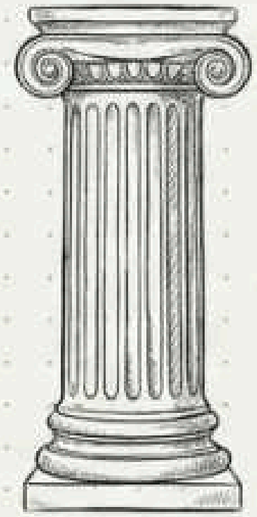
¶ 5.1

Booms, Recessions, and Aggregate Demand and Supply

ECON 130 B: Lecture 5

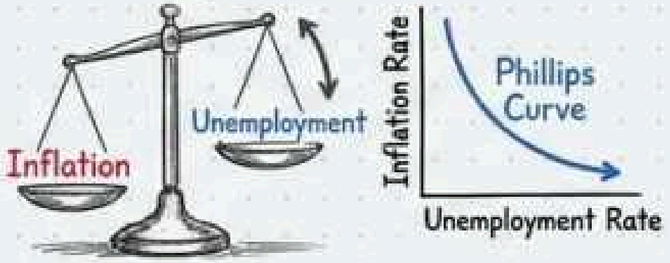




¶ 5.2

Economic Fluctuations

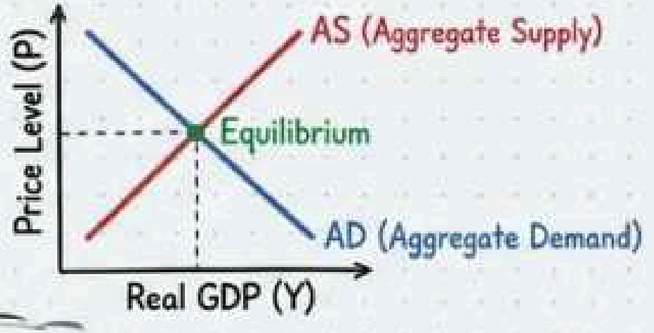
The Phillips Curve



The Business Cycle

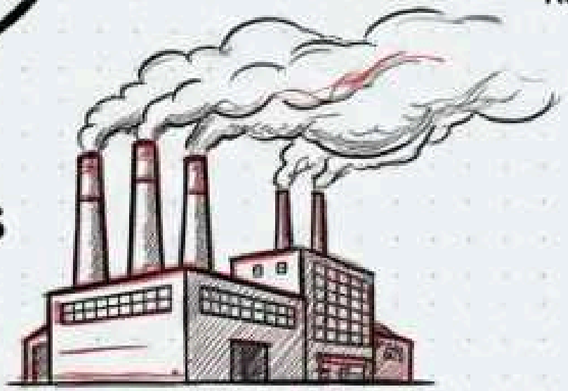


AD/AS Model

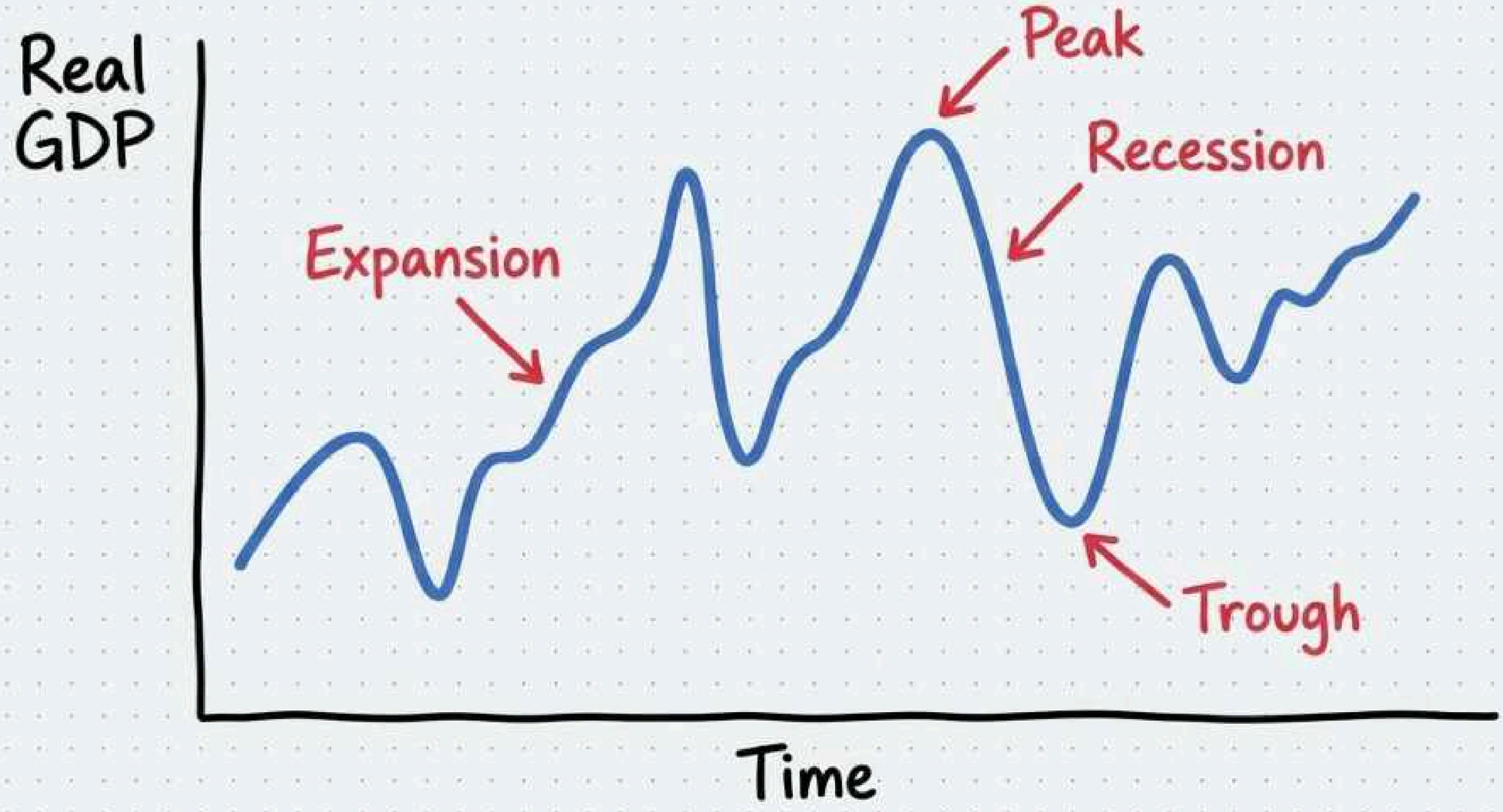


Recessions & Booms





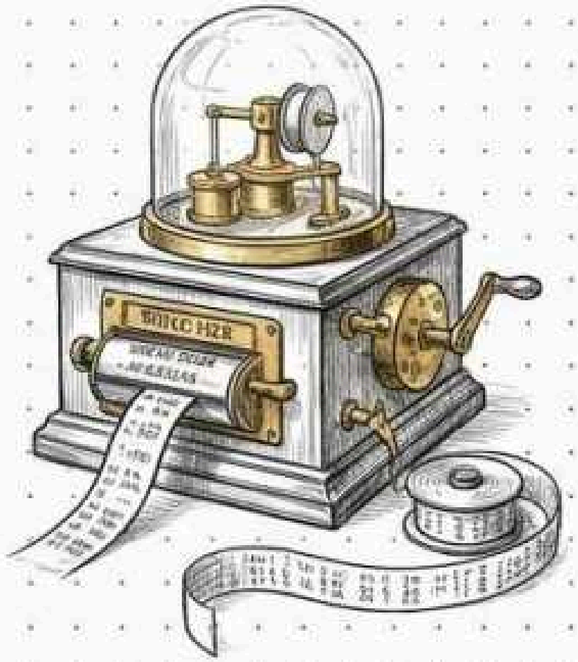
Economies do not grow smoothly. We will track the cycle, build the AD/AS model, apply it to booms/busts, and link inflation to unemployment.



Swings are irregular. No one can predict the next recession.

