

Lecture 19: Monetary and Fiscal Policy

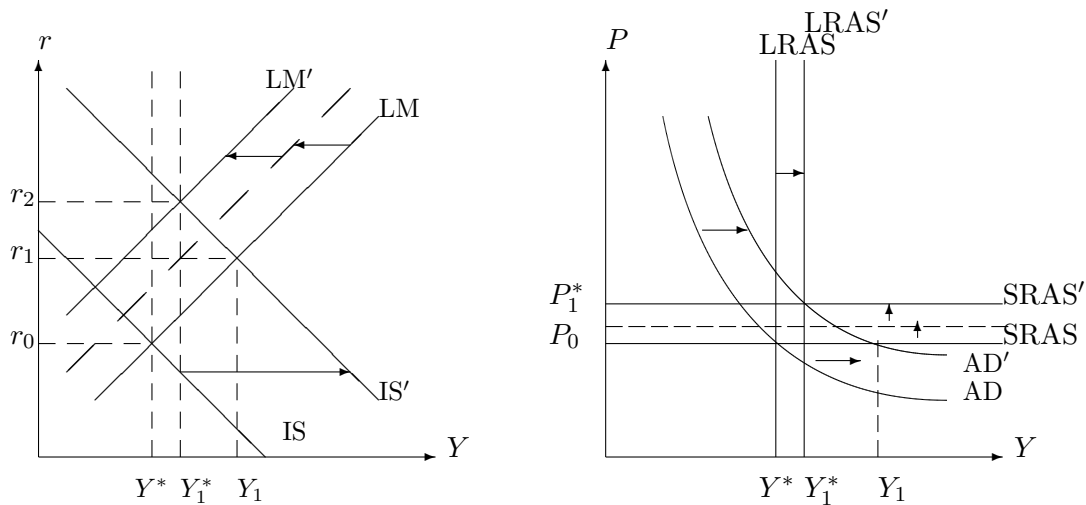
I. OVERVIEW

- In the last class, we looked at the total impact of monetary policy and fiscal policy on output and prices in the short run and the long run.
- In today's class, we will take a closer look at monetary and fiscal policy. We will first define what "good" monetary and fiscal policy is, then take a look at the delicate task the Fed has to follow in coordinating monetary policy with the fiscal policy choice of the government.
- We will also examine some limitations of the IS-LM/AD-AS model. These limitations are important to keep in mind, and come mostly from lack of information about Y^* , coordination failures and timing discrepancies.

II. GOOD FISCAL POLICY

- In the last class, we took a significant step towards identifying what a "good" fiscal policy would like. If the economy is in recession, the government should act decisively to pursue an expansionary fiscal policy that will move Y back to Y^* . That policy should get good "bang for the buck", i.e. have as large a multiplier effect as possible (who should get the tax cuts?).
- Furthermore, expansionary policy that is pursued after the economy reaches Y^* is definitely NOT good policy - it will crowd out investment in the long run.
- There is however one possible reason to pursue an expansionary fiscal policy if the economy is at Y^* . That is if the expansionary policy is one that is likely to improve Y^* .
- Spending increases that could increase the potential output level of the economy include things like more research spending into new technology development, building an electricity grid, a new highway system, improving scientific education in schools etc.
- Some economists, known as supply-siders believe that tax cuts can encourage people and firms to work harder and thus increase Y^* . The evidence on supply side tax cuts is weak - likely only to hold at very high tax rates.
- The evidence on beneficial spending by the government is also mixed because it is difficult to judge whether or not the research money is being spent productively.
- So, even though "good" fiscal policy can have an effect on Y^* , you should always be skeptical unless you had good reason to believe that Y^* has improved.
- We can show the impact of a good fiscal policy - consider an increase in government purchases in the form of higher research and development spending that shifts the IS curve and the AD curve out. It will also shift the level of potential output out to Y_1^* . This will increase output to Y_1 , interest rates to r_1 and leave prices unchanged in the short run.

