MACROECONOMICS 201
Spring 2020
NOTES 11

Fiscal policy and its effects on aggregate expenditures/demand and the consequences thereof

Effects of changes in different types of taxes
Effects of changes in different types of spending
Effects of Federal deficit
Efficiency considerations

Reading Assignments:

Reading Assignments

Principles of Economics: Chapters 30,31
Madariaga: 72, 100

1. What do we mean by government?

Although there are many definitions of the term "government," I regard governments as organizations with the authority to compel activities which would not otherwise take place if markets and people were allowed to follow their own inclinations. By their very nature governments are ***coercive*** in the sense that any activity they undertake will invariably cause some people or organizations to do something they would not otherwise do, or be willing to pay for. As examples:

- people are ***required*** to obey traffic laws;
- people are ***required*** to take their disputes to courts rather than settle them by individual conflict or mob rule;
- people are ***taxed*** to pay for road improvements, even if they do not use the roads;
- people are ***taxed*** to pay for mass transit, even if they never ride a bus or subway;
- people are ***taxed*** to help support public schools, whether or not they, or their progeny, would ever use public schools;
- people are ***taxed*** to maintain minimum income and health care for some individuals;
- business are ***required*** to reduce pollutants;
- theft, murder, assaults and other illegal activities are ***forbidden***, and if committed, the perpetrators are ***punished*** (sometimes);\
- etc. etc. etc.

2. Why must/should governments exist?

This topic was discussed earlier (notes 3). As a quick review, the rationale for a public sector is that there are many social needs that the private sector will not meet in an optimal manner. Among these social needs are:

- to take account of external benefits and costs that private markets would not consider , e.g., national defense (external benefit), pollution control (external cost);
- to provide access to services that people need (or we think should have), e.g., education,

parks, public health, income support, health care, support for the aged, that are unlikely to be provided to ***all*** people by the private sector;
- to provide or regulate services which are inherently natural monopolies, e.g., electric power, water supply, telephone service, which require a physical connecting grid to each home (note that these natural monopolies are being turned into more competitive activities by requiring that multiple firms be allowed to use existing telephone and electric grids:
- to provide law enforcement;
- to assure effective functioning of markets, i.e., assure that the incentives for business lead to safe and hopefully improved products and/or lower costs), ***a very important function***;
- to provide or maintain the country's infrastructure, e.g., roads, bridges, water systems, electric systems, police and fire protection, a court system, etc.:
- etc. etc. etc.

And of course, the government is expected to take appropriate steps to assure the attainment of macroeconomic goals, the most important of which are:

- keeping inflation at an acceptable level;
- keeping unemployment at an acceptable level;
- adjusting the distribution of income within the population to acceptable differences among people ;
- encouraging economic growth;
- reducing poverty; and other beneficial social activities.

You may be skeptical, but some level of government activity, possibly a substantial amount, is needed to ***protect and preserve*** a market economy. In the remainder of this chapter, we will focus on government efforts to control inflation and unemployment, although these policies also have implications for the other macroeconomic goals as we will note periodically.

3. How is government organized in the U.S? .

Government in the U.S. is a federal system comprised of: a) the federal government; b) state governments; and c) local governments, i.e., , city governments, county governments, and other local entities. This division of responsibility between the central government, and regional or local governments is duplicated (roughly) in most countries. However, the responsibilities assigned to the various levels differ among different countries.

Although the Federal government in the U.S. funds many different activities, the most important (i.e., costly) are:

- Defense;
- Income support and health care financing (primarily the Medicare, Medicaid, Social Security, and Supplemental Security Income (basically a federal welfare program) programs; and
- Interest on the National Debt.

State and local governments have primary responsibility for:

- Education

- Transportation
- Police and fire protection
- parks.

4. How large is the government?

In a word, humongous. Total **roughly** estimated expenditures by ***all*** levels of government (schools, roads, national defense, pensions, education, etc.) in 2018 was crudely estimated at $7.12 trillion, about 35 percent of GDP. Although we pride ourselves on being a market economy, government funded activities consume a large part of our economy.

Moreover, tax receipts and expenditures tell only part of the influence of government. Much government activity takes place by regulation of industries and of personal activities (e.g., OSHA, FDA, banking, housing and everything connected with housing, etc). In fact, it affects most aspects of your life. It is hard to think of anything that you do that the government does not in some way influence. Some economists refer to our economy as ***welfare capitalism***. As we have repeatedly stressed, government must undertake some activities in order to provide essential services that the market system will ***not*** provide, or does so badly. These essential public services assure the continuance of a well functioning market system. There is, of course, great controversy about the amount and types of government activity that is needed to achieve this goal. It is not a question of capitalism versus socialism. It is a matter of how much government is needed to deal with problems that a market economy does not resolve satisfactorily.

We should note that the Federal government is the big elephant on the block. Roughly three-fifths of public spending is spent at the Federal level. Moreover, much of the activities of state and local governments are influenced or determined by Federal matching funds.. Congress can ***almost always*** induce state and local government to establish/fund and operate programs in accordance with Federal objectives and regulations by making it a condition that Federal matching funds will be issued ***only if*** these governments are in compliance with federal regulations, e.g., the employment service, rehabilitation and social service programs, road construction, bridge construction, health care programs (Medicaid, Medicare), etc. Obviously, many of these regulations are currently very controversial.

