ECON 202 - MACROECONOMIC PRINCIPLES

Instructor: Dr. Juergen Jung

Towson University

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Chapter 15 - Modern Macro: From the Short-Run to the Long-Run

Modern Macroeconomics: From the Short Run to the Long Run - Topics

1. Describe the key difference between the short run and long run in macroeconomics
2. Demonstrate graphically how the economy can return to full employment
3. Analyze monetary neutrality and crowding out using graphs
4. Assess how classical economic doctrines relate to modern macroeconomics

The Difference Between the Short and Long Run

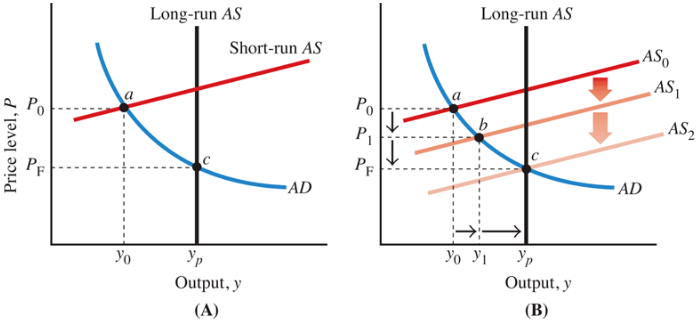
- In the short run: Wages and prices are sticky
- In the long run: Prices are flexible

Wage and Prices and Their Adjustment Over Time

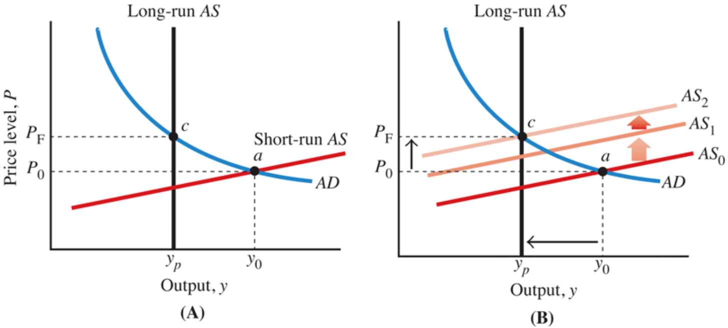
TABLE 15.1 Unemployment, Output, and Wage and Price Changes

When unemployment is below the natural rate ...	When unemployment is above the natural rate ...
• output is above potential. • wages and prices rise.	• output is below potential. • wages and prices fall.

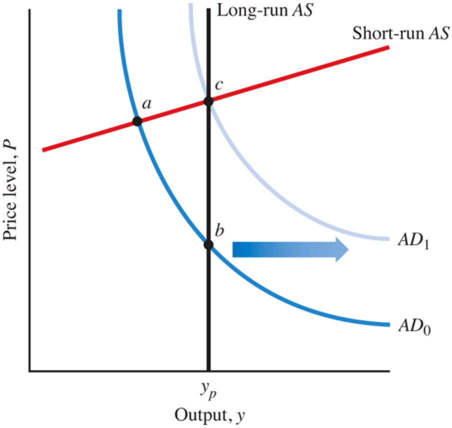
How Wage and Price Changes Move the Economy Naturally Back to Full Employment



Returning to Full Employment from a Boom

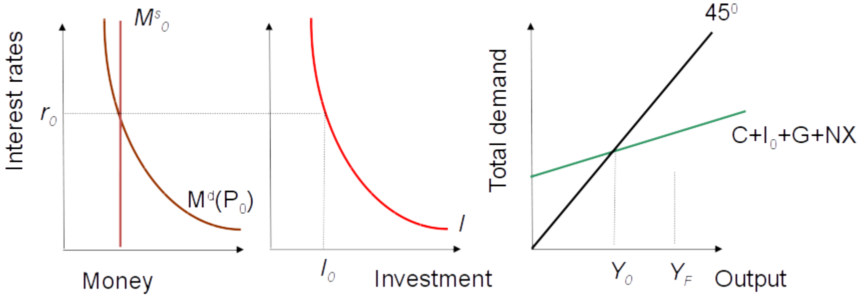


How Economic Policy Can Hasten the Speed of Adjustment



Details on the Adjustment Process

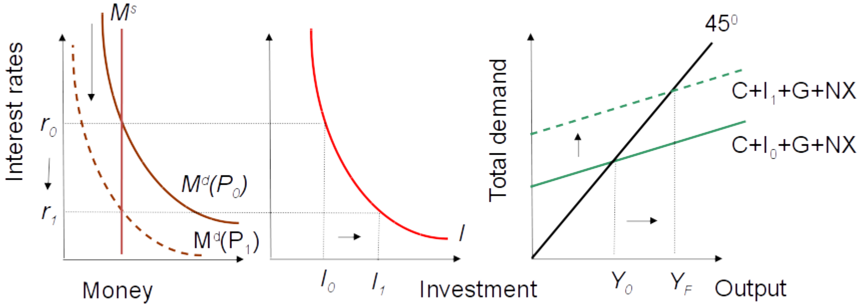
- Model of demand with money. $Y_0 < Y_F$.