- Over time, since output is greater than potential, prices begin to rise. Since potential output is also higher at Y_1^* however, prices do not rise by as much as in Case 2 because they only increase as long as Y exceeds the new potential output. As a result, the LM curve does not shift in as much. The end result is a higher level of output at Y_1^* , higher interest rates at r_2 (but not as high as in case 1) and higher prices P_1^* (but again not as high as in case 1).



III. GOOD MONETARY POLICY

- In the last class, we also identified what a “good ” monetary policy would like. If the economy is in recession, the Federal Reserve should act decisively to pursue an expansionary monetary policy that will move Y back to Y^* .
- When the economy is back at Y^* , the Fed should NOT pursue an expansionary policy at all.
- Finally if $Y > Y^*$, the Fed may want to pursue a contractionary monetary policy in order to stop prices from rising.
- In order to identify what a good monetary policy is, one should know a few details about the goals and procedures of the Fed.
- First, the Fed has a longer-term horizon than the government. Governments, facing elections every 2-6 years are often tempted to implement policy changes that benefit the economy in the short run but have little or no impact on output in the long run. In other words, expansionary policies that push Y above Y^* in the short run but only crowd out investment and cause inflation in the long run are considered to be desirable by the government.
- In contrast, the Board of Governors of the Federal Reserve are appointed to 14 year-terms in office! Thus their horizons are much longer and they pursue policies that are good for the long-term health of the economy.
- Economists also attach great importance to the degree of independence granted to the central bank in a country by the government. The degree of freedom given to the central bank varies widely across countries: but the U.S and Germany are recognized to have very independent central banks.

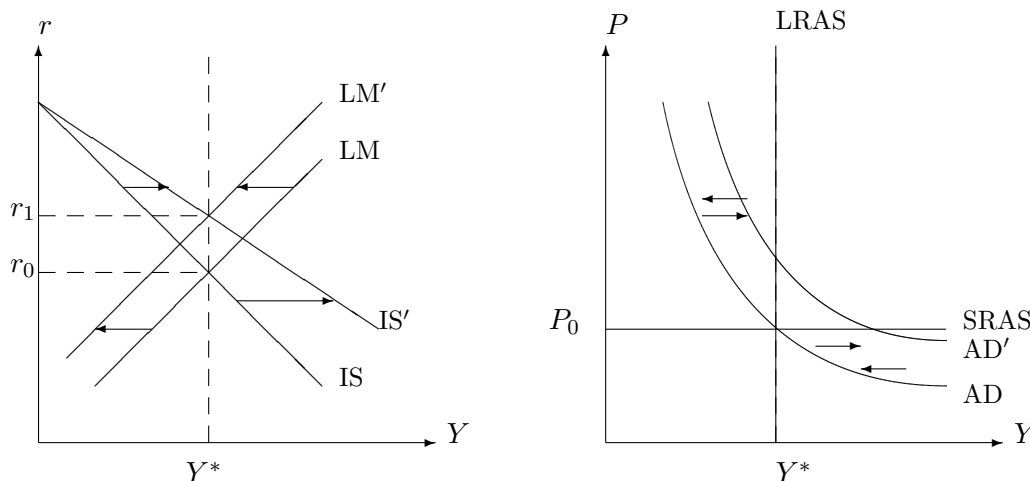
- In the U.S., the governor of the Federal Reserve is appointed to terms that span multiple presidents to preserve independence. In general, the likelihood that a president would replace the current chairman of the Federal Reserve is remote. Some call Alan Greenspan “the most powerful man in the world”.
- Economists believe that greater central bank independence leads to better economic performance by allowing the Central Bank to focus on the long run and by disassociating the central bank from having to continually worry about the short-term benefits to the economy.

IV. POLICY COORDINATION

- Now that we have established the long-term perspective and the independence of the Central Bank to a certain degree the next task is to see how the Fed should react to various changes in the economy.
- For illustration purposes, we will focus on three fiscal policy cases: a tax cut, a spending increase that does not affect Y^* and a spending increase that raises Y^* .