5. How large is the National Debt?

Sometimes, in fact far more often than not, the national government in the U.S. spends more than it receives in revenues from taxes and fees, thereby causing an annual deficit. The total of these deficits over time constitutes the national debt in the U.S. Note that states and local governments are usually required to balance receipts and expenditures each year, although there are some noticeable exceptions. A few local governments have had to declare bankruptcy because of their inability or unwillingness to control spending.

You have probably read much about the growing national debt and our apparent inability to balance the Federal budget. The national debt seems enormous. The outstanding national public debt as of January 16, 1920 was $23,204,231,499,229 that is over $23 trillion.

The U.S. population was about 329 million as of this date so each citizen's share of this debt is a little over $70,500. That is your personal share. If you have a wife and two children, your family share of the national debt is about $281,000 (and rising). It has been growing rapidly in recent years as seen below.

Date	Amount of Federal Debt
9/30/201 9	$ 22,719,402,000,000
9//30/2018	$21,516,100,000,000
09/30/2017	$20,244,900,000,000
09/30/2016	$19,573,444,713,936.79 Trump **- TAX DECREASE**
09/30/2015	$18,150,617,666,484.33
09/30/2014	$17,824,071,360,733.82
09/30/2013	$16,738,183,526,697.32
09/30/2012	$16,066,241,407,385.89
09/30/2011	$14,790,340.328,557.15
09/30/2010	$13,561,623,030,891.79
09/30/2009	$11,909,829,003,511.75
09/30/2008	$10,838,758,414,164.46 obama -RECESSION
09/30/2007	$9,007,653,372,262.48
09/30/2006	$8,506,973,899,215.23
09/30/2005	$7,932,709,661,723.50
09/30/2004	$7,379,052,696,330.32
09/30/2003	$6,783,231,062,743.62
09/30/2002	$6,228,235,965,597.16
09/28/2001	$5,807,463,412,200.06
09/29/2000	$5,674,178,209,886.86 bush TAX DECREASE
09/30/1999	$5,656,270,901,615.43
09/30/1998	$5,526,193,008,897.62
09/30/1997	$5,413,146,011,397.34
09/30/1996	$5,224,810,939,135.73
09/29/1995	$4,973,982,900,709.39
09/30/1994	$4,692,749,910,013.32
09/30/1993	$4,411,488,883,139.38
09/30/1992	$4,064,620,655,521.66 clinton
09/30/1991	$3,665,303,351,697.03
09/28/1990	$3,233,313,451,777.25
09/29/1989	$2,857,430,960,187.32
09/30/1988	$2,602,337,712,041.16 bush senior TAX DECREASE
09/30/1987	$2,350,276,890,953.00

In 1980, the national debt was about 35 percent of GDP. It is currently greater than GDP, about 110%, and rising - Ouch. Of the total debt, about 74% is held privately and 26% is held by various Federal agencies such as the Social Security Trust fund and the Highway Trust Fund. The Federal Reserve owns a little under 11% of the national debt. Interest paid on these intragovernmental holdings are used to fund government activities and do not technically constitute a burden to taxpayers although your social security pension may someday depend upon part of this debt being repaid by taxpayer money which may be (probably will be) resisted. Other countries own slightly over one third of the U.S. debt of which the two largest are China and Japan both of which own a little over $1 trillion of U.S. federal government debt.

In Fiscal Year 2019 about 9 percent of the Federal budget was spent on interest payments to the holders of the national debt. Compare that to estimated Federal expenditures on education of 3%, transportation of 2%, energy of 2%,. Our enormous Federal debt does, and will increasingly, interfere with our ability to provide vital services to the nation. This is the ***crowding out*** effect discussed in your text.

6. Will this enormous debt crush our economy?

Maybe, some day, but we are apparently o.k. for the present, but I am increasingly concerned. I am not so sure that this will continue to be true if we continue to incur these large annual federal deficits, or if interest rates begin to rise significantly. The current size of the debt is less a fault of the current high deficits that are at least partly a consequence of the recent recession, than of gross federal fiscal mismanagement over many years when the economy was quite prosperous.

Many countries have managed quite well with national debt to GDP ratios well in excess of 75% (perhaps not happily as citizens must be taxed, and taxed significantly, to pay the interest on their debt.). The proportion of our national debt to GDP was higher than 100% at the end of WWII. But it must be acknowledged that with the growing deficit levels, and no end in sight, it will become increasingly burdensome to future taxpayers and will crowd out other Federal programs as money is transferred from taxpayers to holders of the national debt, many of whom are not U.S. citizens, rather than used to provide public services. These creditors are unlikely to be sympathetic to our funding problems. Consider how we view debt issues in Europe. Look at how some people view the debt laden Greeks (irresponsible???). You will all pay for the excesses of your elders. It would not surprise me if we are headed for trouble. What do you think?

For goodness sakes, will someone explain to me why we are borrowing at a national level to pay for recent tax reductions.

It most be emphasized that it is the ***ratio*** of the national debt to GDP that determines how burdensome the debt is, **not the absolute amount of the debt.** One big issue with the national debt is that interest on the national debt is currently over 9% of the Federal budget, and is only at this low level because of the currently extraordinarily low interest rates that are a consequence of Federal Reserve efforts to stimulate the economy during the recent great recession. It is extremely unlikely that these low rates will continue indefinitely.

You may wonder if the national debt will ever be paid off. It clearly is easier for congress to increase spending and reduce taxes than to raise taxes or lower spending (as would be required to lower the debt)

But, we have another little understood, little known, and little publicized gimmick to reduce the national debt. As you know, inflation has been running between 2 and 3 percent since WWII (although much higher on occasion). As we previously pointed out, this reduces the value of the dollars we would use (theoretically) to repay the debt and ***thereby reduces the real burden*** of the national debt. The largest, almost the only, reductions in the ***real*** burden of the national debt since WWII have been due to inflation, ***not due to repaying any part of the debt***.