- Output Y_0 is below full employment output $Y_F \rightarrow$ excess unemployment
- Wages and prices will start to fall

Details on the Adjustment Process (cont.)

- Fall in price level will decrease the demand for money and the M^d curve shifts to the left
- Interest rates fall and investment increases
- This increases the level of output
- This goes on until the economy reaches full employment again



The Reverse Adjustment Process

- If current actual output $Y_0 > Y_F$ then
  - Economy is overheating
  - Wages and prices rise
  - Higher price increases the demand for money
  - Interests rise and decrease investment
  - Which reduces the level of output

Liquidity Traps

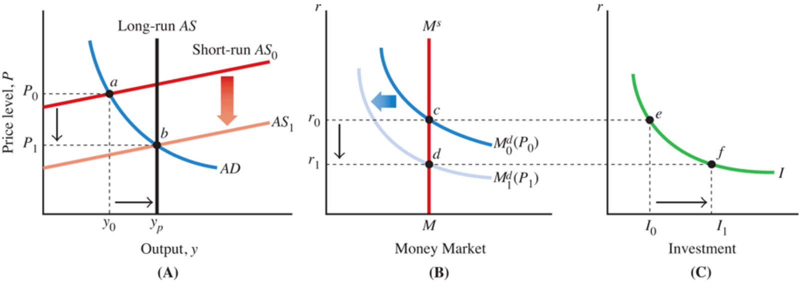
- Liquidity trap $\rightarrow$ a situation in which nominal interest rates are so low, they can no longer fall
- Keynes expressed doubts about whether a country could recover from a major recession without active policy
- He had two distinct reasons:
  - First, the adjustment process requires interest rates to fall, but if nominal interest rates become so low that they cannot fall any further, the economy has fallen into what Keynes called a liquidity trap, and the adjustment process no longer works
  - Second, Keynes also feared that falling prices could hurt businesses

The Long-Run Neutrality of Money

The Long-Run Neutrality of Money

- In the previous illustration, the increase in the supply of money had no effect on real interest rates, investment, or output
- Economists call this the long-run neutrality of money
- In the long run, changes in the supply of money are neutral with respect to "real" variables in the economy
- Increase of money supply
  - Short run $\rightarrow$ Output increases and prices increase
  - Long run $\rightarrow$ Output stays where we started, at full employment, but prices have risen

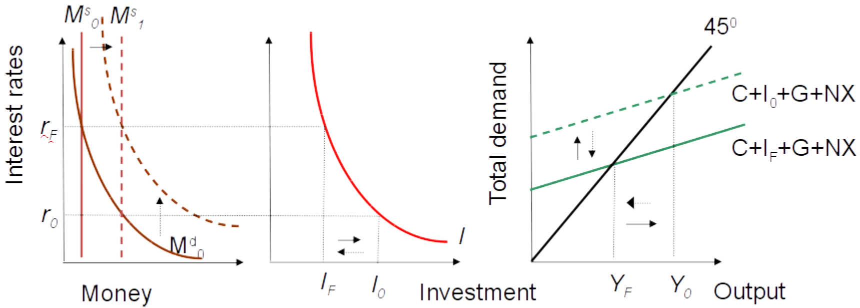
The Long-Run Neutrality of Money (cont.)



- With the economy initially below full employment, the price level falls, as shown in Panel A, stimulating output
- In Panel B, the lower price level decreases the demand for money and leads to lower interest rates at point d
- In Panel C, lower interest rates lead to higher investment spending at point f

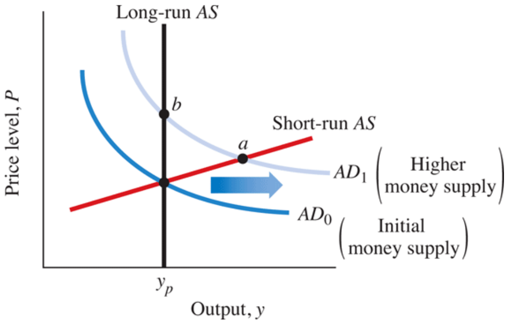
The Long-Run Neutrality of Money (cont.)

- As the economy moves down the aggregate demand curve from point a toward full employment at point b in Panel A, investment spending increases along the aggregate demand curve



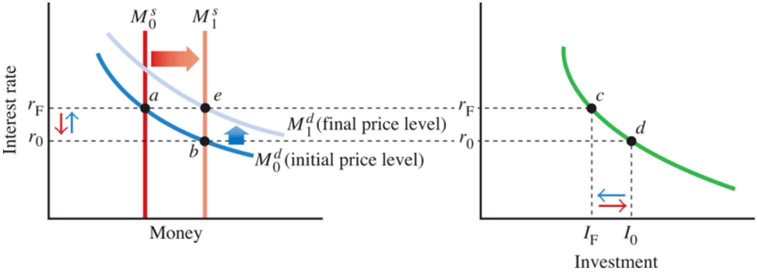
- Fed increases Ms, Md adjusts, prices rise and GDP stays constant

The Long-Run Neutrality of Money (cont.)