¶ 5.4

Great Depression (1929-1933)



Real Output: -25%

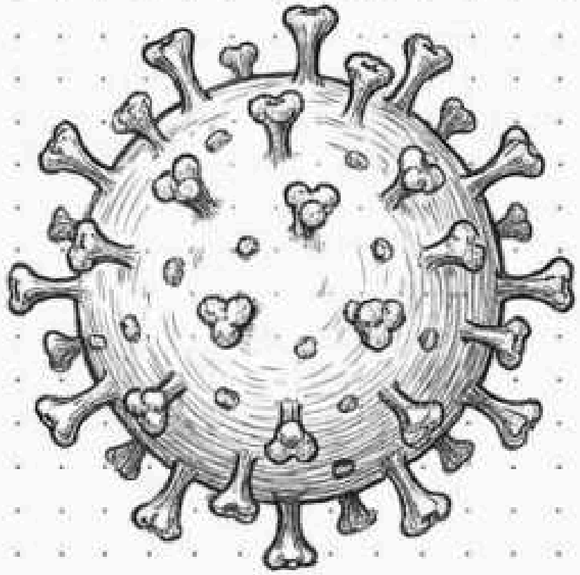
Unemployment: ~25%

Great Recession (2007-2009)



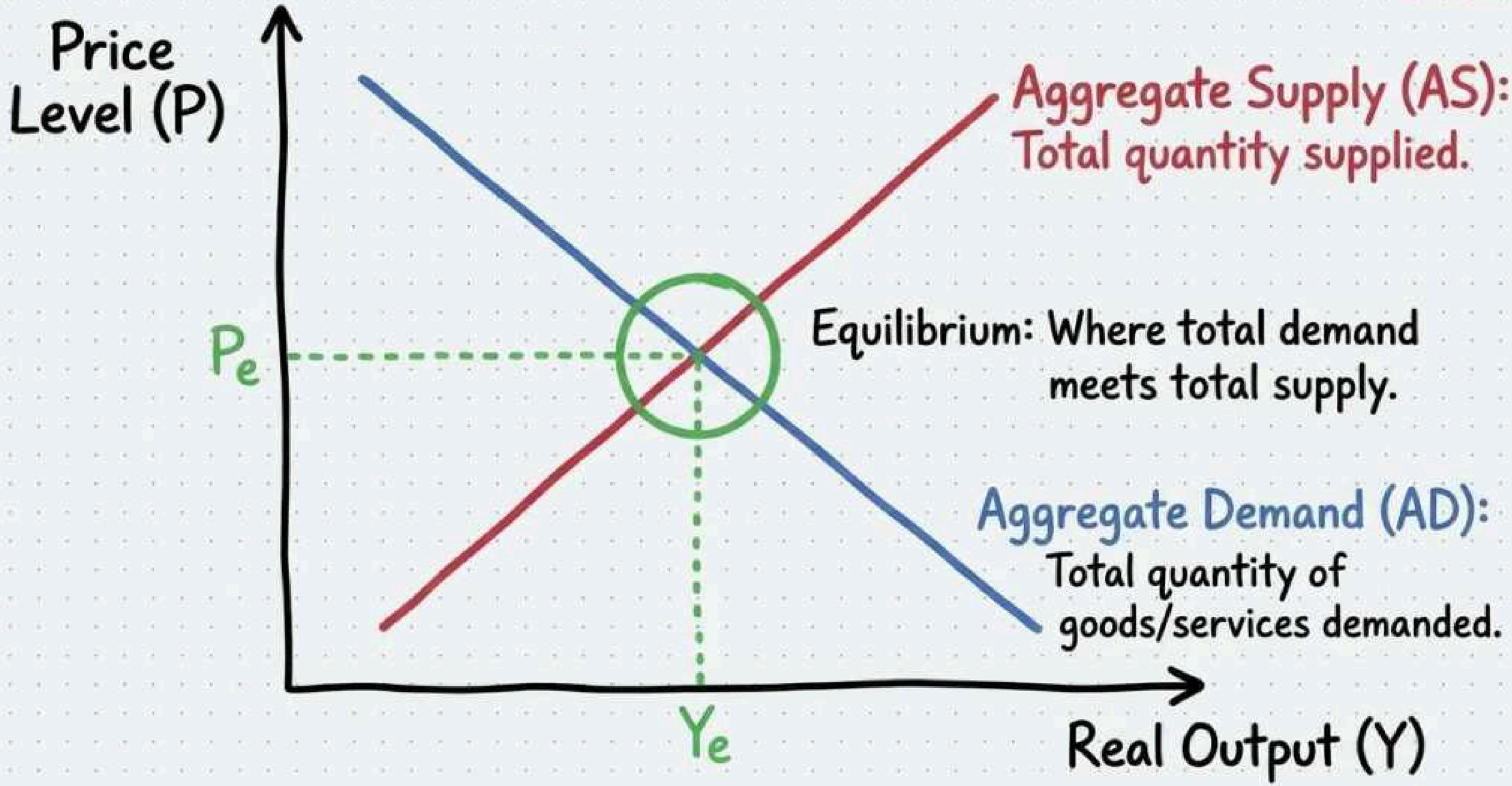
Unemployment Peak: 10%

COVID-19 Pandemic (April 2020)

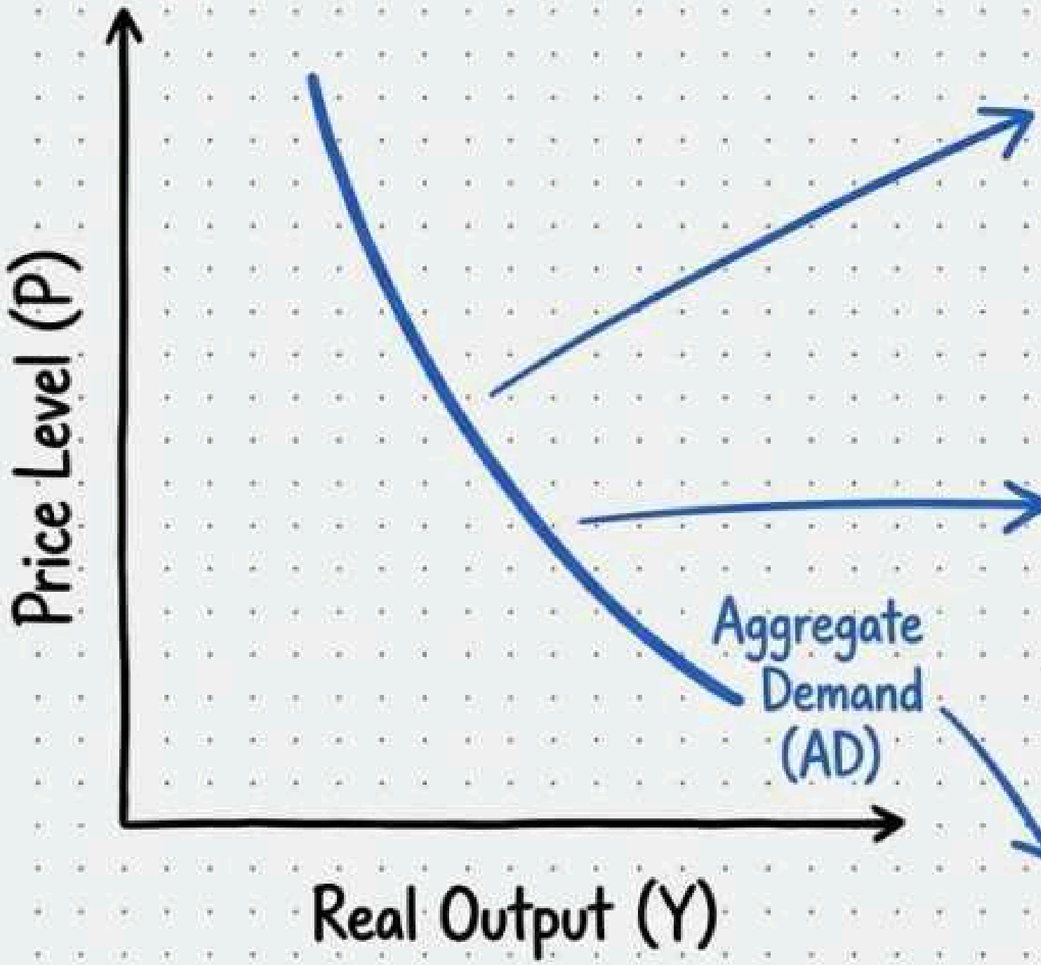


Unemployment Peak: ~15% (Fell back quickly)

¶ 5.5


Price Level (P)
Pe
Ye
Real Output (Y)
Aggregate Supply (AS):
Total quantity supplied.
Equilibrium: Where total demand meets total supply.
Aggregate Demand (AD):
Total quantity of goods/services demanded.