Consider, with a national debt of about 20 trillion, (ours is larger) a modest 2 percent inflation will reduce the ***real value*** of this debt by about $40 ***billion*** per year. Now, compare that with the piddling little annual $5 billion or so in debt reduction that Congress **used** to struggle with (currently they have given up the pretense of any effort to reduce the national debt), always to take place in future years, and which no one really expected would ever happen (and in fact, didn't).

Another problem with a large annual deficit, emphasized in the text, is that the government must compete with the private sector for available funds. A large part of the investment strategy of the private sector depends upon borrowed funds. In a normal high functioning economy, this means that if the government uses borrowed funds to acquire resources that would normally be used by the private sector to produce capital goods and promote economic growth, economic growth will, in consequence, be slowed. This is sometimes termed the “crowding out” effect (also briefly discussed in notes 5 and frequently in the text)..

However, the “crowding out” effect is not inevitably true. If an economy has **unused** resources, then government use of these idle resources need not reduce investment in the private sector. In addition, the Federal Reserve, as we have seen, can create money which can then be used to finance private investment, ***if*** there are unused resources in the economy. Remember, although the Fed is prohibited from directly purchasing government securities, there is no restriction on its ability to purchase securities from the private sector, thereby increasing the money supply, increasing loanable funds, lowering interest rates, promoting investment, and enhancing economic growth and making it possible for the Government to borrow money at low rates.

7. What is the Role of the Federal Government in Macroeconomic policy?

The responsibility for maintaining low unemployment and stable prices is almost (but not quite) exclusively the responsibility of the Federal government. In fact, the Full Employment Act of 1946, and subsequently amended in 1978 by the Full Employment and Balanced Growth Act, ***requires*** the Federal government to pursue policies designed to maintain a low level of unemployment and inflation, and to achieve balanced growth of GDP (WOW - wish we could do all this as easily as it sounds).[1]

Note that most ***States*** must either tax or borrow to finance expenditures (they do not have the ability to influence interest rates, or manufacture money). There are practical, and sometimes legal, limits on the ability of states to borrow, so they have little ability to borrow and spend to influence aggregate expenditures in order to control employment or inflation. In that sense, they are comparable to countries in the Eurozone. On the other hand, the Federal government can borrow and spend virtually at will (if so desired by congress), and the Federal Reserve can exercise great influence over interest rates and the money supply (see notes 10). In consequence, only the Federal government can influence the macro economy in a meaningful way. If the national deficit continues to rise, however, may need to rethink the premise that the U.S. Federal government can continue to borrow and spend at will.

8. How does the Federal Government influence Macroeconomic Goals?

If we focus primarily on unemployment and inflation, the Federal government has two **broad** types of policies to deal with problems in these areas: **monetary policy and fiscal policy**. In notes 10, we discussed monetary policy.

---

[1] The task of maintaining an acceptable (not necessarily equitable) distribution of income, is also primarily the role of the Federal government, carried out largely through entitlement programs (social security, Medicare), programs for the needy (e.g., SSI, medicaid), and the progressive income tax. Much of the responsibility for other public services, e.g., roads, justice, promoting economic growth, is placed on state and local programs.

Fiscal policy has ***two*** major subdivisions, ***spending policy and tax policy.*** As we have seen, either approach can have an effect on either unemployment or inflation.

Consider spending policy. As we have seen, if the government increases spending, **while holding taxes constant**, almost inevitably additional people will be hired, and there will be a multiplier effect of ***uncertain*** size on aggregate demand/expenditures. This will either cause more workers to be hired, or, if unemployment **is low**, cause a combination of price increases and reduced unemployment. If unemployment is very low, then prices may rise substantially **with little change in output.**

Conversely, if the government decreases public spending (remember, taxes, or other means of creating revenue must not be changed), then it is probable that there will be a reduction in employment (a leftward shift of the aggregate demand curve) and that this will lead to downward pressure on prices and quite possibly will increase unemployment.

These observations about the effect of public spending on employment and inflation follow directly from the shape of the AS/AD curve in the AS/AD chart where it can be seen that the effects on inflation and output depend upon where the AD curve crosses the AS curve.

Now, consider tax policy. If taxes are **reduced**, then it is probable that some of the people whose disposable incomes are increased will buy more goods and services creating a need to hire more workers. If taxes are i**ncreased**, some people, particularly those with lower disposable incomes will spend less thereby causing some workers to lose their jobs and probably result in some reduction in prices.

Clearly, we know how to take steps to increase or reduce employment and inflation using fiscal policy and almost every economist agrees that these procedures will have effects in the desired direction. Why then, is there so much controversy over adopting appropriate fiscal policies to achieve low unemployment and low inflation? We will discuss this issue further in notes 12.

9. Using changes in government expenditures to change AE/AD?

During the great depression, and for a while after the development of Keynesian economics, the use of public spending to combat unemployment was emphasized. After Keynes book was published in 1936, there was a great surge of enthusiasm for promoting employment by funding public works, i.e., building roads, conservation activities, building dams, building bridges, etc. For obvious reasons politicians and economists were primarily concerned with ways of helping people find jobs (remember, this was during the great depression) . Many had little concern about the possibility of inflation. At that time, they felt (and many still do) that government should increase spending in order to increase employment. Remember, monetary policy was regarded as ineffectual during the great depression of the 1930s as people were reluctant to borrow given the economic uncertainties that existed.

