Taxes in the United States:

History, Fairness, and Current Political Issues

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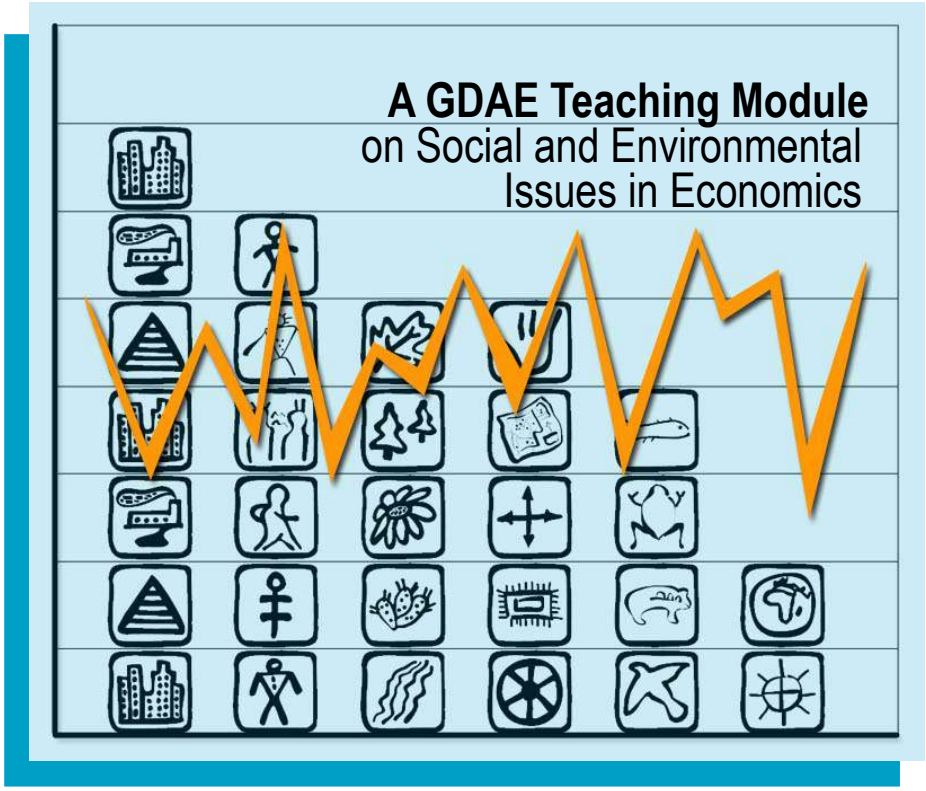

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I. INTRODUCTION

"The hardest thing in the world to understand is income tax!" – Albert Einstein

Taxes are complicated. The U.S. federal tax code contains over three million words – about 6,000 pages. A casual browsing of the tax code's table of contents offers a glimpse into the vast complexity of federal taxation. Entire sections of the tax code apply specifically to the taxation of vaccines (Sec. 4131-4132), shipowners' mutual protection and indemnity associations (Sec. 526), specially sweetened natural wines (Sec. 5385), and life insurance companies (Sec. 801-818). Annual changes to the tax code imply that taxes will continue to become more complex even as politicians tout tax simplification. Taxes levied by other jurisdictions, such as states and cities, add further complexity to taxation in the U.S. Americans spend billions of hours each year working on their taxes, not to mention the costs of accountants and tax preparers.

Fortunately, one needn't comprehend the imposing complexity of the tax code to understand the crucial role of taxes in American society. Taxation is an important, but commonly neglected, topic for students of economics, political science, and other disciplines. Tax policy has important economic consequences, both for the national economy and for particular groups within the economy. Tax policies are often designed with the intention of stimulating economic growth – although economists differ drastically about which policies are most effective at fostering growth. Taxes can create incentives promoting desirable behavior and disincentives for unwanted behavior. Taxation provides a means to redistribute economic resources towards those with low incomes or special needs. Taxes provide the revenue needed for critical public services such as social security, health care, national defense, and education.

Taxation is as much of a political issue as an economic issue. Political leaders have used tax policy to promote their agendas by initiating various tax reforms: decreasing (or increasing) tax rates, changing the definition of taxable income, creating new taxes on specific products, etc. Of course, no one particularly wants to pay taxes. Specific groups, such as small-business owners, farmers, or retired individuals, exert significant political effort to reduce their share of the tax burden. The voluminous tax code is packed with rules that benefit a certain group of taxpayers while inevitably shifting more of the burden to others. Tax policy clearly reflects the expression of power in the U.S. – those without power or favor are left paying more in taxes while others reap the benefits of lower taxes because of their political influence. Broad attempts to reform the tax system have produced dramatic and sudden shifts in tax policy, generally motivated by political factors rather than sound economic theory. For example, the top marginal federal tax bracket on individual income in the U.S. dropped precipitously from 70% to 28% during the 1980s. Tax policy has clearly been used to promote political, as well as economic, agendas.

This module is intended to provide a basic understanding of the economic, political, and social context of the entire U.S. tax system. When most people think about taxes, they

tend to think only of the federal income tax. However, looking solely at the federal income tax would miss several important issues. Perhaps most importantly, the federal income tax is *not* the largest tax bill to most Americans. We'll see that the largest tax for most Americans is federal social insurance taxation. Also, the federal income tax is one of the most progressive taxes in the U.S. system. When all taxes are considered, the U.S. tax system is much less progressive. You may be surprised to find out how many taxes in the U.S. are actually regressive – hitting low-income households at a disproportionately high rate.

This module is divided into three major sections. First, some basic terms will be defined and discussed, including tax progressivity and the differences between several types of taxes. Second, a brief overview of tax history in the United States will be presented. Third, data on tax trends will be used to illustrate the changing nature of taxation with a focus on the overall progressivity of the entire tax system.

II. THE STRUCTURE OF TAXATION IN THE UNITED STATES

Tax Progressivity

The overall system of taxation in the United States is progressive. By a **progressive tax** system, we mean that the percentage of income an individual (or household) pays in taxes tends to increase with increasing income. Not only do those with higher incomes pay more in total taxes, they pay a higher *rate* of taxes. This is the essence of a progressive tax system. For example, a person making $100,000 in a year might pay 25% of their income in taxes ($25,000 in taxes), while someone with an income of $30,000 might only pay a 10% tax rate ($3,000 in taxes).

A tax system may also be regressive or proportional. A **regressive tax** system is one where the proportion of income paid in taxes tends to decrease as one's income increases. A **proportional tax** system simply means that everyone pays the same tax rate regardless of income. A particular tax system may display elements of more than one approach. Consider a hypothetical tax system where one pays a proportional, or flat[1], rate on income below a certain dollar amount and then progressively increasing rates above that dollar amount. Also, within an overall tax system, some particular taxes might be progressive while other taxes are regressive. We'll see later on that this the case in the United States.

The Reasons for Progressive Taxation

The overall tax system of the United States, and in most other countries, is progressive for a number of reasons. A progressive tax embodies the concept that those with high incomes should pay more of their income in taxes because of their greater ability to pay

[1] This is not exactly the same concept embodied in current proposals for a "flat tax" in the U.S. These proposals would set just one tax rate but would exclude a given amount of income from taxation. Thus, the flat tax proposals would retain a small degree of progressivity.

without critical sacrifices. By paying a tax, any household must forego an equivalent amount of spending on goods, services, or investments. For a high-income household, these foregone opportunities might include a second home, an expensive vehicle, or a purchase of corporate stock. A low-income household, by comparison, might have to forego basic medical care, post-secondary education, or vehicle safety repairs. As income increases, the opportunity costs of paying taxes tend to be associated more with luxuries rather than basic necessities. The **ability-to-pay principle** recognizes that a flat (or regressive) tax rate would impose a larger burden, in terms of foregone necessities, on low-income households as compared to high-income households.

A progressive tax system is also a mechanism to addresses economic inequalities in a society. To evaluate a tax system's impact on inequality, one must consider both the distribution of taxes paid and the distribution of the benefits derived from tax revenue. If the benefits of programs funded by taxation primarily benefit low-income households while high-income households pay the majority of taxes, then the tax system effectively operates as a transfer mechanism. Increasing the progressivity of the tax system or altering the distribution of benefits allows greater redistribution of economic resources. We'll mainly focus on tax payments in this module but you should also be aware that the benefits of public expenditures are not evenly distributed throughout society.[2]

There is also an economic argument for a progressive tax system – it may yield a given level of public revenue with the least economic impact. To see why, consider how households with different levels of income would respond to a $100 tax cut. A low-income household would tend to quickly spend the entire amount on needed goods and services – injecting $100 of increased demand into the economy. By comparison, a high-income household might only spend a fraction on goods and services, choosing to save or invest a portion of the money. The money that a high-income household saves or invests does not add to the overall level of effective demand in an economy.[3] In economic terms, we say that the **marginal propensity to consume** tends to decrease as income increases. So, by collecting proportionally more taxes from high-income households we tend to maintain a higher level of effective demand and more economic activity.