- As the Fed increases the supply of money, the aggregate demand curve shifts from AD0 to AD1
- In the long run, the economy returns to long-run equilibrium

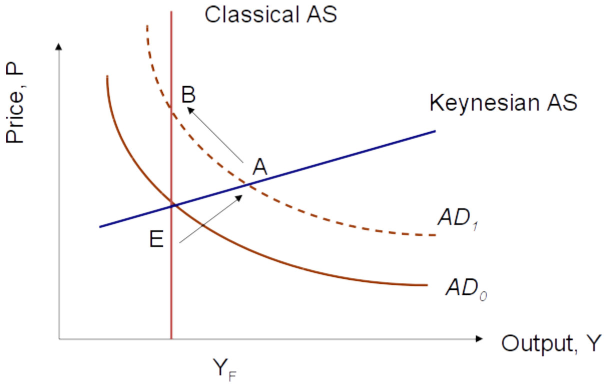
The Long-Run Neutrality of Money (cont.)



- Starting at full employment, an increase in the supply of money from Ms0 to Ms1 will initially reduce interest rates from rF to r0 (from point a to point b) and raise investment spending from IF to I0 (point c to point d)
- We show these changes with the red arrows

The Long-Run Neutrality of Money (cont.)

- The blue arrows show that as the price level increases, the demand for money increases, restoring interest rates and investment to their prior levels—rF and IF, respectively
- Both money supplied and money demanded will remain at a higher level, though, at point e



The Long-Run Neutrality of Money (cont.)

- Summary:
  - The increase in the supply of money had no effect on real interest rates, investment, and output
  - Long-run neutrality of money
  - Changes in Ms have no real effects, only prices adjust

Short-Run vs Long-Run Debate

Short Run

- Money is NOT neutral in the short run
- The Fed can influence the level of real GDP in the short run
- However, this power is only temporary
- Short run is 2 to 6 years

"Classical Economics" in Historical Perspective

- Classical economics refers to the body of work developed over time starting with Adam Smith in the late eighteenth and nineteenth century
- The term "classical model" was first used by Keynes to contrast his "Keynesian" or activist model with the conventional economic wisdom of the time that didn't emphasize the difficulties that the economy could face in the short run

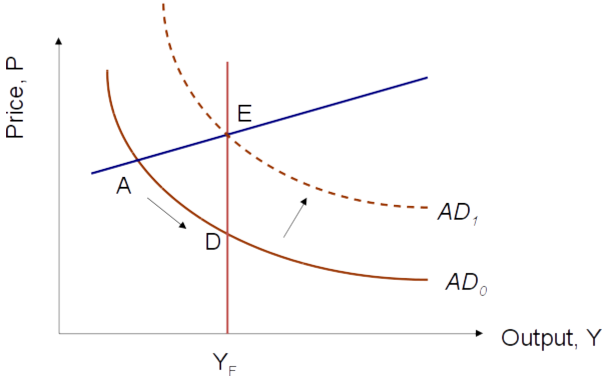
Say's Law

- Say's law is the doctrine that "supply creates its own demand."

Speed of Adjustment

- How long does it take to move from the short run to the long run?
- Estimates range from 2 to 6 years!

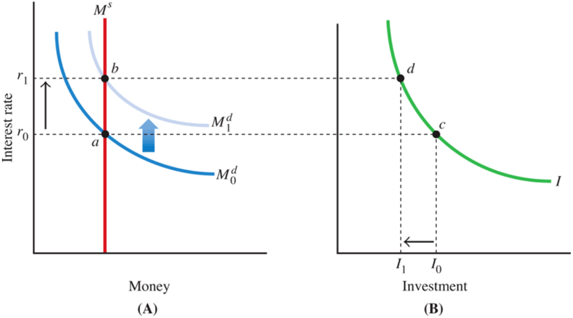
Keynes or Not Keynes?



Crowding Out in the Long-Run

Crowding Out in the Long-Run

- Keynes claims that increases in G, stimulates the economy
- Critics say, that this works only temporarily and ultimately harms the economy because G will crowd out investment spending



Crowding In

- Cuts in G (like cuts in military spending) will lead to increases in investment in the long run
- Initially though a decrease in G will cause a decrease in real GDP
- As prices fall interest go down $\rightarrow$ and I goes up

Political Business Cycles

- Using monetary and fiscal policy in the short run to improve a politician's reelection prospects may generate what is known as a political business cycle
- In a classic political business cycle, the economy booms before an election but then contracts after the election
- The original political business cycle theories focused on incumbent presidents trying to manipulate the economy in their favor to gain reelection

- Subsequent research began to incorporate other, more realistic factors:
- The first innovation was to recognize that political parties could have different goals or preferences

- The second major innovation was to recognize that the public would anticipate that politicians will try to manipulate the economy