buyer at the later date includes both payment for the goods and compensation for use of the money during the period when the credit is extended. Thus, if the price is $\$ 97$ at the time of purchase, or $\$ 100$ after 90 days, then $\$ 3$ of the $\$ 100$ might be better characterized as interest charged by the seller for the deferred payment, rather than the purchase price of the goods themselves. Because the tax law differentiates between the price for goods and the cost of interest, if the $\$ 3$ is not carved out as interest, it will be taxed incorrectly. (See Chapter 7.)

Disguised interest can also be taxed to the wrong person. If those goods are prepaid, instead of post-paid, then the interest goes in the other direction, because the buyer is essentially lending money to the seller during the prepayment period. If the prepaid price of the goods is $\$ 97$, rather than the usual $\$ 100$, then the discount enjoyed by the buyer might be better characterized as compensation from the seller to the purchaser for the use of the money during the prepayment period, i.e., $\$ 3$ of interest for lending the money to the seller for 90 days. If we treat the $\$ 97$ purchase price as the only taxable transaction, and ignore the time value of money element, then the $\$ 3$ of interest, which should be included in the buyer's income and deducted by the seller, will be taxed to the seller and not to the buyer.

In recent years, Congress has recognized the planning opportunities created by the failure of the Code to address time value of money issues. In specific Code sections, it has, for example, attempted to minimize the government's interest-free loans to taxpayers by charging interest on deferred tax liabilities, § 453A(c), and by identifying the interest on transactions where it is not stated, $\S \S 1272$ and 1274.

## PROBLEMS

1. Assume a discount rate of $10 \%$. Using the tables, which of the following would you prefer to receive?
(a) $\$ 1$ at the end of Year $1, \$ 3$ at the end of Year 3, and $\$ 5$ at the end of Year 5, or
(b) $\$ 2$ at the end of years 1,2 , and 3 .
2. Explain why a taxpayer would prefer to recognize income in Year 2 that was realized in Year 1.
3. Explain why you would prefer to deduct the cost of a three-year insurance policy when it is purchased in Year 1, rather than one-third each year over three-years.
4. What are the time value of money issues raised by the following examples? What planning opportunities might they create and how could the Code address them?
(a) A tortfeasor settles a tort claim brought against it by agreeing to make annual payments to the victim over the next 20 years.
(i) Assume the tortfeasor can immediately deduct the settlement payment as a business expense and the victim need not include any amount in income.
(ii) Assume the tortfeasor can only claim a deduction as it makes the payments and the victim need not include any amount in income.
(iii) Assume the tortfeasor cannot deduct the payments and the victim need not include any amount in income.
(iv) Assume the tortfeasor cannot deduct the payments and the victim must include the interest component only.
(v) Assume the tortfeasor cannot deduct the payments and the victim must include all the payments in income.
(b) Employer agrees to pay Employee deferred compensation of $\$ 100,000$ for this year's services, payable in 15 years. What tax consequences would make this advantageous to Employee? Employer?

Table 3: Future Value-Amount to Which $\$ 1$ Now Will Grow by End of Specified Year at Compounded Interest