Of course, one can posit that a tax system can become too progressive. Extremely high tax rates at high-income levels might create a significant disincentive that reduces the productive capacity of society. Very high taxes might limit the risks taken by entrepreneurs, stifling innovations and technological advances. The desire to "soak the rich" through an extremely progressive tax system might be viewed as unfair, and not just by the rich. In fact, this was a concern of the Constitutional framers – that a democratic majority would eventually impose unduly burdensome taxes on the wealthy minority. We'll see that their concerns have proved groundless. Many critics of the current tax

[2] The distribution of the benefits derived from public expenditures is, of course, more difficult to determine that the distribution of tax payments. The distribution of public assistance programs can be easily measured. However, the distribution of the benefits of scientific research support, business subsidies, public works, national defense, and other expenditures is a difficult research task.

[3] Money saved or invested may, however, provide the financial capital necessary to increase the productive capacity of the economy. "Supply-side" economists stress the importance of investment by the wealthy as the key to economic growth.

system point to the contrary position – that the powerful minority have used their might to shift the tax burden away from themselves onto an immobilized and misinformed majority.

Even if one could devise a tax system that is economically optimal (i.e., producing the highest overall level of economic growth), the topic of taxation encompasses ideals about equity and fairness. A society may be willing to sacrifice some degree of economic growth in exchange for a more equitable distribution of economic resources. This is not to say that economic growth must always be sacrificed with redistribution. In fact, analysis of the U.S. historical data finds that high levels of economic growth tend to be associated with periods of relatively equitable distribution of economic resources (Krugman, 2002).

We now turn to differentiating between the different types of taxes levied in the U.S. We'll first discuss several forms of federal taxation, roughly in order of the revenue they generate, and then consider taxation at the state and local levels. A final section will consider taxes that are generally not used in the U.S. but are important in other nations.

Federal Income Taxes

The federal income tax is the most visible, complicated, and debated tax in the U.S. The federal income tax was established with the ratification of the 16th Amendment to the U.S. Constitution in 1913. It is levied on wages and salaries as well as income from many other sources including interest, dividends, capital gains, self-employment income, alimony, and prizes. To understand the basic workings of federal income taxes, you need to comprehend only two major issues. First, all income is not taxable – there are important differences between "total income," "adjusted gross income," and "taxable income." Second, you need to know the distinction between a person's "effective tax rate" and "marginal tax rate."

Total income is simply the sum of income an individual or couple[4] receives from all sources. For most people, the largest portion of total income comes from wages or salaries. Many people also receive investment income from the three standard sources: interest, capital gains, and dividends. Self-employment income is also included in total income, along with other types of income such as alimony, farm income, and gambling winnings.

The amount of federal taxes a person owes is not calculated based on total income. Instead, once total income is calculated, tax filers are allowed to subtract some expenses as non-taxable. To obtain **adjusted gross income (AGI)**, certain out-of-pocket expenses made by a tax filer are subtracted from total income. These expenses include individual retirement account contributions, allowable moving expenses, student loan interest, tuition, and a few other expenses. AGI is important because much of the tax data presented by the IRS are sorted by AGI.

[4] Married couples have the option of filing their federal taxes either jointly or separately. Children aged 14 or over with sufficient income ($7,700 in 2002) have to file their own federal income tax returns.

However, taxes are not calculated based on AGI either. **Taxable income** is basically AGI less deductions and exemptions. Deductions are either standard or itemized. The **standard deduction** is a fixed amount excluded from taxation – for the 2009 tax year the standard deduction was $5,700 for single individuals and $11,400 for married couples. Tax filers have the option of itemizing their deductions. To itemize, a tax filer adds up certain expenses made during the year including state taxes, real estate taxes, mortgage interest, gifts to charity, and major medical expenses.[5] If the **itemized deductions** exceed the standard deduction, then the itemized total is deducted instead. **Exemptions** are calculated based on the number of tax filers and dependents. A single tax filer with no dependent children can claim one exemption. A married couple with no children can claim two exemptions. Each dependent child counts as one more exemption. Additional exemptions are given for being age 65 or over or blind. In 2009, each exemption excluded a further $3,650 from taxation.[6]

Taxable income is obtained by subtracting the deduction and exemption amounts from AGI. This is the amount a taxpayer actually pays taxes on. However, the amount of tax owed is not simply a multiple of taxable income and a single tax rate. The federal income tax system in the U.S. uses increasing **marginal tax rates**. This means that different tax rates apply on different portions of a person's income. The concept is best illustrated with an example using the 2009 tax rates. For a single filer, the first $8,350 of taxable income (not total income or AGI) is taxed at a rate of 10%. Taxable income above $8,350 but less than $33,950 is taxed at a rate of 15%. Taxable income above $33,950 but less than $82,250 is taxed at a rate of 25%. Income above $82,250 is taxed at higher marginal rates – 28%, 33%, and 35%.

Consider how we would calculate the taxes due for a single tax filer (let's call her Susan) with no children and a total income of $35,000. Assume Susan contributed $3,000 to an individual retirement account and that this is her only allowable adjustment expense. Thus, her AGI is $32,000. She claims one exemption (herself) in the amount of $3,650 and the standard deduction of $5,700. Thus, Susan's taxable income is $22,650. On the first $8,350 of taxable income she owes 10% in taxes, or $835. The tax rate on the rest of her income is 15% for a tax of $2,145, (($22,650 - $8,350) $\times$ 0.15). So, her total federal income tax bill is $2,980, ($835 + $2,145). Note that Susan's taxable income is $12,350 less than her total income.

While Susan paid a maximum tax rate of 15%, we can see that her **effective tax rate** is much lower. An effective tax rate can be calculated based on total income, AGI, or taxable income. Suppose we wish to calculate Susan's effective tax rate based on her total income of $35,000. Given that her federal income tax is $2,980, her effective tax rate is only 8.5%, (($2,980/$35,000) $\times$100). If we based her effective tax rate on her AGI, it would be 9.3%, (($2,980/$32,000) $\times$100).

[5] Note that some expenses, such as moving costs, are subtracted from total income to obtain AGI while other expenses, such as mortgage interest, are classified as deductions from AGI to obtain taxable income.
[6] Those with high incomes (more than $125,100 for an individual) either have their exemption allowance either reduced or eliminated.

Social Insurance Taxes

Taxes for federal social insurance programs, including Social Security, Medicaid, and Medicare, are taxed separately from income. **Social insurance taxes** are levied on salaries and wages, as well as income from self-employment. For those employed by others, these taxes are generally deducted directly from their paycheck. These deductions commonly appear as "FICA" taxes – a reference to the Federal Insurance Contributions Act. Self-employed individuals must pay their social insurance taxes when they file their federal income tax returns.

Social insurance taxes are actually two separate taxes. The first is a tax of 12.4% of wages, which is primarily used to fund Social Security. Half of this tax is deducted from an employee's paycheck while the employer is responsible for matching this contribution. The other is a tax of 2.9% for the Medicare program. Again, the employee and employer each pay half. Thus, social insurance taxes normally amount to a 7.65% deduction from an employee's wage (6.2% + 1.45%). Self-employed individuals are responsible for paying the entire share, 15.3%, themselves.

There is a very important difference between these two taxes. The Social Security tax is due only on the first $106,800 (in 2009) of income. On income above $106,800, *no* additional Social Security tax is paid. In other words, the maximum Social Security tax in 2009 that would be deducted from total wages is $6,622 ($106,800 $\times$ 0.062). The Medicare tax, however, is paid on *all* wages. Thus, the Medicare tax is truly a flat tax while the Social Security tax is a flat tax on the first $106,800 of income but then becomes a regressive tax when we consider income above this limit.

Consider the impact of social insurance taxes on two individuals, one making a typical salary of $45,000 and another making $300,000. The typical worker would pay 7.65% on all income, or $3,443, in federal social insurance taxes. The high-income worker would pay the maximum Social Security contribution of $6,622 plus $4,350 for Medicare (1.45% of $300,000) for a total bill of $10,972. This works out to a 3.7% overall tax rate, or less than half the tax rate paid by the typical worker. As the high-income individual pays a lower rate of taxation, we see that social insurance taxes are regressive.

Federal Corporate Taxes

Corporations must file federal tax forms that are in many ways similar to the forms individuals complete. Corporate taxable income is defined as total revenues minus the cost of goods sold, wages and salaries, depreciation, repairs, interest paid, and other deductions. Thus corporations, like individuals, can take advantage of many deductions to reduce their taxable income. In fact, a corporation may have so many deductions that it actually ends up paying no tax at all or even receives a rebate check from the federal government. We'll discuss this issue further later in the module.

Corporate tax rates, like personal income tax rates, are progressive and calculated on a marginal basis. In 2009, the lowest corporate tax rate, applied to profits lower than

$50,000 was 15%. The highest marginal corporate tax rate, applied to profits between $100,000 and $335,000 was 39%.[7] As with individuals, the effective tax rate corporations pay is lower than their marginal tax rate.

Federal Excise Taxes

An **excise tax** is a tax on the production, sale, or use of a particular commodity. The federal government collects excise taxes from manufacturers and retailers for the production or sale of a surprising number of products including tires, telephone services, air travel, transportation fuels, alcohol, tobacco, and firearms.

