

MACROECONOMICS

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PowerPoint® Slides by Ron Cronovich

SEVENTH EDITION

CHAPTER 9.2

Introduction to Economic Fluctuations

In this chapter, you will learn:

- an introduction to aggregate supply in the short run and long run
- how the model of aggregate demand and aggregate supply can be used to analyze the short-run and long-run effects of “shocks.”

The model of aggregate demand and supply

- The paradigm most mainstream economists and policymakers use to think about economic fluctuations and policies to stabilize the economy
- Shows how the price level and aggregate output are determined
- Shows how the economy's behavior is different in the short run and long run

Aggregate supply in the long run

- Recall from Chapter 3:
In the long run, output is determined by factor supplies and technology

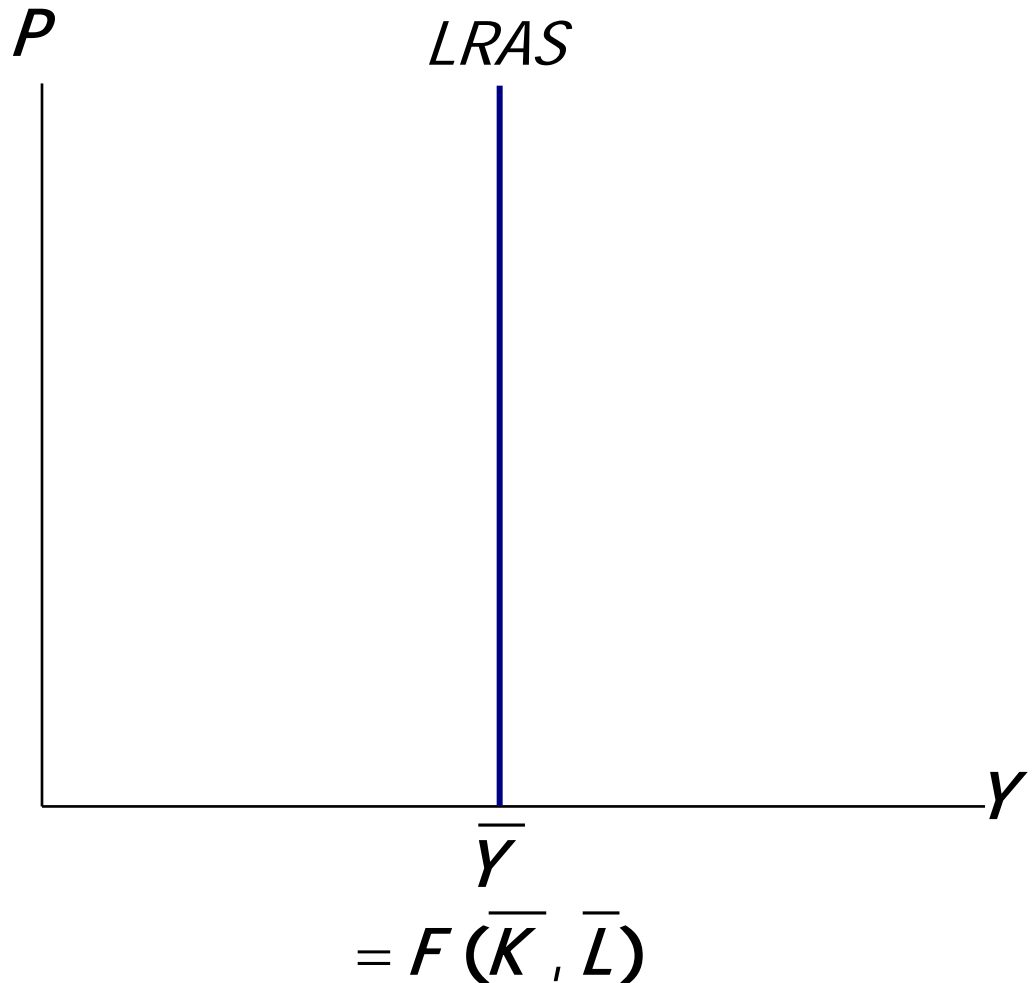
$$\bar{Y} = F(\bar{K}, \bar{L})$$

\bar{Y} is the **full-employment** or **natural** level of output, at which the economy's resources are fully employed.