¶ 5.6





The Wealth Effect

Lower Price Level → Higher Real Value of Money → More Spending



The Interest Rate Effect

Lower Price Level → Lower Interest Rates → Increased Investment

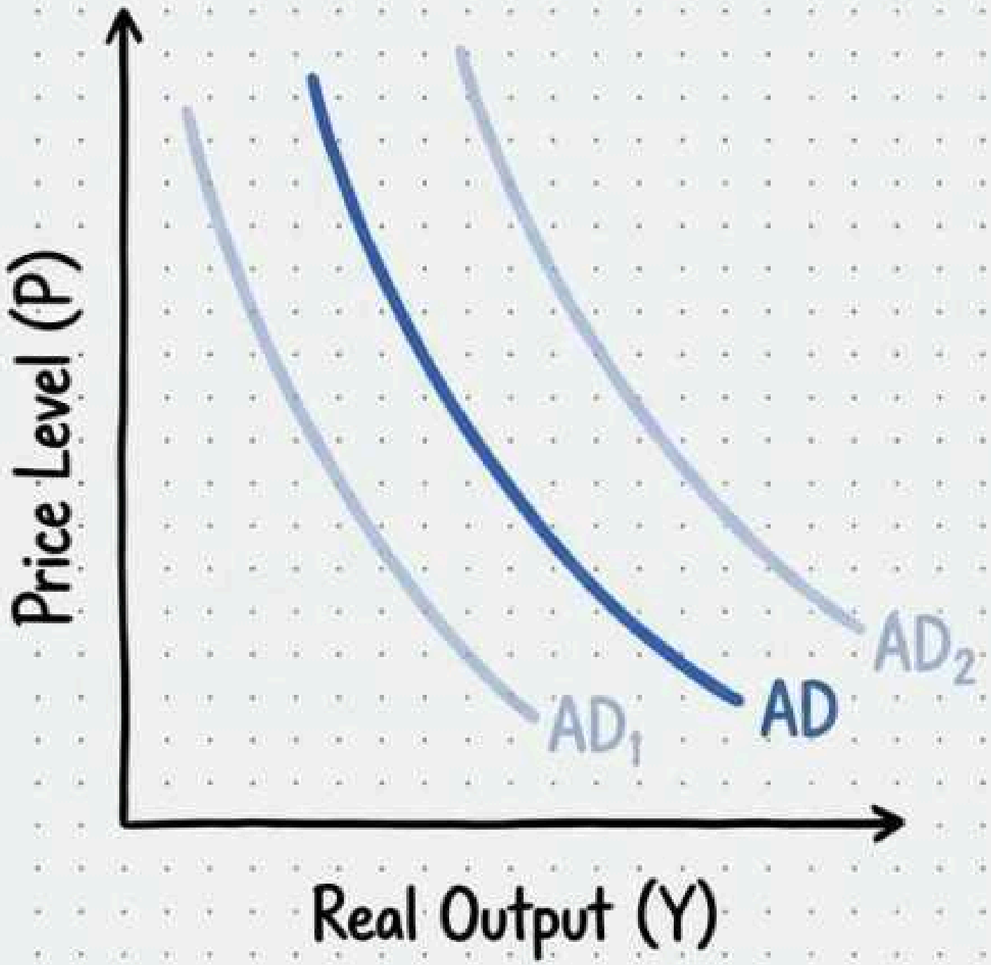


The Net Exports Effect

Lower Price Level → Home Goods Cheaper than → Rising Net Exports

$Y = C + I + G + NX$

¶ 5.7



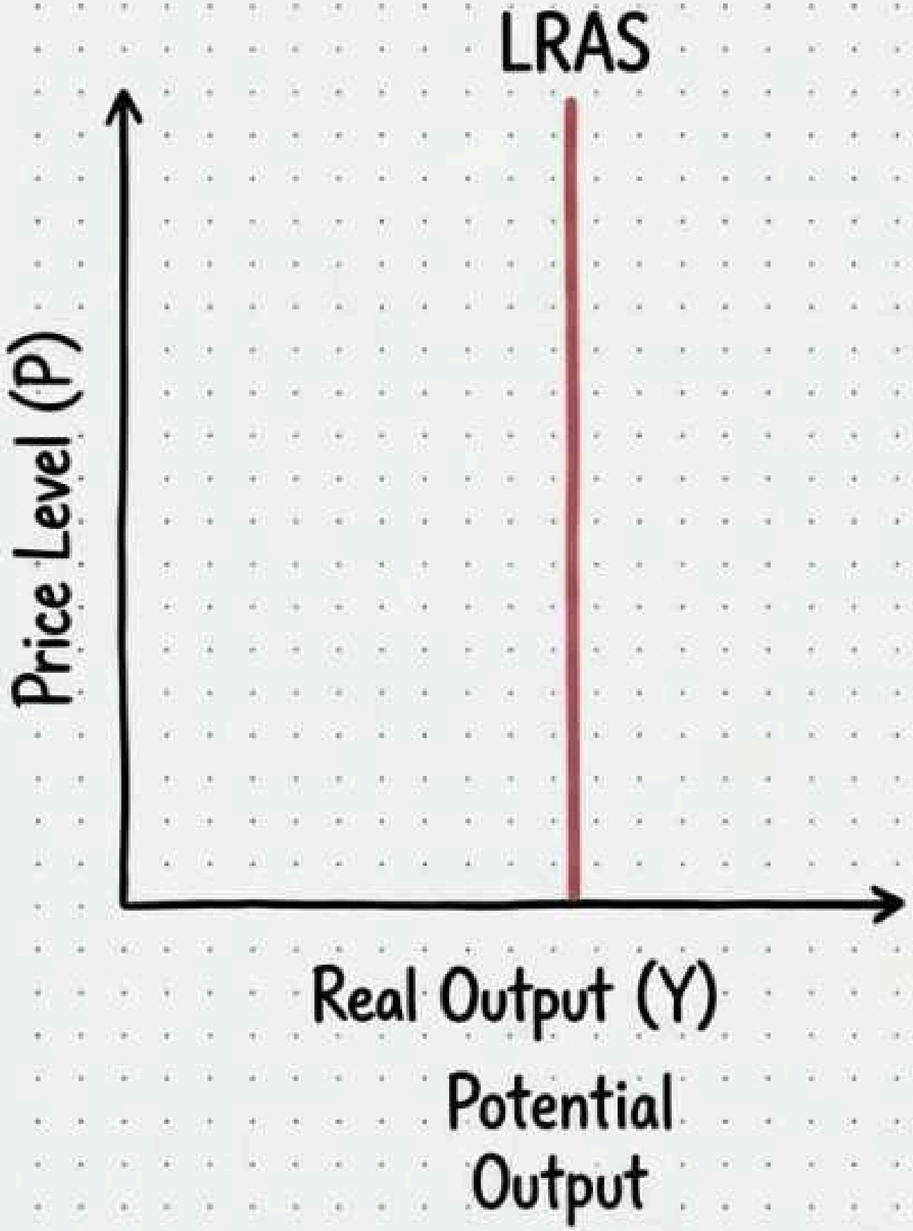
Fall in Consumer Confidence (C ↓) — Shifts Left

Surge in Business Investment (I ↑) — Shifts Right

Higher Government Purchases (G ↑) — Shifts Right

Boom Abroad raises Exports (NX ↑) — Shifts Right

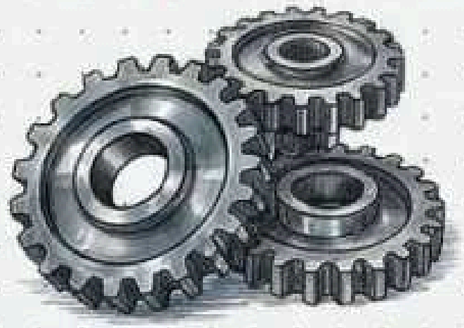
Any change in these components at a given price level shifts Aggregate Demand, altering output and prices.