| Year | 3\% | 4\% | 5\% | 6\% | 7\% | 8\% | 10\% | 12\% | 15\% | 20\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1.03 | 1.04 | 1.05 | 1.06 | 1.07 | 1.08 | 1.10 | 1.12 | 1.15 | 1.20 |
| 2 | 1.06 | 1.08 | 1.1 | 1.12 | 1.14 | 1.17 | 1.21 | 1.25 | 1.32 | 1.44 |
| 3 | 1.09 | 1.12 | 1.16 | 1.19 | 1.23 | 1.26 | 1.33 | 1.4 | 1.52 | 1.73 |
| 4 | 1.13 | 1.17 | 1.22 | 1.26 | 1.31 | 1.36 | 1.46 | 1.57 | 1.74 | 2.07 |
| 5 | 1.16 | 1.22 | 1.28 | 1.34 | 1.4 | 1.47 | 1.61 | 1.76 | 2.01 | 2.49 |
| 6 | 1.19 | 1.27 | 1.34 | 1.41 | 1.5 | 1.59 | 1.77 | 1.97 | 2.31 | 2.99 |
| 7 | 1.23 | 1.32 | 1.41 | 1.5 | 1.61 | 1.71 | 1.94 | 2.21 | 2.66 | 3.58 |
| 8 | 1.27 | 1.37 | 1.48 | 1.59 | 1.72 | 1.85 | 2.14 | 2.48 | 3.05 | 4.30 |
| 9 | 1.30 | 1.42 | 1.55 | 1.68 | 1.84 | 2.00 | 2.35 | 2.77 | 3.52 | 5.16 |
| 10 | 1.34 | 1.48 | 1.63 | 1.79 | 1.97 | 2.16 | 2.59 | 3.11 | 4.05 | 6.19 |
| 11 | 1.38 | 1.54 | 1.71 | 1.89 | 2.1 | 2.33 | 2.85 | 3.48 | 4.66 | 7.43 |
| 12 | 1.43 | 1.6 | 1.8 | 2.01 | 2.25 | 2.52 | 3.13 | 3.9 | 5.30 | 8.92 |
| 13 | 1.47 | 1.67 | 1.89 | 2.13 | 2.41 | 2.72 | 3.45 | 4.36 | 6.10 | 10.7 |
| 14 | 1.51 | 1.73 | 1.98 | 2.26 | 2.58 | 2.94 | 3.79 | 4.89 | 7.00 | 12.8 |
| 15 | 1.56 | 1.8 | 2.08 | 2.39 | 2.76 | 3.17 | 4.17 | 5.47 | 8.13 | 15.4 |
| 16 | 1.6 | 1.87 | 2.18 | 2.54 | 2.95 | 3.43 | 4.59 | 6.13 | 9.40 | 18.5 |
| 17 | 1.65 | 1.95 | 2.29 | 2.69 | 3.16 | 3.7 | 5.05 | 6.87 | 10.6 | 22.2 |
| 18 | 1.7 | 2.03 | 2.41 | 2.85 | 3.38 | 4 | 5.55 | 7.7 | 12.5 | 26.62 |
| 19 | 1.75 | 2.11 | 2.53 | 3.02 | 3.62 | 4.32 | 6.11 | 8.61 | 14.00 | 31.95 |
| 20 | 1.81 | 2.19 | 2.65 | 3.2 | 3.87 | 4.66 | 6.72 | 9.65 | 16.10 | 38.34 |
| 25 | 2.09 | 2.67 | 3.39 | 4.29 | 5.43 | 6.85 | 10.8 | 17 | 32.9 | 95.40 |
| 30 | 2.43 | 3.24 | 4.32 | 5.74 | 7.61 | 10 | 17.4 | 30 | 66.2 | 237 |
| 40 | 3.26 | 4.8 | 7.04 | 10.3 | 15 | 21.7 | 45.3 | 93.1 | 267 | 1470 |
| 50 | 4.38 | 7.11 | 11.5 | 18.4 | 29.5 | 46.9 | 117 | 289 | 1080 | 9100 |

Table 4: Present Value-What Is the Value Today of $\$ 1$ Paid at End of Specified Future Year

