Objectives for Chapter 17: The Tax System

At the end of Chapter 17, you will be able to answer the following:

1. What are the main taxes collected at each level of government?

2. How do American taxes as a percent of GDP compare to other countries? How have they changed over time?

3. Briefly describe how the federal income tax and the social security tax are determined and how tax policy is made.

4. Define the following: "progressive tax"; "regressive tax"; "proportional tax"; "average tax rate"; "marginal tax rate".

5. For each of the taxes collected, is that tax progressive, regressive, or proportional? Why? (Include the income tax, the social security tax, the Medicare tax, the sales tax, and the property tax.)

6. Is the tax system as a whole, progressive, regressive, or proportional?

7. What were the main provisions of the 1981 Economic Recovery Tax Act?

8. Define "indexation". Define “bracket creep” (review).

9. What were the main provisions of the 1986 Tax Reform?

10. What changes in the tax law were made under President Clinton in 1993?

11. What changes in the tax law were made under President Bush in 2001 and in 2003?

12. What are the arguments for and against (1) a national sales tax; (2) a flat tax; (3) Green taxes? (This is part of your assignment for this chapter.)
Chapter 17: The Tax System  (latest revision September 2004)

1. The Most Important Taxes at Each Level of Government

Chapter 16 considered one aspect of fiscal policy: government spending. This chapter will consider the second aspect of fiscal policy: the tax system. In this chapter, we will first examine the most important taxes at each of the levels of government. Then, we will look at the way tax policy in the United States is made. Third, we will see how American taxes have changed over time and how they compare to other countries. Fourth, we will examine the federal income tax in detail. Finally, we will evaluate some of the changes that have been made in the federal income tax over the past twenty years and other changes that have been proposed. Let us begin our analysis of the tax system by looking at the most important taxes at each level of government.

The federal government is the only level of government with responsibility for fiscal policy. In FY2004, it is projected that the federal government will take in $1,922 billion in tax revenues. Most of these tax revenues will come from three sources. (1) The individual income tax is responsible for about 45% of the federal government’s revenue. In FY2004, individual income taxes are projected to raise $849.9 billion for the federal government, equal to about 8.5% of GDP (down from 9.9% in FY2002). The individual income tax will be the subject of much of this chapter. (2) The Social Security (FICA) and Medicare taxes are responsible for about 39% of the federal government’s revenues. In FY2004, these taxes are projected to raise $764.5 billion, equal to about 7% of GDP. These taxes have taken an increasing percent of GDP over time; in 1955, they took only 2% of GDP. These taxes were discussed in Chapter 16. (Let us briefly review. As of 2004, the Social Security tax was 6.2% of income up to an income of $87,900. The employee’s share is matched by the employer. The Medicare tax is 1.45% of income with no upper limit. The employee’s share is again matched by the employer). (3) Finally, the corporate profit tax was responsible for less than 10% of the federal government’s revenues. This tax was discussed in Chapter 15. In FY 2004, the corporate profit tax is projected to raise $169 billion in revenues, equal to about 1.5% of GDP. As a percent of GDP, corporate profits taxes have been declining; they were equal to 4.5% of GDP in 1955. The remainder of the federal government’s revenues come from excise taxes, such as the taxes on gasoline, cigarettes, alcohol, foreign products, and so forth.

The state governments also raise their own tax revenues. Combining all of the fifty states together, in 1996, 23.8% of their revenues came from the individual income tax and another 24.8% of their revenues came from the sales tax. Many states do not have a state income tax; only four states do not have a sales tax. The sales tax is often favored by state governments because it is much easier to collect than is the individual income tax. Notice that, while these are the two largest sources of tax revenue for state governments, they do not account for even half of the states’ revenues. The rest of the states’ tax revenues come from a variety of other state taxes: social insurance taxes (such as disability and workmen’s compensation), excise taxes (such as gasoline taxes), and so forth. The situation for the state of California is different. Of the revenues that go
into the California General Fund, 56% are raised from the individual income tax, almost 30% are raised from the sales tax, and nearly 9% are raised from the Bank and Corporation tax. Therefore, California relies more heavily on the individual income tax than does the typical state.

