Topic 5.1

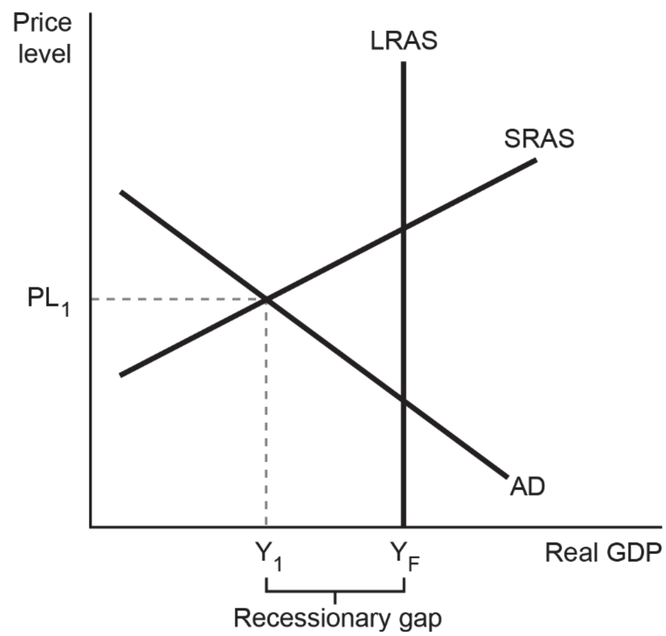
Fiscal and Monetary Policy Actions in the Short Run

You Will Learn To:

- Explain the effects of combined fiscal and monetary policies on aggregate demand, real GDP, unemployment, the price level, and interest rates.

Combining Expansionary Policies in a Recessionary Gap

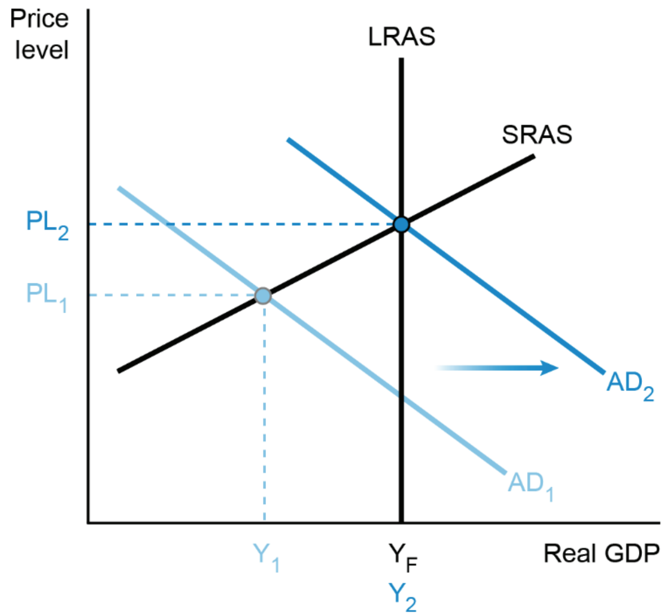
A recessionary gap occurs when unemployment has risen above the natural rate (NRU) and real GDP (Y_1) is lower than full-employment output (Y_F).



A combination of expansionary fiscal and monetary policies may be used to return the economy toward its full-employment output by increasing aggregate demand (AD).

Raising Aggregate Demand

Expansionary fiscal policies often involve increased consumption (C) and government spending (G). Expansionary monetary policies lower interest rates, increasing C and investment (I).



An increase in C, I, or G causes AD to shift rightward, closing the recessionary gap, as:

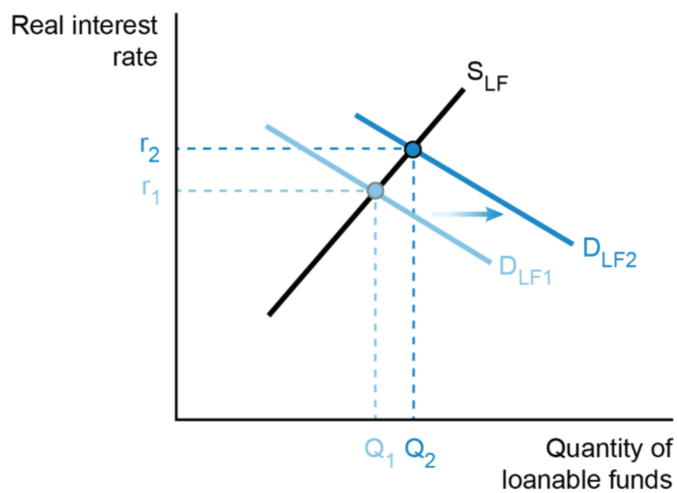
- real GDP increases from Y_1 to Y_F.
- unemployment falls.
- the price level rises from PL_1 to PL_2.