Unlike a sales tax, which is evident as an addition to the selling price of a product, excise taxes are normally incorporated into the price of a product. In most cases, consumers are not directly aware of the federal excise taxes they pay. However, every time you buy gas, make a phone call, fly in a commercial plane, or buy tobacco products, you are paying a federal excise tax. For example, the federal excise tax on gasoline as of 2009 was about 18 cents per gallon.

Federal excise taxes are another example of a regressive tax. Lower-income households tend to spend a greater portion of their income on goods that are subject to federal excise taxes. This is particularly true for gasoline, tobacco, and alcohol products.

Federal Estate and Gift Taxes

The vast majority of Americans will never be affected by the federal estate or gift taxes. These taxes apply only to the wealthiest Americans. The **estate tax** is applied to transfers of large estates to beneficiaries. Similar to the federal income tax, there is an exemption amount that is not taxed. Only estates valued above the exemption amount are subject to the estate tax, and the tax only applies to the value of the estate above the exemption. For example, if the tax rate were 45% of the exemption amount was $2 million, then the tax on an estate valued at $3.5 million would be $675,000, ((3,500,000-2,000,000)*0.45).

As of Fall 2010, the future of the estate tax is in limbo. Under the Economic Growth and Tax Relief Act of 2001, estate taxes rates were gradually reduced, and exemption rates gradually increased, over the period 2001-2009. In 2001, the exemption amount was $675,000 million and the tax rate was 55%. For the 2009 tax year, the exemption amount was $3.5 million and the tax rate was 45%. But for 2010, there is no estate tax at all! Then, in 2011, the tax is scheduled to be reinstated with an exemption of $1 million and a tax rate of 55%. The ongoing debate over the estate tax will be covered in more detail later in this module.

The transfer of large gifts is also subject to federal taxation. The estate tax and **gift tax** are complementary because the gift tax essentially prevents people from giving away their estate to beneficiaries tax-free while they are still alive. In 2009, gifts under

[7] For the highest profit bracket – profits above $18,333,333 – the marginal rate was 35%.

$13,000 were excluded from the tax. Similar to the federal income tax, the gift tax rates are marginal and progressive, with a maximum tax rate of 45%.

The estate and gift taxes are the most progressive element of federal taxation. The estate tax is paid exclusively by those with considerable assets. Even further, the majority of all estate taxes are paid by a very small number of wealthy taxpayers. According to the Tax Policy Center, in 2009 the richest 0.1% of those subject to the estate tax pay 42% of the total estate tax revenue. (Tax Policy Center, 2010).

State and Local Taxes

Like the federal government, state governments also rely on tax revenues to fund public expenditures and transfer programs. Like the federal government, state governments rely on several different tax mechanisms including income taxes, excise taxes, and corporate taxes. Thus, much of the above discussion applies to the tax structures in place in most states. However, there are some important differences that deserve mention.

First, nearly all states (45 as of 2010) have instituted some type of general sales tax. State sales tax rates range from 2.9% (Colorado) to 8.25% (California[8]). A few states reduce the tax rate on certain goods considered to be necessities, such as food and prescription drugs. For example, the general sales tax in Illinois is 6.25% but most food and drug sales are taxed at only 1%. Other states with sales taxes exempt some necessities from taxation entirely. In most states, localities can charge a separate sales tax. While local sales taxes are generally lower than state sales taxes, there are exceptions. In New York the state sales tax is 4% but local sales taxes are often higher than 4%.

Unlike income taxes, sales taxes tend to be quite regressive. The reason is that low-income households tend to spend a larger share of their income on taxable items than high-income households. Consider gasoline – an item that tends to be a smaller share of total expenditures as income rises. An increase in the state taxes on gasoline impacts low-income households more than high-income households. Some states, such as Idaho and Kansas, offer low-income households a tax credit to compensate for the regressive nature of state sales taxes.

Forty-one states levy an income tax.[9] Most of these states have several progressive tax brackets (up to 12 rates) similar to the federal income tax. However, state income taxes tend to be much less progressive than the federal income tax. Six states have only one income tax rate, meaning that their income tax approaches a flat tax. Several more states approach a flat tax because the top rate applies at a low income or the rates are relatively constant. For example, Maine's two tax rates are 6.50% and 6.85%.

[8] Local sales taxes are also levied in some municipalities in California, which can raise the total sales tax to as high as 10.75%.
[9] Two other states, Tennessee and New Hampshire, levy no state income tax but do tax dividends and interest.

Another important distinction between the federal system of taxation and the taxes levied at state and local levels is use of property taxes. In fact, property taxes tend to be the largest revenue source for state and local governments. The primary property tax levied in the U.S. is a tax on real estate, including land, private residences, and commercial properties. Generally, the tax is an annual assessment calculated as a proportion of the value of the property, although the formulas used by localities differ significantly. Property taxes are commonly collected at a local level, but a share of property taxes is allocated for state purposes. Property taxes tend to be regressive, although less regressive than excise and sales taxes. The reason is that high-income households tend to have a lower proportion of their assets subjected to property taxes. While renters do not directly pay property taxes, most economists conclude that the costs of property taxes are largely passed on to renters in the form of higher rents.

Composition of Tax Collections in the U.S.

Table 1 presents government tax receipts, by tax source, for 2008 (the most recent year for which complete data were available). The table shows that federal taxes dominate the nation's tax system with nearly 65% of all receipts. The largest federal tax is the income tax, followed closely by social insurance taxes. State and local tax systems are primarily dependent on sales, income, and property taxation. The data in Table 1 cover the major taxes utilized in the United States. To gain a broader perspective on taxation, see Box 1 for a summary of tax mechanisms that are major revenue sources for some countries but are currently non-existent or insignificant in the U.S.

Table 1. 2008 U.S. Tax Receipts, by Source

Source	Amount (Millions $)	Percent of All Taxes
Federal Taxes		
Income Taxes	1,145,700	30.4%
Social Insurance Taxes	900,200	23.9%
Corporate Taxes	304,300	8.1%
Excise Taxes	67,300	1.8%
Estate Taxes	23,000	0.6%
Total, Federal Taxes	2,440,500	64.7%
State Taxes		
Sales Taxes	304,400	8.1%
Property Taxes	409,700	10.9%
Income Taxes	304,600	8.1%
Corporate Taxes	57,800	1.5%
Excise and Other Taxes	253,900	6.7%
Total, State Taxes	1,330,400	35.3%
Total, All Taxes	3,770,900	100.0%

Source: U.S. Census Bureau (2010), except for federal estate tax data from Tax Policy Center (2008).

BOX 1. TAX ALTERNATIVES

It is worthwhile to briefly consider tax types that are not currently important in the U.S. because these mechanisms are used in other countries or are central in various proposals to reform the U.S. tax system. We summarize five tax types here:

1. **National sales tax.** This would function similar to a state sales tax – as an addition to the retail price of certain products. A national sales tax would clearly be simpler and cheaper to administer than the current federal income tax. It would also encourage savings because, under most proposals, income that is not spent on taxable goods and services is not taxed. There are, however, two significant disadvantages to a national sales tax. First, it would create an incentive for black market exchanges to evade the tax. Second, it can be highly regressive – similar to the regressivity of state sales taxes. A national sales tax could be made less regressive, or even progressive, by providing rebates for low-income households.
2. **National consumption tax.** This is slightly different from a national sales tax. A household would pay the tax at the end of the year based on the value of its annual consumption of goods and services. Consumption can be calculated as total income less money not spent on goods and services (i.e., invested or saved). Again, a consumption tax would promote savings by exempting it from taxation. A consumption tax could also be designed to be progressive by taxing different levels of consumption at different marginal rates.
3. **Value added tax.** Most developed countries levy some form of value added tax (VAT). A VAT is levied at each stage in the production process of a product, collected from manufacturers according to the value added at each stage. Thus, the tax is not added to the retail price but incorporated into prices, similar to the way excise taxes become embedded into the price of products. Compared to a national sales tax, a VAT reduces the likelihood of black markets.
4. **Wealth taxes.** While the U.S. tax system includes local property taxes and, at least for a while, estate taxes, there is no tax on holdings of other assets such as corporate stocks, bonds, and personal property. Several European countries, including Sweden, Spain, and Switzerland, have instituted an annual wealth tax. A wealth tax could be very progressive by setting high rates and becoming effective only at significant wealth levels.
5. **Environmental taxes.** These are levied on goods and services in proportion to their environmental impact. One example is a carbon tax, which taxes products based on the emissions of carbon attributable to their production or consumption. The rationale of environmental taxation is that it encourages the use and development of goods and services with reduced environmental impacts. Like other taxes on goods and services, environmental taxes can be regressive – suggesting that environmental taxes need to be combined with other progressive taxes or rebates for low-income households. Among developed countries, the U.S. collects the smallest share of tax revenues from environmental taxes (OECD, 2010).

III. A BRIEF HISTORY OF TAXATION IN THE U.S. [10]

Before the Federal Income Tax

The tax mechanisms used during first 150 years or so of U.S. tax history bears little resemblance to the current system of taxation. First, the U.S. Constitution restricted "direct" taxation by the federal government – meaning taxes directly on individuals. Instead, the federal government relied on indirect taxes including taxes on imports (**tariffs**) and excise taxes. Tariffs were the major source of U.S. government receipts from the beginning of the nation up to the early 1900's. For example, in 1800 custom duties comprised about 84% of government receipts (U.S. Census Bureau, 1960). Internal federal revenue collections (which exclude tariffs on imports) as recently as the early 20th century were primarily derived from excise taxes on alcohol. In 1900 over 60% of internal revenue collections came from alcohol excise taxes with another 20% from tobacco excise taxes.