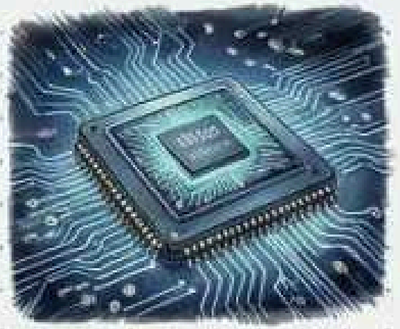


A rise in the price level raises all prices and wages alike. Supply remains vertical at Potential Output.

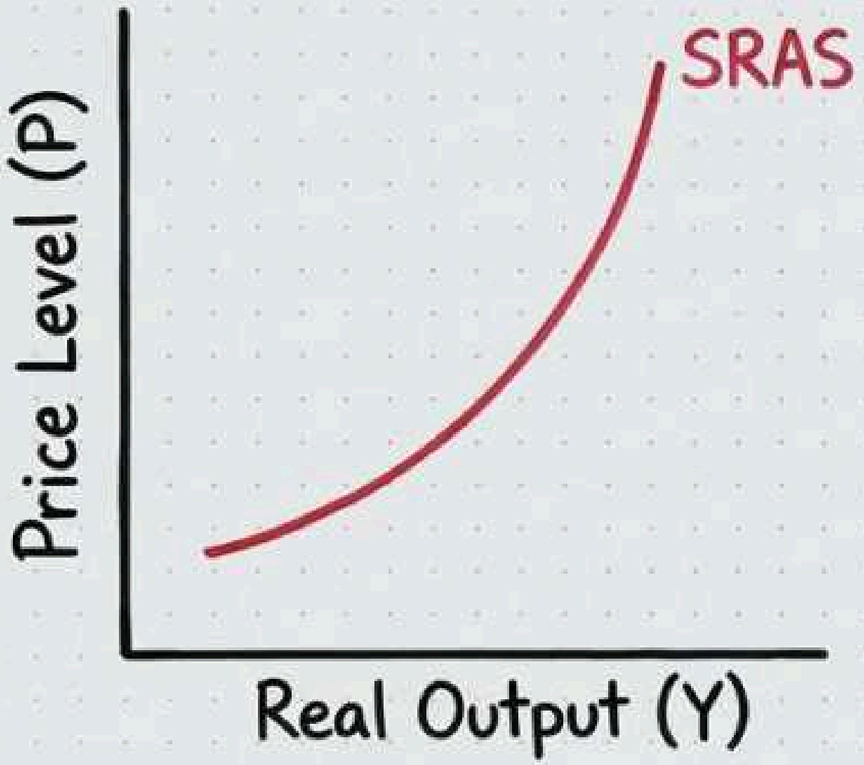
Shifts right with economic growth.







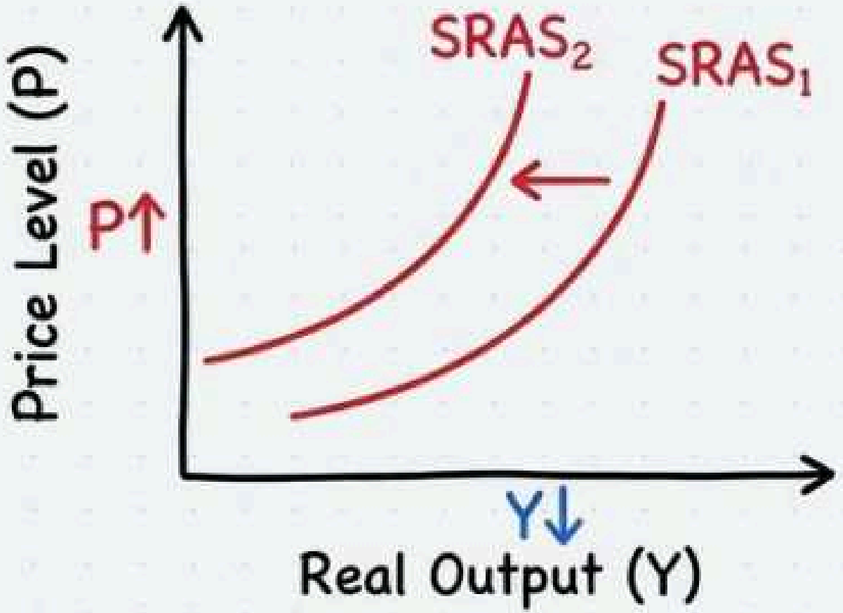
¶ 5.9





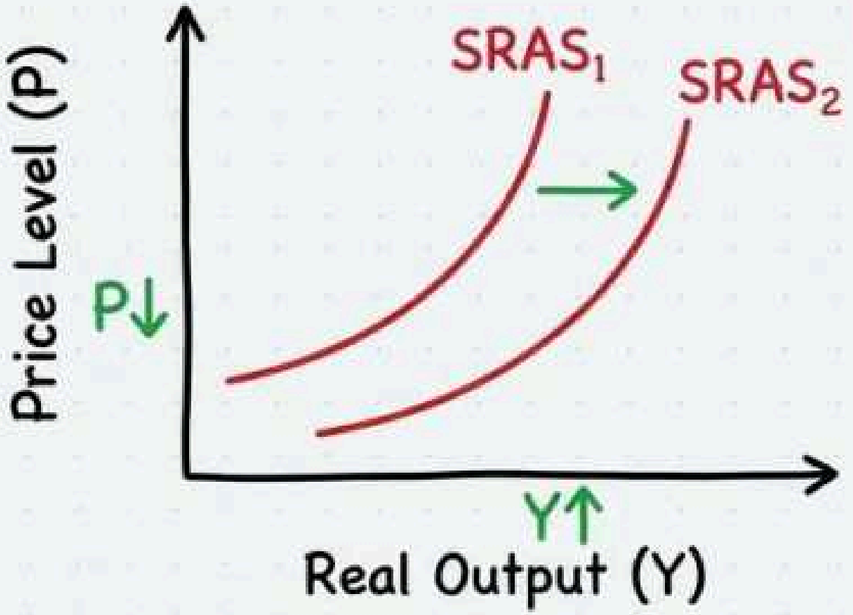
Price Level Rises + Costs Hold Steady (Sticky) → Profit Margins Rise → Firms Produce More.

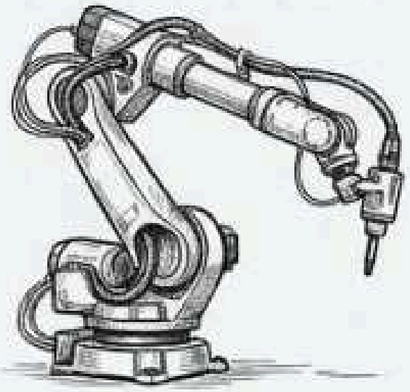
The Central Idea of Keynesian Economics:
In the short run, output can differ from potential.