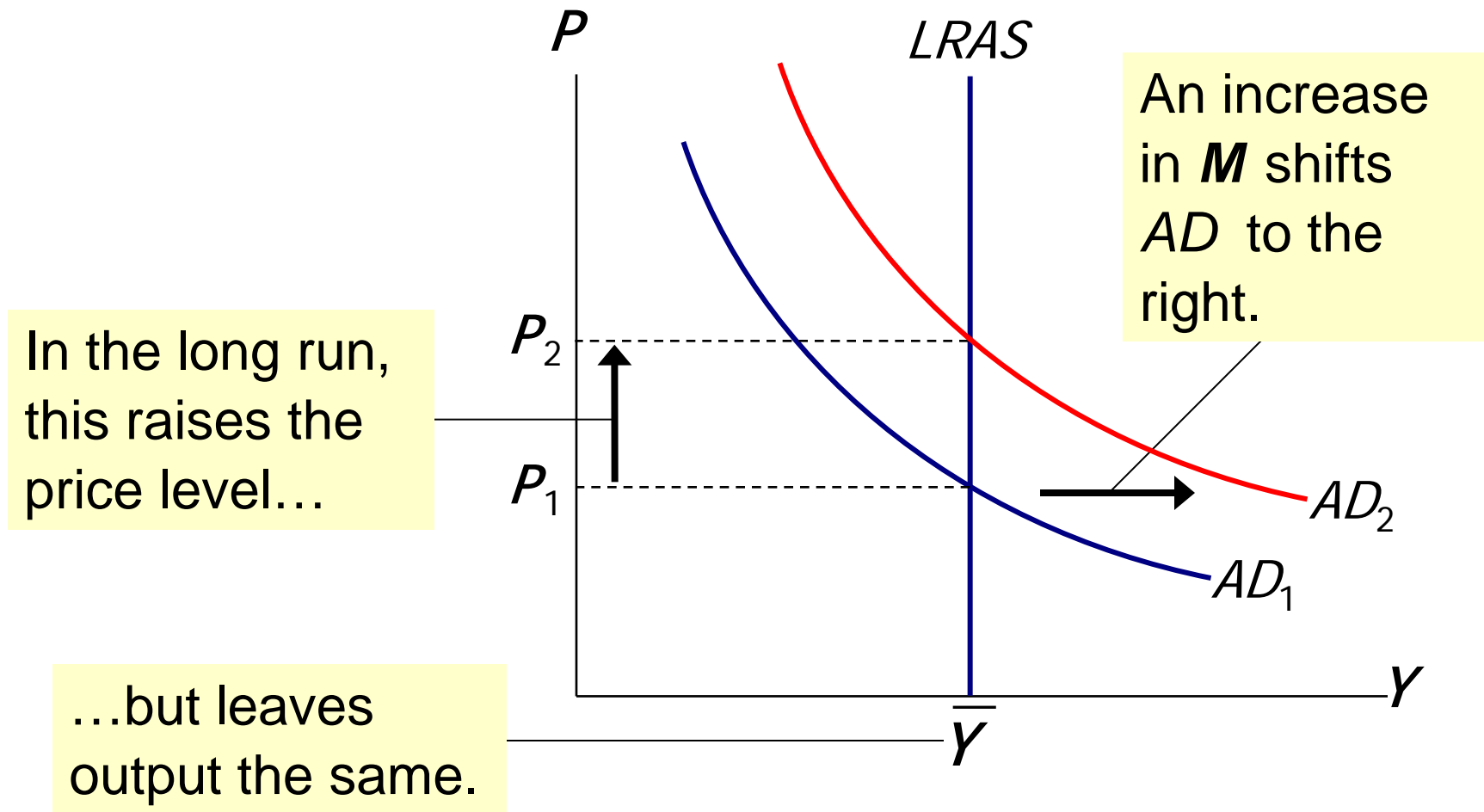
“Full employment” means that unemployment equals its natural rate (not zero).

The long-run aggregate supply curve

\bar{Y} does not depend on P , so $LRAS$ is vertical.



Long-run effects of an increase in M



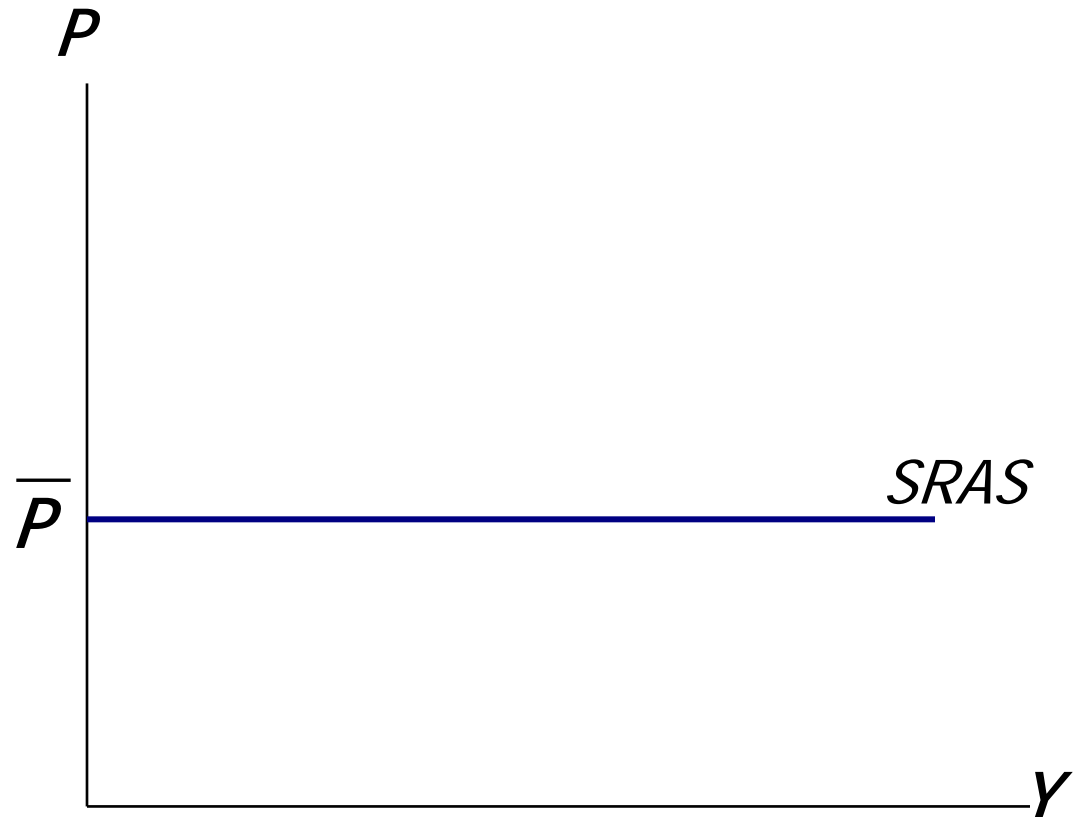
Aggregate supply in the short run

- Many prices are sticky in the short run.
- For now (and through Chap. 12), we assume
 - all prices are stuck at a predetermined level in the short run.
 - firms are willing to sell as much at that price level as their customers are willing to buy.
- Therefore, the short-run aggregate supply (*SRAS*) curve is horizontal:

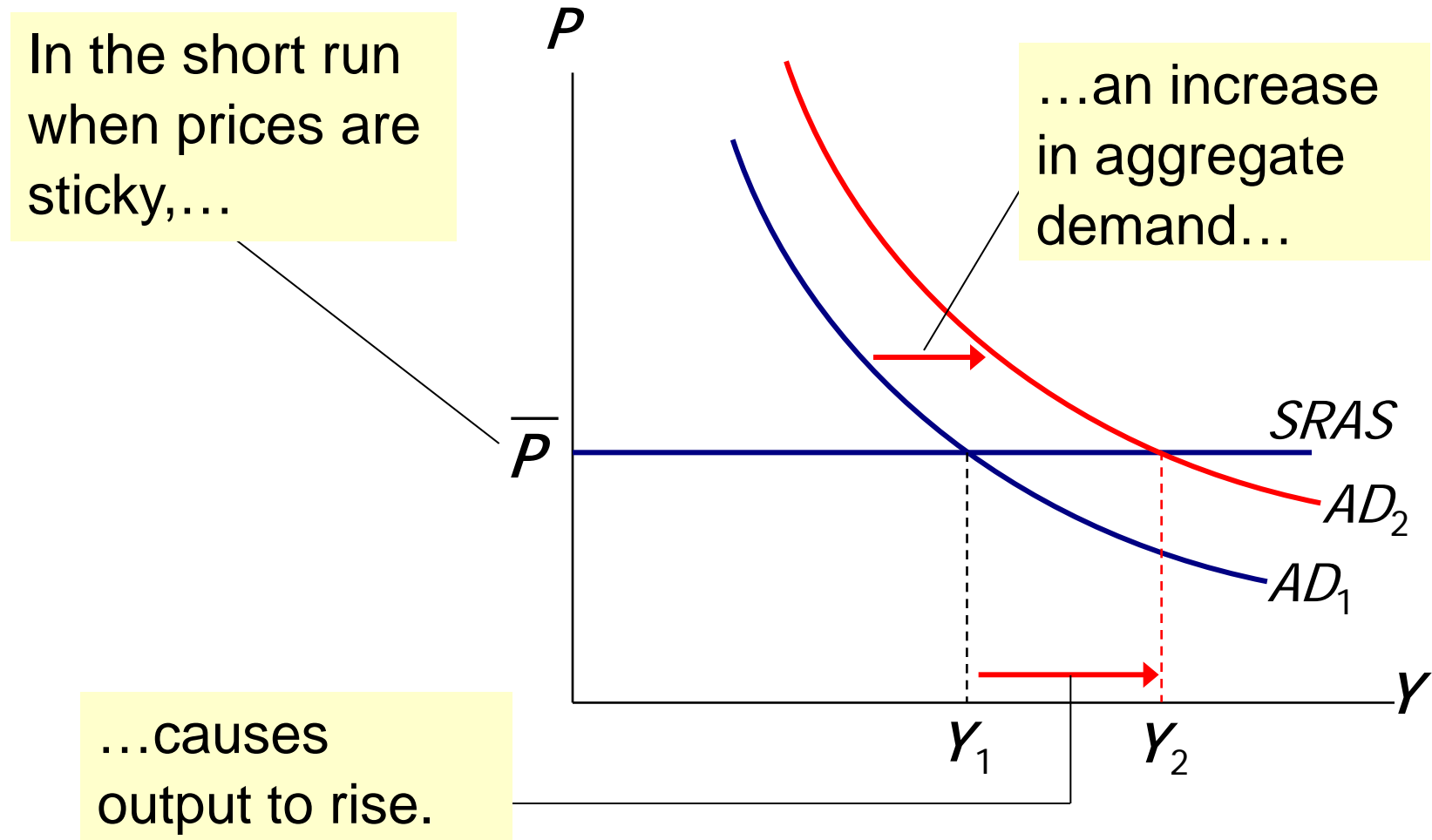
The short-run aggregate supply curve

The *SRAS* curve is horizontal:

The price level is fixed at a predetermined level, and firms sell as much as buyers demand.



Short-run effects of an increase in M



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...
$Y > \bar{Y}$	<i>rise</i>
$Y < \bar{Y}$	<i>fall</i>
$Y = \bar{Y}$	<i>remain constant</i>