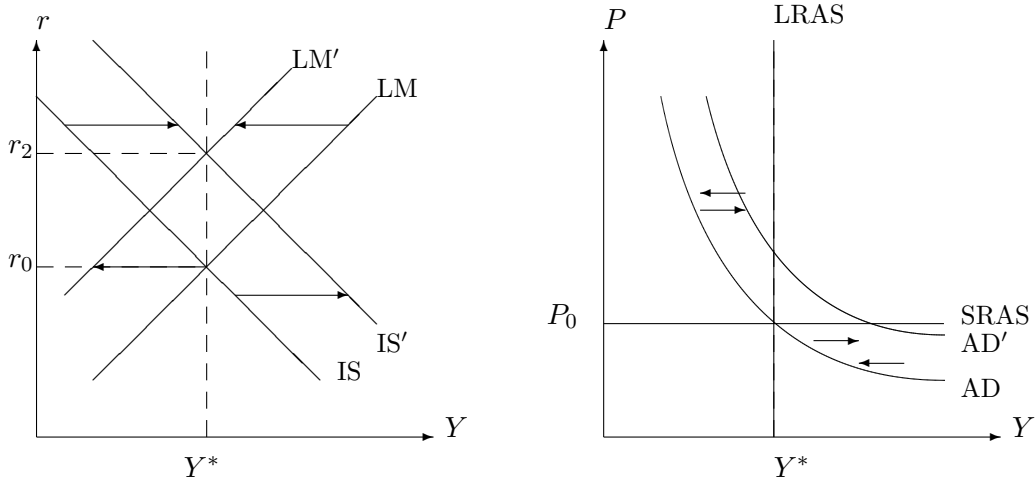
Case 1: A Tax Cut

- We saw that a tax cut in an economy that is at potential output will result in much higher interest rates, and higher inflation with no positive effect on output in the long run.
- The Fed may not like this change in the economy given its long-term outlook in which case it can immediately pursue a contractionary monetary policy that will shift the LM curve in immediately and move the economy back to Y^* . Since the AD curve shifts back in to Y^* , Y is not above Y^* and there is no change in P over time [See Figure below]
- In comparison to the long term effects of the tax cut, pursuing this contractionary policy enables the Fed to keep P unchanged (instead of having it increase) while achieving the same long-term levels of Y , and r that would have resulted if it did not act.



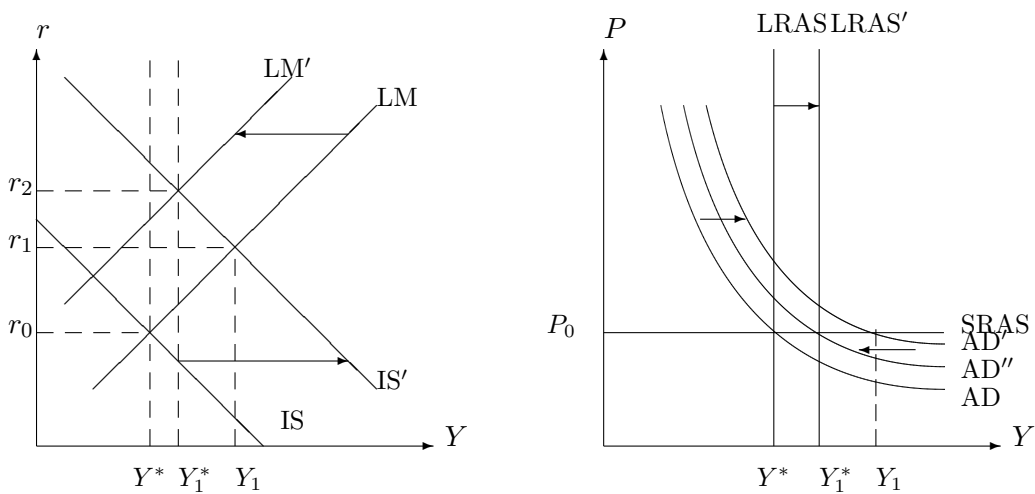
Case 2: An Increase in Government Spending (Y^* is unaffected)