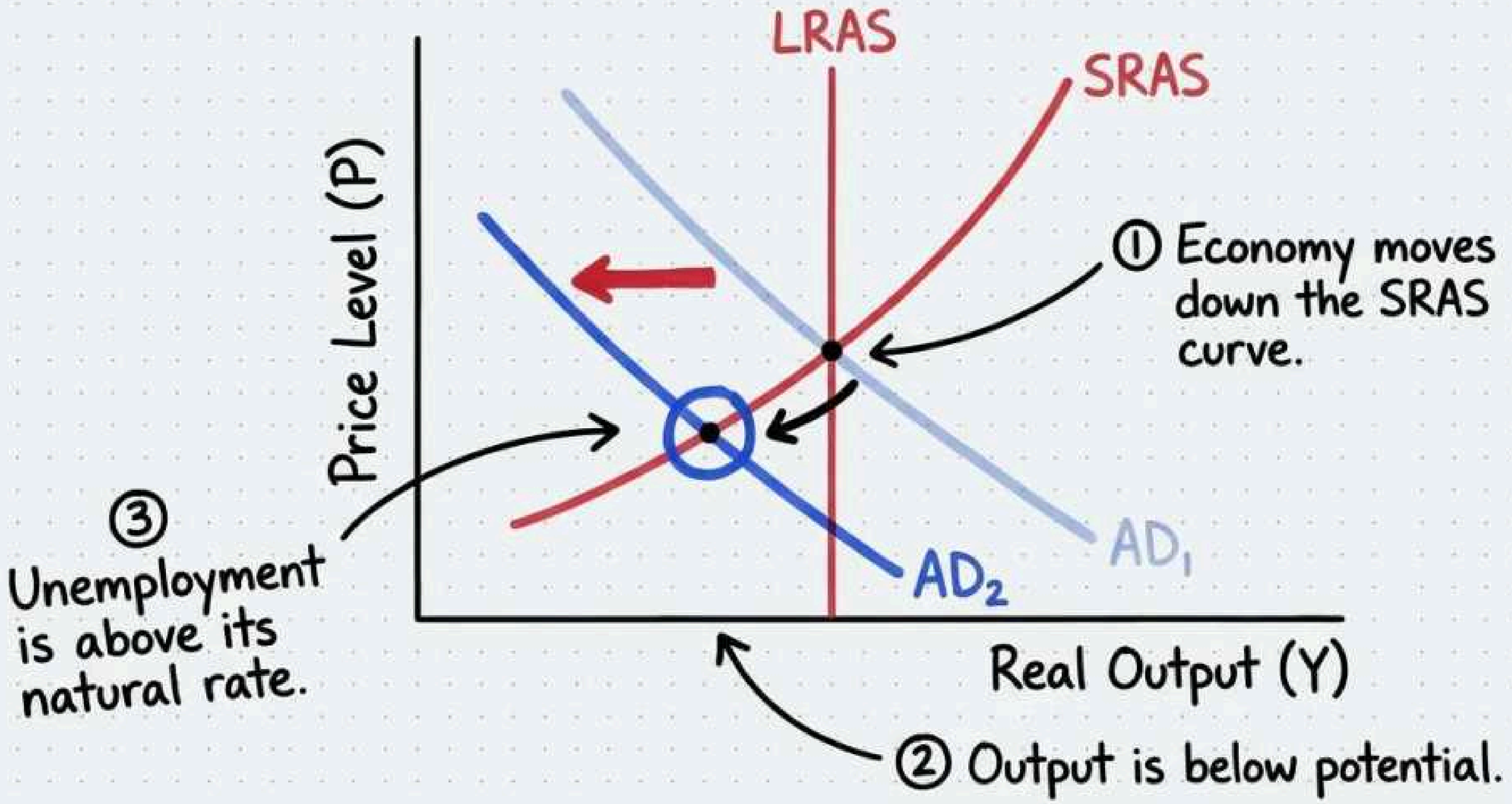
Higher costs (e.g., 1970s oil spike) shift SRAS left. Output falls, prices rise = STAGFLATION.

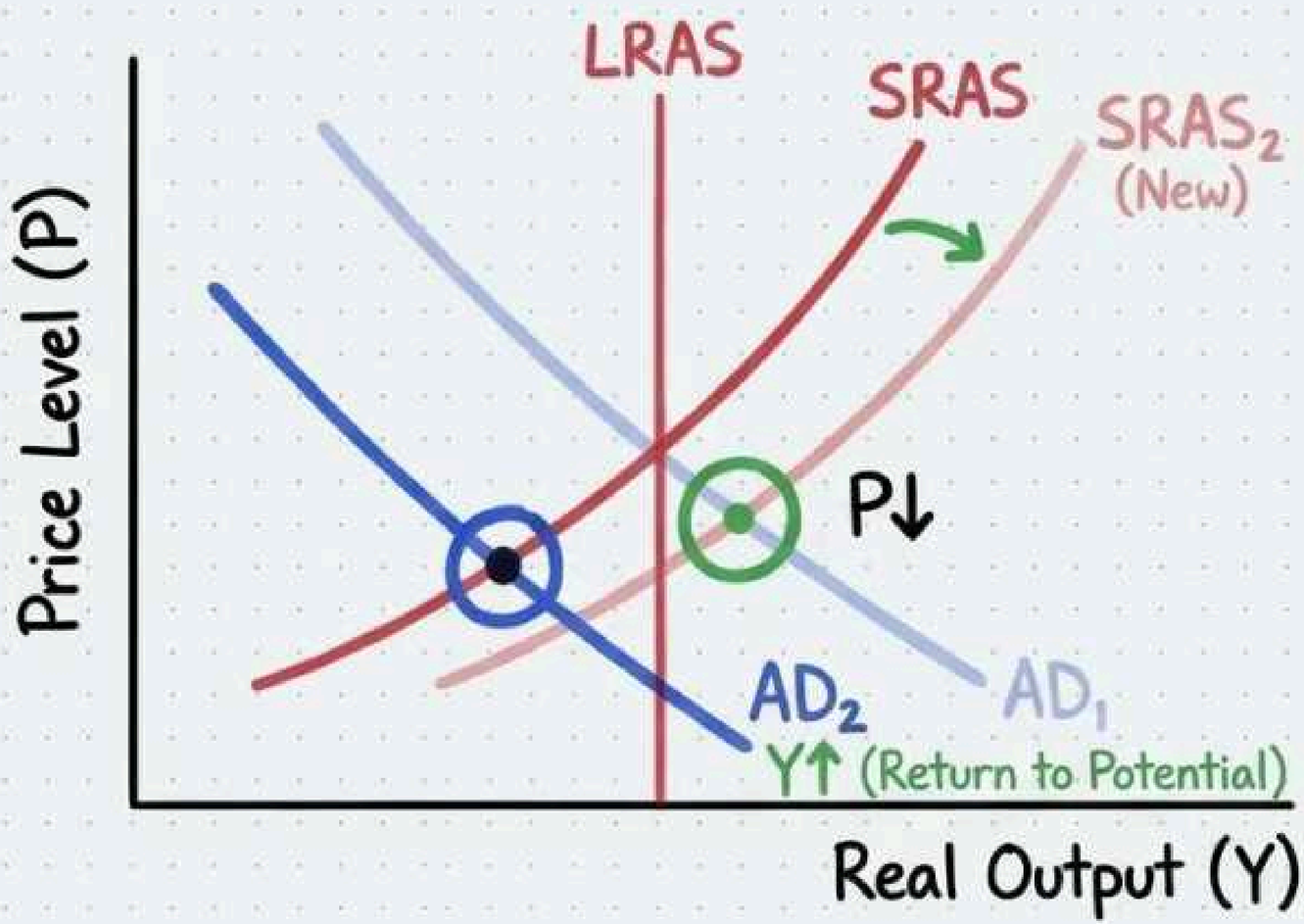




Better technology or cheaper inputs shift SRAS right.