Finally, there are the local governments. These are the cities, counties, school districts, and so forth. They obtain much of their money from the state governments and from the federal government. But of the revenue they obtain for themselves, one source clearly stands out. About three-fourths of all of the revenues that local governments obtain for themselves come from property taxes. Property taxes, which are taxes on homes and business property, are the easiest and cheapest of all taxes to collect. Property taxes provide the subject of what is arguably the most significant ballot proposition in California history. In 1978, property taxes had been rising very fast. They had been rising because land prices were rising during a time of high inflation (remember that homeowners are “winners” during times of inflation). In June of 1978, the state of California passed Proposition 13, designed to reduce property taxes significantly. The rules that it created are still basically in place. First, the value of your property is equal to the amount you paid for it. This value can be increased by 2% per year as long as real estate prices rise by at least 2%. Second, the property tax rate is set at 1%. So for example, imagine you bought a house for $500,000 this year. Your property tax this year would be $5,000 (1% of $500,000). You would get a bill for $2,500 due in December and another $2,500 due in April. If prices were to rise enough, next year your house would be worth $510,000 ($500,000 + 2% of $500,000). Your property tax would be $5,100 (1% of $510,000). If you bought the average house in 1978, you would have paid about $65,000 for it. For tax purposes, your house would be valued much less than it actually is worth today. Owners of similar houses on the same block could be paying vastly different amounts of property tax even though their houses would sell for the same price today. Because of Proposition 13, California ranks only 33rd among the states in the percent of people’s incomes that they pay in property taxes.

2. The Making of Tax Policy

Tax laws in the United States are made just as any other laws are made. Most proposals for changes in the tax laws are initiated by the President of the United States. The most important advisor to the President on tax matters is the Secretary of the Treasury, currently John Snow. (In the federal government, a Secretary is a higher position than a Director. A Secretary is a member of the President’s cabinet.) The Secretary of the Treasury heads the Treasury Department. This department is responsible for the financial affairs of the federal government. It spends the government’s money, as described in the previous chapter. It borrows money for the government, as will be described in the next chapter. And it collects the government’s tax revenues through one of its agencies, the Internal Revenue Service (IRS). Changes to the tax law must be legislated by the Congress. In the House of Representatives, the committee that is concerned with tax matters is called Ways and Means. In the Senate, the committee that is concerned with tax matters is called the Senate Finance Committee. The people who are the Chairs of these two committees are two of the most powerful people in the
Congress. Currently, these people are Bill Thomas (R-CA) of the House Ways and Means Committee and Charles Grassley (R-IA) of the Senate Finance Committee. Near the end of this chapter, we will examine some major changes that were made to the income tax laws. Two very important changes occurred under President Reagan in 1981 and then again in 1986. Another change occurred under President Clinton in 1993. And major changes occurred under President Bush in 2001 and again in 2003.

3. The Trend of Government Tax Revenues as a Percent of GDP

Examine the chart below. The chart shows the trend of federal government tax revenues as a percent of GDP from 1960 (year 1) to 2000 (year 41). Two results are noticeable from this chart. First, notice that the percent of GDP taken by the federal government changed very little from 1960 to 1995. It increased somewhat in the late 1960s (a result of the Vietnam War) and again in the early 1980s (a result of inflation). But otherwise, it was between 17.5% and 18.5% and changed very little. Second, notice that the percent of GDP taken by the federal government rose in the late 1990s. When we get to the end of this chapter, we will consider why this might have occurred.
5. The Federal Income Tax

As was mentioned, beginning with President Reagan in 1981, there have been some very significant changes to the federal income tax. In order to understand these changes, let us go back to 1980 (the year President Reagan was elected) and make up a federal income tax return for a typical single person.

Income $25,000
+ Capital Gains 4,000
- Business Loss (3,000)
- Individual Retirement Account (up to $2000 per person) (2,000)
- Deductions (or standard deduction), including:
  Charitable Contributions 1,000
  Sales Taxes Paid 1,000*
  Interest on Home Mortgages 6,000
  Property Taxes Paid 1,000
  Interest on Consumer Loans 1,000*
  Medical/Professional Expenses 1,000
= Exemptions ($1000 per person) (1,000)
= Adjusted Gross Income (AGI) 12,000

We can examine each of these parts. First, the tax return begins with the person’s wage or salary income. Second, to that is added income from capital gains. A capital gain is a profit from the sale of an asset. Most capital gains were profits from the sale of either one’s house or stocks. As of 1980, 60% of any capital gain was tax-free as long as the asset had been held for at least six months (called the “capital gains tax break”). So in this case, the person had a capital gain of $10,000 from selling shares of stock for a profit. Since 60% of the gain was tax-free, the person would only pay tax on 40% of $10,000, or $4,000. Third, there was the Business Loss. Those with a business could subtract their losses. Many people with high incomes found ways to have businesses whose purpose was to lose money. Fourth, there is the contribution to the Individual Retirement Account (IRA). A person could put up to $2,000 each year in a special account. If one did so, there would be no tax due on that income. Any interest earned by that account would also be tax deferred. However, the person could not take the money out of the account without penalty until age 59 ½. Fifth, you see that there were a whole series of deductions. These are expenses that can be subtracted from one’s income in calculating the income on which one will pay tax. Finally, there is an exemption; in 1980, one subtracted $1,000 per person in the family from one’s income. The total is called the Adjusted Gross Income. This income is the basis for the calculation of one’s tax due.
Here is the federal income tax rate schedule in 1980 for a single person:

<table>
<thead>
<tr>
<th>If income is:</th>
<th>You Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 2,300</td>
<td>0</td>
</tr>
<tr>
<td>+2,301-3,400</td>
<td>14% of the amount over 2,300</td>
</tr>
<tr>
<td>+3,401-4,400</td>
<td>16% of the amount over 3,400</td>
</tr>
<tr>
<td>+4,401-6,500</td>
<td>18% of the amount over 4,400</td>
</tr>
<tr>
<td>+6,501-8,500</td>
<td>19% of the amount over 6,500</td>
</tr>
<tr>
<td>+8,501-10,800</td>
<td>21% of the amount over 8,500</td>
</tr>
<tr>
<td>+10,801-12,900</td>
<td>24% of the amount over 10,800</td>
</tr>
<tr>
<td>+12,901-15,000</td>
<td>26% of the amount over 12,900</td>
</tr>
<tr>
<td>+15,001-18,200</td>
<td>30% of the amount over 15,000</td>
</tr>
<tr>
<td>+18,201-23,500</td>
<td>34% of the amount over 18,200</td>
</tr>
<tr>
<td>+23,501-28,800</td>
<td>39% of the amount over 23,500</td>
</tr>
<tr>
<td>+28,801-34,100</td>
<td>44% of the amount over 28,800</td>
</tr>
<tr>
<td>+34,101-41,500</td>
<td>49% of the amount over 34,100</td>
</tr>
<tr>
<td>+41,501-55,300</td>
<td>55% of the amount over 41,500</td>
</tr>
<tr>
<td>+55,301-81,800</td>
<td>63% of the amount over 55,300</td>
</tr>
<tr>
<td>+81,801-108,300</td>
<td>68% of the amount over 81,800</td>
</tr>
<tr>
<td>+108,301+</td>
<td>70% of the amount over 108,300</td>
</tr>
</tbody>
</table>

So, in our example, the person would pay no tax on the first $2,300 of income, 14% of the next $1,100 of income ($3,400-$2,300), 16% of the next $1,000 of income ($4,400 - $3,400), 18% of the next $2,100 of income ($6,500-$4,400), 19% of the next $2,000 of income ($8,500 - $6,500), 21% of the next $2,300 of income ($10,800 - $8,500), and 24% of the final $1,200 of income ($12,000 - $10,800). When one does this calculation, the person’s tax payment comes to $1,843.

**Test Your Understanding**
Using this old 1980s tax schedule, how much tax would you owe if your adjusted gross income were $2,301? If it were $3,401?

In analyzing the federal income tax, we need to distinguish between the average tax rate and the marginal tax rate. The average tax rate is simply the percent of one’s income that one pays in taxes.

\[
\text{Average Tax Rate} = \frac{\text{Taxes Paid}}{\text{Income}}
\]

In this example, the person had an income of $29,000 ($25,000 wage income + $4,000 capital gain). As a percent of income, this person paid about 6.4% ($1,843 divided by $29,000). As a percent of adjusted gross income, the person paid 15.4% ($1,843 divided by $12,000).

**Test Your Understanding**
If the person had an income of $3,401, what would the person’s average tax rate have been?
The marginal tax rate is the change in the tax paid due to a change in one’s income.

\[
\text{Marginal Tax Rate} = \frac{\text{Change in Tax Paid}}{\text{Change in Income}}
\]

So in this example, the person ends up with a marginal tax rate of 24%. If the person’s adjusted gross income were to increase by $1 (from $12,000 to $12,001), the person’s tax would increase by $0.24. ($0.24 divided by $1.00 = 24\%$.) Notice that there is a lower boundary and an upper boundary defining each marginal tax rate. (For example, $81,800 and $108,300 are the boundaries for the marginal tax rate of 68\%.$) Because these boundaries resemble brackets, the marginal tax rate is called the tax bracket. Again, do not confuse the two terms. The tax bracket refers to the marginal tax rate, not the average tax rate. The person in this example is in the 24\% tax bracket but only paid 6.4\% of his or her income in taxes.