| Year | $\mathbf{3 \%}$ | $\mathbf{4 \%}$ | $\mathbf{5 \%}$ | $\mathbf{6 \%}$ | $\mathbf{7 \%}$ | $\mathbf{8 \%}$ | $\mathbf{1 0 \%}$ | $\mathbf{1 2 \%}$ | $\mathbf{1 5 \%}$ | $\mathbf{2 0 \%}$ |
| :---: | ---: | :--- | ---: | :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 0.971 | 0.962 | 0.952 | 0.943 | 0.935 | 0.926 | 0.909 | 0.893 | 0.87 | 0.833 |
| 2 | 0.943 | 0.925 | 0.907 | 0.89 | 0.873 | 0.857 | 0.826 | 0.797 | 0.756 | 0.694 |
| 3 | 0.915 | 0.89 | 0.864 | 0.839 | 0.816 | 0.794 | 0.751 | 0.711 | 0.658 | 0.578 |
| 4 | 0.889 | 0.855 | 0.823 | 0.792 | 0.763 | 0.735 | 0.683 | 0.636 | 0.572 | 0.482 |
| 5 | 0.863 | 0.823 | 0.784 | 0.747 | 0.713 | 0.681 | 0.62 | 0.567 | 0.497 | 0.402 |
| 6 | 0.838 | 0.79 | 0.746 | 0.705 | 0.666 | 0.63 | 0.564 | 0.507 | 0.432 | 0.335 |
| 7 | 0.813 | 0.76 | 0.711 | 0.665 | 0.623 | 0.583 | 0.513 | 0.452 | 0.376 | 0.279 |
| 8 | 0.789 | 0.731 | 0.677 | 0.627 | 0.582 | 0.54 | 0.466 | 0.404 | 0.326 | 0.233 |
| 9 | 0.766 | 0.703 | 0.645 | 0.591 | 0.544 | 0.5 | 0.424 | 0.36 | 0.284 | 0.194 |
| 10 | 0.744 | 0.676 | 0.614 | 0.558 | 0.508 | 0.463 | 0.385 | 0.322 | 0.247 | 0.162 |
| 11 | 0.722 | 0.65 | 0.585 | 0.526 | 0.475 | 0.429 | 0.35 | 0.287 | 0.215 | 0.134 |
| 12 | 0.701 | 0.625 | 0.557 | 0.497 | 0.444 | 0.397 | 0.318 | 0.257 | 0.187 | 0.112 |
| 13 | 0.681 | 0.601 | 0.53 | 0.468 | 0.415 | 0.368 | 0.289 | 0.229 | 0.162 | 0.0935 |
| 14 | 0.661 | 0.577 | 0.505 | 0.442 | 0.388 | 0.34 | 0.263 | 0.204 | 0.141 | 0.0779 |
| 15 | 0.642 | 0.555 | 0.481 | 0.417 | 0.362 | 0.315 | 0.239 | 0.183 | 0.122 | 0.0649 |
| 16 | 0.623 | 0.534 | 0.458 | 0.393 | 0.339 | 0.292 | 0.217 | 0.163 | 0.107 | 0.0541 |
| 17 | 0.605 | 0.513 | 0.436 | 0.371 | 0.317 | 0.27 | 0.197 | 0.146 | 0.093 | 0.0451 |
| 18 | 0.587 | 0.494 | 0.416 | 0.35 | 0.296 | 0.25 | 0.179 | 0.13 | 0.0808 | 0.0376 |
| 19 | 0.57 | 0.475 | 0.396 | 0.33 | 0.277 | 0.232 | 0.163 | 0.116 | 0.0703 | 0.0313 |
| 20 | 0.554 | 0.456 | 0.377 | 0.311 | 0.258 | 0.215 | 0.148 | 0.104 | 0.0611 | 0.0261 |
| 25 | 0.478 | 0.375 | 0.295 | 0.232 | 0.184 | 0.146 | 0.0923 | 0.0588 | 0.0304 | 0.0105 |
| 30 | 0.412 | 0.308 | 0.231 | 0.174 | 0.131 | 0.0994 | 0.0573 | 0.0334 | 0.0151 | 0.00421 |
| 40 | 0.307 | 0.208 | 0.142 | 0.0972 | 0.067 | 0.046 | 0.0221 | 0.0107 | 0.00373 | 0.00068 |
| 50 | 0.228 | 0.141 | 0.087 | 0.0543 | 0.034 | 0.0213 | 0.00852 | 0.00346 | 0.00092 | 0.00011 |


[^0]:    1 Compania General De Tabacos De Filipinas v. Collector of Internal Revenue, 275 U.S. 87, 100 (1927) (J. Holmes dissenting).

    2 McColloch v. Maryland, 17 U.S. (4 Wheat.) 316 (1819).
    3 Lawrence Zelenak, Maybe Just a Little Bit Special, After All?, 63 DUKE L.J. 1897, 1907 (2014) (relating the story of Einstein speaking to his tax advisor, an accountant in Princeton, N.J.; the accountant suggested that perhaps the theory of relativity was more difficult, to which Einstein responded, "Oh, no, that is easy").

    426 U.S.C. § 1 et seq.
    ${ }^{5}$ See infra Figure 1.
    ${ }^{6}$ See Gregory N. Mankiw \& Matthew Weinzierl, The Optimal Taxation of Height: A Case Study of Utilitarian Income Redistribution, 2(1) Am. Econ. J.: ECon. Pol’Y 155-76 (2010).