Another important difference is the scale of government taxation and expenditures relative to the entire economy. Government spending is currently a major portion of the total U.S. economy – in 2010 government expenditures and investment at all levels comprised about 20% of total economic output. In the late 1800s government expenditures were responsible for only about 2% of national output (earlier data on national output are not available). The role of government has become more prominent as a result of expansion of military activity and an increase in the provision of public services. Consequently an overall trend of increasing taxation is evident, although we'll see that this trend has recently stabilized or reversed.

The Constitutional framers were wary of a government's power to tax. Taxation of the American Colonies by a distant and corrupt England was a driving force behind the American Revolution. Consequently, they believed in decentralized taxation and delegated most public revenue collection to localities, which relied primarily on property taxes. During peacetime the federal government was able to meet its expenses through relatively modest excise taxes and tariffs. During times of war, such as the War of 1812, federal taxes were temporarily raised to finance the war or pay down the ensuing debts. Once the financial crisis passed, taxes were reduced in response to public opposition to high tax rates.

Like previous wars, the Civil War initiated an increase in both excise tax and tariff rates. Government revenue collections increased by a factor of seven between 1863 and 1866. Perhaps the most significant tax policy enacted during the Civil War was the institution of the first national income tax. Concerns about the legality of the tax, considering the Constitution's prohibition of direct taxation, were muted during the national emergency. The income tax rates were low by modern standards – a maximum rate of 10% along with generous exemptions meant that only about 10% of households were subject to any income tax. Still, the income tax generated over 20% of federal revenues in 1865. After

[10] The history of taxation is primarily derived from Brownlee (1996).

the war, few politicians favored the continuation of the income tax, and in 1872 it was allowed to expire.

The impetus for the modern federal income tax rests not with a wartime emergency but with the Populist movement of the late 1800s. The internal tax system in place at the time, based primarily on excise taxes on alcohol and tobacco, was largely regressive. The Populists revived interest in an income tax as a means to introduce a progressive tax based on ability to pay. They saw it as a response to excessive monopoly profits and the concentration of wealth and power. In other words, the tax was not envisioned as a means to generate significant additional public revenue but as a vehicle of social justice.

A federal income tax, with a large exemption of $4,000, was instituted in 1894 but the Supreme Court ruled it unconstitutional in 1895. Over the next couple of decades proposals were made for a constitutional amendment to establish a federal income tax. While these attempts were defeated, support for federal income taxation gradually increased. Eventually, in 1913 the 16th Amendment was ratified creating the legal basis for the federal income tax.

While the initial income tax was progressive, it was less radical than many desired. In fact, many conservatives expressed guarded support for the measure to prevent a more significant tax. While the income tax was targeted towards the wealthy – in the first few years only about 2% of households paid any income tax – tax rates of only 1%-7% prevented it from generating significant revenues.

> "...virtually none of the income tax proponents within the government believed that the income tax would become a major, yet alone the dominant, permanent source of revenue within the consumption-based federal tax system." (Brownlee, 1996, p. 45)

These views were to quickly change as the nation required a dramatic increase in revenues to finance World War I.

The Growth of Direct Taxation

Rather than relying on increases in excise taxes and tariffs to finance World War I, the administration of Woodrow Wilson transformed the income tax framework laid down just a few years previously. Desiring both to raise additional revenue and enforce social justice, the top marginal rate increased dramatically from 7% in 1915 to 67% in 1917 (IRS, 2002). Corporate taxes also became an important revenue source, accounting for over one-quarter of internal revenue collections in 1917. In 1916 the estate tax was created, not necessarily to generate large revenues but as another instrument of progressive taxation.

Unlike previous wars, much of the tax system laid down during World War I remained in place after the war. In the period from 1910 to 1925 tariffs fell from about half of government receipts to less than 15%. Meanwhile the new corporate and individual

income taxes made up nearly half of government receipts in the mid 1920s. The level of excise tax collections dropped significantly, especially during the years of Prohibition when alcohol excise taxes virtually disappeared.

The Great Depression, of course, caused a significant decline in federal receipts. In 1932 tax rates were increased in an attempt to boost federal revenue. Franklin Roosevelt, in the years leading up to World War II, presented progressive taxation as a key element of the New Deal. However, the most significant measure enacted during this period was the creation of old-age insurance.

Prior to national social insurance programs, poverty was the common state of the elderly (Skidmore, 1999). By the 1930s, several European countries had already instituted programs of social insurance. Germany was the first to establish old-age and survivors pensions in 1889 (Peterson, 1999). The Great Depression finally motivated policy makers in the U.S. to enact similar legislation. Rather than funding Social Security programs through increases in income, or other, taxes, the funding mechanism was a separate tax, split equally between employers and employees. All employees covered by the system[11] contributed and received benefits regardless of their income. This design was intended to protect the system from political attack. As everyone who pays into the system receives benefits, Social Security is not considered "welfare" that is allocated to only a segment of the population. Also, because Social Security is a separate tax, contributors view their old-age payments as entitlements and oppose attempts to weaken the program. This design has so far proved very successful – Social Security is often called the "third rail" of American politics (i.e., touch it and you die).

World War II created yet another emergency situation requiring additional revenues. Similar to Woodrow Wilson during World War I, President Franklin Roosevelt sought to raise revenues primarily from higher taxes on corporations and high-income households. Roosevelt went so far as to state that:

> "In this time of grave national danger, when all excess income should go to win the war, no American citizen ought to have a net income, after he has paid his taxes, of more than $25,000." (Brownlee, 1996, p. 91)

Roosevelt was unable to obtain enough Congressional support to enact his most progressive proposals. The ensuing compromise did produce a more progressive federal income tax but it also became levied on more households. Personal exemptions were reduced by half between 1939 and 1942 – meaning the income tax reached well into the middle class for the first time. The taxable income subject to the highest marginal rate dropped from $5 million in 1941 down to $200,000 in 1942. Also, the top marginal tax rate reached a record high of 94% in 1944. Another change during World War II was withholding federal taxes from an employee's paycheck rather than requiring payment of

[11] While Social Security has expanded over the years to cover more employees, all workers are not currently covered by the system. For example, about one-quarter of state and local government employees are not included in the system (Peterson, 1999).

taxes due at the end of the year. These, as well as other, changes produced a dramatic shift in the structure of federal taxation:

> "Under the new tax system, the number of individual taxpayers grew from 3.9 million in 1939 to 42.6 million in 1945, and federal income tax collections over the period leaped from $2.2 billion to $35.1 billion. By the end of the war nearly 90 percent of the members of the labor force submitted income-tax returns, and about 60 percent of the labor force paid income taxes. … At the same time, the federal government came to dominate the nation's revenue system. In 1940, federal income tax had accounted for only 16 percent of the taxes collected by all levels of government; by 1950 the federal income tax produced more than 51 percent of all collections. Installation of the new regime was the most dramatic shift in the nation's tax policies since 1916." (Brownlee, 1996, p. 96-97)

As in the period after World War I, much of the new tax structure instituted during World War II remained in place after the war. Both major political parties expressed support for a progressive but broad income tax, relatively flat tax rates on corporate profits, and social insurance taxes that were basically regressive. Public support for the existing tax system was boosted by patriotic feelings and broad-based economic growth after the war.

Changes to the tax system between the end of World War II and the 1980's were generally minor. The Social Security tax occasionally increased as more people were receiving benefits. The initial tax rate of 2% (1% each for employers and employees) had increased to 6.13% by 1979. The Medicare and Medicaid programs were established in the 1960s. Across-the-board tax cuts in 1964 reduced marginal rates for both low- and high-income households (the top marginal rate fell from 91% in 1963 to 70% in 1965). Still, government continued to become a more significant portion of the entire economy in the decades after World War II. Total government expenditure and investment increased gradually from less than 18% of GDP in 1946 to over 22% by the mid 1970s.

From the "Reagan Revolution" to the Bush Tax Cuts

The general stasis of the federal tax system ended in the 1980s with the passage of several important tax reforms. Ronald Reagan was elected president in 1980 on a platform of smaller government and lower taxes. The Economic Recovery Tax Act of 1981 (ERTA) enacted the largest tax cut in American history[12] and inspired tax cutting by many other nations in the 1980s. The supply-side rationale behind ERTA's sharp reduction in tax rates, particularly on high-income households and capital, was that greater incentives would motivate increased investment and economic activity. The ensuing economic growth and consequent tax revenue growth would, in theory, more than offset the revenue reductions as a result of the tax cuts. Thus, the theory was that tax cuts could actually produce an *increase* in federal revenues and address the growing federal budget deficit as well. ERTA phased in a reduction in the top tax rate from 70% to 50%, enacted several corporate tax cuts, and indexed many tax parameters to inflation (such as personal exemptions and deductions).

[12] When measured in constant dollars (adjusted for inflation).