Anatomy of a Recession





High Unemployment

↓

Wages & Prices Fall Slowly

↓

SRAS Shifts Right

↓

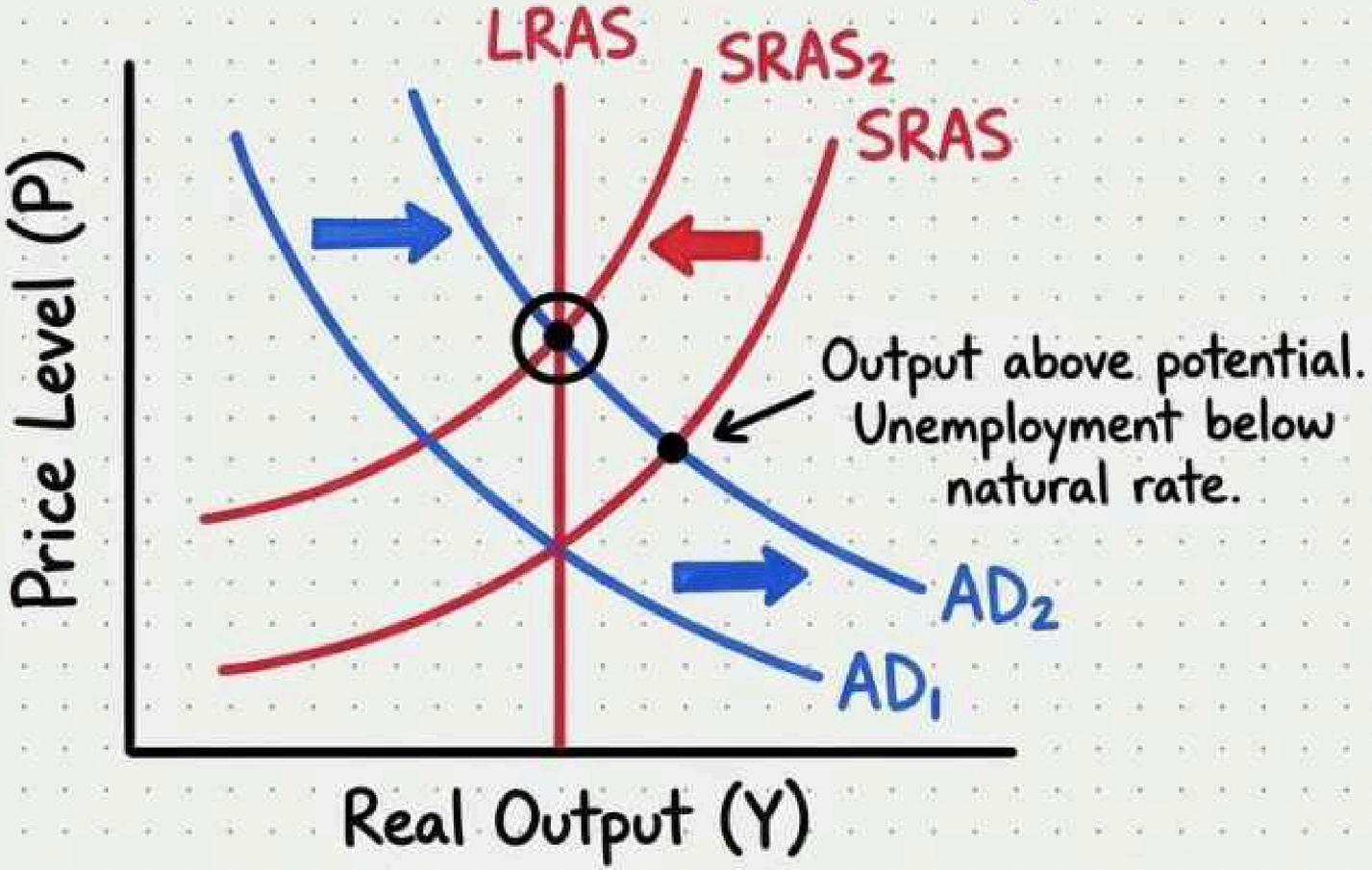
Return to Potential Output (at lower price level)



Left alone, the economy heals itself. BUT the adjustment takes years, and the pain is real. This justifies active policy intervention.

¶ 5.13

Anatomy of a Boom



Workers are scarce

↓

Wages rise

↓

Pushes SRAS left.

Demand pushes output beyond its limit only for a while.
In the end, only the price level goes up.

¶ 5.14

$$\text{Output Gap} = \frac{\text{Actual Output} - \text{Potential Output}}{\text{Potential Output}} * 100$$

$$\text{Output Gap} = \frac{\$1{,}140\text{B} - \$1{,}200\text{B}}{\$1{,}200\text{B}} * 100$$