[^1]:    $7 \quad 26$ U.S.C. § 5701(b).
    8 The base for the Federal cigarette tax described in the example above is "small" cigarettes, which are defined in the statute as cigarettes weighing 3 pounds per thousand or less; heavier cigarettes are taxed at a higher rate. Id.

[^2]:    $9 \quad$ Section 1 provides different brackets based on "filing status": single individuals face a rate structure that increases more quickly than married couples filing jointly, with heads of household (single parents) falling between the two. The basic goal is to tax households with the same number of people similarly, although this is easier said than done as tax brackets necessarily penalize or reward marriage (it is mathematically impossible for progressive brackets to be neutral as between single individuals with low and high income who get married and single individuals with equal income who get married). This is discussed more fully in Chapter 8. The minimum and maximum amounts of income that fall within each rate bracket-the so called "rate breaks"-occur at different dollar amounts depending on filing status.

[^3]:    10 Take a look at §1. Section 1(c) and 1(d) provide rate tables, but those tables look very different than the one presented on Table 1 here. Take a quick tour through $\S 1$, and you'll find that subsection (i) of § 1 modifies subsections (c) and (d), and subsection (j) displaces subsection (i). Still, the numbers on the tables in subsection (j) are slightly different than the numbers in Table 1 here. That is because $\S 1(\mathrm{j})(3)(\mathrm{B})$ provides that the rate breaks are to be adjusted each year to account for inflation. This adjustment is provided each year in a publication called a Revenue Procedure (discussed further in this chapter). See Rev. Proc. 2018-57 § 3.01, 2018-49 I.R.B. 827.

    11 The legislation Congress enacted in December 2017 is often referred to as the Tax Cuts and Jobs Act, although its official name-because of the procedural posture in which it was considered in the Senate, and partisan wrangling that resulted-is the "Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018." It is referred to throughout this text as the 2017 Tax Act.

[^4]:    1226 U.S.C. §§ 11, 301-385 (establishing the corporate tax base and imposing a tax of $21 \%$ on the taxable income of corporations). Partnerships, and other so-called "pass-through" entities, do not themselves pay taxes, but their income is taxed directly to the individuals who have interests in those entities.

    1326 U.S.C. $\S \S 3101-3128$ (imposing a tax of $6.2 \%$ on wages up to $\$ 132,900$ as of 2019 , which is used to fund Social Security, and a tax of $1.45 \%$ on all wages, which is used to fund Medicare; these amounts are withheld from employees' paychecks, and employers must pay equal amounts as well); 26 U.S.C. $\S \S 3301-3311$ (imposing a tax on employers of $6 \%$ on the first $\$ 7,000$ an employee earns, which is used to fund payment of unemployment compensation to workers who have lost their jobs; these amounts are withheld from employees' paychecks). These taxes are sometimes referred to colloquially as "payroll taxes" or as Social Security and/or Medicare taxes.

    1426 U.S.C. § 2001.
    1526 U.S.C. § 2501.
    16 For example, distilled spirits produced in or imported into the United States are subject to a Federal tax of $\$ 13.50$ on each "proof gallon." 26 U.S.C. § 5001. Dump trucks that can carry over eight cubic yards of freight are generally subject to a $12 \%$ tax when sold new. 26 U.S.C. § 4051; Rev. Proc. 2005-19, 2005-1 C.B. 832.

    17 For example, ducks are taxed at a rate of $0.9 \phi$ each (although, under the North American Free Trade Agreement and other agreements, certain duck imports are not taxed; and duck imports from Cuba and North Korea are taxed at a rate of $\$ 3$ each). See U.S. Int'L Trade Comm’n, HARMONIZED TARIFF SCHEDULE 2015 (Revision 5-2018), https://www.usitc.gov/tata/hts/bychapter/ index.htm. Duties are enacted by Congress under Title 19 of the U.S. Code, titled Customs Duties, and imposed by the U.S. Customs and Border Protection Agency. Under current law, the President has broad authority to impose duties if congressionally determined preconditions are met. For example, President Trump in early 2018 imposed duties on aluminum imports based on a finding that excessive importation of aluminum presented a national security threat. Presidential Proclamation on Adjusting Imports of Aluminum into the United States (Mar. 8, 2018) (citing 19 U.S.C. § 1862).