The following needs to be emphasized if you wish to use changes in public spending as a stabilization tool.

a. To be most effective, and as frequently emphasized, if it is desired to generate a multiplier effect (and increase employment), a change in public spending must be carried out ***without*** increasing taxes.
\

b. However, even if a change in public expenditures is balanced by a rise or fall in taxes, GDP would still change in the desired direction due to the ***balanced budget multiplier*** (notes 9) but to a **significantly lesser** extent.

c. We should note that many economists do not believe that the level of government spending should be influenced by stabilization policy. They argue that the government shouldn't undertake public spending purely for the sake of enhancing employment. They do not deny that some public expenditures are needed, but feel that taxes should be based on the actual expenditure needs of the economy and the population, regardless of whether the economy is facing inflation, unemployment, or both, and should not change because there is unemployment or inflation. They argue, instead, that AD should be changed through tax and monetary policies, and the use of automatic stabilizers. They believe that the private market system will do a much more effective job of allocating resources. It should be noted, however, that the severity of the recent great recession caused even some very conservative economists to advocate for increased public spending

d. Even when economists agree on the need for a change in public spending, many still disagree vigorously on which types of spending should be changed. The type of public expenditure enacted can make a great deal of difference as to who benefits and who does not and how effective the spending stimulus is for stabilization purposes. A few examples of spending that would ***increase*** AD/AE may help in emphasizing this point.

- Expanding health care/health coverage as seems to be advocated by both parties during times of elections. . This would obviously increase employment for nurses, doctors, hospital workers, etc. However, it should be noted that these individuals are not facing any current shortage of jobs and the net effect might be inflationary at the present time (by driving up their wages and ultimately the price of medical care), even though unemployment exists elsewhere. At present, the case for expanded health coverage must rely on social values.

- Expanding road construction and bridge repair would benefit engineers, day laborers, and heavy equipment operators. This is likely to have a significant effect on reducing the number of persons who are unemployed during depressed times for both skilled and unskilled workers. One might say the same thing about improving other social infrastructure (e.g., water systems, trash disposal). Note the emphasis on infrastructures by both parties as the 2020 election approaches.

- Expanding education funding. Improving education might employ a few more teachers, but it might also simply fund scheduled wage increases (as apparently occurred under the stimulus act at the beginning of the great recession). However, it would be nice if it focused on expanding college scholarships, or improved the quality of elementary education in low income areas. It would enhance economic growth in future years, but might not do much towards reducing unemployment in the short run. Although I have long believed that it would greatly increase part-time employment for retired persons.
- Developing methods of producing and distributing alternative energy sources. This could result in the hiring of many different types of workers, skilled and unskilled, throughout the country, as well as produce much that is socially useful. Unfortunately, government efforts to support the development of alternative energy companies have had some well known failures, sticking taxpayers with the bill. This, of course, supports those who believe that innovation is best accomplished in the private sector based solely on the profit motive, and not generous public subsidies.

- Bail out companies in danger of failing, as was done for General Motors. Note that regardless of the bailout, GM was greatly reduced in size and employment. The bailout apparently protected some jobs, both at GM and the suppliers of GM. In the long run, the restructuring of GM may have lead to economic revival and increasing security for some U.S. automotive jobs. However, this is speculative and the bailout of GM, although generally regarded as successful, still has its detractors.

The above are general observations, and I would appreciate disagreement and/or further comments. Just remember, the different ways that government spends money can have vastly different effects.

e. It is generally not realized that the public expenditures argument for increasing employment actually takes place, *de facto*, through the large number of "pork" projects funded by congress. Usually, a senator or representative will partly justify these projects by the ***increased employment and prosperity*** they will bring to his or her home state. Incidently, not all "pork" projects are bad. In fact, most do bring some benefits to people in the area, e.g., the use of a bridge, or a library, or some other real asset. It may not be the most efficient use of public funds, but it is not necessarily a complete waste of funds as is often implied. In any event, why shouldn't your elected representative help determine how your tax money is spent rather than some nameless, out of touch, bureaucrat?

10. Using changes in tax policy to change AE/AD?

As noted, many economists would usually prefer to use changes in tax policy, coupled with automatic stabilizers, rather than changes in government spending to change the level of **AD**. The argument is as follows. If **AD** needs to be increased, they would prefer to lower taxes and hopefully increase private spending. If **AD** needs to be reduced, they (at least some) would prefer to raise taxes (sometimes), and hopefully reduce private spending. Using tax policy to change the level of disposable income and **AD** would subject any changes in investment or consumption to the test of the private market which they feel is far more efficient in allocating resources to their most desirable use than a politically motivated congress would be. And a critical problem with using public spending to increase AD and employment is how do you reduce this spending if you move into inflationary times. Imagine trying to reach a consensus on reducing spending on health care, or education at the present time. In the next set of notes we may, ***if we have time***, discuss a ***possible*** solution to this problem..

As background information, in the 2017 Budget, the U.S. Federal government anticipated receiving received $3.3 trillion in revenue. Income taxes contributed about 50%, payroll taxes (Social Security and Medicare) about 36%, corporate taxes only 6%, and the remaining 8% from customs duties (tariffs), excise taxes, estate taxes and other miscellaneous sources. About 24% of Federal spending was funded by borrowing (YIKES).

A critical issue in using tax policy as a stabilization tool is whose taxes should be reduced or increased? It makes a great deal of difference not only to the effectiveness of tax policy but also for who benefits. Here are some possibilities, all of which have been debated in Congress when considering various tax changes. The focus here is on increasing AD/AE, but making the opposite changes would decrease AD/AE.

