

## Lecture 15: Policy III – Some Basics

Next year's Lake Pleasant Conference focused on "Fiscal Policy". Representatives of three countries, East, Central, and West Elmore, were the primary presenters. In all three countries the unemployment rate was at the natural rate and the inflation rate was sufficiently low that it was not an issue.

One question that did arise was whether there was any role for economic planners from the Central Banks. Money is, after all, neutral. While the economists from the Central Bank were welcome at the conference, it was widely agreed that the tax and spending questions were primarily questions for the Finance Ministries. The one exception – and it was an important one – is that a nation must have healthy financial institutions to prosper. While control of the nominal money supply is unimportant in the long run, maintaining healthy financial institutions is not.

The planning committee had decided to open the conference open two background papers. Much of the discussion about fiscal and tax policies would focus on American experience and institutions. Since members of the audience might not be familiar with the material, the panel decided to begin with some basic material on the US economy.

### Government Spending and Taxes in the United States

The United States has two levels of government, each with their own responsibilities. While the line has blurred over the years, there are still important differences. Most states, for instance, have Universities, which are state institutions, though many receive significant funding from the Federal Government. Before World War II combined state and local government spending was much greater than the federal government. Federal spending greatly increased during World War II, and dominated the state and local sectors. While state and local spending has grown significantly since then, it is still less than Federal spending. (State and local purchases of goods and services are twice that of the Federal Government, but when transfer payments are included, the Federal Government still dominates).

#### *Spending and taxes*

In 1902, the federal government employed 350,000 people with a budget of 650 million dollars. Today, the government employs over five million people with a budget of about 1.5 trillion dollars. Until the 1930's, the federal government's role was severely limited. Since then, it has expanded into a wide range of activities, including a vastly expanded defense

establishment, welfare, social security programs, minimum wage laws, workplace standards, and massive public works. Current Federal revenues and expenses break down as follows:

<b>Table 15-1</b>			
<b>Federal Revenue and Expenses</b>			
<b>Revenues</b>		<b>Expenditures</b>	
Personal Income Taxes	48%	Transfer Payments	54%
Social Security Taxes	33%	Defense	16%
Corporate Income Taxes	11%	Interest	15%
Other (Estate Taxes, Customs, Federal Reserve Earnings, etc.)	8%	Non-defense	15%

State and local

When we combine state and federal revenues and expenditures, we get the following picture:

<b>Table 15-2</b>			
<b>Combined Federal and State Revenue and Expenses</b>			
<b>Revenues</b>		<b>Expenditures</b>	
Personal Income Taxes	32%	Transfer Payments	42%
Social Security Taxes	20%	Defense	13%
Property Taxes	9%	Non-defense	39%
Corporate Income Taxes	8%	Interest	6%
Excise Taxes (Including Sales Taxes)	13%		
Other	18%		

The textbook has an excellent series of graphs showing how spending, both at the federal and at the state and local level, has changed over time. You should spend some time studying them.

## Borrowing

There are many myths about government borrowing. We want to talk later about whether the deficit matters. For the moment, let's note some key facts. In September 1998, the public debt of the US was \$5.711 trillion. The public held only \$3.712 trillion of that. The other \$1.99 trillion was actually held by the government itself, by the Federal Reserve System, the Social Security System, the Government Retirement System, etc. This debt is due to the accumulation of many years of running a government budget deficit. The deficit is the amount of spending over taxes collected, or in the present case the surplus is the amount of taxes collected over spending.

For most of the period since World War II, the debt/GDP ratio has been sinking in the United States. It began to rise around 1980, and has now begun to fall again. Even now, it is back to the level of the early 1960's. See Table 15-3.

<b>Year</b>	<b>Percent</b>
1950	76%
1955	56%
1960	46%
1965	38%
1970	29%
1975	26%
1980	26%
1985	37%
1990	44%
1994	52%
1998	44%

However, these data are incomplete. Many types of debt are not included. For example, the government has promised (quite reasonably) to pay pensions to its employees. This constitutes an obligation on the part of the US government of about \$1 trillion. The government data on debt do not include this obligation. Similarly, the government has promised most citizens social security benefits. Those obligations, which have a present value of about \$4 trillion, are also not included in the official data on debt.

Further, when we compare American Debt to that of other countries, we need to adjust for the failure to include debt at all levels of government. Many other countries have a unitary government, where all debt is the debt of the national government, which is not the case in the United States.

Indeed accounting for all of these debts is complicated. Consider, for instance, the action of the government of France some years ago, when it required its citizens to make a loan to the government. Was this forced loan borrowing or was it taxation? And, when the government pays back the loan, is this debt reduction or is it a transfer payment? Thus measures of the government debt are quite tricky.