    18 Internal Revenue Service Data Book, 2017 tbl. 6 (IRS Gross Collections, by Type of Tax, Fiscal Years 1960-2017), https://www.irs.gov/pub/irs-soi/17databk.pdf. The more precise amount of revenue raised in 2017 was: $\$ 3,416,714,139$.

[^5]:    19 Congressional Budget Office (CBO), The Distribution of Household Income, 2014, at 1-48 (Mar. 19, 2018), https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/ 53597-distribution-household-income-2014.pdf.

    20 Id. fig. 14.
    21 Joint Comm. on TAxation (JCT), Overview of the Federal Tax System as in Effect FOR 2018 (JCX-3-18) tbl.A-6 (Feb. 7, 2018) (Distribution of Income and Taxes, and Average Tax

[^6]:    Rates in 2018 (Projected)), https://www.jct.gov/publications.html?func=startdown\&id=5060 [hereinafter 2018 TAX System Overview].
    ${ }_{22}$ T18-0054-Distribution of Federal Payroll and Income Taxes by Expanded Cash Income Percentile, 2018, TAX PoL’Y CTR. (May 15, 2018), https://www.taxpolicycenter.org/model-estimates/ distribution-federal-payroll-and-income-taxes-may-2018/t18-0054-distribution-federal. The number of households not owing income tax became a political flashpoint during the 2012 presidential election when candidate Mitt Romney claimed that the $47 \%$ of households in that position consist of those people are "who are dependent upon government, who believe that they are victims, who believe the government has a responsibility to care for them, who believe that they are entitled to health care, to food, to housing, to you-name-it." This statement disregarded employment tax liability, as well as state and local tax liability.
    ${ }^{23} 2018$ Tax System Overview, supra note 21, at 35 tbl.A-7 (Tax Returns with Income or Employment Taxes in 2018 (Projected)).
    $24 \quad I d$.
    25 Id. at 34 tbl.A-6.
    26 CBO, supra note 19, at 27 fig. 13.
    272017 Quarterly Summary of State \& Local Tax Revenue Tables, U.S. Census Bureau tbl. 1 (National Totals of State and Local Government Tax Revenue, By Type of Tax (Through December 2017)), https://www.census.gov/data/tables/2017/econ/qtax/historical.Q4.html.

[^7]:    ${ }^{28}$ OECD Revenue Statistics 1965-2016, tbl.1.1 (2017), https://www.oecd-ilibrary.org/ taxation/revenue-statistics-1965-2016/tax-revenue-trends-1965-2016_rev_stats-2017-4-en.

[^8]:    ${ }^{29}$ Section 9, clause 4 provides that "No Capitation, or other direct, Tax shall be laid, unless in Proportion to the Census or Enumeration herein before directed to be taken." Section 2, clause 3 provides that "Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other Persons." Following the Civil War, the Fourteenth Amendment eliminated the "three-fifths compromise," thus providing that formerly enslaved persons would be counted as whole persons in the census (and, by extension, for purposes of apportionment of any direct taxes).

    30 As further discussed below, ambiguity and debate regarding what constitutes a direct tax began at the Founding, and has continued to the current era. See Nat'l Fed. Indep. Bus. v. Sebelius, 567 U.S. 519, 570-71 (2012) (describing the Supreme Court's treatment of the term, which in 1796 was understood to include only head taxes and property taxes, and which later expanded to include the income tax). It is possible that the Constitution's prohibition on direct taxes aside from the income tax would proscribe enactment of a Federal wealth tax, though this point is contested and would ultimately need to be settled by the Supreme Court.

[^9]:    31 The Supreme Court confronted this issue in 1796 when it considered a challenge to a Federal tax on carriages in Hylton v. United States, 3 U.S. (3 Dall.) 171 (1796). The Court held that a carriage tax must not be a direct tax, "in part reasoning that apportioning such a tax would make little sense, because it would have required taxing carriage owners at dramatically different rates depending on how many carriages were in their home State." Nat'l Fed. Indep. Bus. v. Sebelius, 567 U.S. at 570 . The Hylton holding did not stand. See Pollock v. Farmers' Loan \& Trust Co., discussed below.