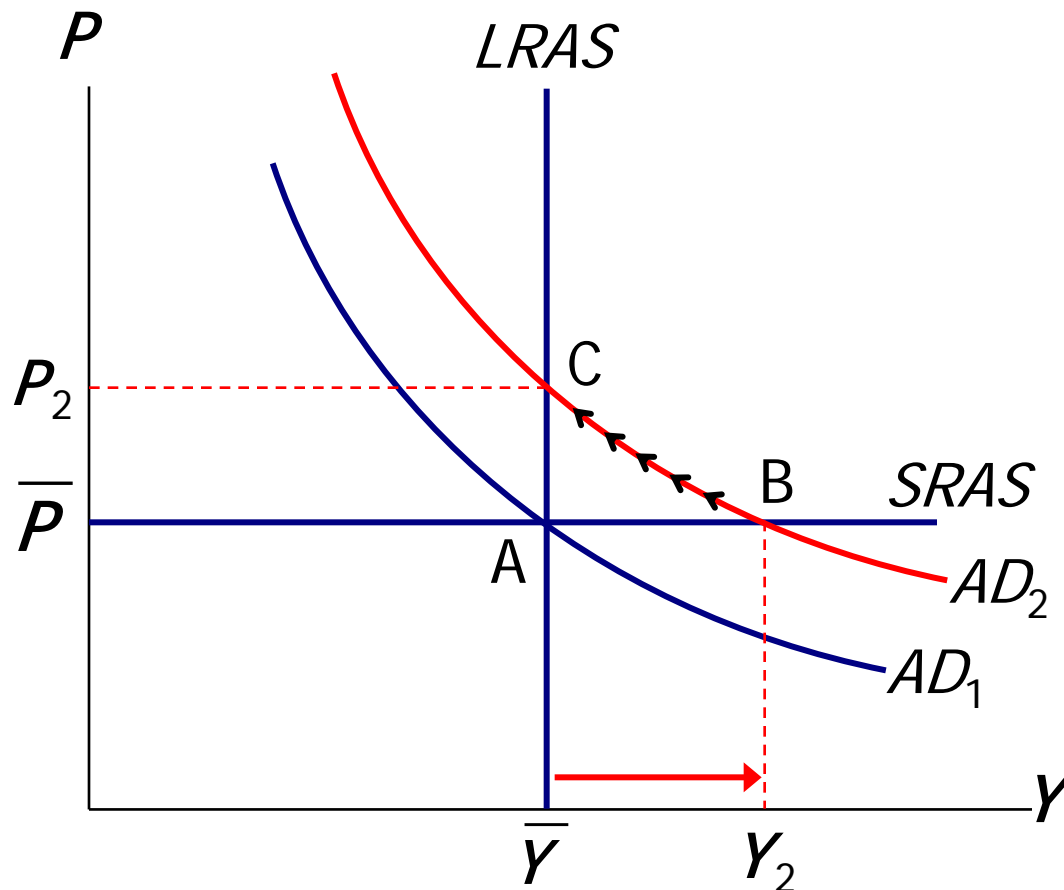
The adjustment of prices is what moves the economy to its long-run equilibrium.

The SR & LR effects of $\Delta M > 0$

A = initial equilibrium

B = new short-run eq'm after Fed increases M

C = long-run equilibrium



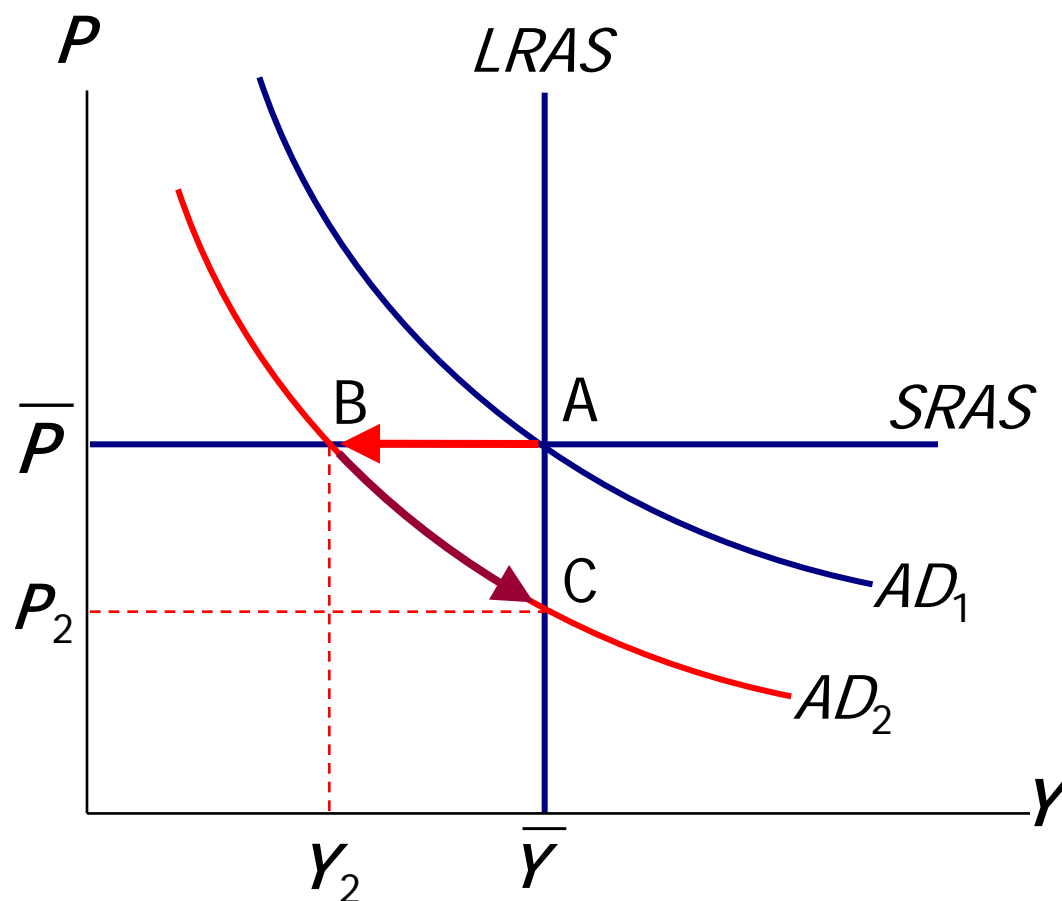
How shocking!!!

- **shocks**: exogenous changes in agg. supply or demand
- Shocks temporarily push the economy away from full employment.

The effects of a negative demand shock

AD shifts left, depressing output and employment in the short run.

Over time, prices fall and the economy moves down its demand curve toward full-employment.