-$60 Billion

-5%

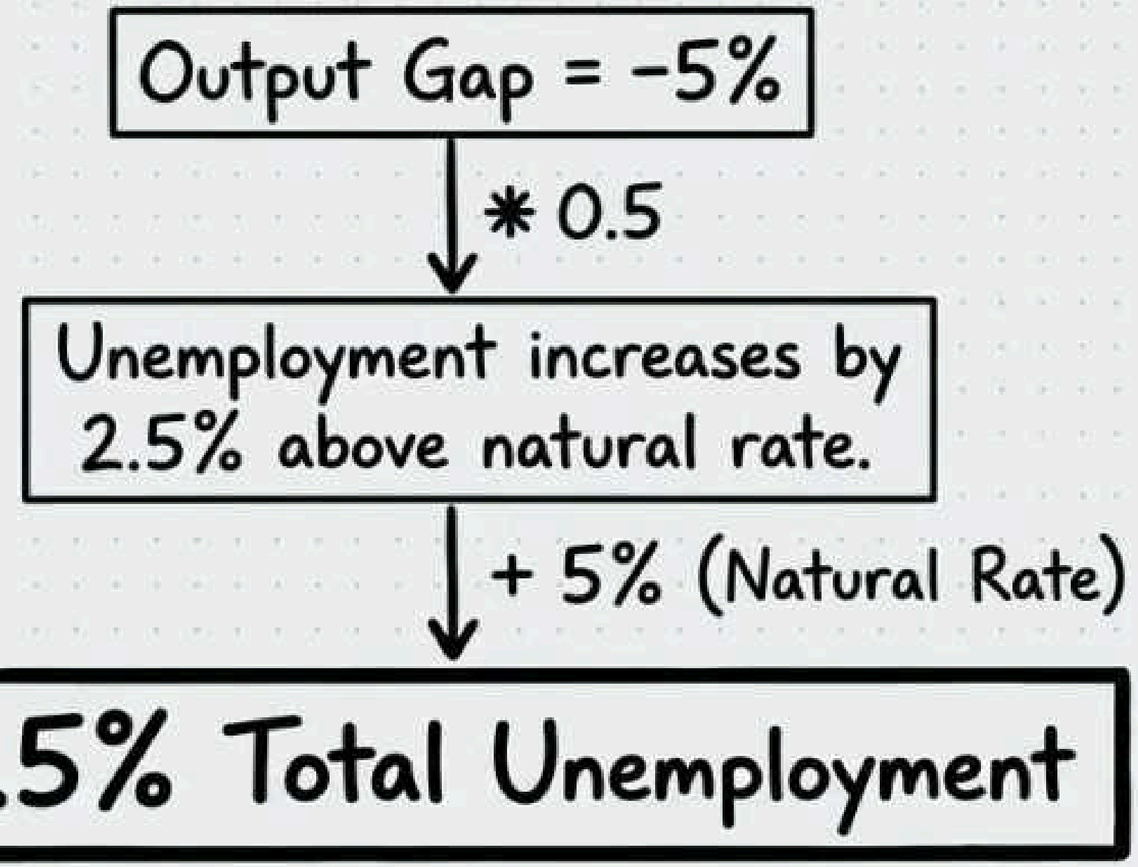
Negative Gap = Recessionary Gap

Positive Gap = Inflationary Gap

¶ 5.15

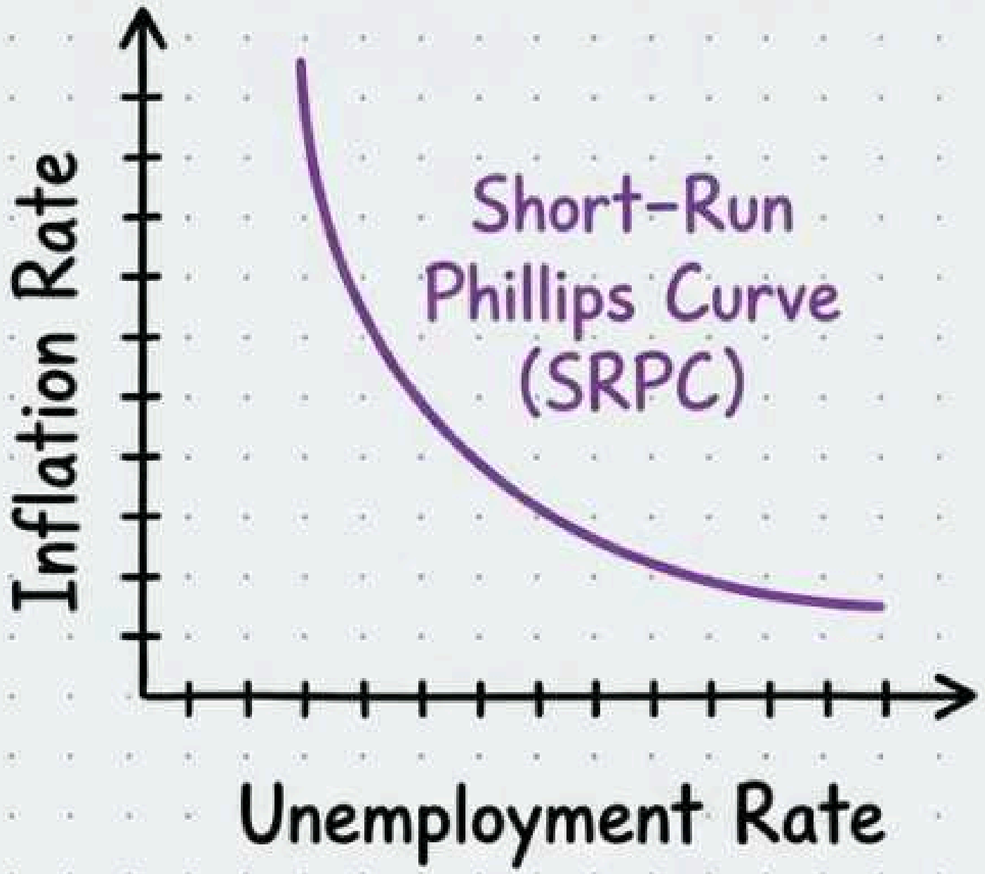
Okun's Law: Rule of Thumb

For every 1% output falls below potential, unemployment rises ~0.5% above its natural rate.



Note: This is a statistical rule of thumb, not a law of nature.

¶ 5.16



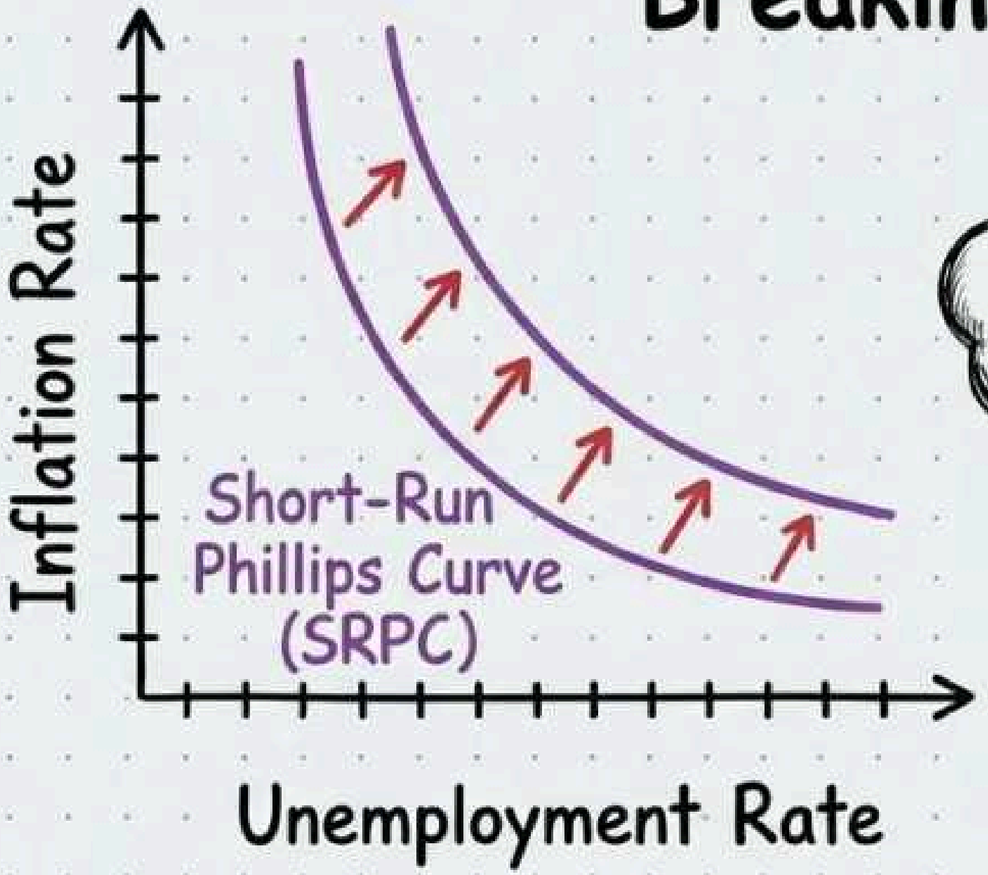
1958: Bill Phillips observes British data—low unemployment goes with rising wages.

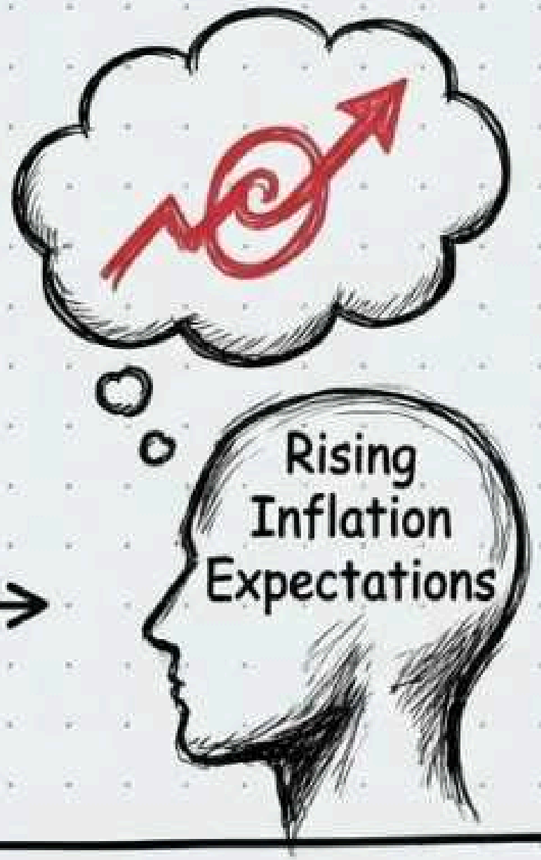
Demand Rises → Output Goes Up → Unemployment Falls → Prices Rise.

In the short run, policymakers face a direct trade-off between inflation and unemployment.