    32 See Joel S. Newman, Slave Tax as Sin Tax: 18th and 19th Century Perspectives, 101(9) Tax Notes (Nov. 2003) (quoting Act of July 22, 1813, ch. 16, "An act for the Assessment and Collection of Direct Taxes and Internal Duties section 5" 3 U.S. Statutes at Large 22, 26. The Constitution permitted taxation on the importation of enslaved persons of up to $\$ 10$ per person, but Congress never enacted such a tax. At various times, including during the War of 1812,

[^10]:    Congress enacted taxes on property and enslaved persons, which, so as to comply with the apportionment requirement, came in the form of obligations to state legislatures to raise a set portion of revenue by imposing tax at appropriate rates to raise the state's share of revenue.).

    33 Act of August 5, 1861, c. 45, 12 Stat. 292, 309, § 49. See generally Edwin R. SELIGMAN, The Income Tax: A Study of the History, Theory, and Practice of Income Taxation at Home and Abroad (Lawbook Exchange ed., 2011) (1914).

    34 Act of July 1, 1862, c. 119, 12 Stat. 432, 473, § 90; Act of June 30, 1864, c. 173, 13 Stat. 223, 281, § 116 amended by Act of March 3, 1865, c. 78, 13 Stat. 469, 479; Act of July 14, 1870, c. 255, 16 Stat. 256, 257, § 6.

    35102 U.S. (12 Otto) 586 (1881).
    36 The Court explained, in reasoning that it would reject barely 10 years later, that "direct taxes, within the meaning of the Constitution, are only capitation taxes, as expressed in that instrument, and taxes on real estate." Id. at 602. Capitation taxes refers to a head tax.

    37 Act of August 27, 1894, c. 349, 28 Stat. 509, § 27.
    38157 U.S. 429 (1895), on reh'g, 158 U.S. 601 (1895).
    39 See SELIGMAN, supra note 33, at 592-94.

[^11]:    40 Id. at 593-96.
    ${ }^{41}$ Act of August 5, 1909, c. 6, 36 Stat. 11, § 38.
    $42 \quad 220$ U.S. 107 (1911).
    43 Act of October 3, 1913, ch. 16, 38 Stat. 114, 166, § 2. In 2018 dollars, the exemption amount was around $\$ 76,000$ for single individuals and around $\$ 101,000$ for married couples.

    44240 U.S. 1 (1916).
    ${ }^{45}$ Id. at 12. More recently, the Supreme Court has suggested that it no longer endorses this maximal view of Congress's taxing power under the Constitution. Nat'l Fed. Indep. Bus. v. Sebelius, 567 U.S. 519, 570-71 (2012) (in dicta, the majority opined that if a tax were too onerous such that it was primarily regulatory in nature, it would not be a valid exercise of the taxing power).

    46 N.Y. Trust Co. v. Eisner, 256 U.S. 345 (1921) (estate tax); Milliken v. United States, 283 U.S. 15 (1931).

    471939 Internal Revenue Code, Pub. L. 1, 76th Cong. (Jan. 2, 1939).

[^12]:    48 Some of the details of these amendments to the Code are discussed throughout this book.
    49 Although it is convenient to analyze tax policy independently of spending policies, consideration of efficiency and equity in taxation cannot escape the question of the size and scope of government. See generally Liam Murphy \& Thomas Nagel, The Myth of Ownership (2002).

[^13]:    50 See Joel Slemrod \& Christian Gillitzer, Tax Systems 182-83 (2014).
    ${ }^{51}$ Pigouvian taxes are taxes that are levied against a market activity that creates negative externalities. Ideally, the tax is set to equal the social cost of the negative externalities, causing the market to account for the full cost of the activity and leading to an efficient outcome. Examples of Pigouvian taxes include taxes on gasoline and tobacco products.

[^14]:    52 Although even when the price appears to incorporate the full cost of the tax, there may be deadweight loss.

    53 If the seller reduces the pre-tax price to $\$ 1.91$, the government will collect $\$ 0.19$ in tax, and the cost to the purchaser will be $\$ 2.10$.

    54 The most recent estimates by the CBO and JCT are that $75 \%$ of the corporate tax burden falls on the shareholders while $25 \%$ falls on employees. The most recent estimate by the Treasury is that $82 \%$ of the corporate tax burden falls on the owners and the other $18 \%$ falls on the laborers. JCT, Modeling the Distribution of Taxes on Business Income (JCX-14-13), at 4, 5, 8 (Oct. 16, 2013).