**Test Your Understanding**

In 1980, in what tax bracket would you be in if your adjusted gross income were $20,000? $40,000? $100,000?

Assume that your income last year was $3,400. Using this schedule, you would pay nothing on the first $2,300 and 14\% of the next $1,100, or $154 in total. Your tax bracket was 14\%. Now assume that this year, prices rise by 10\%. Your income also rises by 10\% (to $3,740). Are you any better-off? The answer clearly is “no”. Your real income is unchanged. But notice what happened to your taxes. You would now pay nothing on the first $2,300 of income, 14\% of the next $1,100 of income, and 16\% of the remaining $340, for a total of $208. Your tax bracket is now 16\%. Because of inflation, and for no other reason, you have crept up into a higher tax bracket. In Chapter 4, we saw that this phenomenon was called “bracket creep”. Remember that inflation rates were quite high through most of the 1970s. If you examine the 1980 tax schedule again, you can imagine that many middle class people found themselves in tax brackets over 30\%. Indeed, many two-income families found themselves in tax brackets over 50\%.

When we examine various taxes, we often wish to know if they are progressive, regressive, or proportional (flat). These depend on what happens to the percent of income one pays in tax (the average tax rate) as one’s income rises. A tax is progressive if, as one’s income rises, one pays a higher percent of that income in tax.

**Progressive Tax:** As income rises, taxes paid rises income

Notice that it is the percent that rises, not just the amount paid in tax. A progressive tax takes a disproportionate percent away from the people with the highest incomes. A tax is regressive if, as one’s income rises, one pays a lower percent of that income in tax.

**Regressive Tax:** As income rises, taxes paid falls income
A regressive tax takes a disproportionate percent away from the people with the lowest incomes. Finally, a tax is proportional (flat) if, as one’s income rises, one pays the same percent of that income in tax.

**Proportional (Flat) Tax:** As income rises, taxes paid stays the same income

A proportional (flat) tax takes the same percent away from everyone.

The federal income tax described above is an example of a progressive tax. (The state income tax of California is much the same as the federal income tax.) You can see by examining the tax rate schedule that one’s tax will be a higher percent of one’s income if one’s income is greater. For example, in 1999, people with adjusted gross incomes in the top 20% of all income earners paid 79% of all of the federal income taxes paid. People in the top 5% of all income earners paid 50% of all of the federal income taxes paid. In California, the 10% of all taxpayers with adjusted gross incomes above $100,000 paid 74% of all of the income taxes paid to the state. Indeed, nearly 1/3 of all of the income taxes collected by the state were paid by the richest 0.25% of taxpayers.

**Test Your Understanding**
For each of the following taxes, do you believe that the tax is progressive, regressive, or proportional? Explain why.
1. the sales tax
2. the Social Security (FICA) tax
3. the Medicare tax
4. the property tax

Each of these is explained below. But try to answer these questions before you read the next sections.

The sales tax is actually a regressive tax. It is possible that you said that it is a proportional tax because the sales tax rate is a fixed percentage. But the sales tax is a fixed percent of the amount one spends. The definition asks what happens to the percent of income, not to the percent of spending. To illustrate this, let us return to the case of Joe and Bill from Chapter 13. Each is married with five children. Joe earns $10,000 per year. He obviously spends all of it on consumer goods. Assume that the sales tax rate is 7%. Joe would spend 7% of $10,000, or $700 on sales taxes. This amount would also be 7% of his $10,000 income. Bill has an income of $100,000,000. In Chapter 13, we assumed that Bill could get by if he spent $10,000,000 a year. The other $90,000,000 would be saved. Bill’s sales taxes would equal 7% of $10,000,000, or $700,000. While it would be incredible to spend $700,000 just on sales taxes, that amount represents only 0.7% of Bill’s $100,000,000 income. **Bill pays a lower percent of his income in sales taxes because Bill can afford to do the one thing that will get him out of paying sales taxes --- save.** Joe cannot afford to save so his entire income is subject to the sales taxes. Since people are able to save more as their incomes rise, the sales tax takes a smaller percent of income away from richer people.
Test Your Understanding
Use the principle concerning the sales tax in the preceding paragraph to explain why each of the following taxes is also regressive:

1. the gasoline tax  
2. the cigarette tax

The Social Security (FICA) tax is also a regressive tax. Remember that the Social Security (FICA) tax is 6.2% of income up to an income of $87,900 per person per year. So more precisely, the Social Security (FICA) tax is proportional at 6.2% for all people who earn $87,900 per year or less. *It is the upper limit that makes the Social Security (FICA) tax regressive.* Someone earning $87,900 and someone earning $879,000 per year would pay the same amount of tax, $5,450 (6.2% of $87,900). But this is a smaller percent of the $879,000 income than it is of the $87,900 income.