1. An across the board percentage reduction in federal income tax rates. This will provide ***no*** benefit to people who do *not* pay taxes and hence cannot lead to an increase in spending by them. (it is argued by some analysts and politicians that only people who pay taxes should get a rebate) The largest

share of an across the board percentage reduction in federal income tax rates will necessarily go to the middle or upper classes (remember, almost 50% of the population pays no federal income tax). This raises the crucial question as to how much this increase in disposable income will increase spending. Relatively affluent people may save a large percentage (or all) of the increase in disposable income resulting in little job stimulation. Whether or not to increase or decrease taxes for very high income taxpayers is a major ongoing policy issue as I hope you are all aware. ***Note the recent federal tax reform***.

2. An increase in the personal exemption. Of course, as you may know, the recent tax reform bill has eliminated the personal exemption, although I suspect that this issue will continue to be debated in Congress in l future years. Anyway, lets talk about it. The personal exemption for many years allowed taxpayer to deduct a certain amount from their gross income ($4,050 in 2017) for each family member. This reduced their taxable income and their tax liability. While it was in existence, an increase would provide more benefit to large families and to those at the lower end of the income scale (of those who pay taxes) since an increased personal exemption would reduce their taxable income more than it would for smaller families or higher income families. Moreover, being more in need, these families are likely to spend a higher proportion of the reduced taxes, and spend these funds more rapidly. However, note again that it would only benefit people who actually pay taxes which excludes half of the population.

The personal exemption has been replaced by a standard deduction that will apply to all households. It will be almost $25,000 for marrie4d people filing jointly, about half of that for people filing separately and about $18,000 for a head of household It rose by about $400 in 2020 which, of course confers no benefit for the half of the population that does not pay federal income taxes. In addition, large families no longer are given more treatment, or those with large medical bills, large charitable donations, or those with large casualty losses.

3. Reduce tax rates ***only*** for people with low incomes, say under $50,000 and provide a ***negative tax*** for people who do not pay any income tax (increasing their disposable income). This will not only benefit lower-income people, but also, because their MPC is higher than for other people, should lead to an even greater increase in spending than any of the two alternatives listed above for the same public cost. Incidently, the unemployment compensation benefits program (an automatic stabilizer) is almost/effectively the same as a negative tax.

If you wish to start an argument with someone, suggest raising taxes on people with high incomes, who often have lows MPCs, and lowering them on people with low incomes, who usually have higher MPCs in order to stimulate the economy. Believe it or not, this could be done in a way that balanced the budget. You might even justify doing so on the grounds that the distribution of income has been markedly skewed towards high income individuals in the last 20 years or so.

4. Provide a one-time lump sum payout. This was done in the last stimulus package in response to the great recession. Some people will undoubtedly rush out and spend these funds, but apparently, according to one estimate, 80 percent of the funds distributed in the last lump sum package was not immediately spent, although I suspect that over a year's time (as vacations, birthdays, holidays, etc. went by), a larger proportion was spent. The size of the stimulus will depend, of course, on who is included. If only taxpayers, it will have a much smaller effect, than if it is paid to all citizens which will include many low income individuals who pay no federal income taxes. The lump sum payment under the stimulus act was widely distributed.

5. Reduce corporate tax rates. This is part of the famous trickle down argument. If these taxes are reduced, after-tax profits should rise, companies and individuals should be encouraged to invest more,

causing **AD/AE** and real GDP to rise. Employment, and perhaps wages, will also rise. The problem is that this is a long-term solution (to enhance economic growth) rather than a solution to an immediate problem (lack of jobs). It takes a considerable time for companies to decide to invest, and then act upon that decision. Nonetheless, some economists prefer this approach since it should stimulate economic growth (another macroeconomic goal) as well as increase employment over time.

6. Reduce sales taxes. Of course, the Federal government does not have a sales tax, but if it did (as I wish it did), then this would lower prices on the very items that persons with limited income are most likely to buy and could have a significant effect on spending ***(perhaps***).

7. Increase unemployment compensation levels and the duration of payments (as was done during the recent recession). This would funnel money to persons who are almost certain to spend most of it and to spend it rapidly because of great and recent need. It would help people pay their bills, save their homes from foreclosure, and may even help the banking system since they would need to foreclose on fewer homes. **Of course, it may (almost certainly would) also lead to a certain amount of malingering.** Note that significant benefits would accrues to people who pay no income taxes.

8. Reduce social security taxes during times of high unemployment. This would direct money to the lower end of the income scale, and should have a sharp impact on **AD**. This suggestion pops up every time that unemployment rises to a level that some people think is unacceptable, and is fueled by the fact that Social Security taxes takes a substantial part of the earnings of workers with low earnings (almost 15 percent if you consider the employer's contribution). In fact, for many Americans, it is the largest and/or only federal tax they pay. Moreover, it would benefit most of the individuals who pay no income taxes - only people without paid work would not benefit.

There are an infinite number of different taxes and possibilities. It is certain that you will see many different proposals during your lifetime. I hope that you now have the ability to assess the different alternatives that you may read or hear about. Some politicians are anxious to steer help to needy individuals, others think it is unjust to tax well-off people at what are considered high rates just because they are more productive and/or have higher incomes.