[^15]:    55 The concept of present value is discussed further later in this chapter.
    56 An interest payment on a bond is the amount that the lender (the bond purchaser) charges to allow the borrower (the bond seller) to use the lender's cash. A business that needs capital might issue bonds promising a $10 \%$ annual return for 10 years, which means that if a person purchases $\$ 1,000$ of bonds, the business will pay that person $\$ 100$ each year, and then repay the $\$ 1,000$ principal amount at the end of Year 10.

[^16]:    57 See generally N. Gregory Mankiw, Principles of Economics 160 (7th ed. 2014); Jonathan Gruber, Public Finance and Public Policy (5th ed. 2015).

[^17]:    58 See generally John Stuart Mill, Principles of Political Economy (New Ed., Prometheus Books 2004) (1848); John Stuart Mill, On Liberty (Dover Thrift ed., Dover Publications 2002) (1859).

    59 See generally Jeremy Bentham, An Introduction to the Principles of Morals and Legislation (Prometheus Books ed., Prometheus Books 1988) (1789).

[^18]:    60 A person who earns $\$ 10,000$ would pay $\$ 0$ in taxes, which means they have a $0 \%$ effective tax rate. This is because their total income is within the $\$ 10,000$ exemption amount. A person who earns $\$ 20,000$ would pay $\$ 2,500$ in taxes, which means they have a $12.5 \%$ tax rate $(\$ 2,500 / \$ 20,000)$. This is because the first $\$ 10,000$ is exempted from tax so only the second $\$ 10,000$ is taxed at the $25 \%$ rate. A person who earns $\$ 100,000$ would pay $\$ 22,500$ in taxes, which means they have a $22.5 \%$ tax rate ( $\$ 22,500 / \$ 100,000$ ). This is because the first $\$ 10,000$ is exempted so only the next $\$ 90,000$ is taxed at the $25 \%$ rate.

    61 A person who earns $\$ 10,000$ receives a $\$ 2,500$ demogrant, and pays a $\$ 2,500$ tax bill, for a net payment of $\$ 0$, which is a rate of $0 \%$. A person who earns $\$ 20,000$ receives the same $\$ 2,500$ demogrant, and pays $\$ 5,000$ in tax liability, for a net payment of $\$ 2,500$, which is a $12.5 \%$ rate. A person who earns $\$ 100,000$ receives a $\$ 2,500$ demogrant and pays a $\$ 25,000$ tax bill, for a net payment of $\$ 22,500$, which is a $22.5 \%$ rate.

[^19]:    62 See Louis Kaplow, Horizontal Equity: Measures in Search of a Principle, 42 Nat'L TAX J. 139-54 (1989).
    ${ }^{63}$ Congressional Budget \& Impoundment Control Act of 1974, Pub. L. No. 93-344, 88 Stat. 297, 299 (1974).

[^20]:    64 U.S. Dep’t of the Treasury, Office of Tax Analysis, Tax Expenditures Fiscal Year 2019 (Oct. 16, 2017), https://www.treasury.gov/resource-center/tax-policy/Documents/Tax-Expenditures-FY2019.pdf.

    65 JCT, Estimates of Federal Tax Expenditures for Fiscal Years 2017-2021 (JCX-3418) (May 25, 2018).
    ${ }^{66}$ This section is based on Linda Sugin, Invisible Taxpayers, 69 TAX L. REV. 617, 656-63 (2016).

[^21]:    $67 \quad 461$ U.S. 574 (1983).
    $68 \quad I d$. at 585.
    69468 U.S. 737 (1984). The majority's reasoning was grounded in standing doctrine, i.e., whether under the Constitution's Article III case or controversy requirement, the litigant "is entitled to have the court decide the merits of the dispute or of particular issues." Warth v. Seldin, 422 U.S. 490 , 498 (1975). The students attended public schools in an area where private schools remained segregated and continued to have tax exempt status, despite the Court's holding in Bob Jones.
    $70 \quad 570$ U.S. 744 (2013).

