

TA Info

Office: Social Sciences 6470
Email: gary.baker@wisc.edu
Website: garygbaker.com
Office Hours: Mondays, 1–2 PM (Zoom, see Canvas for link)
 Wednesdays, 2–3 PM (in person)

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*.

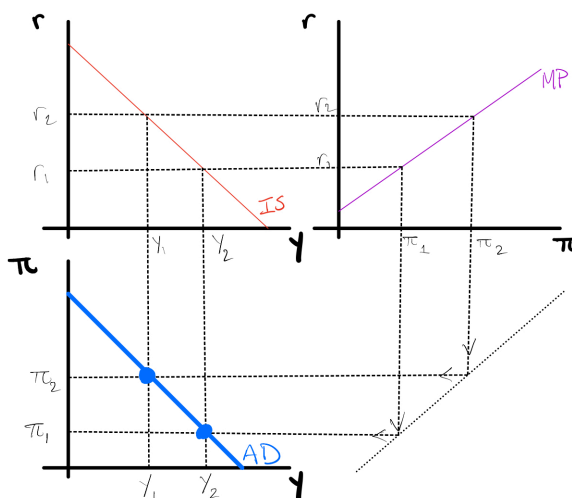
So now we need something that converts interest rates to *inflation rates*.

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.

$$\text{MP curve: } r = \bar{r} + \lambda \times \pi \quad (1)$$

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

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



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.

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

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
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
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
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.
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.
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.