The Deficits of the 1980's

Many Americans think the large deficits in the 1980's were caused by huge tax cuts. Yet, as Stockman's Figure 16-5 shows, government revenue as a percent of GDP remained relatively constant. What really happened was that government spending soared, because of the soaring level of transfer payments.

## **The Basics of Taxation**

Most popular discussions of taxation focus on what economists call the incidence question: who pays the government's bills. The discussion generally focuses on whether the "wealthy" should pay more or less than the middle class or the poor (though usually most people who engage in this debate conclude that they are paying too much taxes). There is a limit to what economists can say about this issue. In terms of who should bear the burden of taxation, the "scientific" rule was framed years ago by United States Senator Russell Long (Louisiana), then Chairman of the Senate Finance Committee:

*Don't tax you, don't tax me  
Tax the man behind the tree.*

Self-interest leads all of us to want someone else to pay the cost of government. There is no scientific basis, for instance, for the common notion that higher income families should pay a higher percentage of the taxes. There is a political reason for this of course: if 20 percent of the families have 40 percent of the national income, the other 80 percent can –and do – outvote them.

## Progressive versus Regressive Taxes

Much is made of whether taxes should be progressive or regressive. A tax code is *progressive* if the amount you pay rises faster than your income and *regressive* if the amount you pay rises slower than your income. For example, if a person with an income of \$20,000 a year pays \$2,000 (10%) a year in taxes

- The tax system would be progressive if a person making \$100,000 a year paid more than \$10,000 (>10%) a year in taxes.
- The tax system would be regressive if a person making \$100,000 a year paid less than \$10,000 (<10%) a year in taxes.

We have a tax code where some taxes are regressive and others are progressive. The income tax, for example, is generally considered an example of a progressive tax. The lowest Federal tax rate is 15 percent, and rises to a maximum of 39.6 percent. The sales tax is generally thought to be regressive.

However, there are other issues at work in regards to progressive taxation, for much effort goes into avoiding progressive taxation. Most college professors are, like the rest of the American middle class, taking part of their compensation in the form of pension plans, designed to defer their compensation to retirement, when they expect to be in lower tax brackets, thus defeating the intended progression of the tax rate. To give another example, many corporate executives take their pay in stock options, taxed at the capital gains rate of (now) 20%. Thus Michael Eisner, who gets hundreds of millions of dollars in stock options from Walt Disney, will end up paying a lower rate on his income than many of you after you graduate and start working.

The tradeoff between efficiency and progression presents another complication. We will talk later about taxes and incentives, but common sense tells us that taxes influence behavior. Here, we make a distinction between *marginal* and *average* tax rates. Suppose, for example, we didn't tax the first \$20,000 of a person's income, but taxed income above \$20,000 at a 25% rate. Then a person making \$100,000 a year would pay \$20,000 in taxes. His average rate would be 20%, but his marginal rate would be 25%. Each additional dollar earned would mean, net of taxes, another seventy-five cents of net income. Table 15-4 shows some examples. If the marginal rate were 50%, each additional dollar earned would mean only fifty cents of net income. Again, common sense tells us that people are more likely to bestir themselves to earn another dollar if they get to keep seventy-five cents of that dollar than they are if they only get to keep half of it.

<b>Table 15-4</b> <b>Average and Marginal Taxes Illustrated</b> <b>by Marginal Rate of 25% and \$20,000 exemption</b>		
<b>Income</b>	<b>Tax</b>	<b>Average Rate</b>
\$20,000	0	0%
\$50,000	\$7,500	15%
\$100,000	\$20,000	20%
\$200,000	\$45,000	22.5%

To see what this means, suppose we make our system progressive by giving people a generous exemption and then taxing the rest of their income at a flat rate. This is, of course, a variant of the flat tax proposal that comes up from time to time. But how big an exemption should there be? And what should be the marginal rate? These questions are not independent of each other. Consider the data in Table 15-5 on a hypothetical economy Flatland, and see the choices it faces:

<b>Table 15-5</b> <b>Flatland has total income of</b> <b>\$100,000,000. It must finance a</b> <b>government budget of \$20,000,000</b>	
<b>If it wants to Exempt the following amount of income</b>	<b>Then its marginal tax rate must be</b>
\$20,000,000	25%
\$30,000,000	28%
\$40,000,000	33%
\$50,000,000	40%

In short, the more progressive the system, the higher the marginal rates. That means reduced incentives.