[^22]:    71 Sugin, supra note 66, at 661.
    72 See 26 U.S.C. §§ 1-9834.
    ${ }^{73}$ See supra notes 47-48 and accompanying text, discussing earlier iterations of the Code.
    74 Chapter 1 covers "normal taxes," sections 1 through 1400Z-2 (sometimes Congress adds additional sections by appending letters or additional numbers to a regular section number), which is part of Subtitle A; Chapter 12 covers the gift tax, sections 2501 through 2524 which is part of Subtitle B.

[^23]:    75 Subchapter C of Chapter 1 covers that taxation of corporations; this is a particularly wellknown subchapter because it is reason for the term "C Corporation." Subpart F (of Part III of Subchapter N under Chapter 1) is a particularly important-and often referenced-subpart in the realm of international tax, as it provides guidelines for the reporting of certain income from foreign sources.
    ${ }^{76}$ For example, section 61 is the first section in Subchapter B, which is titled "Computation of Taxable Income." Section 61 includes cross references to "this subtitle" (meaning Subtitle A), and to part II and part III (of Subchapter B).

    77 The Origination Clause, U.S. Const. art. I, § 7, cl. 1.
    78 See Megyn S. Lynch, Cong. Research Serv., RL30458, The Budget Reconciliation Process, Timing of Legislative Action (Feb. 23, 2016).

[^24]:    79 See Kristin E. Hickman, Unpacking the Force of Law, 66 VAND. L. Rev. 465 (2013)
    805 U.S.C. § 553(b), (c).
    81 For example, § $274(o)$ instructs that "The Secretary shall prescribe such regulations as he may deem necessary to carry out the purposes of this section, including regulations prescribing whether subsection (a) or subsection (b) applies in cases where both such subsections would otherwise apply." This sort of instruction is a specific grant of regulatory authority, in contrast to the general authority provided in § 7805(a).
    $82 \quad 562$ U.S. 44 (2011).
    $83 \quad 467$ U.S. 472 (1979).
    84145 T.C. No. 3 (2015), appeal docketed, Nos. 16-70496, 16-70497 (9th Cir. Feb. 23, 2016).
    85463 U.S. 29 (1983)

[^25]:    86 See Encino Motorcars, LLC v. Navarro, 136 S. Ct. 2117, 2125 (2016); Judulang v. Holder, 565 U.S. 42, 52 n. 7 (2011).

    87 E.g., Rev. Proc. 2018-57, 2018-49 I.R.B. 827.
    88 Rev. Proc. 2019-1, 2019-1 I.R.B. 1.
    89 For the current list of issues that taxpayers may and may not request a private letter ruling for, see IRS Revenue Bulletin 2018-1, https://www.irs.gov/irb/2018-01_IRB.

[^26]:    90 Internal Revenue Bulletins, IRS, https://apps.irs.gov/app/picklist/list/internalRevenue Bulletins.html. Until 2008, published rulings and procedures are then accumulated semiannually in a bound volume called the Cumulative Bulletin.

    91 See IRS, INTERNAL REVENUE MANUALS (IRM), https://www.irs.gov/irm.

[^27]:    $92 \quad 26$ U.S.C. § 6212.
    93 Branerton Corp. v. Comm'r, 61 T.C. 691 (1974); § 7453; U.S. TAX Court, Rules of Practice \& Procedure r. 143, https://www.ustaxcourt.gov/rules.htm [hereinafter RULES OF Practice \& Procedure].

    94 RULES OF Practice \& Procedure, supra note 93, r. 91.

[^28]:    ${ }^{95}$ See Rev. Proc. 2018-57 § 3.16, 2018-49 I.R.B. 827.
    $96 \S \S 170,164$. Deductions for state and local taxes are limited to $\$ 10,000$ each year; charitable deductions are not so limited. The 2017 Tax Act suspended "miscellaneous itemized deductions," previously permitted under $\S 67$ to the extent such deductions exceeded $2 \%$ of the taxpayer's AGI, through 2025, and it eliminated the $\S 68$ limitation on certain itemized deductions.

[^29]:    97 See William D. Andrews, A Consumption-Type or Cash Flow Personal Income Tax, 87 Harv. L. Rev. 1113 (1974); Alvin C. Warren, Jr., Fairness and a Consumption-Type or Cash Flow Personal Income Tax, 88 HARV. L. REV. 931 (1975).