Effect on Interest Rates

Expansionary monetary policy pressures interest rates downward (see Topic 4.6) because of:

- open-market purchases or a decrease in the discount rate or required reserve ratio in a limited-reserves system.
- a decrease in the administered interest rate, such as the rate of interest on reserve balances, in an ample-reserves system.

However, expansionary fiscal policy can pressure interest rates upward, as the following graph illustrates.



When the government borrows money to increase spending due to an expansionary fiscal policy, demand for loanable funds increases, raising the interest rate in the loanable funds market (r_1 to r_2).

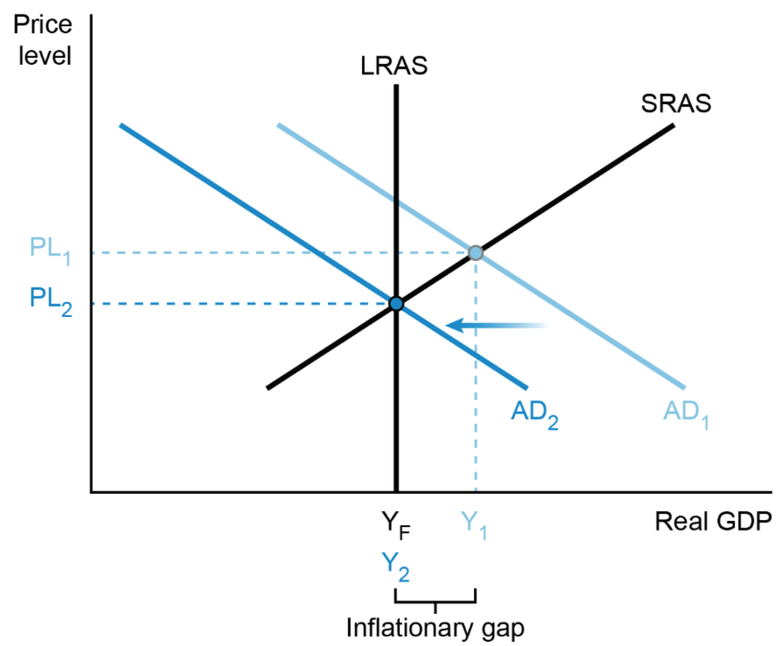
Because expansionary monetary policy tends to lower interest rates and expansionary fiscal policy tends to raise them, the effect on interest rates is indeterminate (uncertain) when both policies are implemented.

Combining Contractionary Policies in an Inflationary Gap

An inflationary gap occurs when unemployment has fallen below the NRU and real GDP is unsustainably higher than full-employment output.

Decreasing Aggregate Demand

In an inflationary gap, a combination of contractionary fiscal and monetary policies may be used to return the economy toward its full-employment output by decreasing AD, such as from AD_1 to AD_2 in the example.



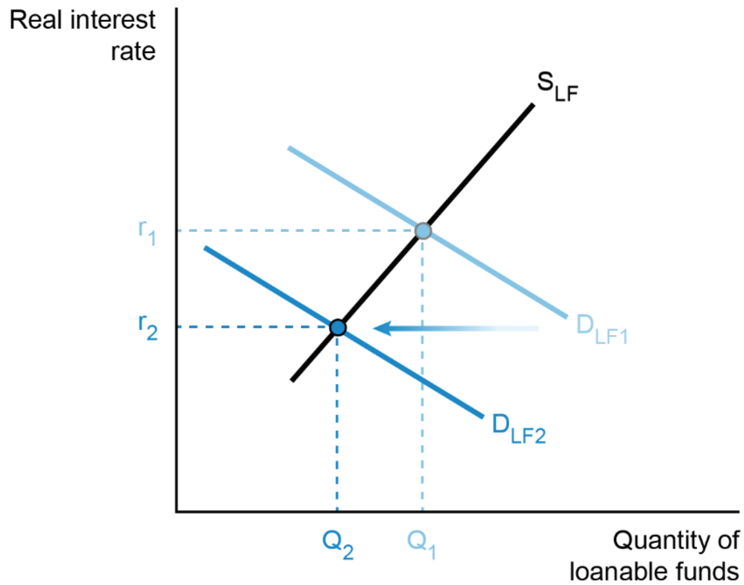
The effects of combined contractionary policies on AD—and therefore on unemployment, real GDP, and the price level—are the opposite of those produced by expansionary policies. The decreasing levels of output and prices, along with increasing unemployment, close an inflationary gap.