Analysis suggests that, in reality, ERTA resulted in the largest reduction in federal revenues of any tax bill since World War II (Tempalski, 1998). The federal budget deficit continued to grow. The very next year, in 1982, the largest peacetime tax increase was passed (Martin, 1991). The act repealed some of the more revenue-reducing provisions of ERTA, such as accelerated depreciation reductions for corporations, and closed several corporate loopholes in the tax code. Social Security reforms were enacted in 1983 that increased Social Security tax rates and initiated taxation of some benefits.

Reagan continued to push for further tax reforms, leading to the Tax Reform Act of 1986 – considered to be the most comprehensive revision of the tax code since the 1950s (Petska and Strudler, 1999). This act reduced top income tax rates even further – from 50% in 1986 to 28% in 1988. Among many other changes, it also lowered the top corporate tax rate from 46% to 34%.

Clearly, the "Reagan revolution" is an important era in U.S. tax history, but many people misinterpret it as a period where the size of the federal government was drastically reduced and taxes cut significantly. Despite the two major tax cuts during Reagan's terms, federal revenue collections increased at nearly the same pace as national output (total federal revenues increased about 76% from 1980-1988 while GDP increased 83%). The actual changes were more evident in the distribution of federal revenues than their total level. The share of revenues from both individual and corporate taxation fell (by 9% and 16% respectively) while the portion from social insurance taxes increased by 38%. As the individual and corporate taxes are progressive, while social insurance taxes are regressive, the outcome was a decrease in the overall progressivity of the federal tax system. Specific changes within the individual income tax code exacerbated the decline in progressivity.

The Reagan era failed to control the growing federal deficit. The annual budget deficits of the federal government tripled during the 1980s[13] (OMB, 2003). Partly to raise additional revenue to try to reduce deficits, the first President Bush reneged on his campaign promise of "no new taxes" and agreed to a compromise tax proposal in 1990 that raised the top marginal tax bracket to 31%. President Clinton reinstated additional progressivity in 1993 by creating the 36% and 39.6% individual tax brackets. In 1993, the corporate tax rate was increased slightly to 35%. These changes produced an increase in the progressivity of federal taxes.

The most recent important tax legislation was the $1.35 trillion Bush tax cut passed in 2001. The major provisions of this act include lowering individual income tax rates across-the-board, scheduling repeal of the estate tax in 2010, and increasing the amount employees can contribute under various programs for retirement purposes. Many of the bill's provisions are "back-loaded," meaning the tax reductions are phased in over time with most of the tax reduction occurring in the future. For example, the top marginal bracket fell from 39.6% in 2001 to 38.6% in 2002 but eventually fell to 35.0% in 2006.

[13] This is based on the "on-budget" calculations. The on-budget accounting excludes the Social Security trust fund as well as other minor balances.

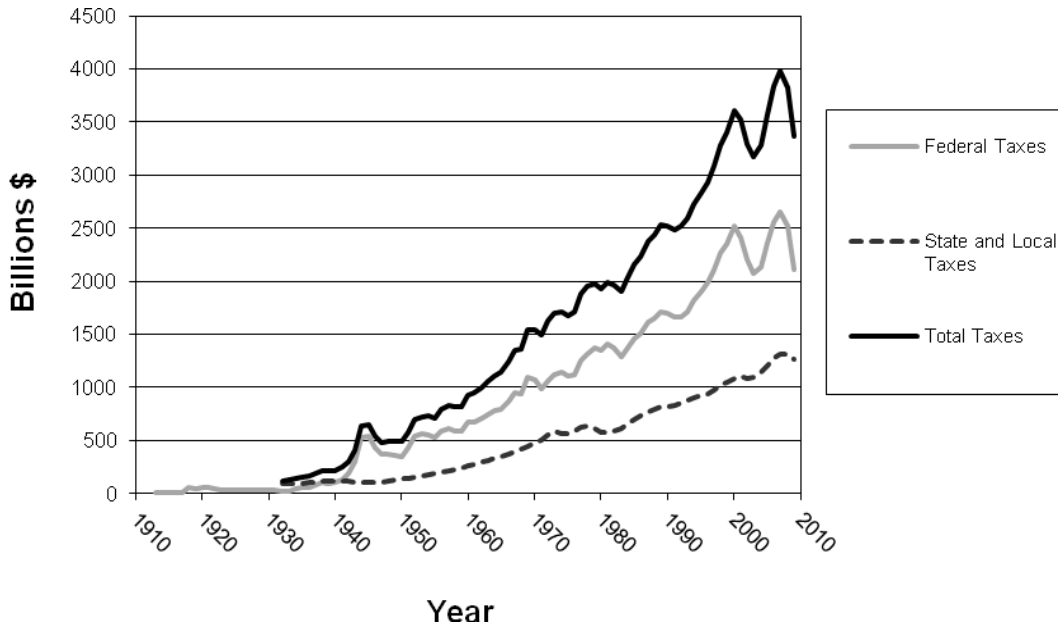
The Bush tax cut reduced the overall progressiveness of the federal income tax as high-income taxpayers received a disproportionate share of the total cuts (CTJ, 2001).

A somewhat smaller tax cut was passed in 2003 that, among other changes, accelerated scheduled tax rate decreases and lowered the maximum tax rate on capital gains and dividends. Most recently, the 2009 American Recovery and Reinvestment Act of 2009 instituted or expanded various tax credits such as a payroll tax credit of $400 per worker and an expanded tax credit for college tuition.

IV. Summary Data of U.S. Tax History

Until quite recently, tax collections have tended to increase over time; paralleling the increase in the size of the federal government. We see in Figure 1 that federal tax revenues have grown considerably during the 20th century, even after adjusting for inflation. A large increase in federal tax collections occurred during World War II, with relatively consistent growth after about 1960. However, notice occasional declines in federal tax revenues, due either to recessions or to major tax code changes. The growth

Figure 1. Tax Collections, 1913-2009 (All values in 2009 dollars)[14]

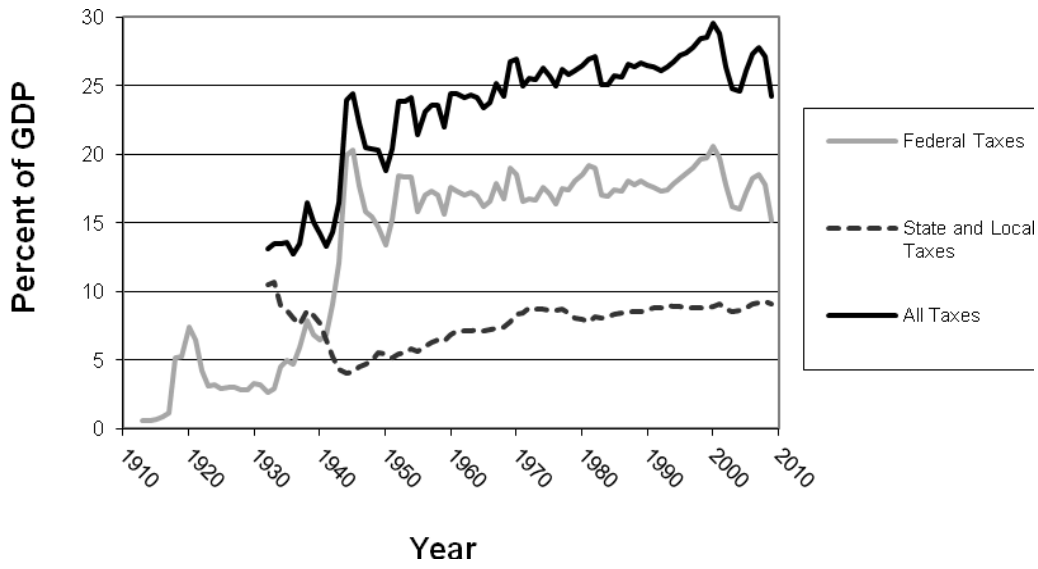


[14] Data on state and local taxes are incomplete and/or inconsistent prior to 1932. All data from various editions of the Statistical Abstract of the United States and U.S. Census Bureau (1960).

of state and local tax collections, by comparison, has been steadier with less fluctuation. The reason is that state and local tax revenues are derived primarily from property and sales taxes, which vary less than income (particularly corporate income) during business cycles.

Another way to illustrate the growth of federal taxation is to measure it relative to national economic output. In Figure 2 we plot federal and state and local tax collections as a share of GDP. Three facts are evident from Figure 2. First, total tax collections have generally grown as a percentage of GDP over the 20th century. Again, the largest leap occurred during World War II, but some additional growth is evident after the war as well. The second fact is that federal tax revenues now substantially exceed state and local tax revenues. While World War II solidified the federal government as the primary tax collector in the U.S., note that this trend began prior to the war. Finally, note the decline in federal taxes as a percentage of GDP since 2000. This is a result of both economic recessions and declines in federal tax rates. In fact, federal taxes as a percentage of GDP were lower in 2009 than in any year since the 1940s.