11. Why not a balanced federal budget? Almost inevitably, the Federal government runs an annual deficit. Many people wonder why the federal budget cannot be balanced in the same way that most households, private enterprises, state governments, and local governments must do. They feel that it is prudent to roughly balance expenditures with revenues and not slide too far into debt. Actually, there is no reason that the Federal budget could not be balanced (roughly), ***if*** members of Congress were willing to make the ***hard*** decisions about tax rates and spending limits that would be required. Unfortunately this is anathema to most lawmakers (although they will never admit it).

In fact, economists have a name for this, ***fiscal responsibility, and please do not (dare) forget this term***. Fiscal responsibility basically means that if the federal government wishes to spend, say a trillion dollars, then it should raise a trillion dollars through taxes (and/or a few other means) so that resources that would have been used for private production/consumption are freed up for use in public production. To do otherwise is inherently inflationary, **if the economy is operating at a high level of employment**. Remember our discussion about the production possibility frontier.

There is a problem though. As we have seen, at times the government should run a deficit in order to reduce unemployment, and at times the government should run a surplus, in order to restrain inflationary pressures. In effect, the Federal government should run a deficit during times of high unemployment and a surplus during times of high inflation. It sounds reasonable and simple, but self-serving politics always intervenes.

In fact, the advocates of a balanced budget are typically their own worst enemies. Clearly, you would *normally not* wish to have a balanced federal budget if there was significant unemployment, or if there was significant inflation. But there have been proposals to amend the constitution to require a balanced budget. Most such proposals for a balanced budget have included provisions for running an unbalanced budget in time of excessive unemployment or inflation. These provisions typically require the approval of congress. But would any of you trust such provisions to work given the divisive and sluggish way in which the congress currently operates.

There is a way that you may wish to consider. Suppose that the Office of Management and Budget estimated the likely tax revenues that the Federal government would receive in the next fiscal year on the assumption that the economy would perk along at a ***targeted*/normal** rate of unemployment. This would set the target for the Federal budget. The sole role of congress would then be to determine what programs and services would be most beneficial to the country ***within*** that budget.

But suppose some members of Congress wished to reduce taxes, then (in order to maintain fiscal discipline) it would become **thei**r responsibility to also identify which public programs e.g., health care, education, transportation) would be cut by an amount equal to the tax reduction. Or if some members of Congress wished to expand or add public programs, it would become **their** responsibility (to maintain fiscal discipline) to identify which taxes, and whose taxes, should be increased, or which other Federal programs should be reduced to pay for these programs.

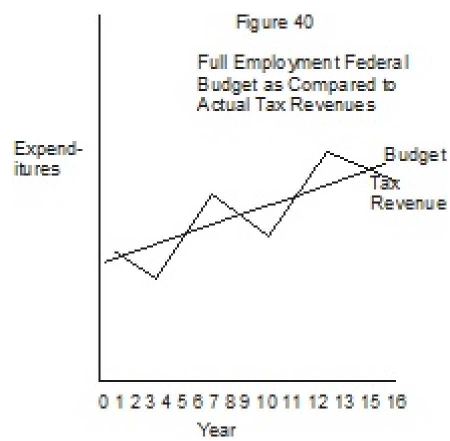
After all, if the economy is perking along smoothly, it makes no sense to have a large deficit. The above approach would focus congressional attention on how scarce public resources should be most efficiently allocated in the country, as it should.

What if the economy went into a recession. Under this approach, if the economy went into a recession, revenues, not expenditures, would decline, and a deficit would automatically be run, as it should in a recession (since expenditures are based on an assumption of normal unemployment). If the economy went into inflation, revenues would generally exceed the projections, which would serve to dampen **AD**, again as it should.

This, I think, is too rational for our present political system, particularly among politicians who seem to be unable to think further ahead than the next election.

You should not assume that balancing the budget in this way would necessarily completely resolve unemployment and inflation issues, but it is a step in the right direction, and would require congress and the president to behave in a responsible manner. Inevitably the time would arrive when a stimulus package is needed, or a larger deficit or surplus is needed than would be generated by this approach. However, how such surpluses or deficits are put in place would be an entirely separate decision making process, which we may discuss further in notes 12. It must be emphasized that any tax or spending changes that would be made for stabilization purposes should explicitly be limited to the time in which they were needed, and Congress ***would not be permitted*** to use tax and spending changes that were made to stabilize the economy to enact permanent changes outside of the regular budget.

This is nothing new. A very similar proposal was made about 50 years ago by a Harvard economist. Moreover, for as long as I can remember, some (probably most) economists have routinely



argued that the federal government should run a deficit during periods of high unemployment, and a surplus in times of inflation. Over time it was hoped that these surpluses and deficits would offset each other. It makes perfect sense. Of course, there is no assurance that the surpluses would exactly balance out the deficits, but this is a minor issue. Figure 40 illustrates how this would work in theory.

There is one way in which this approach is partially implemented. Automatic stabilizers, e.g., unemployment insurance, and income tax revenues (that increase during boom periods, and decrease during down periods) can be considered as one way to automatically help achieve these surpluses and deficits over the course of a business cycle.

Compare this approach to what was have done during recent years. At the beginning of the Bush presidency, it was argued that we should have a tax decrease because we could afford it, based on the surpluses at the end of the Clinton years. Then, when the economy turned down, the same tax cuts were justified on the grounds that they were needed to promote greater employment. And then it was urged that these tax cuts be made permanent. These changes are consistent with achieving political popularity, but inconsistent with responsible public policy.

12. Why run a deficit?

By now it should be apparent that we have amassed an enormous Federal debt in the U.S., something which concerns many people. Will this debt crush future generations of Americans? Probably not, but economists argue over this issue. It will probably (may) be eventually paid down in the time honored way of inflating it away.