Effect on Interest Rates

Contractionary monetary policy pressures interest rates upward because of:

- open-market sales or an increase in the discount rate or required reserve ratio in a limited-reserves system.
- an increase in the administered interest rate in an ample-reserves system.

However, contractionary fiscal policy can pressure interest rates downward, as the following graph illustrates.



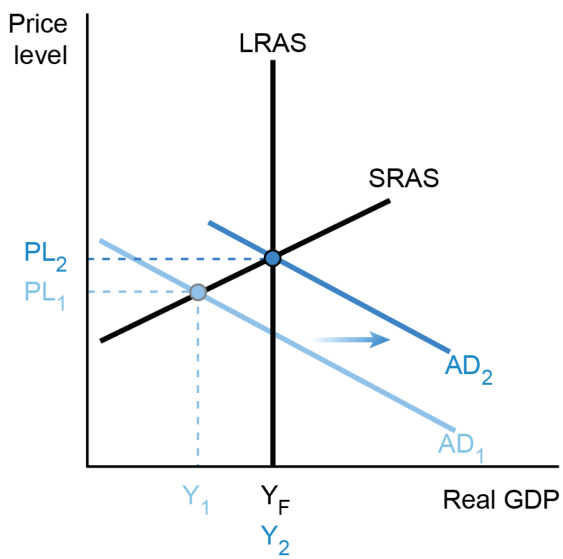
When the government reduces borrowing due to a contractionary fiscal policy, demand for loanable funds decreases, lowering the interest rate in the loanable funds market (r_1 to r_2).

Because contractionary monetary policy tends to raise interest rates and contractionary fiscal policy tends to lower them, the effect on interest rates is indeterminate when both policies are implemented.

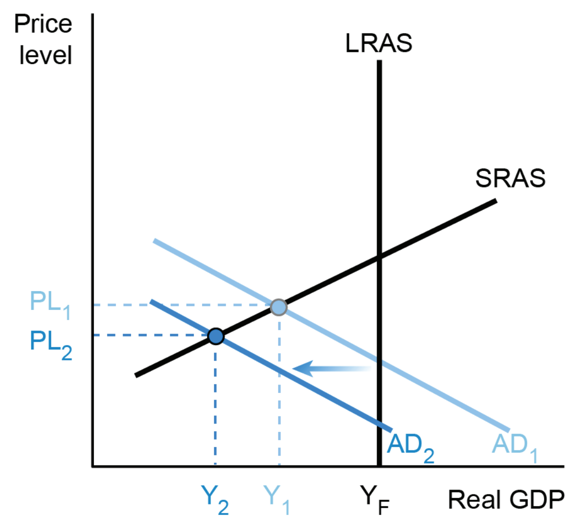
Mixed Expansionary and Contractionary Policies

A mix of expansionary and contractionary policies produces opposing effects on AD. For example, contractionary monetary policy tends to decrease AD because higher interest rates reduce investment, but expansionary fiscal policy increases AD through increased government spending.