Figure 2. Tax Collections as a Percentage of GDP, 1913-2009[15]

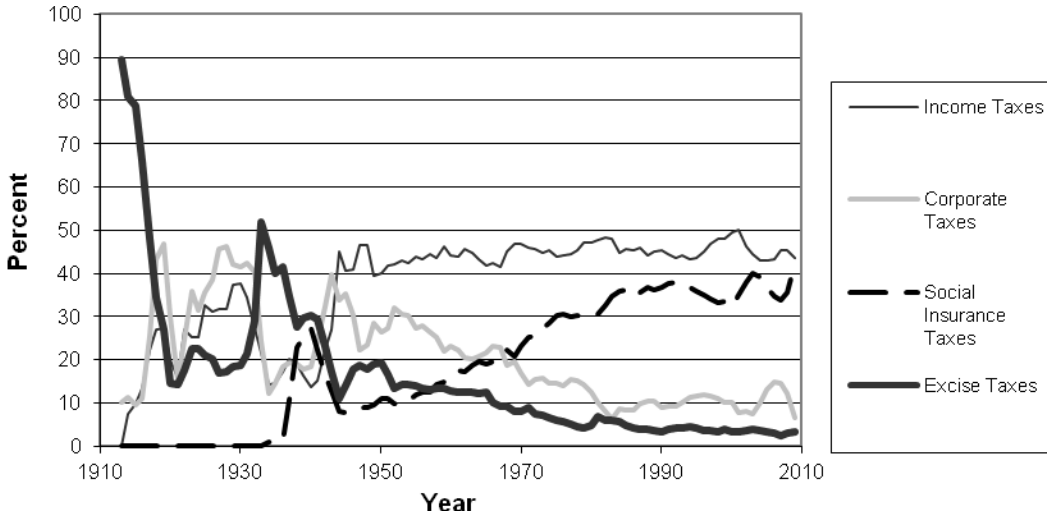


As federal revenues grew during the 20th century, the composition of taxation has changed considerably. We see in Figure 3 that at the beginning of the century federal taxation was dominated by excise taxes. Except for a revival of excise taxes during the Depression Era, their importance has generally diminished over time. Corporate taxes became the most significant source of federal revenues for the period 1918-1932. After a period of higher corporate taxes during World War II, corporate taxes have generally diminished in significance relative to other forms of federal taxation. Personal income

[15] Data on state and local taxes are incomplete and/or inconsistent prior to 1932.

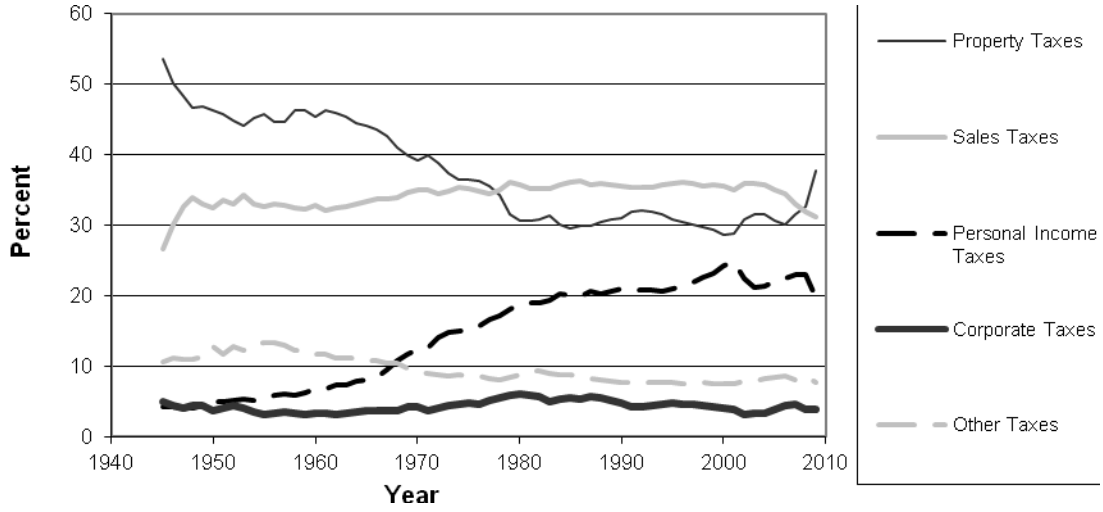
taxes became the largest source of federal revenues in 1944 and have remained so. Since World War II, income taxes have consistently supplied between 40-50% of federal revenues. Since about 1950, social insurance taxes have increased their share of federal revenues from about 10% up to nearly 40%. In fact, social insurance taxes may soon exceed personal income taxes as the largest source of federal revenues.

Figure 3. Composition of Federal Taxes, 1913-2009



The composition of state and local taxes, with its increased reliance on sales and property taxes, differs from the composition of federal taxes. Of course, each state has a different tax system – some states have no income and/or sales taxes, and tax rates can differ significantly across states. In this module, we combine tax data for all states rather than presenting a state-by-state analysis. Figure 4 presents the composition of state and local taxes over the period 1945-2009. The two major trends that are evident are a decline in the importance of property taxes and an increase in the importance of personal income taxes except for a recent reversal of these trends in the last few years. While property taxes were the primary source of state and local revenues until the 1970s, sales taxes became the major source of revenues until 2008, when property taxes again became the major revenue source.

Figure 4. Composition of State and Local Taxation, 1945-2009



V. THE DISTRIBUTION OF TAXES IN THE UNITED STATES

Tax Incidence Analysis

There are basically two ways to analyze how the tax burden is distributed. The easiest way is to measure the taxes directly paid by entities, such as households or businesses, classified according to criteria such as household income, business profit levels, etc. These data can be obtained directly from aggregate tax return data published by the IRS and from reports from other government agencies. This approach considers only who actually pays the tax to the government. Thus, it would allocate corporate taxes to corporations, excise taxes to manufacturers, sales taxes to consumers, etc.

The second approach, called **tax incidence analysis**, is more complex yet more meaningful. While taxes are paid by various entities other than individuals, such as corporations, partnerships, and public service organizations, the burden of all taxes ultimately fall on people. The final incidence of taxation is contingent upon how a specific tax translates into changes in prices and changes in economic behavior among consumers and businesses:

> "Tax incidence is the study of who bears the economic burden of a tax. More generally, it is the positive analysis of the impact of taxes on the distribution of welfare within a society. It begins with the very basic insight that the person who

> has the legal obligation to make a tax payment may not be the person whose welfare is reduced by the existence of the tax. The statutory incidence of a tax refers to the distribution of those legal tax payments – based on the statutory obligation to remit taxes to the government. …
>
> Economic incidence differs from statutory incidence because of changes in behavior and consequent changes in equilibrium prices. Consumers buy less of a taxed product, so firms produce less and buy fewer inputs – which changes the net price or return to each input. Thus the job of the incidence analyst is to determine how those other prices change, and how those price changes affect different groups of individuals." (Metcalf and Fullerton, 2002, p. 1)

Tax incidence analysis has produced a number of generally accepted conclusions regarding the burden of different tax mechanisms. Remember, for example, that the payroll tax on paper is split equally between employer and employee:

> "So, who really pays the payroll tax? Is the payroll tax reflected in reduced profits for the employer or in reduced wages for the worker? ... there is generally universal agreement that the real burden of the tax falls almost entirely on the worker. Basically, an employer will only hire a worker if the cost *to the employer* of hiring that worker is no more than the value that worker can add. So, a worker is paid roughly what he or she adds to the value of production, minus the payroll tax; in effect, the whole tax is deducted from wages. ... to repeat, this is not a controversial view; it is the view of the vast majority of analysts..." (Krugman, 2001, p. 43)

The most common assumption made regarding the allocation of corporate taxes is that the burden of these taxes falls almost exclusively on the owners of capital investments. Given the mobility of capital, the burden is not limited to owners of corporate capital but extends to owners of all capital.[16] This result is primarily a theoretical finding – in reality some portion of the corporate tax burden likely falls on workers (through lower wages) and consumers (through higher prices).

Excise taxes, although directly paid by manufacturers, are generally attributed entirely to consumers according to their consumption patterns.[17] This result is based on an assumption of **perfect competition** in the affected industries. Real-world markets, however, are not perfectly competitive. The actual incidence of excise taxes will depend on the degree of competition in an industry. For example, imperfectly competitive industries with upward-sloping supply curves imply that prices increase by less than the tax and that a portion of excise taxes is borne by businesses.[18]

[16] See summary in Metcalf and Fullerton (2002).
[17] See CBO (2008).
[18] See Fullerton and Metcalf (2002) for a summary of incidence assumptions and analyses for different types of taxes.

The burden of sales taxes is generally assumed to fall directly on consumers who buy the taxed goods and services. Again, this is a simplifying assumption – in reality some portion of sales taxes filters to corporate owners, other capital owners, and workers. Personal income taxes paid by households are directly attributed to those households paying the tax. Estate tax burdens fall on the heirs paying the tax. Finally, property tax burdens are generally assumed to fall on property owners although the burden can be passed on renters (some analysts attribute property taxes more broadly to owners of capital).

So, for several types of tax mechanisms (personal income, sales, excise, and estate taxes), data on direct tax payments is analogous to tax incidence. However, for other taxes (payroll, corporate, and to a lesser extent property taxes) the direct data on tax payments will differ from the ultimate burden of the tax.