Supply shocks

- A **supply shock** alters production costs, affects the prices that firms charge. (also called **price shocks**)
- 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.

CASE STUDY:

The 1970s oil shocks

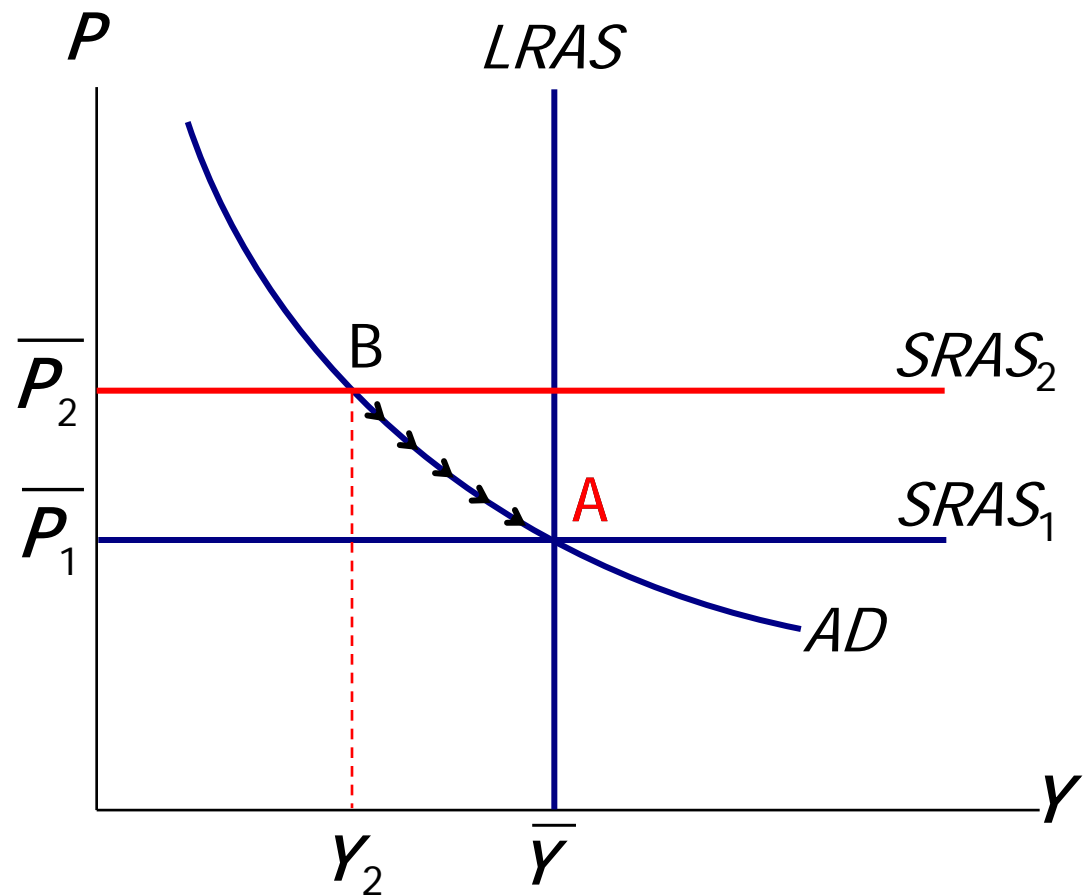
- Early 1970s: OPEC coordinates a reduction in the supply of oil.
- Oil prices rose
 - 11% in 1973
 - 68% in 1974
 - 16% in 1975
- Such sharp oil price increases are supply shocks because they significantly impact production costs and prices.

CASE STUDY:

The 1970s oil shocks

The oil price shock shifts $SRAS$ up, causing output and employment to fall.

In absence of further price shocks, prices will fall over time and economy moves back toward full employment.



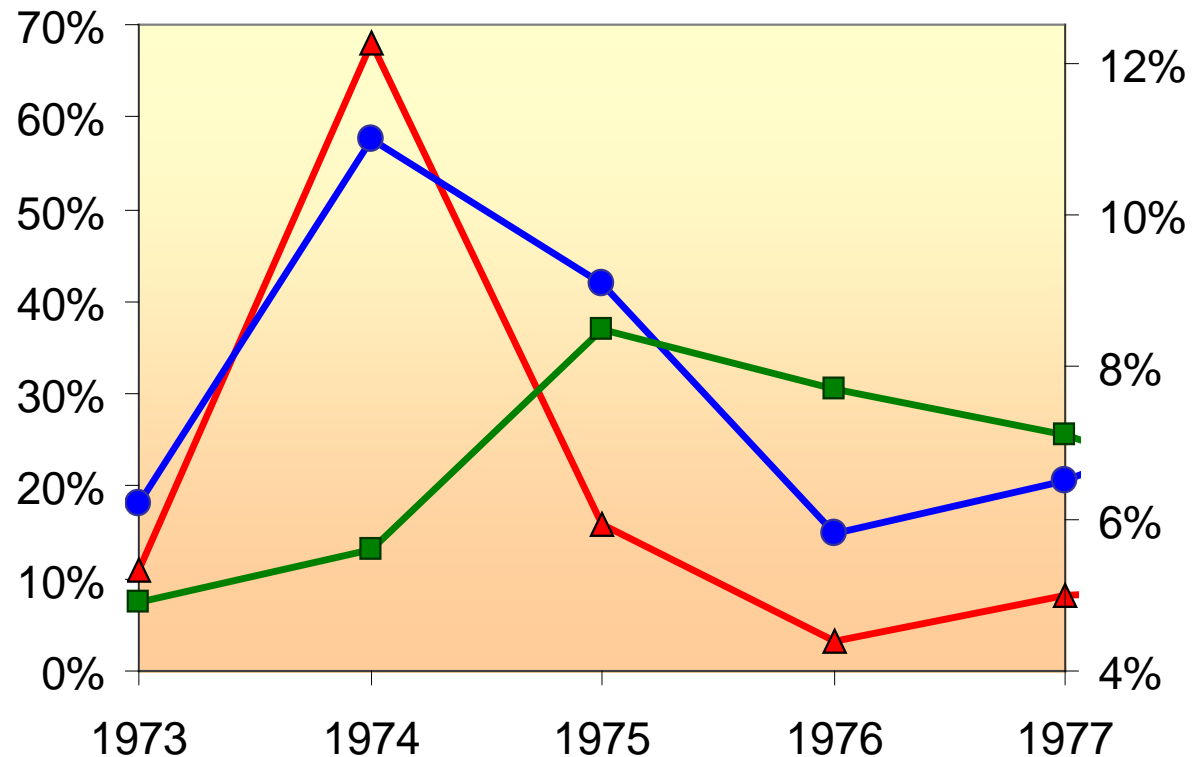
CASE STUDY:

The 1970s oil shocks

Predicted effects
of the oil shock:

- inflation \uparrow
- output \downarrow
- unemployment \uparrow

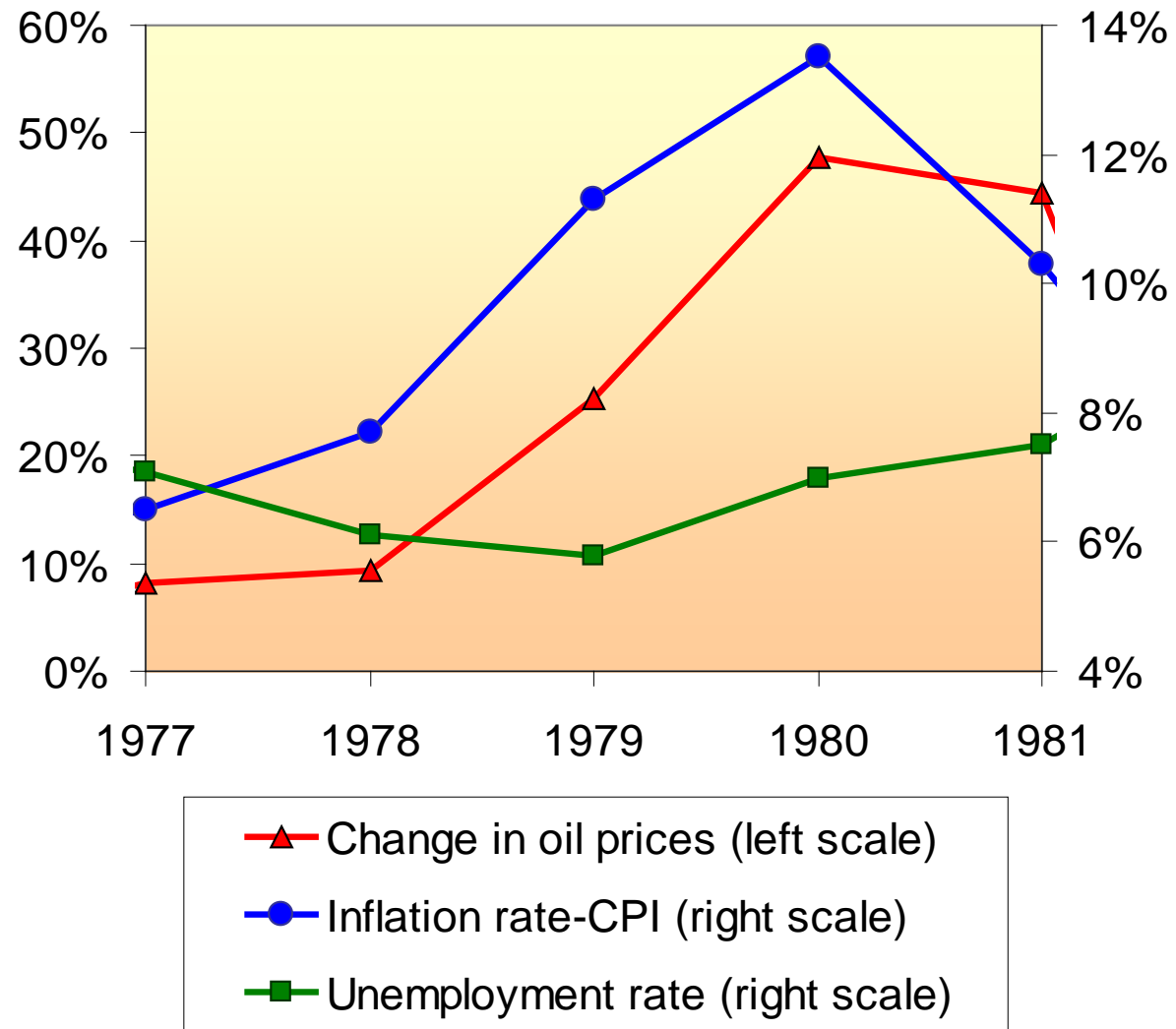
...and then a
gradual recovery.



