Short Run Aggregate Supply

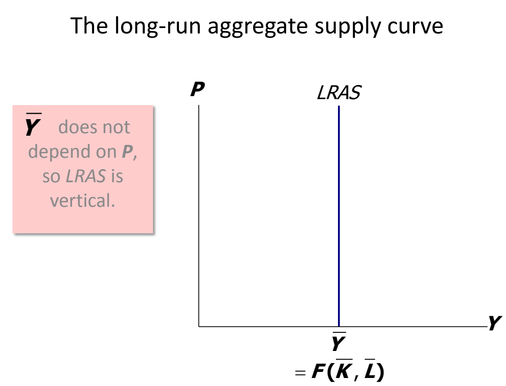
Road Map

- Short Run Aggregate Supply
- Practice

Overview: Short Run Aggregate Supply

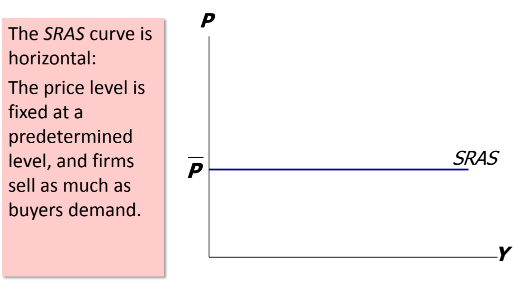
- Long Run: real GDP $= \bar{Y} = F(\bar{K}, \bar{L})$ and is unrelated to nominal forces.
- Short Run: Real GDP depends on nominal forces.
  - Key rationale for this is that prices are "sticky" in the short run.
  - This then yields a upward sloping (or horizontal) relationship between real GDP/unemployment and the price level.
  - Provides a rationale for monetary policy to stimulate/dampen output, i.e. there will be short run deviations from long-run real GDP.

Short Run Effects on an Increase in Aggregate Demand



Short Run Aggregate Supply

The short-run aggregate supply curve

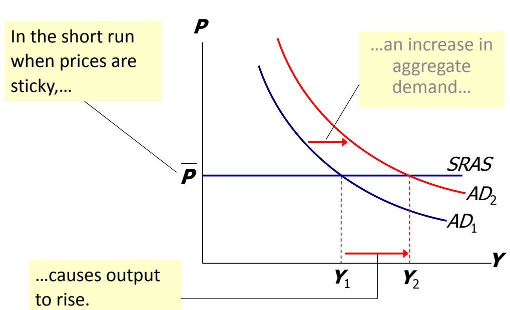


Why Price "Stickyness"

- Reasons for sticky prices
  - Long-term contracts between firms and customers
  - Menu costs
  - Firms not wanting to annoy customers with frequent price changes

Short Run Effects on an Increase in Aggregate Demand

Short-run effects of an increase in *M*



Adjustment to the Long Run

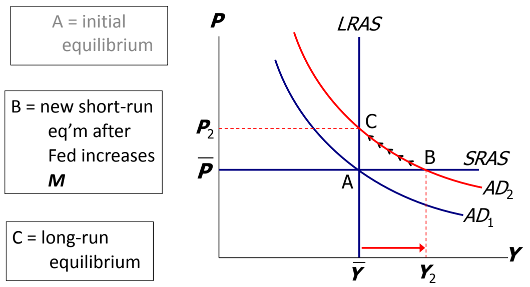
From the short run to the long run

Over time, prices gradually become "unstuck."
When they do, will they rise or fall?

In the short-run equilibrium, if	then over time, P will…
$Y > \overline{Y}$	*rise*
$Y < \overline{Y}$	*fall*
$Y = \overline{Y}$	*remain constant*

The adjustment of prices is what moves the economy to its long-run equilibrium.

Adjustment to the Long Run



What Just Happened?

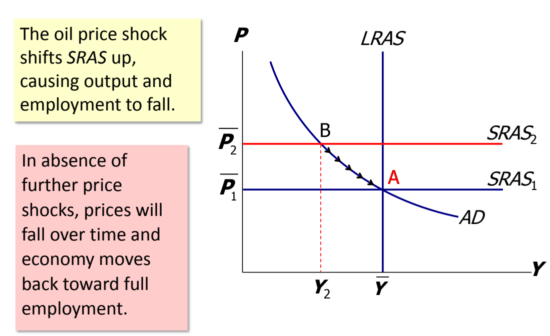
- Point A is a long-run equilibrium...
  - Aggregate demand equals long-run AND short-run aggregate supply
- Aggregate demand unexpectedly shifted out
  - Why? Say because of a increase in M...
  - This generates a movement along SRAS curve from A to B.
  - This is a boom, high output/ low unemployment
- Firms reset their expectations that the price level will be at new long-run level consistent the new aggregate demand curve.
  - As firms reset their expectations, the SRAS curve moves along the AD curve from B to C.

Supply shocks

- A supply shock alters production costs, affects the prices that firms charge.
- Examples of adverse supply shocks:
  - Bad weather reduces crop yields, pushing up food prices.
  - Workers unionize, negotiate wage increases.
  - New environmental regulations require firms to reduce emissions. Firms charge higher prices to help cover the costs of compliance.
- Favorable supply shocks lower costs and prices.

An Oil Price Shock in the 1970's

CASE STUDY:
The 1970s oil shocks



What Just Happened?

- Point A is a long-run equilibrium...
  - Aggregate demand equals long-run AND short-run aggregate supply
- SRAS shifts up due to the Oil price shock.
  - This generates a movement along AD curve from A to B.
  - This is a special kind of bust... low output/ high unemployment and high prices/inflation ... "stagflation."
- Firms reset their expectations that the price level will be at long-run level consistent the aggregate demand curve.
  - If nothing else happens, as firms reset their expectations, the SRAS curve moves along the AD curve from B to back to A.

Final Points

- How would this work if there was a negative shift in Aggregate Demand curve?
- Positive shocks to the Short-Run Aggregate Supply curve? Shocks to Long-Run Aggregate Supply?
- Next class...
  - "Shocks" and work through some examples.
  - How monetary policy might want to respond to shocks