Recessionary gap



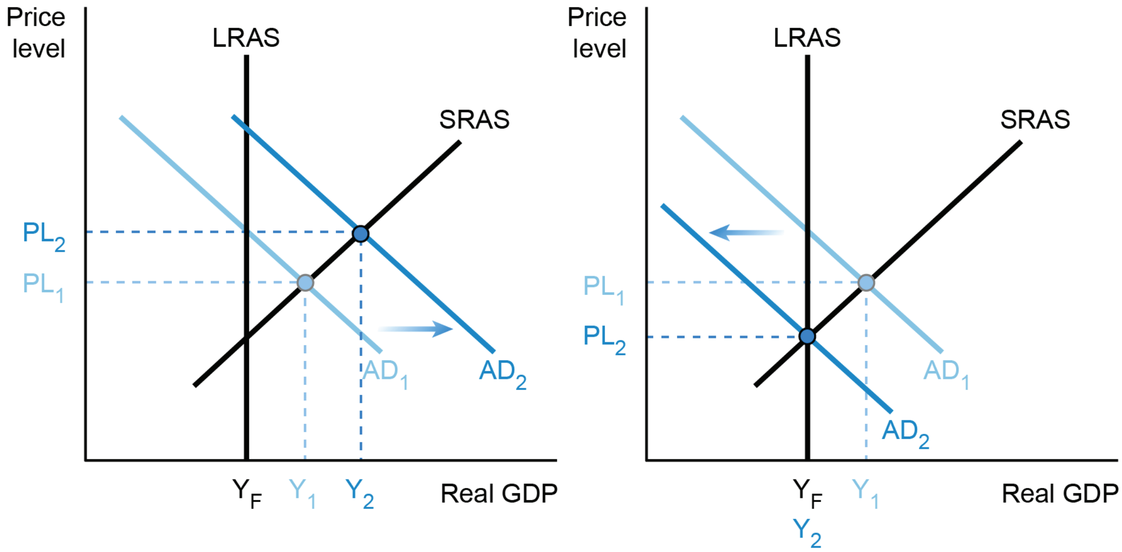
Effect of expansionary policy



Effect of contractionary policy

The preceding graphs illustrate that in a recessionary gap, an expansionary policy would increase AD and return output to the full-employment level (Y_F), but a contractionary policy would have the opposite effect.

Inflationary gap



Effect of expansionary policy

Effect of contractionary policy

Conversely, in an inflationary gap, increased AD resulting from expansionary policy would increase output (Y_1 to Y_2) even farther above Y_F. Contractionary policy, on the other hand, would shift AD leftward, returning the economy toward its full-employment level of output as output decreases.

Therefore, the effects of mixed expansionary and contractionary policies on AD, and consequently on real GDP, unemployment, and the price level, would be indeterminate.

Effect on Interest Rates

Policymakers can address an output gap by influencing interest rates to stimulate or slow consumption. As mentioned previously:

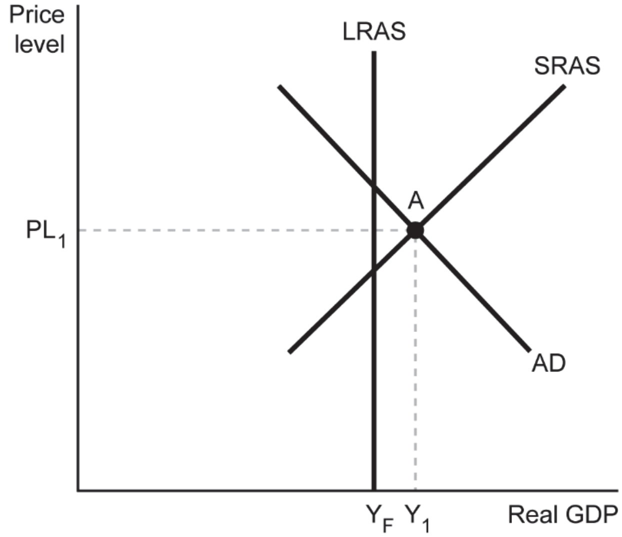
- contractionary monetary policy raises the interest rate in the money market.
- expansionary fiscal policy through increased government spending increases the demand for loanable funds, raising the interest rate in the loanable funds market.

Likewise, expansionary monetary policy and contractionary fiscal policy lowers interest rates. Therefore—unlike the unemployment rate, real GDP, and the price level—a change in interest rates can be determined when expansionary and contractionary policies are combined.

Things to Remember

- In a recessionary gap, a combination of expansionary fiscal and monetary policies can restore full employment by increasing AD, which increases real GDP, increases the price level, and decreases unemployment.
- In an inflationary gap, a combination of contractionary fiscal and monetary policies can restore full employment by decreasing AD, which decreases real GDP, decreases the price level, and increases unemployment.
- When expansionary and contractionary fiscal and monetary policies are used simultaneously, they result in indeterminate (uncertain) changes to real GDP, the price level, and unemployment.
- Interest rates tend to decrease when expansionary fiscal and contractionary monetary policies are combined, and vice versa.

5.1 Check for Understanding



1. **Assume the economy is currently in short-run equilibrium at point A. Which of the following could be used in combination with a decrease in government spending to restore full-employment output?**

   A. A decrease in open-market sales by the Federal Reserve

   B. A decrease in the reserve requirement

   C. An increase in transfer payments

   D. An increase in the administered rate

2. **If the economy is in a recessionary gap, which of the following could be increased using fiscal and monetary policies to restore full employment?**

   A. Aggregate demand

   B. Short-run aggregate supply

   C. Long-run aggregate supply

   D. The income tax rate

3. **Which of the following would most likely result from a combination of decreased government spending and a decrease in the discount rate?**

   A. A decrease in interest rates

   B. An increase in interest rates

   C. A decrease in the unemployment rate

   D. An increase in the unemployment rate