Macroeconomics
Topic 9: "Explain the strategy behind government policies to stabilize the economy and the specific role of the Federal Reserve."

Reference: Gregory Mankiw's *Principles of Microeconomics*, 2^{nd} edition, Chapter 20.

Smoothing out the fluctuations: stabilization policy

Real GDP in the United States has grown at about 3.3% per year since about 1875. Overtime this has led to the US becoming one of the richest countries in the world. Unfortunately, this growth in real GDP has not been smooth. In some years (expansions) GDP grows much faster than the long term trend, and inflation often increases. while in others (called recessions) real GDP falls. The pattern of recessions and expansion is called the <u>business cycle</u> by economists. Since the burden of poor economic performance during recessions falls principally on the unemployed, policy aimed at eliminating the fluctuations associated with the business cycle seems desirable to most people. Government policy designed to smooth out the business cycle are called <u>stabilization policies</u>. The two primary types of stabilization policy used in the United States are monetary and fiscal policy.

Monetary policy

Monetary policy attempts to reduce the fluctuations in nominal GDP and unemployment by manipulating the rate of growth in the money supply. Monetary policy is carried out by Federal Reserve Bank's open market committee. The general strategy is to increase money growth during periods of higher unemployment (recession) and reduce money growth during periods of inflation (excess expansion) Why does increasing the money supply raise aggregate demand?

Economists following the writings of John Maynard Keynes believe that recessions stem mostly from unusually low aggregate demand for final goods and services. To combat low aggregate demand a government policy must increase some component of aggregate demand without commensurately reducing some other component.

Aggregate Demand	=	Consumer Spending	+	Investment Spending	+	Government Purchases	+	Net Exports

Monetary policy attempts to increase aggregate demand during recession by increasing the growth of the money supply. The <u>theory of liquidity preference</u> suggests that increasing the money supply will cause interest rates to fall. Lower interest rates cause higher investment spending which increases aggregate demand.

When the Federal Reserve Bank increases the money supply through an open market operation, it is buying government bonds from large banks with newly created reserves. The additional reserves allow the banks to create new money through loans to private citizens and companies. As banks compete to make new loans, they will offer loans at lower interest rates. The new lower interest rates attract new borrowers. Most borrowers are using the loans to purchase durable items such as cars, houses, or – in the case of companies – new factories and equipment. As a result, the lower interest rates increase investment spending, and aggregate demand increases.

- Why does monetary policy involve slower money growth during expansions ?

While most economists believe that increasing money growth can affect aggregate demand in the short run, in the long run a high rate of growth in the money supply leads to inflation. As a result, the average rate of growth in the money supply should be slowed if inflation develops in the expansionary phase.

If growing the money supply more rapidly during the recessions lowers interest rates and increases investment spending, the slower growth of money during expansions raises interest rates an reduces investment spending and aggregate demand. When one combines the effects on both recessions and recoveries, monetary policy reduces the swings in economic activity – it stabilizes the economy. Rather than growing unusually rapidly during the recovery, with monetary policy GDP should rise at a rate closer to the long-term sustainable growth rate.

- Interest rate targets and monetary policy at the Federal Reserve Bank

When the Federal Reserve Bank describes its monetary policy actions in the newspaper, it does not typically discuss the rate at which it will be increasing the money supply. Instead, the Fed typically announces an interest rate target for the federal funds interest rate. The idea is that the Fed will keep increasing the money supply until that interest rate is reduced to its target level. In the newspaper, they often say something like "The Fed has lowered interest rates from 5% to 4%," meaning that the Fed will increase bank reserves until this happens. Increasing reserves in most cases will lead to an increase in the money supply.

Fiscal policy

The word "fiscal" refers to "budget." Since most Keynesian economists believe that recessions arise from low aggregate demand, the phrase "fiscal policy" amounts to a collection of strategies that manipulate the government's budget to affect aggregate demand. In practice, fiscal policy involves using one of two strategies:

<u>Increasing Government Purchases</u>: The government buys more goods and services during recessions (paying with borrowed money), and then pays back the loans during the recovery by buying fewer goods and services.

<u>Cutting Taxes</u>: The government reduces the amount of tax collections during recessions (borrowing money to pay the bills), and then pays back the loans during the recovery by raising taxes.