But will repayment of this debt be a burden on future generations. Here is what you need to consider.

- If we continue to have a large debt, this will have distributional considerations in the future as some Americans are taxed to pay interest on debt held by other people, including many foreign citizens and governments. The debt will have distributional effects within a later generation, but not between generations.

- Suppose, some years down the road. The economy is operating full tilt producing enormous amounts of goods and services. Who is going to consume these goods. I guarantee you that it will **not** be the current generation that is running up the debt. It will be the **future** generation who are enjoying **al**l of the goods and services that are being produced even though they must also pay the interest on the debt, which will undoubtedly cause complaints. So what burden is that generation, *as a whole*, incurring other than redistributing what is produced among taxpayers and debt holders, some of whom may live in another country.

- So what generation is bearing the burden of the debt. One fact should be obvious. There is an enormous cost to the generation that is dealing with severe unemployment if large numbers of people, are unable to pay their mortgages, medical bills, education and other necessary costs for their children, etc. This loss will ***never*** be made up.

- Moreover, it should be clear that if ***otherwise*** idle people are put to work building roads, schools, and other needed items as a result of a government deficit, then, from a social point of view, it involves very little current social cost since this simply puts idle resources to work to build things that would otherwise not be produced. In that sense, any deficit that is run to reduce unemployment does not create an opportunity cost for the economy, i.e., does not cause the economy to sacrifice another alternative. It does bring the country closer to the production possibility frontier.

- The existence of interest payments on the national debt is largely a matter of tax distribution within an existing future generation, some members of which may live in other countries..

Several further points should be made.

First, sometimes borrowing, especially at a local level, is justified on the grounds that some large expenditures, e.g., large dams, bridges, road construction, would be too burdensome to fund entirely by taxes in the year that the expenditures are incurred. It is argued that these large projects should be paid for over time ***by the people who receive the benefits of these projects as they pay fees tolls, taxes, etc.***

Second, it is important to realize that a large portion of expenditures by the Federal government are largely, ***but not completely***, beyond the control of congress. These expenditures include Social Security, Medicare, Supplemental Security Income, Medicaid[2] as well as a few others (e.g., veteran's benefits). People receive benefits from these programs largely irrespective of any government appropriation decisions. If we include interest on the national debt along with entitlements and national defense, these expenditures make up about three-fourths of the budget, leaving only about one-fourth of the budget in the discretionary range, i.e., easily adjusted by Congress. In consequence, efforts to reduce spending to reduce the current horrendous deficit are largely limited to a small segment of Federal expenditures. This small part of the budget that could be cut includes programs that are considered essential and underfunded by many people, e.g. roads, employment, schools, college scholarships and other support, etc.

Some people feel that we must cut entitlements, e.g. extend the working age, reduce income or medical benefits or means test them, i.e., the federal payment would vary according to a person's income and assets. Others feel we should raise taxes. These proposals are very controversial. Perhaps we should try to just inflate the debt away. By now, your opinions are just as good as those of anyone else.

13. What is the Laffer Curve?

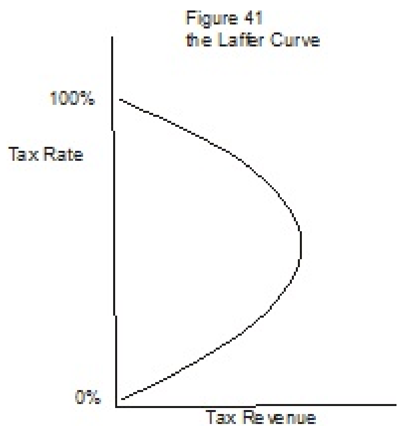
This is a well-known curve that has had, and still has, an extensive effect on public policy. It is based on a truism. It notes that tax revenues will be 0 at a 0% tax rate, and probably 0 at a 100% tax rate.

As tax rates rise from 0%, total revenues will rise, as most people pay their taxes. At some

---

[2]The Supplemental Security Income (SSI) program and Medicaid are means tested and are generally considered poverty programs as only very poor people qualify for them. The Social Security and Medicare programs are not means tested and are considered entitlements.

point, it is ***assumed*** that rising tax rates will discourage some people from working and they will cut back on their work effort (When you take microeconomics this will be described as the substitution effect, i.e. choosing leisure over work). It was therefore concluded that reducing taxes might sometimes encourage people to work more, earn more, and might even increase total tax revenues. Figure 41 illustrates this rosy concept.



This argument, sometimes referred to as Supply Side economics, was used in the Reagan era, to justify large tax cuts. However, these tax cuts led only to enormous deficits so if there is any truth to the argument that **some** people might increase their work effort if their taxes are lowered causing tax revenues to increase, there were many more people who did not change the amount of work they performed. After all, most people work a standard 35-40 hour work week and changing tax rates would have minimal effect on their work habits.

Whose work effort might be affected by higher taxes.

- Certainly, women/housemates whose husbands/housemates work full time and especially those with children who, after paying taxes and child care, might not find work to be worth while. I suspect many of you know of cases like that.

- Perhaps a few people who are self employed may take a few extra days off if tax rates are high, although most people who depend on self employment usually work steadily and long hours to boot.

- And almost certainly, some people who work on part-time jobs in addition to full time work may decide that part-time work does not net enough after taxes to be worthwhile. When I was teaching as an adjunct at the UM, my marginal Federal tax rate was about 45%, state taxes took another 8%, social security taxes about 13%, a total of almost two-third of what I made, and in addition, I had travel expenses and a horrible commute. It really didn't pay, and I knew people who turned down part-time jobs on this account.