The Medicare tax is a proportional (flat) tax. Remember that the Medicare tax is 1.45% of income. There is no upper limit. Therefore, the Medicare tax takes the same percent of income (1.45%) away from all taxpayers.

Finally, the property tax is a regressive tax. Remember that, if you rent an apartment, you still pay property tax. The property tax is added into your rent. The reason that the property tax is regressive is similar to the reason that the sales tax is regressive. Who spends a higher proportion of their income on housing – a poor person or a rich person? Even with very expensive homes, very rich people may devote only 5% or 10% of their incomes to housing. It is not uncommon for very poor people to devote 50% and more of their incomes to housing. *Since a higher percent of the income of a poor person is subject to the property tax, the property tax is regressive.* (There are some prominent economists who disagree with this conclusion.)

We have only considered some of the most important taxes in this section. There are, of course, many other taxes. If we put them all together, we have what we will call the overall tax system. If we examine just the federal part of it, we find that the federal taxes, taken together, are progressive. For example, the Congressional Budget Office estimated for 1999 that all federal government taxes together took away 4.6% of the income of the poorest 20% of the population and 29.1% of the income of the richest 20% of the population. Within that top 20%, federal taxes took 31.8% of the income of the top 5% of the population and 34.4% of the income of the top 1% of the population.

However, state and local taxes are primarily regressive. The regressive sales tax is the most important tax at the state level and the regressive property tax is the most important tax at the local level. *When we put all three levels together, the overall tax system seems to be basically proportional.* For most people, all of the taxes that exist take away a bit more than 30% of their incomes. Only the very poor and the very rich pay higher percentages.
**Test Your Understanding**

1. Income | Taxes Paid | Average Tax Rate | Marginal Tax Rate
0 | 0 | | |
$10,000 | $ 500 | | |
$20,000 | 2,000 | | |
$30,000 | 4,500 | | |
$40,000 | 8,000 | | |
$50,000 | 12,500 | | |

Fill-in the table above. Is the tax above progressive, regressive, or proportional? Why?

**Assignment**

Form into groups of two to three people. You will be given one of the following:

1. Go to the following site: [http://www.nrst.org/basics/index.html](http://www.nrst.org/basics/index.html)

   The information on this site argues that a national retail sales tax should replace the current income tax. What are the arguments made on this site to justify having a national retail sales tax? Then, based on what you have learned, provide some criticisms of having a national retail sales tax. (You may use other sites or printed material on the national retail sales tax, if you wish.)

2. Go to the following site: [http://www.policy.review.com/summer95/tharmey.html](http://www.policy.review.com/summer95/tharmey.html)

   Here Congressman Dick Armey argues against the national sales tax and in favor of a flat tax. What arguments does he make against a national retail sales tax? What is a flat tax? What arguments does Congressman Armey make in favor of a flat tax? Finally, based on what you have learned, provide some criticisms of having a flat tax. (You may use other sites or printed material on the flat tax.)

3. Go to the following site: [http://www.northwestwatch.org](http://www.northwestwatch.org)

   Here you will find a citizen action group that advocates a shift from the income tax to what are called “Green Taxes”. Skim over the site. Then, first explain what are meant by “Green Taxes”. Second, name some of the arguments given on this site on behalf on shifting to “Green Taxes”.

6. **Changes to the Federal Income Tax Law**

   As mentioned above, there have been some major changes to the federal income tax law over the past two decades. As a candidate for President in 1980, Ronald Reagan made reform of the federal income tax law the heart of his campaign. When he was elected, tax reform was one of the first proposals he made. When his proposal was enacted into law, it was called the **Economic Recovery and Tax Act of 1981**. There were two main provisions of this law. **First, and most important, was the lowering of the marginal tax rates.** President Reagan’s reasons for this provision will be discussed in Chapter 19. The second provision of this Act was to create what is called **“indexation”**. **This means that the tax brackets are adjusted each year for inflation. If prices rise 10% and one’s income rises 10%, one will no longer find oneself in a higher tax bracket because the tax brackets will also rise by 10%**. The Economic Recovery and Tax Act was fully implemented by 1985. Below is the tax rate schedule for a single person in 1985. Compare it to the schedule for 1980 above. **First, notice that the**
Marginal tax rates are lower than they were in 1980 (25% lower in fact). Notice especially that the highest marginal tax rate has fallen from 70% to 50%. Second, notice that the tax brackets have been raised to compensate for inflation. This change (indexation) has been made every year since 1985.

