**BB Chapter 9**

**Aggregate Supply**

The aggregate supply curve shows the relationship between the price level and the quantity of stuff that firms will choose to make and sell.

Holding input costs constant, as the price level rises, firms will make and sell a larger quantity of goods.

**Shifts in Aggregate Supply**

*Increase in AS*

*Decrease in AS*

Once more, here are the things that shift AS.

1. Wages
   
   An increase in wages decreases AS, a decrease in wages increases AS

2. Costs of other (non-labor) inputs
   
   An increase in their cost decreases AS, a decrease in their cost increases AS

3. Technology and productivity
   
   Improved technology increases AS
4. Availability of labor and capital
   As labor and capital become more available, AS increases
   As labor and capital become more scarce, AS decreases

**Equilibrium in the AS/AD model**
The equilibrium in the AS/AD is where the two curves intersect. At this price level, the total quantity of goods demanded is equal to the total quantity or value of goods supplied.

If the price level is too high, the aggregate quantity supplied will exceed aggregate quantity demanded and businesses’ inventories of goods will build up. Eventually, they will want to get rid of these inventories and will try to do so by lowering prices, thus bringing price levels down.

If the price level is too low, the aggregate quantity of stuff demanded will exceed what is supplied and inventories will get drawn down. Profit maximizing firms will raise price and the price level will increase.

![Diagram of AS/AD model](image)

**The Self-Correcting Mechanism, Again**
If GDP is below the full employment level, unemployment will be relatively high. This will put downward pressure on wages and, as wages fall AS will increase until the economy returns to full employment.

Similarly, if GDP is above the full employment level, unemployment will be relatively low. This will put upward pressure on wages and, as wages rise, AS will decrease until the economy returns to full employment.
**Stagflation**

Stagflation occurs when an economy experiences high unemployment and inflation at the same time. This is caused by a reduction in AS, perhaps due to a big increase in the cost of some input.
**Inflation and the Multiplier**

We discussed the expenditure multiplier and how it shifts AD. As we mentioned in the previous lecture, the slope of the AS curve has an impact on how much of an increase in AE gets translated into an increase in GDP in equilibrium.

An increase in AE translates into an increase in AD, but the increase in AD results in some change in GDP (Y) and some change in the price level.

When AS is flat, most of the change in AD gets translated into a change in GDP. When AS is steep, most of the change in AD gets translated into a change in the price level.

Basically, when the economy is near full employment, AS is probably steeper, so changing AE isn’t going to have a huge impact on GDP. From a policy perspective, this should be no big deal. If the economy is doing well, you should leave it alone anyway.
B&B Chapter 10 – Fiscal Policy

Fiscal policy is what the government does to influence the macroeconomy through taxes and spending.

In general:
1. Increases in G and reductions in T increase aggregate demand.
2. Decreases in G and increases in T reduce aggregate demand

We’ll try to say a bit more.

Fixed versus Flat versus Progressive: The Form of Taxes Matters

First, the definitions:

A fixed tax, also known as a head tax is a fixed amount that each person must pay. For example, in the U.S., this might be $8,000 per person. It’s called a head tax because it’s basically a tax on your head. If you have a head and want to keep it, you must pay the tax.

A flat tax is a tax that is a constant proportion of your income, such as 20%, regardless of how high your income is.

A progressive tax is a tax in which the percentage of your income that you pay increases as your income rises. This is the case with the U.S. income tax.

A change in a fixed tax brings about a parallel shift in a consumption function.

A change in a flat tax rate or in a progressive tax rate will change the slope of the consumption function.

Moving from a fixed tax to a flat or variable tax rate will tend to flatter the consumption function and, as a result, flatten the AE line. This will reduce the value of the multiplier.

The book shows this as:
In terms of the AE function, the effect of replacing a fixed tax with a flat tax or a progressive income tax will be to flatten the AE curve:

By reducing the multiplier, progressive income taxes tend to stabilize the economy.

**Automatic Stabilizers**

Automatic stabilizers are things that reduce the multiplier and helps stabilize the economy. Some examples, including things we’ve already discussed, are:

1. Proportional (flat rate) or progressive (increasing rate) income taxes instead of fixed (constant amount) taxes.
2. International trade in which imports depend on GDP.
3. Unemployment insurance

These things let fiscal policy respond to changes in the economy before anyone even knows that the economy has changed.

Automatic stabilizers are sort of like the thermostat in your house. You set it, and then the best thing you can do is leave it alone and let it take care of stuff. Of course, that’s just not good enough for some people…
Activist Fiscal Policy
In theory, the government could respond to either a recession or threats of inflation by changing taxes and/or spending to try to bring the economy back to full employment.

Tax cuts and spending increases would tend to increase AD.
Tax increases and spending cuts would tend to decrease AD.

If you believe the stereotypes, Republicans would probably prefer tax cuts and spending cuts and Democrats would probably prefer tax increases and spending increases.

Problems with Activist Fiscal Policy
Just like you probably shouldn’t mess with the thermostat, Congress and the president probably shouldn’t try to mess with the economy. Here’s why.

To help folks understand this a bit better, you might like to think of the economy as a car that Congress and the president might be trying to drive.

1. Information lags
Even the most current information about the economy is about a month old. It takes that long to collect and process data, so we don’t know where the economy is, only where it was a little while ago. Trying to control the economy on this information is rather like trying to drive your car by looking through the rear view window.

2. Policymaking lags
Once Congress and the president get the information, it takes a really long time for them to organize and enact a response to it. This is like driving on a bellyful of muscle relaxants, it takes a long time for you to respond to information you get.

3. Effectiveness lags
Once policies are enacted, it takes a while for them to have an effect on the economy. This is like having a car with built-in delays on the accelerator and the brakes.

4. Lack of knowledge about full employment
We don’t really know where the road is.

5. Lack of knowledge about multipliers
We don’t know how hard to hit the gas or the brakes.

6. Politicians respond to their own political influences
One person in the car wants to go to Pizza Hut, the other wants to go to Bennigans.
**Supply Side Economics**
One school of thought suggests using fiscal policy to try and shift the AS curve. Basically, to try and shift AS, by giving people increased incentives for work.

Policies along these lines include:
1. Lower personal income tax rates – to get people to work more
2. Reduced taxes on income from savings – to increase savings and investment
3. Reduced taxes on capital gains
4. Reduced taxes on corporate profits
5. Education tax credits

The problems with this approach to trying to increase GDP and cut inflation include
1. The small magnitude of supply-side effects – would you change the amount you work or save due to changes in tax rates?
2. Much larger demand side effects – the increase in AD tends to dwarf the increase in AS, so prices rise
3. Effectiveness lags
4. Effects on income distribution – Oh yeah, these tax cuts generally help wealthier people
5. Loss of tax revenue – Honey, I shrunk the budget.