Incidence, both Direct and Indirect

We should also note that the person from whom the tax is collected might not ultimately pay the tax. Proposals to levy a tax on (say) cigarettes usually involve a discussion of whether the producers or the consumers should pay. In fact, this is a classic problem in microeconomics: the person who pays the tax directly may or may not ultimately pay the tax. For example, if cigarette manufacturers pay \$1 a pack in new taxes, supply and demand conditions will determine how much of that is passed along to consumers in higher prices. In fact, many microeconomics textbooks prove the proposition that the final incidence of the tax will be independent of who pays it. How much consumers pay and how much manufacturers pay depends on supply and demand, not who writes the check to the government.

This incidence question is arising in current proposals to raise cigarette taxes. Many argue that the manufacturers should pay a higher tax because of the dangers of the product they sell. Without getting into the merits of taxing cigarettes, the manufacturers are correct in pointing out that smokers will pay much of the tax. Moreover, since smokers typically have low incomes, low-income families, not the stockholders of tobacco companies, will pay much of the tax burden.

On top of it, we can *not* assume that stockholders are wealthy. Pension plans hold most common stock. Thus Fred Truckdriver, the beneficiary of the Teamsters pension plan, may ultimately pay the taxes paid by stockholders.

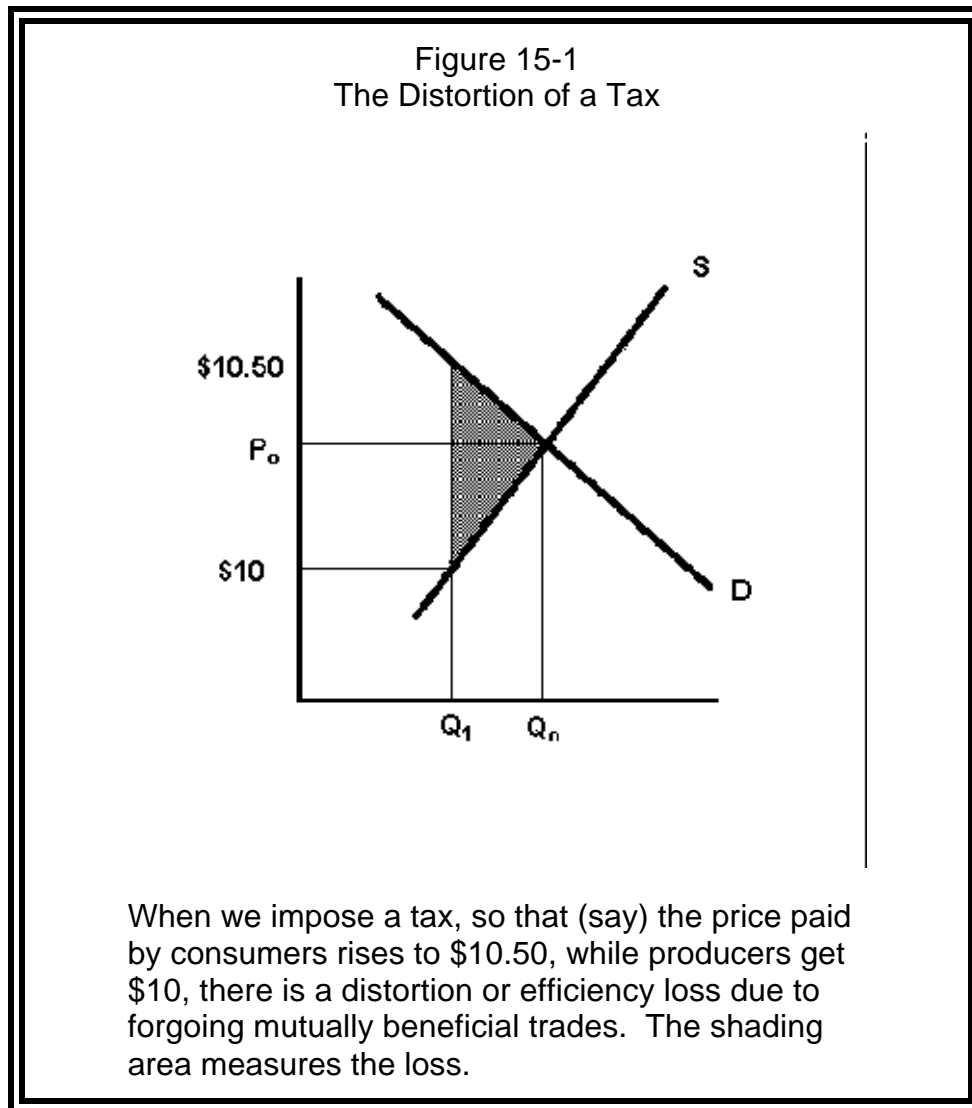
### ***Minimize the Efficiency Losses of Taxation***

While the incidence question is interesting and important, there is another side of taxes that we want to stress in this course: the *behavioral* effects. The sad truth is that all taxes - or virtually all taxes - do affect behavior and we must consider those effects. A recent request by Senator Hatfield illustrates the issue. Hatfield asked the Treasury to study the revenue gain from a 100% tax on all incomes over \$200,000 per year. The Treasury responded that the government would receive \$X billion the first year and \$Y billion per year thereafter. Common sense suggests that while a tax could perhaps prove very effective the first year, as people were caught napping, it would have little effect in the years thereafter, and would raise zero revenue. How many of us would work if we had to give all of our income to the government?