If income is: If income is: You Pay
0 – 2,390 0
+ $2,391-$3,540 11% of the amount over $2,390
+ $3,541-$4,580 12% of the amount over $3,540
+ $4,581-$6,760 14% of the amount over $4,580
+ $6,761-$8,850 15% of the amount over $6,760
+ $8,851-$11,240 16% of the amount over $8,850
+ $11,241-$13,430 18% of the amount over $11,240
+ $13,431-$15,610 20% of the amount over $13,430
+ $15,611-18,940 23% of the amount over $15,610
+ $18,941-$24,460 26% of the amount over $18,940
+ $24,461-$29,970 30% of the amount over $24,460
+ $29,971-$35,490 34% of the amount over $29,970
+ $35,491-$43,190 38% of the amount over $35,490
+ $43,191-$57,550 42% of the amount over $43,190
+ $57,551-$85,130 48% of the amount over $57,550
+ $85,131+ 50% of the amount over $85,130

Test Your Understanding
Recalculate the tax that would have to be paid by the person in the example. How much would this person have saved from the 1981 change in the tax law?

In 1986, President Reagan proposed a more sweeping reform of the federal income tax law. Again, his proposal was enacted into law. The main provision of this law, as with the 1981 law, was to lower the marginal tax rates. The number of tax brackets was reduced. The new tax rate schedule for a single person in 1986 looked as follows:

<table>
<thead>
<tr>
<th>Adjusted Gross Income</th>
<th>Marginal Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - $19,450</td>
<td>15%</td>
</tr>
<tr>
<td>$19,451 - $47,050</td>
<td>28%</td>
</tr>
<tr>
<td>$47,051 - $97,620</td>
<td>33%</td>
</tr>
<tr>
<td>$97,621+</td>
<td>28%</td>
</tr>
</tbody>
</table>

Notice how much lower the highest marginal tax rate was compared to the highest marginal tax rate in 1980. In addition, the personal exemption was raised from the amount of $1,000 that existed in 1980. (By 2002, the personal exemption had reached the current $2,800.) However, some of the deductions on the 1980 return were limited or removed altogether. Review that tax return example. The tax deductions for interest on consumer loans and for sales taxes (*) were removed altogether. And there were limits placed on the amount of Business Losses that can be taken, on the use of the Individual Retirement Account (IRA), and on the deduction for Medical Expenses. The most controversial change in the 1986 law was that the capital gains tax break was eliminated. Previously, 60% of all capital gains had been tax-free. Now all capital gains would be taxed. But notice how much lower the tax rate would be.
In 1991, the 33% marginal tax rate and the top 28% marginal tax rate were combined into one 31% marginal tax rate. So for 1992, the tax rate schedule for a single person looked as shown below. Notice how the tax brackets have been adjusted for inflation.

<table>
<thead>
<tr>
<th>Adjusted Gross Income</th>
<th>Marginal Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - $21,450</td>
<td>15%</td>
</tr>
<tr>
<td>$21,451 - $51,900</td>
<td>28%</td>
</tr>
<tr>
<td>$51,901+</td>
<td>31%</td>
</tr>
</tbody>
</table>

Test Your Understanding
1. Recalculate the tax that would have to be paid in 1992 by the person in the example given in the chapter. How much would this person’s taxes have changed because of the 1986 change in the tax law? Be sure to change the taxable income as well as the marginal tax rate.
2. Assume that you had a capital gain of $10,000. Also assume that you are in the highest possible tax bracket (even before the capital gain is counted as part of your income). In 1980, how much would you have paid in capital gains tax? (Remember that 60% of the gain was tax-free in 1980.) In 1986, how much would you have paid in capital gains tax? (Now, all of the gain is taxable.) In 1992, how much would you have paid in capital gains tax?