Both strategies increase aggregate demand when it is low, but use different methods. Increasing government purchases during recessions should directly raise aggregate demand. Cutting taxes should cause consumer spending to increase, raising aggregate demand indirectly.

Many factors complicate the use of fiscal policy. One factor that helps the government increase aggregate demand during recessions is called the Keynesian multiplier effect. The multiplier may be illustrated with an example. Suppose that the government buys $100 million worth of new cars during a recession. The car companies now have to produce more cars so they are likely to hire back some of the workers that they laid off early in the recession. With new paychecks, these workers will now buy more goods and services, causing an increase in aggregate demand. In the end aggregate demand rises by more than the increase in government spending because of the secondary increase in consumer spending.

The Keynesian multiplier works in similar fashion with a tax cut. When the government cuts taxes, consumers buy more goods and services. Companies need more workers to produce those goods and services so they hire back previously laid off workers. Those workers then purchase more goods and services. Thus the initial effect of the tax cut is multiplied by secondary increases in consumer spending.

One factor that makes fiscal policy less effective is called crowding out. Crowding out suggest that fiscal policy raises interest rates, causing lower investment spending. Lower investment spending partially offsets the increases in aggregate demand that would otherwise occur when taxes are cut or when government has increased its spending. The higher interest rates arise because as aggregate demand increases, so does money demand. As shown in figure 1, this raises interest rates.

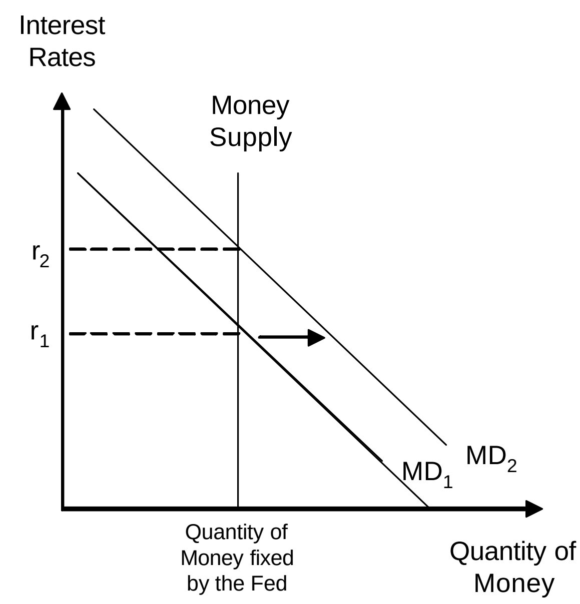

Figure 1: Crowding Out
Fiscal policy increases aggregate demand, which raises Money Demand, causing higher Interest rates.

Suppose, for example, that the government raised its purchases by $100 million. Ignoring the multiplier effect, we might expect this to increase aggregate demand by $100 million. Crowding out says that interest rates will rise, causing investment spending to decline. Suppose that investment spending declines by $20 million. The net effect on aggregate demand, then is an increase of $80 million. Crowding out reduces the effectiveness of fiscal policy.

Automatic stabilizers

When fiscal policy strategies were first developed, economists and others were very eager to see them tried. Now after about 40 years of experience there is a great deal of heated discussion about how effective it has been at reducing the variations in growth and unemployment in the economy. Most of the concern is over active fiscal policy,which amounts to designing a tax cut or an increase in government spending to match the needs of a particular recession. Perhaps the most critical concern relates to timing. To work, fiscal policy must be done at the right time. With active fiscal policy timing is difficult. Before the law is passed for a given recession the legislators must agree (1) that we are in a recession and (2) what kind of tax should be cut or what government program should have its budget increased. To make matters worse, once the law is passed, it typically doesn't affect spending decisions until at least the following year. The US and other governments have a poor track record of getting tax cuts and spending increases to occur during the recession they are aimed at.

As a result of these problems, most economists pin their hopes for fiscal policy to automatic stabilizers. When the economy slips into a recession income tax collections always fall because people get poorer. Similarly, some government spending programs like welfare and unemployment insurance increase as people lose their jobs. Notice that these effects taken together imply that during recessions the government automatically borrows money to cut tax collections and increase government purchases. Without passing a law fiscal policy takes place. The right people get the money and it happens on time. Automatic stabilizers aren't very dramatic or very visible, but they are widely believed to be the best type of fiscal policy.