- ▲— Change in oil prices (left scale)
- Inflation rate-CPI (right scale)
- Unemployment rate (right scale)

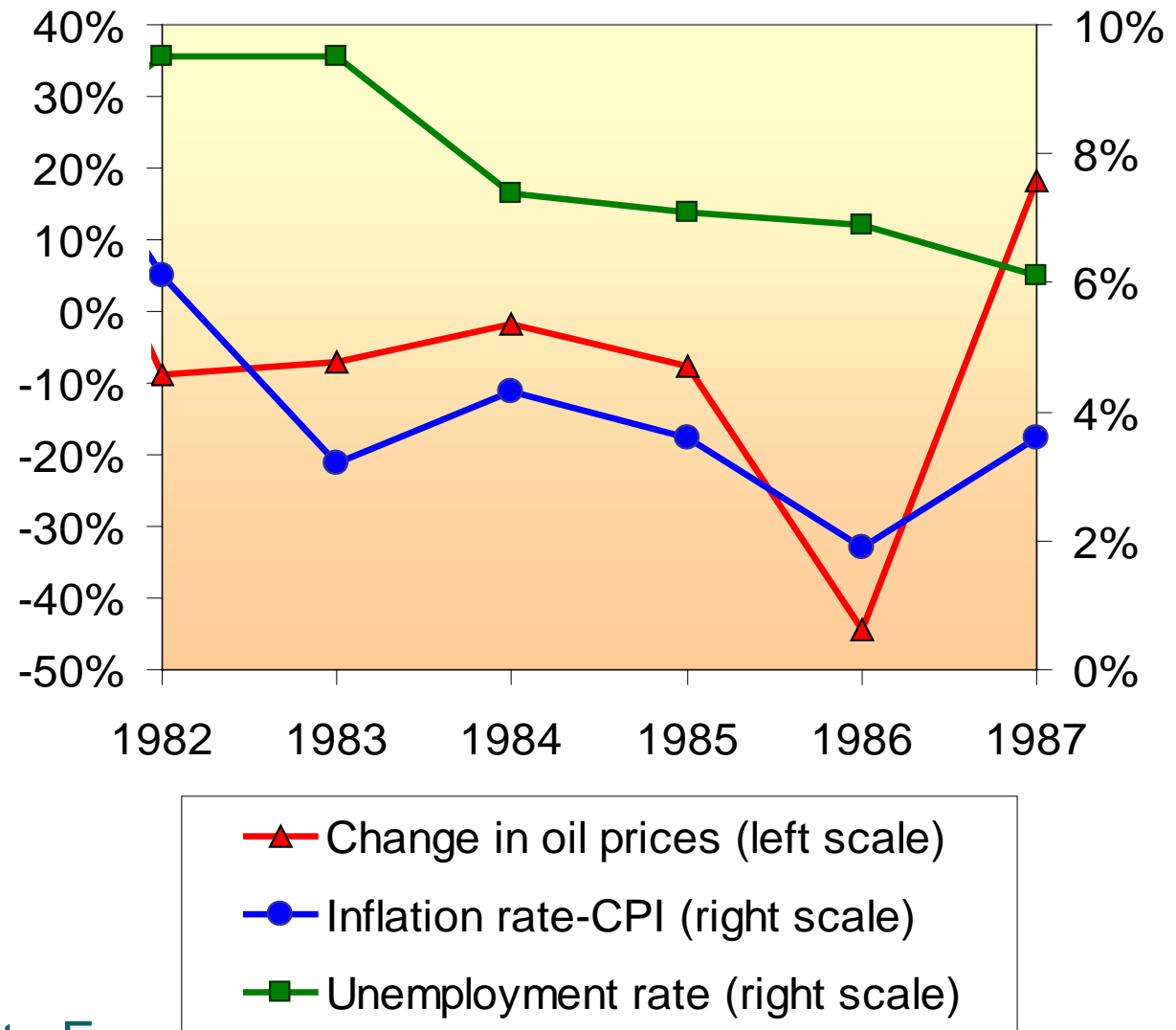
CASE STUDY: The 1970s oil shocks

Late 1970s:
As economy
was recovering,
oil prices shot up
again, causing
another huge
supply shock!!!



CASE STUDY: The 1980s oil shocks

1980s:
A favorable
supply shock--
a significant fall
in oil prices.
As the model
predicts,
inflation and
unemployment
fell:

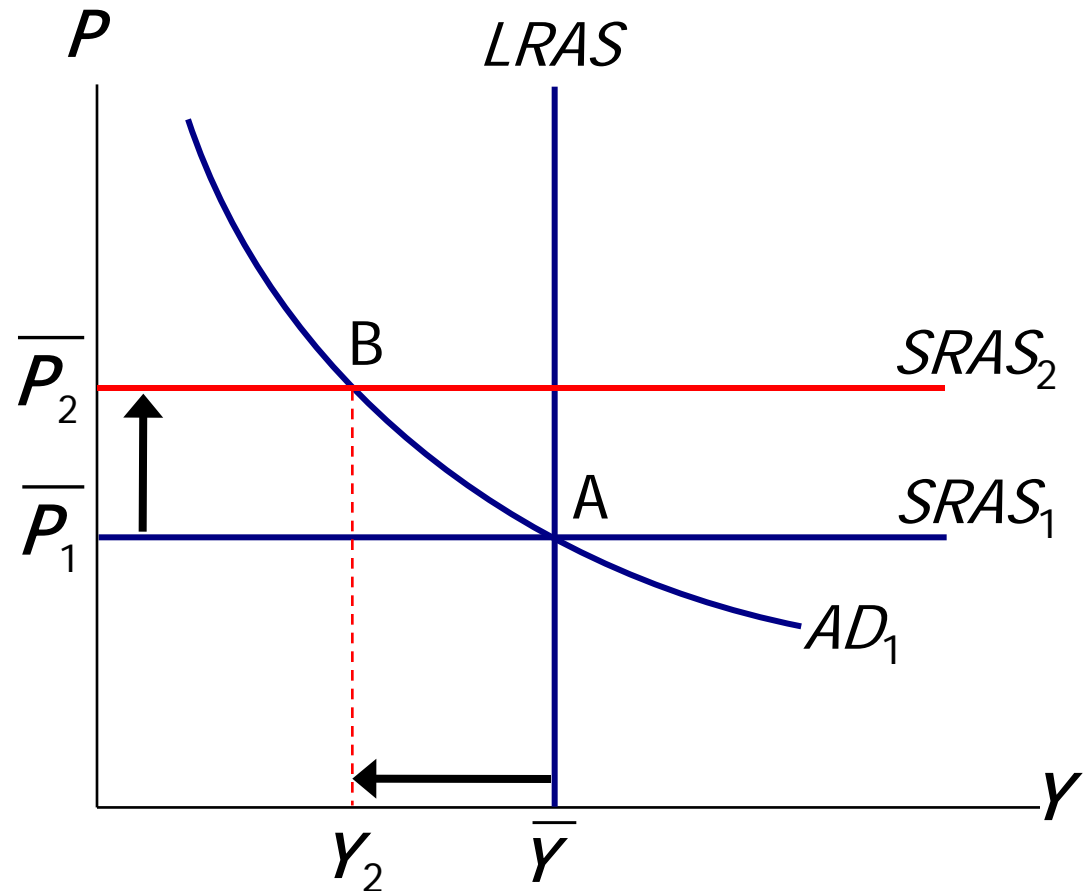


Stabilization policy

- def: policy actions aimed at reducing the severity of short-run economic fluctuations.
- Example: Using monetary policy to combat the effects of adverse supply shocks...

Stabilizing output with monetary policy

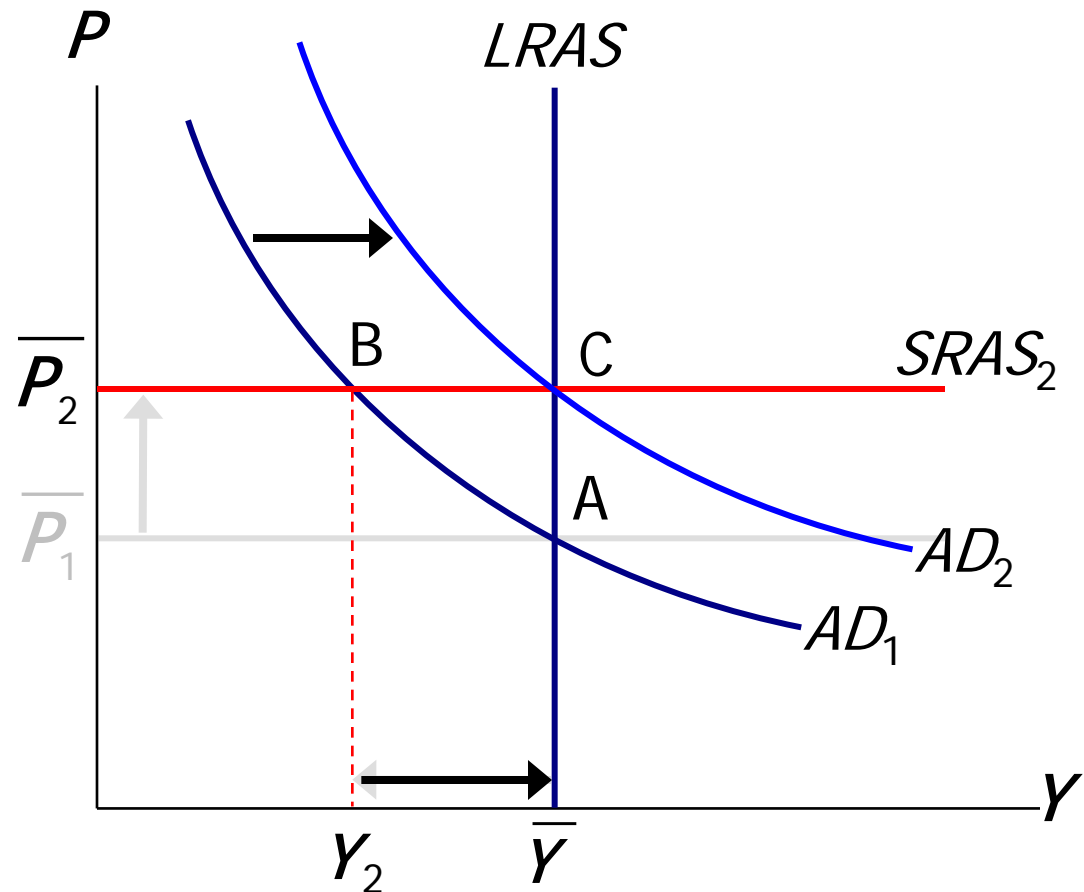
The adverse supply shock moves the economy to point B.



Stabilizing output with monetary policy

But the Fed accommodates the shock by raising agg. demand.

results:
 P is permanently higher, but Y remains at its full-employment level.





Chapter Summary

1. Long run: prices are flexible, output and employment are always at their natural rates, and the classical theory applies.

Short run: prices are sticky, shocks can push output and employment away from their natural rates.

2. Aggregate demand and supply:
a framework to analyze economic fluctuations



Chapter Summary

3. The aggregate demand curve slopes downward.
4. The long-run aggregate supply curve is vertical, because output depends on technology and factor supplies, but not prices.
5. The short-run aggregate supply curve is horizontal, because prices are sticky at predetermined levels.



Chapter Summary

6. Shocks to aggregate demand and supply cause fluctuations in GDP and employment in the short run.
7. The Fed can attempt to stabilize the economy with monetary policy.