In 1993, Bill Clinton became President. He proposed to raise taxes as a means of balancing the federal budget. His reasoning was that if the federal budget were balanced, the government would not need to borrow as much money. If the federal government borrowed less money, interest rates would fall. Falling interest rates would increase business investment spending and this would increase rates of economic growth. His proposal was very controversial; but it did become law in 1993. President Clinton proposed several tax increases, including raising the federal tax on gasoline. But here, we are concerned only with the income tax. His tax increase for the income tax was to add two new marginal tax rates at the top. So the 1993 tax rate schedule for a single person looked as follows:

<table>
<thead>
<tr>
<th>Adjusted Gross Income</th>
<th>Marginal Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - $22,100</td>
<td>15%</td>
</tr>
<tr>
<td>$22,101 - $53,500</td>
<td>28%</td>
</tr>
<tr>
<td>$53,501 - $115,000</td>
<td>31%</td>
</tr>
<tr>
<td>$115,001 - $250,000</td>
<td>36%</td>
</tr>
<tr>
<td>$250,001+</td>
<td>39.6%</td>
</tr>
</tbody>
</table>

Notice two things about the 1993 tax rate schedule. First, the tax brackets are somewhat higher. They were raised by the amount of inflation (indexation). Secondly, there are two additional marginal tax rates - - 36% and 39.6%. However, these two additional marginal tax rates affected only single people with adjusted gross incomes above $115,000 ($140,000 for married couples). Roughly 2% of the American population was affected by these changes.

Between 1993 and 2000, there were few significant changes made to the federal income tax law. Except for indexation, the tax rate schedule looked much the same in 2000 as it did in 1993:
Adjusted Gross Income          Marginal Tax Rate
0 - $26,250                       15%
$26,251 - $63,550                  28%
$63,551 - $132,600                 31%
$132,601 - $288,350               36%
$288,351+                          39.6%

The biggest change to the tax law in this period was the 1997 change in the capital gains tax. Capital gains are now taxed at a maximum rate of 20% (10% if you are in the 15% marginal tax rate). And the tax on the capital gain from selling a home that you lived in has effective been eliminated. (A capital gain from selling a home you lived in is tax-free up to $250,000 for a single person and $500,000 for a married couple.) Also, many provisions similar to the Individual Retirement Account have been created. Millions of people have tax-sheltered annuities or 401K accounts.

As was mentioned earlier, the federal income tax took a higher percent of GDP in 2000 than it had taken in the previous years. One reason for this was the increase in tax rates enacted in 1993. But a more significant reason involved the dramatic rise in the stock market between 1992 and 2000. As stock prices rose, people sold their stocks and earned capital gains. Even though the maximum capital gains rate was reduced, the rise in stock prices was so great that the revenues from the capital gains tax increased greatly.

Test Your Understanding
1. Recalculate the tax that would have to be paid by the person in the example given in the chapter. How much would this person’s taxes have changed as of 2000 compared to 1986? Be sure to change the capital gains tax as well as the marginal tax rate. Assume that the capital gain resulted from the sale of stocks.
2. Assume that you had a capital gain of $10,000. Also assume that you are in the highest possible tax bracket. In 2000, how much would you have paid in capital gains tax?

In 2001, George W. Bush became President. A major part of his campaign had involved a proposed reduction in taxes. In May of 2001, President Bush’s tax reduction proposal was enacted into law. It created a new tax bracket of 10%, effective January 1, 2001. This was estimated to lower tax payments by $300 for a single person and $600 for a married couple. These tax reductions were sent to people as checks in 2001. The marginal tax rates for a single person for 2002 looked as follows:

Adjusted Gross Income          Marginal Tax Rate
0 - $6,000                       10%
$6,001 - $27,950                  15%
$27,951 - $67,700                 27%
$67,701 - $141,250                30%
$141,251 - $307,050               35%
$307,051+                        38.6%

By the time the act is fully implemented in 2006, the new marginal tax rates will be 10%, 15%, 25%, 28%, 33%, and 35%. These changes follow the ideas that became prominent under President Reagan. There were several other provisions of the Act. All of
the changes made to the tax law are to be **eliminated after 2010**. A major debate in the 2004 election concerns the proposal of President Bush to make these changes permanent.

In 2003, further changes to the tax law were passed under the influence of President Bush. The marginal tax rates were reduced once again, as shown below. There were several other tax changes passed in the 2003 law. Two of these changes are notable for us. **First, The capital gains tax rate was reduced from 20% to 15% (and to 5% for taxpayers in the 10% or 15% tax brackets). Second, the same capital gains tax rates now apply to all dividends paid in 2003.**

<table>
<thead>
<tr>
<th>Income</th>
<th>Marginal Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 7,000</td>
<td>0</td>
</tr>
<tr>
<td>7,001 to 28,400</td>
<td>15%</td>
</tr>
<tr>
<td>28,401 to 68,800</td>
<td>25%</td>
</tr>
<tr>
<td>68,801 to 143,500</td>
<td>28%</td>
</tr>
<tr>
<td>143,501 to 311,950</td>
<td>33%</td>
</tr>
<tr>
<td>Over 311,950</td>
<td>35%</td>
</tr>
</tbody>
</table>

**Test Your Understanding**
Recalculate the tax that would have to be paid by the person in the example given in the chapter. How much would this person’s taxes have changed as of 2003 compared to 2000? Be sure to change the capital gains tax as well as the marginal tax rate. Assume that the capital gain resulted from the sale of stocks.