The reason for this nonsensical result is that the Treasury analyzes all tax proposals using static revenue analysis. They have a data base built on the dreaded compliance audits. When asked what a tax would raise, they recomputed tax rates for the database, without assuming any changes in

behavior. While data considerations might drive them to this task, it is a foolish way to discuss tax policies, although many people do this.

Almost all taxes have efficiency losses. Figure 15-1 illustrates the basic proposition. It shows a demand and supply curve for a particular commodity, with the equilibrium price at  $P_0$  and the equilibrium quantity at  $Q_0$ .



Suppose the government levies a 50-cent tax on the commodity. People will now move along the demand curve to  $Q_1$ , where the difference between the price paid by the consumer and the price received by the producer is 50 cents. The consumer is paying \$10.50, while the producer is getting only \$10. The shaded area shows the value of the efficiency loss because it shows the value of the mutually advantageous trades forgone by suppliers and customers. In advanced courses, we show that the efficiency loss rises in

proportion to the square of the tax rate. Thus, if a 1% tax rate involves an efficiency loss of (say) \$100; a 2% tax rate involves an efficiency loss of \$400; a 3% tax rate involves an efficiency loss of \$900, etc.

Try as you might, there is no practical way, to avoid this efficiency loss. If we are going to have government, we must have taxes. The government must pay its bills. While there are some theoretical ways of avoiding the efficiency loss, economists agree that these are only theoretical possibilities. Ultimately we have to tax our earnings (which causes efficiency losses from decisions about working and not working), what we save (which causes efficiency losses from decisions about saving and not saving), or what we consume (which causes efficiency losses from decisions about what we consume). We can choose our poison, but we cannot avoid it.

Of course, we can minimize the damage due to the poison. Two examples will show ways to minimize the efficiency losses of taxation.

First Example, Showing the Benefits of Broad Taxes as opposed to narrow taxes

Suppose you want to collect \$X in taxes, either by putting a tax on apples or bananas or both. People now spend equal amounts on apples and bananas, and you know that you can collect the revenue you want with either a 1% tax on all apple and banana sales, or a 2% tax on apple sales, or a 2% tax on banana sales. Suppose also that, after some arduous calculations, we know that the efficiency losses of a 1% tax on apples and bananas is as given in Table 15-6.

<b>Table 15-6</b> <b>Some Hypothetical Losses from Taxes</b>			
<b><i>Tax Rate on Apples</i></b>	<b><i>Tax Rate on Bananas</i></b>	<b><i>Efficiency Loss from Forgoing Mutually Beneficial Purchases and Sales of Apples</i></b>	<b><i>Efficiency Loss from Forgoing Mutually Beneficial Purchases and Sales of Bananas</i></b>
1%	0%	\$100	0
0%	1%	0	\$100

(Many assumptions that go into this table, but they only simplify the example and do not affect the result.)

Thanks to our rule that efficiency losses square every time the rate doubles, we know that we can add some rows to this table and get Table 15-7.

<b>Table 15-7</b>			
<b>Some Hypothetical Losses from Taxes</b>			
<b><i>Tax Rate on Apples</i></b>	<b><i>Tax Rate on Bananas</i></b>	<b><i>Efficiency Loss from Forgoing Mutually Beneficial Purchases and Sales of Apples</i></b>	<b><i>Efficiency Loss from Forgoing Mutually Beneficial Purchases and Sales of Bananas</i></b>
1%	0%	\$100	0
0%	1%	0	\$100
2%	0%	\$400	0
0%	2%	0	\$400
1%	1%	\$100	\$100

While any of the schemes in the last three rows will do the job, the last approach, equal taxes on apples and bananas, will minimize the efficiency losses of the tax and in that sense is the best tax.

This argument explains why economists generally prefer broad taxes, rather than concentrated taxes. Holding the revenue to be raised constant we would much prefer a sales tax rather than a tax on apples or bananas alone, for example.

We still come back to the issue of who pays the taxes. If I consume apples but not bananas, I may have a different view of the subject, and tax debates generally come down to apple lovers squaring off against banana lovers. But the efficiency aspects are important.