Breaking the Trade-off

¶ 5.17



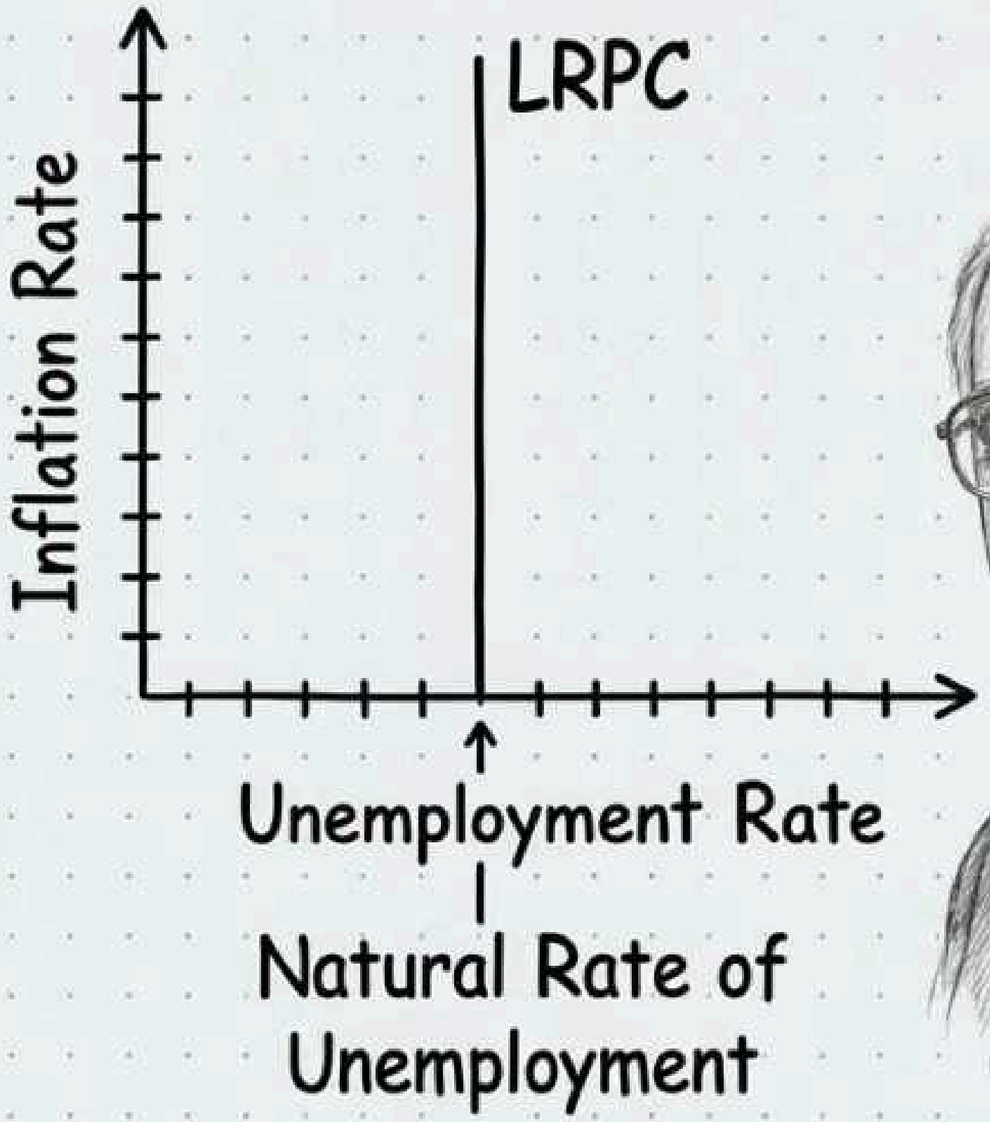


1970s Stagflation: Inflation and unemployment rose together. Phelps & Friedman predicted this.

Inflation stays high →
People expect higher inflation
→ Wage demands rise
→ Short-Run curve moves up.

Policy can only lower unemployment below the natural rate by surprising people, and only briefly.

¶ 5.18





In the long run, higher money growth gives higher inflation, not lower unemployment.

The Cost of Disinflation: In the early 1980s, Volcker cut inflation from over 10%. It required a deep recession with unemployment near 10%.

Lecture Question: Diagnose the Shock

¶ 5.19



Think of a recent economic shock
(Financial crisis, pandemic, oil price spike).

1. The Cause

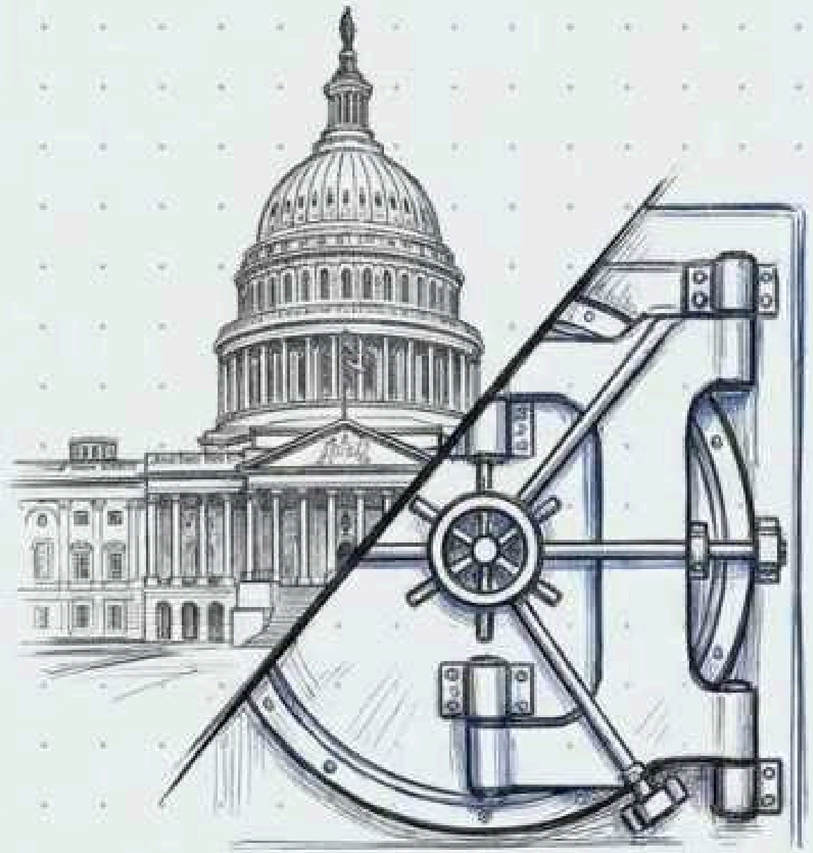
Was it a shift in Aggregate Demand? Or Aggregate Supply?

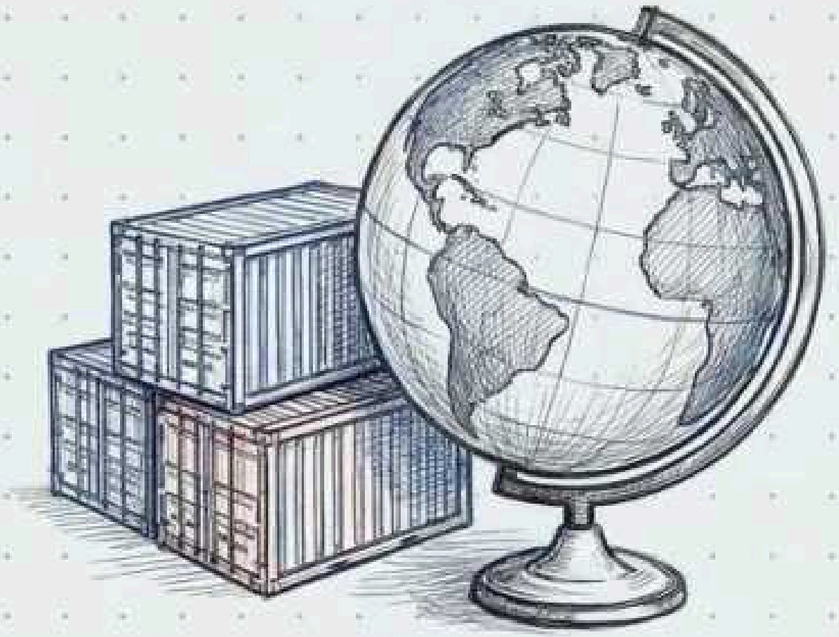
2. The Effect

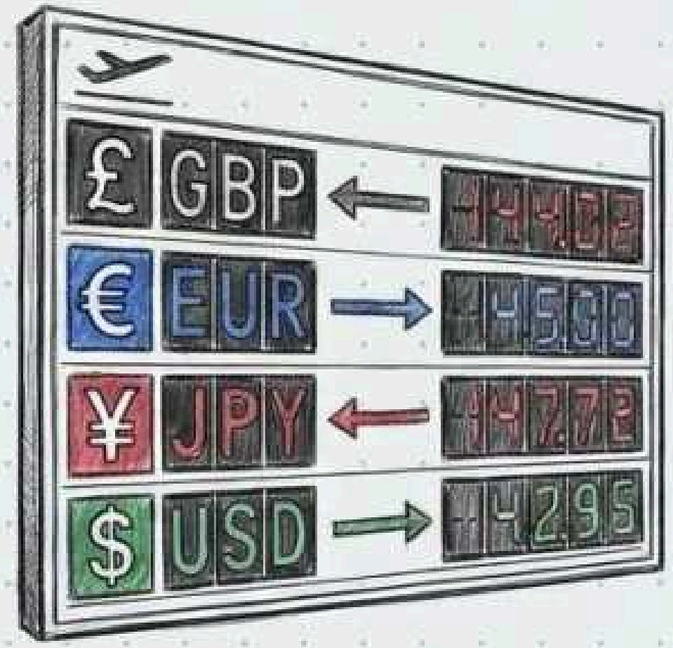
What did the model predict for output and prices? Was that what actually happened?

Looking Ahead to Lecture 6

¶ 5.20







What can governments and central banks do about the cycle?
Plus, widening the picture to include trade and exchange rates.