7. **Evaluation of Taxes**

There are several ways to evaluate the various taxes in existence. One such way is to evaluate each tax in terms of **equity**. Does a tax fall on various people in proportion to their **ability to pay**? Progressive taxes take a larger proportion of income from those with the highest incomes. Regressive taxes do the opposite. A second such way to evaluate taxes is according to **ease of administration**. Is the tax easy to administer and is it easy to comply with? Or is it easy to evade? Yet a third way to evaluate taxes is according to their **incentive effects**. Since people want to avoid taxes, the various taxes encourage people to undertake certain behaviors and to avoid others. Taxes on wages have an incentive effect --- they discourage people from working. We will consider this point more fully in Chapter 19. Taxes on savings also have an incentive effect --- they discourage people from saving. If people work less and save less, total production is reduced. Lower production means a lower standard of living. The loss in production caused by distorted incentives in the tax law is called a **“deadweight loss”**. One influential study estimated that every dollar collected by the federal government in income taxes causes a deadweight loss of 31 cents (that is, production is 31 cents lower as a result of the $1 of income tax). In this study, payroll taxes (such as the Social Security tax) were estimated to have a deadweight loss of 26 cents for each dollar collected, the part of the property tax on the value of buildings was estimated to have a deadweight loss of 24 cents for each dollar collected, the sales tax was estimated to have a deadweight loss of 23 cents for each dollar collected, and the corporate profits tax was estimated to have a deadweight loss of 37 cents for each dollar collected. So, you can see
that the tax system has a major disincentive effect --- giving people the incentive to undertake behaviors that will reduce their taxes, behaviors that also will cause total production (and therefore the standard of living) to be reduced.

Test Your Understanding
Go back over this chapter. Evaluate each of the following taxes as “good” or “bad” according to the three criteria.

<table>
<thead>
<tr>
<th>Tax</th>
<th>Equity</th>
<th>Ease of Administration</th>
<th>Incentive Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Income Tax</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Profits Tax</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Security (FICA) Tax</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Tax</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Tax</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Conclusion

This chapter has devoted considerable space to the federal income tax law. We have examined the various taxes that exist in the United States. We have especially focused on the determination of the federal income tax. Presidents of both political parties have seen changes in the federal income tax law as of great importance in their visions of how to improve the American economy. We need to understand the reasoning behind these visions. To do this, we need to understand the theory of fiscal policy. The use of fiscal policy (changes in government spending and in the tax laws) to deliberately change aggregate demand began with the Kennedy Administration of the early 1960s. Today, it is an integral part of American economic policy-making. So we now turn to the theory of fiscal policy in Chapter 18. After we examine the theory of fiscal policy, we will re-examine the changes to the federal income tax law made by Presidents Reagan, Clinton, and Bush in later chapters.

Practice Quiz

1. The most important tax at the federal level is the
   a. personal income tax  b. social security tax  c. sales tax  d. property tax

2. The Treasury Department of the United States government
   a. is part of Congress  b. is headed by a Director  c. collects the tax revenues for the government  d. makes the budget proposal for the President

3. Today, the amount of federal income tax collected as a percent of GDP is ___ in the past
   a. higher than  b. lower than  c. the same as

4. If my income is $10,000, I pay $1,000 in tax. If my income rises to $20,000, I pay $4,000 in tax. My marginal tax rate is:
   a. 10%  b. 20%  c. 30%  d. 50%

5. If the average tax rate rises as one’s income rises, the tax is:
   a. progressive  b. regressive  c. proportional

6. The sales tax is
   a. progressive  b. regressive  c. proportional
7. The overall tax system is basically  
   a. progressive  b. regressive  c. proportional

8. Indexation  
   a. eliminates bracket creep  c. eliminates the capital gains tax  
   b. makes a tax more progressive  d. increases the personal exemption

9. Which of the following was proposed and enacted by President Reagan in 1981?  
   a. raise the marginal tax rates  c. indexation  
   b. raise the capital gains tax break  d. raise the social security (FICA) tax

10. Which of the following was proposed and enacted by President Clinton in 1993?  
   a. add two new marginal tax rates  c. eliminate indexation  
   b. raise the capital gains tax  d. lower the marginal tax rates