- Now consider the case of an increase in government purchases that leaves Y^* unaffected. We saw that this increase in government purchases increases interest rates and prices and leaves output unchanged in the long run.
- As before, we can see that the Fed does not like this change in the economy so it reduces the money supply shifting the LM curve back. This will shift the AD curve in and move the economy back to Y^* .
- By acting immediately to cut off inflation the Fed leaves the economy with the same long term level of output and interest rates that it would have had as a result of the higher government purchases (in the absence of the contractionary policy), but is able to prevent P from rising.



Case 3: An Increase in Government Spending (Y^* is affected)

- Finally consider the case of an increase in government purchases that also raises Y^* . We saw that this increase in government purchases mildly increases interest rates and prices and also increases output in the long run.
- The Fed clearly prefers this type of government spending since it causes less inflation and also raises output in the long run. It will respond less drastically, and with a less contractionary policy will move the economy to the new level of potential output.



III. PROBLEMS WITH POLICY COORDINATION

Inside and Outside Lags

- Even though the above analysis provides a very nice framework for thinking about policy coordination issues, in real life policymaking is much more challenging.
- One reason for the additional real-life complexity is that policy takes times to implement and time to impact the economy.
- For example, fiscal policy takes a long time to enact, but a relatively short time to take effect. This is known as an **inside lag** or an **implementation lag**. Why? Consider the fiscal policymaking process in the United States - a bill has to be introduced in committee in the House or the Senate, be approved in committee, be approved in the full House or the full Senate, any amendments debated upon and voted on, then sent to the other body for approval, whereby some more committee meetings may be needed to reconcile differences in the two bills and then sent to the president for approval. The entire process can take from 6 months to a year, hardly the speedy response that our IS-LM model indicates.
- However, during this time the economy is not standing still - many changes are taking place so that at the time that the bill is finally approved, the economic conditions may have changed so much that the original intent of the bill may be moot.
- In contrast, monetary policy is relatively quick to implement since it only requires the approval of the Federal Open Market Committee, a group of policymakers within the Federal Reserve System. This makes monetary policy more nimble than fiscal policy in responding to changes in the economy.
- However, monetary policy is by no means perfect either. Monetary policy has a relatively short implementation lag but is said to have a long **outside lag** or **impact lag**, which is simply the time it takes for the enacted policy to have an economic impact. Why? It is because monetary policy makers change only a single short-term interest rate, the Federal Funds rate through their actions. Changes in the FF rate affect shorter and longer term interest rates and hence eventually affect investment spending but it may take a long time for those effects to be felt since consumers and firms don't embark on new housing or investment projects at the drop of a hat. In contrast fiscal policy, once enacted should have an immediate impact at the moment of spending (the impact in the case of a tax cut will also not be long because consumers can spend even before they actually file their tax returns knowing their tax bill will be lower).

Uncertainty about Y^*

- In the initial analysis we did, we showed that the Fed will in general prefer to move the economy to Y^* . Some economists refer to this as the Fed being like Goldilocks - liking the economy to not be too hot or be too cold, but instead wanting it to be "just right"
- However, unlike Goldilocks, it is not clear what "just right" means in the context of the Federal Reserve because Y^* is not observable. So the Fed often has to use their best judgment to decide whether the economy is too hot or too cold. This is why monetary policy is said to be as much art as science.

- The Fed will often act incrementally - making small changes to interest rates over a period of months so that they can observe whether the economy is growing too slow or too fast by what is happening to prices and output.
- In recent times uncertainty about Y^* has been particularly acute - both during the “new economy” speculations that accompanied the asset bubble in 1999 and also in the recent increases in measured productivity which has led the Fed to keep interest rates low for a longer period of time than they would otherwise have.