TA Info

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Tuesday is last day of classes! (Last homework due then.)

Monetary policy + IS Curves = AD Curve

Our goal is a model that relates inflation and output. Last week we built up the IS Curve that relates output with *interest rate*.

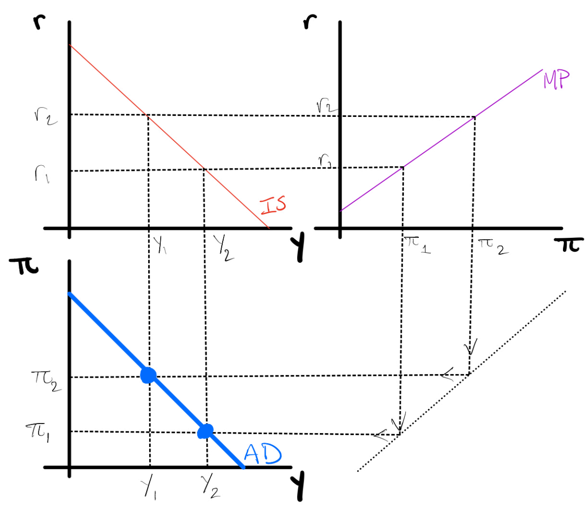
So now we need something that converts interest rates to *inflation rates*.

The Central Bank does this through its choice of monetary policy: the Fed will balance high inflation by reducing open market purchases, and reducing interest rates.

$$\text{MP curve:} \qquad r = \bar{r} + \lambda \times \pi \tag{1}$$

We can plug this into our equation for the IS curve to get the AD curve:

$$Y = \frac{1}{1-mpc}[\overline{C}+\overline{I}-d\cdot\overline{f}+\overline{G}+\overline{NX}-mpc\cdot\overline{T}]-\frac{d+x}{1-mpc}\cdot(\overline{r}+\lambda\cdot\pi)$$



Short- and long-run AS

- Long-run AS (LRAS) - Long-run potential output of the economy. Doesn't depend on inflation.
- Short-run AS - Depends on inflation. If the output gap is large (economy running hot), workers will demand higher wages leading to higher inflation.

$$\pi = \underbrace{\pi^e}_{\text{expected inflation}} + \gamma\underbrace{(Y - Y^p)}_{\text{output gap}} + \underbrace{\rho}_{\text{supply shock}}$$

Factors shifting AS

- Expected inflation π^e
  - Inflation shocks
  - Persistent output gaps
- Supply shocks (ρ)

Exercises

1. The Taylor Principle says the central bank should increase nominal interest rates ________________ than any rise in expected inflation, so real rates ________________ when inflation increases.

   (a) more; fall

   (b) more; rise

   (c) less; fall

   (d) less; rise

   Solution: B

2. A contractionary monetary policy decreases net exports by __________ interest rates and __________ the value of the dollar.

   (a) raising nominal; increasing

   (b) lowering real; increasing

   (c) raising real; increasing

   (d) lowering real; decreasing

   Solution: C

3. If workers demand and receive higher real wages, the cost of production __________ and the short-run aggregate supply curve shifts __________.

   (a) rises; leftward

   (b) falls; rightward

   (c) rises; rightward

   (d) falls; leftward

   Solution: A

4. The fact that an economy always returns to the natural rate level of output is known as:

   (a) the self-correcting mechanism.

   (b) the natural rate of unemployment.

   (c) the price-adjustment mechanism.

   (d) the excess demand hypothesis.

   Solution: A

5. The long-run aggregate supply curve shifts to the right when there is:

   (a) a decrease in the available technology.

   (b) a decrease in the total amount of labor supplied in the economy.

   (c) a decline in the natural rate of unemployment.

   (d) a decrease in the total amount of capital in the economy.

   Solution: C

6. The short-run aggregate supply curve shifts to the right when:

   (a) expected inflation is lower.

   (b) output gap is lower.

   (c) expected inflation is higher.

   (d) output gap is higher.

   Solution: A