Second Example, showing the advantage of deficit financing

Now consider another example. The government is going to pay for a particular project, such as building a road system or fighting a war. The project will cost \$X, and can be financed by a one-year sales tax of two percent. Alternatively it could be financed in part by a one-percent tax this year and next. (Or, borrowing could finance the whole thing). Again, suppose that economists have calculated the data in Table 15-8 on the efficiency losses

<b>Table 15-8</b> <b>Some Hypothetical Losses from a Sales Tax</b>			
<b>Sales Tax This Year</b>	<b>Sales Tax Next Year</b>	<b>Efficiency Loss from this year's sales tax</b>	<b>Efficiency loss from next year's sales tax</b>
1%	0%	\$100	0
0%	1%	0	\$100

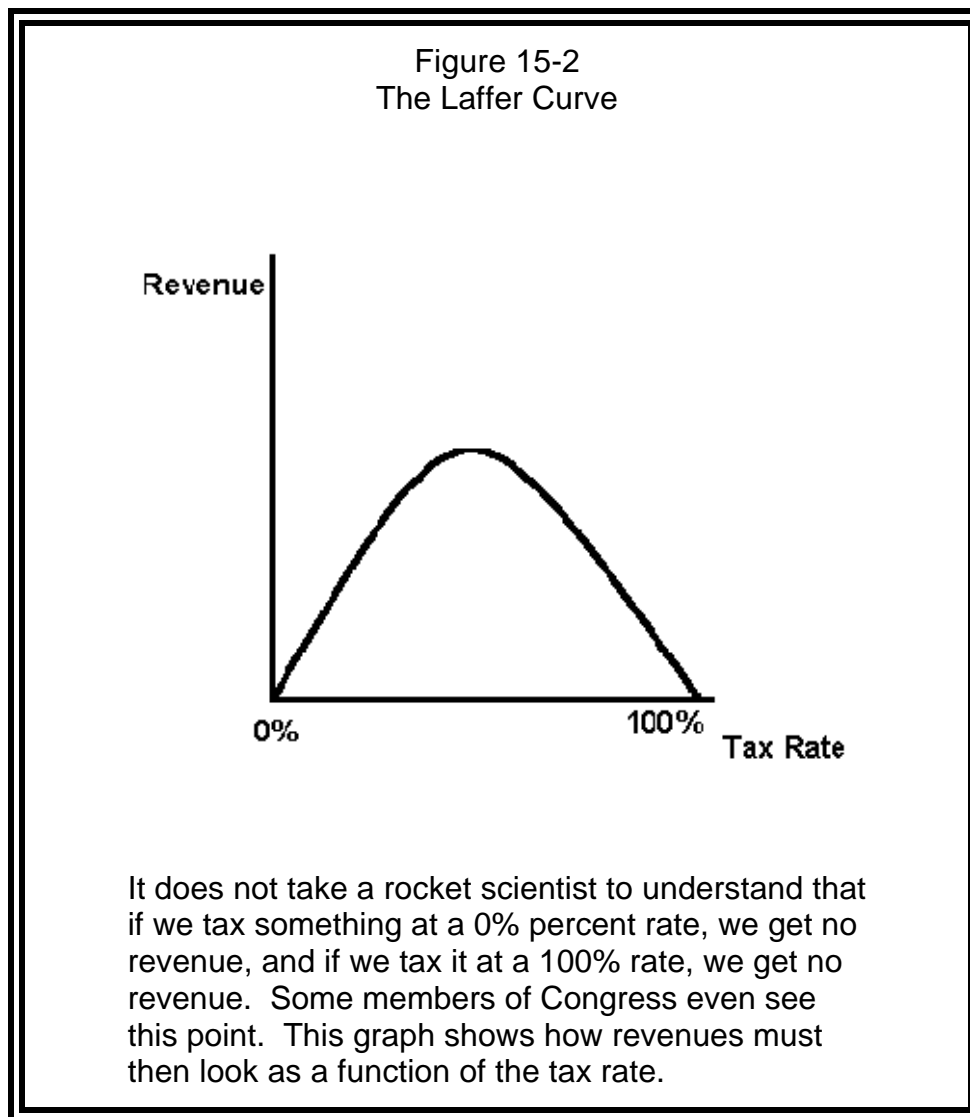
Obviously, the best strategy is to finance part of the expenditure by borrowing and part by increased taxation, with the borrowing serving the purpose of spreading the tax burden out over time. Table 15-9 shows these calculations. (We spread the burden over only two years as opposed to three, four, or five, and neglect to account for interest charges from borrowing to keep the example simple).