Using Effective Tax Rate Data to Determine Tax Progressivity

As mentioned before, a tax is progressive if the percentage of income a person pays for the tax increases as income increases. Thus, we can determine whether a tax is progressive or regressive by looking at a table showing the effective tax rates for a particular tax for people in different income categories. If effective tax rates increase (decrease) with increasing income, then the tax is progressive (regressive). Table 2 shows the percentage of income people in each adjusted gross income (AGI) category paid in federal income taxes in 2008, the most recent data available. We see that effective tax rates for the federal income tax tend to increase with increasing income (although not always). For taxpayers making less than $100,000 AGI per year, the

Table 2. Distribution of Federal Income Taxes, 2008

AGI Category	Percent of Returns	Average AGI	Average Income Taxes	Effective Income Tax Rate
$1-$10,000	16.7	$5,099	$177	3.5%
$10,000-$20,000	16.0	$14,927	$513	3.4%
$20,000-$30,000	13.0	$24,798	$1,421	5.7%
$30,000-$50,000	18.0	$39,126	$2,808	7.2%
$50,000-$75,000	13.5	$61,470	$5,246	8.5%
$75,000 - $100,000	8.2	$86,421	$8,037	9.3%
$100,000-$200,000	9.7	$133,208	$16,903	12.7%
$200,000-$500,000	2.4	$285,735	$55,984	19.6%
$500,000-$1,000,000	0.4	$679,576	$163,513	24.1%
More than $1,000,000	0.2	$3,349,101	$780,550	23.3%

effective federal income tax rate averages less than 10% of income. For those making more than $200,000 per year, the federal income tax averages more than 20% of income.

The federal income tax is clearly progressive because those with higher incomes generally pay a larger share of their income for the tax. For a regressive tax, effective tax rates tend to decrease as income increases. If effective tax rates are constant at different income levels, then a tax is proportional.

Looking at effective tax rates by income categories can normally determine whether a tax is progressive or regressive. However, there may be some cases where effective tax rates do not follow a consistent pattern across income levels. For example, suppose that effective taxes first increase but then decrease as we move up the income spectrum. Another limitation with data on effective tax rates is that this approach does not tell us the degree of progressivity or regressivity. We might not be able to determine whether one tax is more progressive than another or whether a particular tax becomes more or less progressive over time.

Researchers have come up with several tax indices that measure the progressivity of a tax as a single number. These indices allow direct comparisons across different tax types and across time. The most common tax progressivity index is discussed in Box 2.

Effective Tax Rates in the United States

Data on the distribution of taxes in the U.S. are available from several sources. The government sources that publish data on tax distribution include the Internal Revenue Service (IRS), the Joint Committee on Taxation (JCT), the Congressional Budget Office (CBO), and the Office of Tax Analysis within the U.S. Treasury. The IRS data are the most detailed but focus on federal income and estate taxes. The IRS publishes data on corporate taxes but does not conduct tax incidence analysis. The JCT occasionally conducts tax incidence analyses but only on the federal income tax, payroll taxes, and federal excise taxes. The CBO adds the incidence of federal corporate taxes to their analyses but still omits the federal estate tax and all state and local taxes.

The only source for tax incidence data for all taxes in the U.S. is Citizens for Tax Justice (CTJ), a non-profit organization. CTJ uses data from government sources but has developed its own models of tax incidence. Comparison of tax progressivity data from CTJ with data from the federal sources listed above indicates that their results are generally similar to the government's results and not biased in either direction (Roach, 2003).

BOX 2. MEASURING TAX PROGRESSIVITY – THE SUITS INDEX

The **Suits Index**, developed by Daniel Suits in the 1970s (Suits, 1977), calculates a single number that measures tax progressivity. The approach basically compares the cumulative share of income received by taxpayers, order from lowest to highest, to their cumulative share of taxes paid. For a progressive (regressive) tax, the share of taxes paid will tend to be less (more) than the share of income as we move up the income spectrum. Other tax progressivity indices have been developed but the Suits Index remains the most widely used approach (Anderson, et al., 2003).

While the calculation details are not presented here, the Suits Index is a number ranging between –1 and +1. A negative Suits Index means that the tax is regressive while a positive index indicates a progressive tax (with a value of zero for a proportional tax). The Suits Index can be used to compare the degree of progressivity of different tax types as well as determine whether a tax becomes more or less progressive over time.

The Suits Index has been used to estimate the progressivity of different tax types in the U.S. for 2007 (Roach, 2010). Table 2.1 shows that the U.S. tax system contains a mixture of progressive and regressive taxes. The federal estate tax is the most progressive tax while the federal corporate and income taxes are also progressive. On the other hand, federal excise taxes are the most regressive. Federal social insurance taxes and overall state and local taxes are also regressive. When all federal taxes are considered, the Suits Index of +0.18 indicates that federal taxation is progressive. The entire U.S. tax system is also progressive, but the recent Suits Indices of +0.05 and +0.06 are closer to a value of zero (a proportional tax) than just the federal tax system.

Table 2.1. Suits Index Estimates of the U.S. Tax System, 2007, by Tax Type[1]

Tax Type	Suits Index
Federal Income	+0.42
Federal Social Insurance	-0.20
Federal Excise	-0.31
Federal Corporate	+0.51
Federal Estate and Gift	+0.63
State and Local	-0.12
Total Federal	+0.18
All U.S. Taxes (2001 data)	+0.09
All U.S. Taxes (2004 data)	+0.05
All U.S. Taxes (2009 data)	+0.06

1 – The Suits Index for the federal estate and gift tax is based upon 2008 data.

Table 3 presents the tax distribution data from CTJ for 2009. We see that while the federal tax system is progressive, the state and local tax system is, on average, regressive. Overall, the tax system in the U.S. is progressive, although the rate of progressivity levels off at upper income levels and actually reverses at the highest income level in Table 3.

Table 3. Effective Tax Rates, 2009[19]

		Effective Tax Rates		
Income Group	Average Income	Federal Taxes	State & Local Taxes	All Taxes
Lowest 20%	$12,400	3.6%	12.4%	16.9%
Second 20%	$25,000	8.7%	11.8%	20.5%
Third 20%	$40,000	13.9%	11.3%	25.3%
Fourth 20%	$66,000	17.2%	11.3%	28.5%
Next 10%	$100,000	19.0%	11.1%	30.2%
Next 5%	$141,000	20.4%	10.8%	31.2%
Next 4%	$245,000	21.3%	10.2%	31.6%
Top 1%	$1,328,000	22.3%	8.4%	30.8%
ALL	$68,900	18.0%	10.6%	28.6%

Tax Progressivity over Time

Consistent data are generally not available to determine how the entire tax burden in the U.S. has shifted over time. Most analyses are limited to one, or a few, tax types. Further, interest groups can interpret the available data to support their particular agendas. For an illustration about how the same tax data can be used to support different claims, see Box 3.

Analysis of tax progressivity over time indicates that the federal tax system is about as progressive now as it was in the late 1970s (Roach, 2010). The progressivity of the federal tax system declined during the early 1980s, rose in 1987 (the year following the passage of the Tax Reform Act of 1986), either remained stable or rose slightly up to the mid-200s, and decreased slightly since the mid-200s.

Complete data on the distribution of state and local taxes are available from Citizens for Tax Justice for 1995, 2002, 2007, and 2009, with Suits Indices of -0.11, -0.07, -0.12, and -0.07 respectively. Thus the available data suggest no obvious overall trend in the regressivity of state and local taxes. The unavailability of consistent data on the distribution of state and local taxes makes determination of the trends in the overall U.S.

[19] Data from CTJ, 2010.

tax system difficult to determine. As Table 2.1 indicated, total taxes declined in progressivity from 2001 to 2004, and then stayed about the same from 2004 to 2009.

BOX 3. INTERPRETING TAX PROGRESSIVITY DATA

Has the federal income tax burden on the very wealthy been increasing or decreasing in recent decades? Data published by the CBO reveals that the percent of federal income taxes paid by the highest-income taxpayers has increased steady over the past few decades. In 1979, the top 1% of taxpayers paid about 18.3% of all federal income taxes. In 2007, the top 1% of taxpayers paid over 39.5%. Clearly, these data suggest that the federal income tax has become much more progressive since 1979.

However, these statistics represent an incomplete analysis. Specifically, it fails to consider how the proportion of income accruing to the top 1% has changed over the same time period. The increasing tax share paid by high-income taxpayers may be a function of an increase in income, rather than a change in the tax system. In other words, if the share of all income received by the top 1% increased, we would naturally expect that their share of taxes paid would also increase without any changes in the underlying progressivity of the tax system. Income statistics indicate that the share of income going to the top 1% of taxpayers has also increased significantly since 1979. The top 1% of taxpayers received less than 9.2% of income in 1979 but more than 19.4% in 2007. Based on this fact alone, we would expect the top 1% to be paying a greater share of all federal income taxes.

So, has the federal income tax burden on the top 1% increased or decreased since 1979? We can combine the tax and income data for a more complete analysis. The share of income going to the top 1% increased by a factor of 2.1 between 1979 and 2007. Meanwhile, their share of taxes paid has increased by a factor of 2.2. This suggests that the share of taxes paid by the top 1% has risen by about as much as much as their share of income – indicating a relatively stable degree of tax progressivity in the federal income tax – a dramatically different conclusion had we only considered data on tax shares!