- In fact, it is probable that making people poorer by i***ncreasing*** (not decreasing) their taxes will cause some people to work harder, since their house and car payments must still be paid, and they may still have a desire for many consumption items which is just the opposite of the Laffer Curve argument (when you take microeconomics, this will be described as the ***income effect***). This clearly happened in some cases during the recent great current recession as some people who lost their high paying jobs began to work at **several** lower paying jobs, increasing their hours of work.

I think that it is probably true that the lower the tax rate, the more that ***some*** people will work, although I have no idea how many people might work more, but there is absolutely no evidence that the increase in taxes collected from the additional workers who decide to seek work will offset the loss of revenue resulting from lower tax rates although economists still debate the issue and politicians sometimes assert that it must be so. Unfortunately, we do not know the extent to which raising income taxes would affect work habits so we have no idea what the tradeoffs are or what the Laffer curve really looks like

Optional: But decisions have to be made about the effects of taxes on the choices that some people make between work and leisure. Some economists argue that we should reduce our reliance on the income tax, which directly reduces after tax income from work, and place more reliance on consumption taxes (e.g., sales or value added taxes) since these taxes are not so obvious and probably have a lower impact on work effort. But consumption taxes may offend some peoples' notions of equity since these taxes typically impact poorer people more than richer people since poorer people spend a larger part of their income on consumption, and most consumption taxes are not progressive like the Federal income tax.

14. Are their important issues concerning government efficiency and effectiveness?

Absolutely. Many people believe that most government programs are horribly inept and wasteful (of course, most government workers claim that they are doing a wonderful job). This is a major issue dividing some ***so-called*** liberals from ***some so-called*** conservatives, and probably is the most important cause of the widespread resentment of taxation by the tax-paying public. I suspect that many people would object less to taxes if they believed that their hard earned dollars taken for taxes were being well spent.

Some reasons for this widespread inefficiency are that few government programs have a clear notion of what they are trying to accomplish, or have a data system that clearly measures what they accomplish. Success is often defined as just spending the entire budget. Analysts have been trying to tackle this problem for years. They have sought to develop data systems that would serve to assess the effectiveness of public programs in the same way as profit and loss statements do for private firms. Unfortunate, they have had minimal success. They have conducted benefit/cost analyses that, while interesting, have failed to provide any significant incentive to programs to improve their operations. These analyses have mainly served to assist advocates to justify larger program budgets.

As one example, the following was written several years ago (by me) about privately run employment programs for persons with severe disabilities that are publically funded:

> *In sum, the system, as currently organized, creates economic disincentives to providing the lowest cost, most effective services and these disincentives are shared by almost all employees, from the CEO to direct service vocational workers. This is inevitable. As well intentioned as these workers are, it must be remembered that the system provides stable jobs, sometimes in high positions and one should not expect that vocational workers are any different from any other workers who seek job security, whether by seniority, tenure, bailouts, or restricting foreign trade. However subconsciously, the interests and sometimes the actions of the vocational worker will sometimes diverge from those of the consumer.*

Almost daily, you read reports about government inefficiency and corruption, and in the case of many developing nations, this is described as a major impediment to continued economic progress. After many years, I am convinced that bureaucracies (which also exist in middle management in private profit making organizations) often lead to corruption, ineffectiveness, and inefficiency. In some countries, corruption (bribery) is rampant. In this country, at the federal level, although corruption probably exists, it is probably not a major issue (although not everyone would agree). More important issues at the federal level are ineffectiveness and inefficiency. If you really studied state and local government, I am quite sure that you would find an amazing amount of nepotism and corruption at that level.

In sum, a major problem in achieving macroeconomic goals is how to improve the efficiency and effectiveness of many government programs. Some people despair. I am hopeful. Perhaps one of you will solve the problem some day.

One thing is clear. ***We cannot do without government***. We need to make it work better.

Review questions:

1. Why is monetary policy more likely to be used than fiscal policy in addressing unemployment and inflation?
2. Under what conditions of economic distress is the government likely to turn to fiscal policy, e.g, tax and/or spending policy?
3. What misfortunate happens if we try to contain cost-push inflation by reducing AD?
4. What are the consequences of increasing taxes if we are facing inflationary times?
5. Why does Congress find it so difficult to achieve a balanced budget? Would you want a balanced budget if the economy was in a recession? Explain why or why not.
6. How would spending $100 billion by the Federal government without borrowing or increasing taxes stimulate aggregate expenditures? Explain the initial increase in aggregate expenditures and the subsequent increases? Is there a multiplier effect?
7. What is the most important way in which the U.S. government has reduced the burden of the national debt?
8. What are the major elements of Federal expenditures? How easy would it be to significantly reduce the Federal budget?
9. What is the Laffer Curve? Are there conditions under which high tax rates have probably caused some individuals to reduce the amount that they work?
11. Under what conditions can monetary policy be effective in increasing or decreasing AD or AE?
12. What is meant by external costs and external benefits? Why does this create a need for government action?
13. Identify the main reasons for needing a public sector?
14. Do you think public programs are efficient and effective?
15. Which types of changes in taxes do you think would cause the greatest multiplier effect?
16. Why do many economists believe it preferable to change taxes rather than public spending for stabilization purposes?
17. Do you think our large public debt is too large for the country to bear? Why or why not? Could it pose dangers for the future if not held in check? Explain.
18. Why is monetary policy more often used than fiscal policy for stabilization purposes?