This example explains why economists favor financing some short term surges in government spending out of a mixture of taxes and borrowing. The decision to finance World War II partly through higher taxes and partly through borrowing was eminently sound. So too is the decision of a municipality building a new library or police station or fire hall, to finance most of the cost by borrowing. Borrowing spreads out the efficiency losses of the higher taxes over time, thus minimizing them.

<b>Table 15-9</b> <b>Some Hypothetical Losses from a Sales Tax</b>			
<b>Sales Tax This Year</b>	<b>Sales Tax Next Year</b>	<b>Efficiency Loss from this year's sales tax</b>	<b>Efficiency loss from next year's sales tax</b>
1%	0%	\$100	0
0%	1%	0	\$100
2%	0%	\$400	0
0%	2%	0	\$400
1%	1%	\$100	\$100

## The Laffer Curve

The disincentive effect has an impact on tax revenues received by the government. The Laffer Curve is a way of showing that higher tax rates do not always lead to higher tax revenue. The Curve, graphed in Figure 12 -2, plots tax revenue as a function of the tax rate. At a rate of zero percent, zero revenue is collected. As tax rates rise, so does government revenue. At a rate of 100%, we know that no one will work and no taxes will be collected. There must be a point that maximizes total revenues. Any further increase in the tax rate will cause a reduction in the total revenues collected by the government.



In the United States, some people claim that tax rates are above the revenue-maximizing rate. Note that this is not the optimum rate, just the revenue-maximizing rate. Most economists doubt this today as a general

proposition. (It may be true for some special taxes such as capital gains). It may have been true in the past. When President Kennedy took office, the top marginal rate was 91% and it is hard not to believe this rate was above the revenue-maximizing rate.

The Laffer Curve has some important policy implications. Suppose Congress cuts tax rates by 15%. Revenues will not go down by 15%. We will get some incentive effects so that the tax cut will reduce revenues, but by less than 15%. In 1996, Bob Dole proposed a 15% tax cut. His advisors estimated the tax loss at only two thirds of that and many economists would find this a reasonable estimate. The idea seems quite simple and straightforward, while one might argue with the exact numbers.

### ***The Effect of Taxes on GDP***

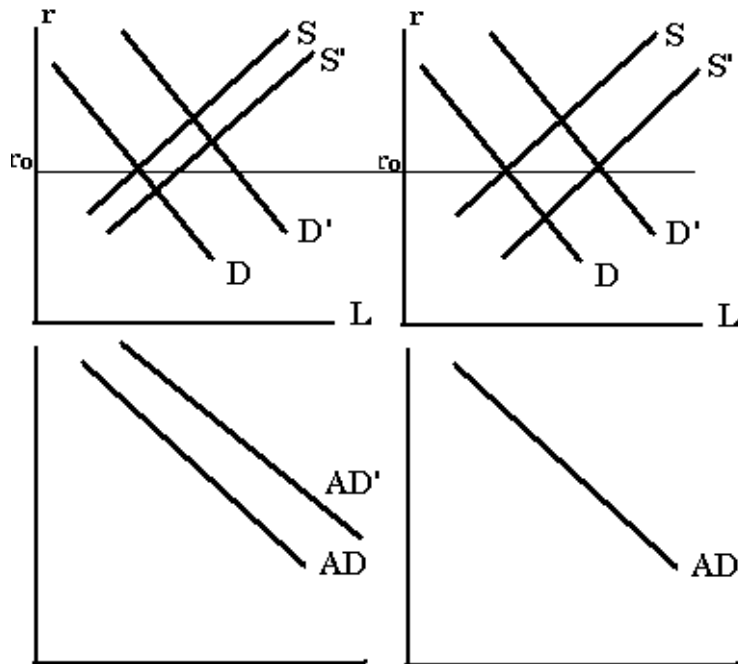
The Laffer Curve is an example of a general proposition: the impact of taxes on GDP. High taxes depress both Aggregate Demand and Aggregate Supply. To see why, suppose the government is running a balanced budget and suddenly cuts taxes by \$100 billion. What happens? This turns out to be a complicated and controversial question. It is also an important question, so we will spend some time on it.

### The Demand for and Supply of Loans

As we discussed in an earlier lecture, there are two views about the effects of the demand and supply of loans. Without question, the government's deficit increases the demand for loans by \$100 billion from  $D$  to  $D'$ . (as shown in figure 15-3) The debate centers on the effect on the supply of loans. All economists agree that people will save part of their tax cut, and the supply of loans will shift to the right from  $S$  to  $S'$ . Some argue that the increased supply will be less than \$100 billion. Others argue that the increased supply of loans will be exactly \$100 billion.