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MODULE SUMMARY

- The overall tax system in the United States is progressive, meaning that effective tax rates tend to increase as income increases. Progressive taxation is based on the view that higher-income taxpayers can pay higher tax rates without having to forego life's basic necessities. Progressive taxation can also redress economic inequalities and collect a given level of revenue while maintaining the maximum level of economic growth.

- The federal income tax is the most complicated and debated tax in the U.S. tax system. The federal income tax is progressive, with increasing marginal tax rates. Federal income taxes are calculated based on taxable income, which is less than total income because various exemptions and deductions are allowed.

- The federal tax system in the U.S. also includes social insurance, corporate, excise, estate, and gifts taxes. Social insurance and excise taxes are regressive while corporate, estate, and gift taxes are progressive. The U.S. tax system also includes state and local taxes, primarily sales, income, and property taxes.

- Nearly 70% of the taxes levied in the U.S. are collected at the federal level. The largest federal tax is the income tax, closely followed by social insurance taxes. The most significant non-federal tax is property taxes, followed by sales and income taxes.

- Up until the early 1900s, the U.S. tax system primarily relied on excise taxes and tariffs for public revenues. The 16th Amendment, ratified in 1913, created the legal basis for federal income taxation, which up to that point had been prohibited under the Constitution.

- Both World Wars led to significant changes in the structure and overall magnitude of taxes in the U.S. By the end of World War II, U.S. taxes were broad-based but progressive and dominated by federal-level taxation.

- Tax cuts passed during the Reagan Administration in the 1980s were based on the theory that lower tax rates would spur economic growth, leading to a net increase in tax revenues. This theory was not supported by the evidence, eventually leading to tax increases in the early 1990s. The Bush tax cuts passed in 2001 and 2003 have made federal taxes less progressive.

- Tax revenues in the U.S. increased dramatically during the 20th century, even after adjusting for inflation. When measured as a percentage of GDP, tax revenues grew significantly during World War II, grew at a slower pace afterwards, and leveled off recently at around 30% of GDP.

- Measuring the distribution of taxes requires tax incidence analysis, which determines the ultimate burden of a tax on taxpayers. Tax incidence analysis generally concludes that social insurance taxes fall on workers, corporate taxes fall on the owners of capital, excise taxes fall on consumers, and property taxes are passed on to renters.

- Effective tax rates measured by income level can be used to determine whether a particular tax is progressive or regressive. While the U.S. tax system contains both progressive and regressive taxes, the overall system is progressive. Recent data suggest that federal taxes are becoming less progressive while state and local taxes are becoming more regressive.

DISCUSSION QUESTIONS

1. Comment on the following statement: "The fairest type of tax system is one in which everyone pays the same rate of taxation, regardless of income." Do you agree or disagree with the statement? Why?

2. Suppose you could set the overall effective tax rates across different levels of income. What do you think should be the appropriate effective tax rates for a household of four (two adults and two children) with an income of $25,000? An income of $60,000? An income of $100,000? An income of $500,000? Is the system you devise more or less progressive than the tax system currently in place in the U.S.? How does your system compare with others in your class?

3. The U.S. tax system is currently comprised of many different types of taxes (income, social insurance, corporate, sales, property, etc.). What reasons could be given to support the use of many different tax types in a nation? Do you think that a nation's tax system should be comprised of many different types of taxes or just one type of tax? If you had to choose just one type of tax to levy in a nation, what type of tax would you choose? Why?

4. Comment on the following statement: "As long as a tax cut reduces taxes for everyone, then everyone will be better off as a result of the tax cut." Do you agree with this statement? Why or why not?

5. Using the Internet or other sources, look up information about basic structure of the tax system in place in a country other than the United States. What differences are evident in that country's tax system? Do you think that country has a more or less progressive tax system? Which nation's tax system is preferable to you? Why?

6. Locate a recent news story about a proposal for a change to the tax system, either at the federal or state level. Summarize the proposed change. Would the change increase or decrease tax progressivity? Who would benefit most from the proposal? Who would be hurt the most from the proposal? Do you support the proposal? Why or why not?

ADDITIONAL RESOURCES

- All the federal government agencies that work on tax issues maintain web sites that provide tax data and reports. The IRS's Statistics of Income Bulletins, published four times a year, can be found dating back to 1998 at http://www.irs.gov/taxstats/article/0,,id=117514,00.html. The SOI Bulletins provide data analysis of primarily individual and corporate taxes. Publications produced by the Joint Committee on Taxation can be found at http://www.jct.gov/publications.html. Publications by the Congressional Budget Office related to tax issues, going as far back as the 1970s, are available at http://www.cbo.gov/publications/bysubject.cfm?cat=33. Finally, tax analysis by the U.S. Treasury Department, only dating back to 2001, can be found at http://www.treasury.gov/resource-center/tax-policy/Pages/default.aspx.

- A large amount of tax-related data is published annually in the Statistical Abstract of the United States. Each year's edition includes a chapter on state and local government finances and another chapter on federal government finances. The Census Bureau has recently added select historical editions of the Statistical Abstract dating as far back as 1878, although online availability is more complete for the first half of the 20th century than the latter half of the century (see http://www.census.gov/compendia/statab).

- Citizens for Tax Justice publishes many other tax analyses besides those referenced in this module. Their web site is www.ctj.org. Two other non-profit organizations that conduct tax analysis are the Tax Policy Center, a joint venture of the Urban Institute and Brookings Institution, and the Center for Budget and Policy Priorities. The Tax Policy Center (www.taxpolicycenter.org) publishes several reports each month on a wide range of tax issues, including distributional impacts and public budget implications. The CBPP (www.cbpp.org) research focuses on "fiscal policy and public programs that affect low- and moderate-income families and individuals." Similar to the Tax Policy Center, the CBPP conducts distributional analyses of current tax proposals.

- For an opposing view on tax issues, the Tax Foundation (www.taxfoundation.org) publishes tax analyses that generally support lower overall taxes and conclude that the distributional impacts of recent tax cuts are fair. A similar organization, with a more activist agenda, is Americans for Tax Reform (www.atr.org).

KEY TERMS AND CONCEPTS

Ability-to-pay principle: the idea that higher-income households and individuals should pay higher tax rates than lower-income taxpayers because they are more able to bear the tax without foregoing life's basic necessities.

Adjusted gross income (AGI): the total income of a household or individual minus certain out-of-pocket expenses such as retirement account contributions, student loan interest, tuition, and other allowable subtractions. AGI is calculated on one's federal tax return.

Effective tax rate: one's total taxes paid divided by some measure of income, such as total income, adjusted gross income, or taxable income.

Environmental taxes: taxes levied on a good or service based on the environmental impact of its production or consumption.

Estate taxes: taxes on the transfer of large estates to beneficiaries.

Excise taxes: taxes on the production, sale, or use of a particular commodity.

Exemptions: an amount excluded from taxation based on the number of tax filers and dependents.

Gift taxes: taxes levied on large gifts; gift taxes are designed to prevent taxpayers from avoiding estate taxes by giving away their assets while alive.

Itemized deductions: certain expenses excluded from federal taxation, including mortgage interest, state taxes, gifts to charity, real estate taxes, and major medical expenses. A taxpayer is allowed to deduct either the standard or itemized deduction, whichever is larger.

Marginal propensity to consume: the proportion of a marginal income increase that is spent on consumption goods and services, as opposed to invested or saved.

Marginal tax rates: a tax system where a single taxpayer can pay different tax rates on successive portions of income.

National consumption tax: a federal-level tax paid on the dollar amount a household or individual spends each year on goods and services, calculated using either a single tax rate or marginal tax rates.

National sales tax: a federal-level tax paid on the purchase of certain goods and services, calculated as a percentage of the selling price.

Perfect competition: an idealized market structure characterized by many informed small firms with no market power selling undifferentiated products and with complete freedom to enter or exit the market.

Progressive tax: a tax in which the percentage of income one pays for the tax increases as one's income increases.

Proportional tax: a tax in which the percentage of income one pays for the tax is constant regardless of income level.

Regressive tax: a tax in which the percentage of income one pays for the tax decreases as one's income increases.

Social insurance taxes: taxes paid to support social insurance programs such as Social Security, Medicare, and Medicaid.

Standard deduction: a fixed amount of income excluded from federal taxation based on filing status (single, married, etc.). A taxpayer is allowed to deduct either the standard or itemized deduction, whichever is larger.

Suits index: an index developed by Daniel Suits in the 1970s to measure the overall progressivity or regressivity of a tax.

Tariffs: taxes levied on imported goods and services.

Tax incidence analysis: estimating the ultimate financial burden of various taxes on different categories of households by tracing a tax's impact on market prices and the economic behavior of consumers and businesses.

Taxable income: the amount of income used as the basis for determine one's income taxes. For federal income taxes, taxable income is equal to adjusted gross income (AGI) minus allowable deductions and exemptions.

Total income: the total income a household or individual receives from all sources

Value-added tax: a tax levied at each stage in the production process of a good or service.

Wealth taxes: taxes levied on the value of one's assets such as real estate, investments, cash, and other personal property.