One view, shown in the upper left-hand corner, is that the increase in demand is greater than the increase in supply. If so, interest rates rise and aggregate demand increases, as shown in the lower left-hand panel. The other view, sometimes labeled *Ricardian Equivalence*, is that the increase in the supply of loans equals the increase in the demand for loans. If so, interest rates remain constant; aggregate demand does not increase. The right hand side of Figure 15-3 represents this view.

Figure 15-3  
Deficit Financing, the Loan Market and  
Aggregate Demand: Two Views



This graph illustrates the two views of deficit financing. Suppose the government, initially running a balance budget, cuts taxes and runs a deficit. The demand for loans increases by the amount of the deficit. There is also an increase in the supply of loans, for people save at least part of the tax cut.

One view, shown in the upper left-hand corner, is that the increase in demand is less than the increase in supply. If so, interest rates rise and aggregate demand increases, as shown in the lower left-hand panel.

The other view is that the increase in supply equals the increase in demand. If so, interest rates remain constant. Aggregate demand does not increase. This view is represented by the right hand side of the graphs

## Impact on Aggregate Demand

Figure 15-3 also illustrates the controversy over aggregate demand. If people save less than \$100 billion, the supply of loans increases by less than \$100 billion, and there is not an exact offset to the increase in the demand for loans. Further, there is an increase in aggregate demand. For example, if the supply of loans increases by (say) \$90 billion, then consumption spending is rising by \$10 billion, which means a \$10 billion increase in aggregate demand.

Once we know what is happening to the supply of loans, we know what is happening to aggregate demand. If people save the entire \$100 billion, the supply of loans increases by \$100 billion, and there is an exact offset to the increase in the demand for loans. Further, there is no increase in aggregate demand. Government spending is not increasing; and, if there is no increase in consumption spending, then there is no increase in aggregate demand.<sup>1</sup>

## Impact on Aggregate Supply

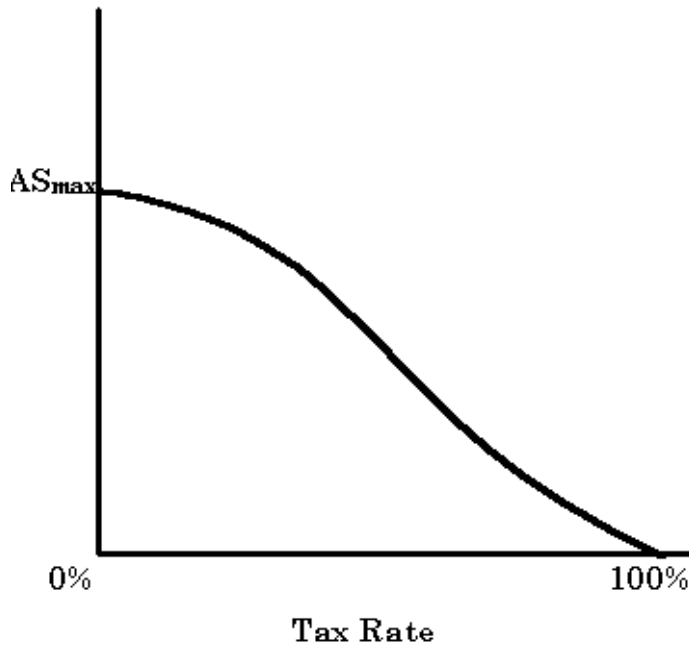
Whatever the effects on aggregate demand, there would be important implications of this tax cut on aggregate supply. While this idea, sometimes called *supply side economics*, often gets a derisive review from the press, the basic ideas are simple. We all know that taxes have disincentive effects. The higher our saving is taxed, the less likely we are to save; the higher our labor income is taxed, the less likely we are to work.

To see the idea, suppose that the government imposed no taxes, so that there were no disincentive effects. Aggregate supply would be  $AS_{max}$ . If the government imposed a 100% tax on our income, common sense tells us people would not work, and aggregate supply would drop to zero. Figure 12-4 shows the relation between aggregate supply and the tax rate. Of course, as we have shown there are wise and foolish ways to impose the tax rates to as to minimize or maximize the impact of taxes on aggregate supply. Further, while we know that the cumulative effect from extreme taxation is zero aggregate supply, economists will differ over the shape of the curve. Some suggest that taxes have little impact until they get very high, while believe the impact comes at a much lower rate.

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<sup>1</sup> The Economist General repeated the warning that the view that there is no shift in aggregate demand, formally known as Ricardian Equivalence, is highly controversial. Most economists do not believe in Ricardian Equivalence. Partial Ricardian Equivalence, the view that the shift in the supply of loans will offset 50 or 80 percent of the increase in the demand for loans is not controversial.

Figure 15-4  
Aggregate Supply and Taxes

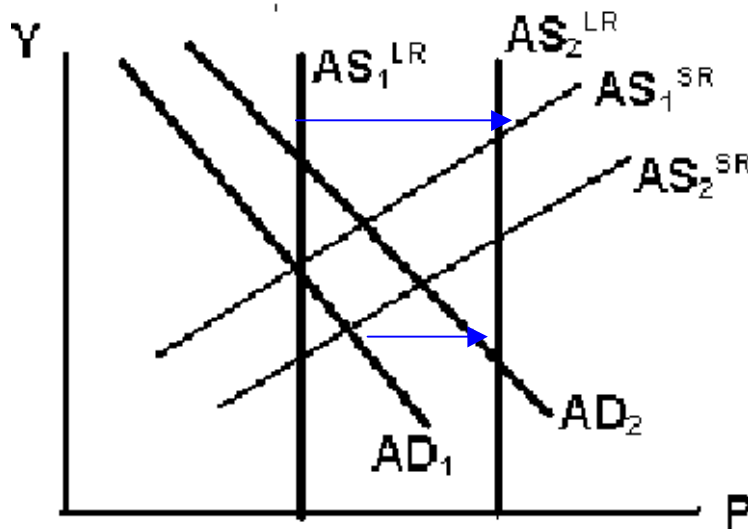


This graph shows the relation between aggregate supply and taxes. When there are no taxes, aggregate supply is at its maximum. As the tax rate increases, aggregate supply declines.

Putting the two effects together

Figure 12-5 combines the two effects. Cutting taxes while holding spending constant may or may not increase aggregate demand from  $AD_1$  to  $AD_2$ . It *will* increase the long-run aggregate supply curve from  $AS_1^{LR}$  to  $AS_2^{LR}$  and the short run aggregate supply curve from  $AS_1^{SR}$  to  $AS_2^{SR}$ . The combined effect will be an increase in GDP.

Figure 15-5  
The Impact of a Tax Cut



This graph shows the combined effects on both aggregate demand and aggregate supply curve of a tax cut. The combined effect is to increase GDP

Which one matters?

This section should really be entitled "Which one matters the most?"  
This is a discussion about magnitude.

Economics is an empirical science. The ultimate question of any economic theory is "does it fit the facts". Most economists would agree that a tax cut has both demand and supply effects. If you ask which one is the more important effect, you will get disagreement. To someone who believes in Ricardian Equivalence, the question is easy: because there are no demand effects, everything we see must be a supply effect.

To others, the choice is harder, and more controversial. Some economists would argue that while perfect Ricardian Equivalence may not work, the principle does attenuate the demand effects, so the supply effects

are dominant. Others do not see the supply effects, and argue that it must be all demand effect.

It is tempting at this point to dismiss economists who do not find supply effects. This would be a mistake. There are effects attenuating supply effects that we have not discussed here. For example, a 50% tax on income does reduce my after-tax wage, reducing my incentive to work. It also makes me poorer increasing my incentive to work. Ultimately this is an empirical issue.

Both sides in this debate take ammunition from two recent rounds of tax cuts:

- The Kennedy Tax Cuts, proposed by President Kennedy and enacted by Congress and President Johnson shortly after his assassination, and
- The Reagan Tax Cuts proposed by candidate Ronald Reagan and carried out by Congress and President Reagan after his election.

Both involved significant cuts in tax rates and periods of extensive economic growth followed. Economists disagree on how much of the boost came from demand growth and how much came from supply growth.

Our model indicates a problem in attributing any of this growth to increases in aggregate demand. An increase in GDP due to an increase in aggregate demand occurs only if we move along a short run aggregate supply curve. We know that the aggregate supply curve would rotate. As it does, any increase due to aggregate demand would disappear. That is, a period of decline in GDP would follow any growth in GDP due to aggregate demand effects. In fact, the Kennedy and Reagan years did not presage years of business decline. Both the Kennedy and Reagan cuts ushered in long periods of economic growth.

It is like the state of Ohio borrowing \$100 million to pay for highways and answering the question “when will you pay this back” by saying, “we’ll get around to thinking about this issue some day”. It just will not fly.

## **Relation to the Text**

Each lecture ends with a section relating it to the text. In some cases, material is omitted, either because the text covers it well enough or because it is not worth learning. In other cases, material is added. Each of these “lectures” will end with a brief note relating the lecture to the text, describing what material is left to the student to learn alone and what material may safely be skipped.

***Which Chapters does this lecture cover?***

Section from Stockman	Coverage
Chapter 14	This lecture covers the parts of Chapter 14 dealing with taxation.

***What material is new?***

The discussion of progressive taxation, and marginal and average tax rates.

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