

EC566 – Macroeconomics for Business

Week 21 – Lecture 2
AD and AS (exercises)

L&C – Ch. 21

B&P – Ch. 13

Learning Outcomes

- You will be able to analyze the impact of:
- a increase in money supply
- a decrease in the government spending
- a decrease in the oil prices

Monetary expansion

- Analyze the impact of an increase in nominal money supply on the economy in the short run and in the long run
- (Think 5 mins)

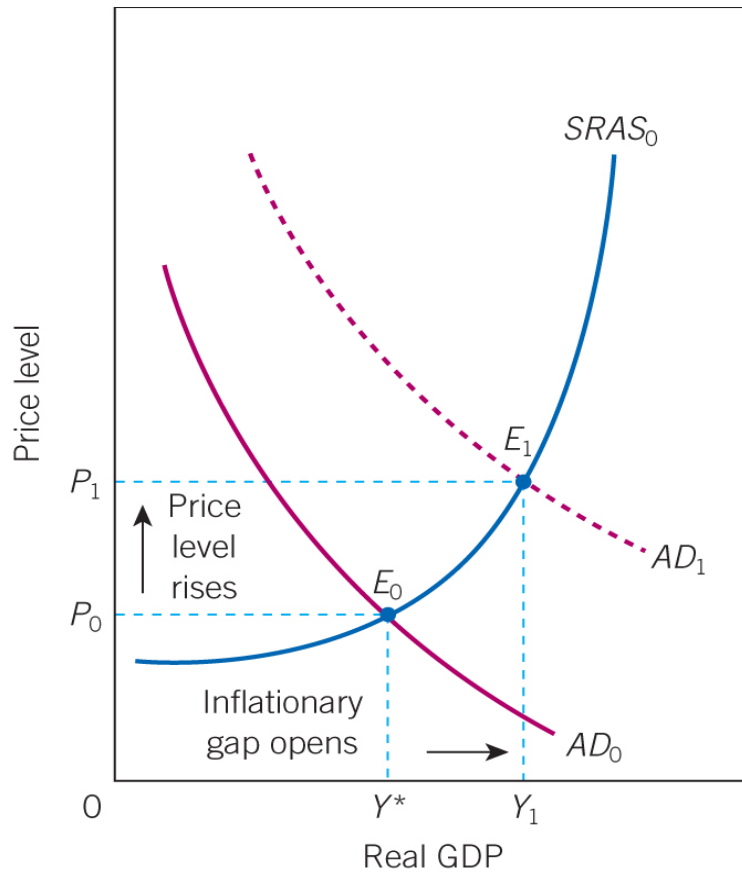
Monetary expansion

- Short run:
 - Nominal money increases
 - Real money stock (M/P) increases
 - Interest rate goes down (why?)
 - Increase in output
 - AD curve shifts to the right

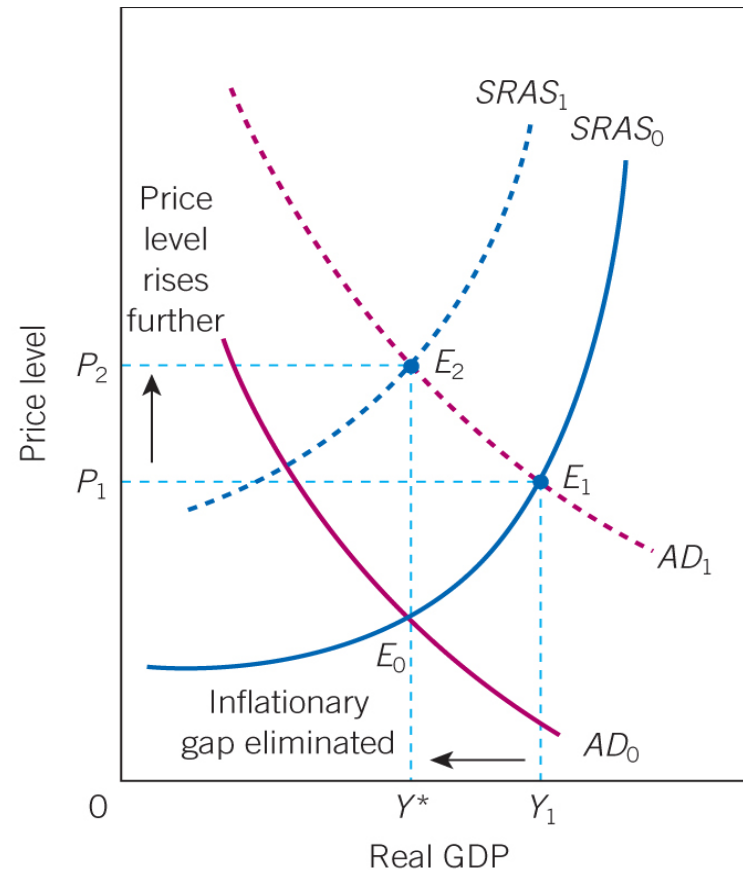
Monetary expansion

- Long run:
 - Factor prices and interest rate adjusts
 - Aggregate supply curve shift to the left
 - Output and interest rate return to their long-run level

Increase in nominal money supply



(i) Autonomous increase in aggregate demand



(ii) Induced shift in aggregate supply

Neutrality of money

- Increase in money supply
- Short run:
 - increase in output
 - decrease in interest rate
 - increase in price level
- Long run:
 - Proportional increase in price level
 - No effect on output
 - No effect on interest rate

Reduction in Government Spending

- Analyze the impact of a reduction in government spending on the economy in the short run and in the long run.
- (Think 5 mins)

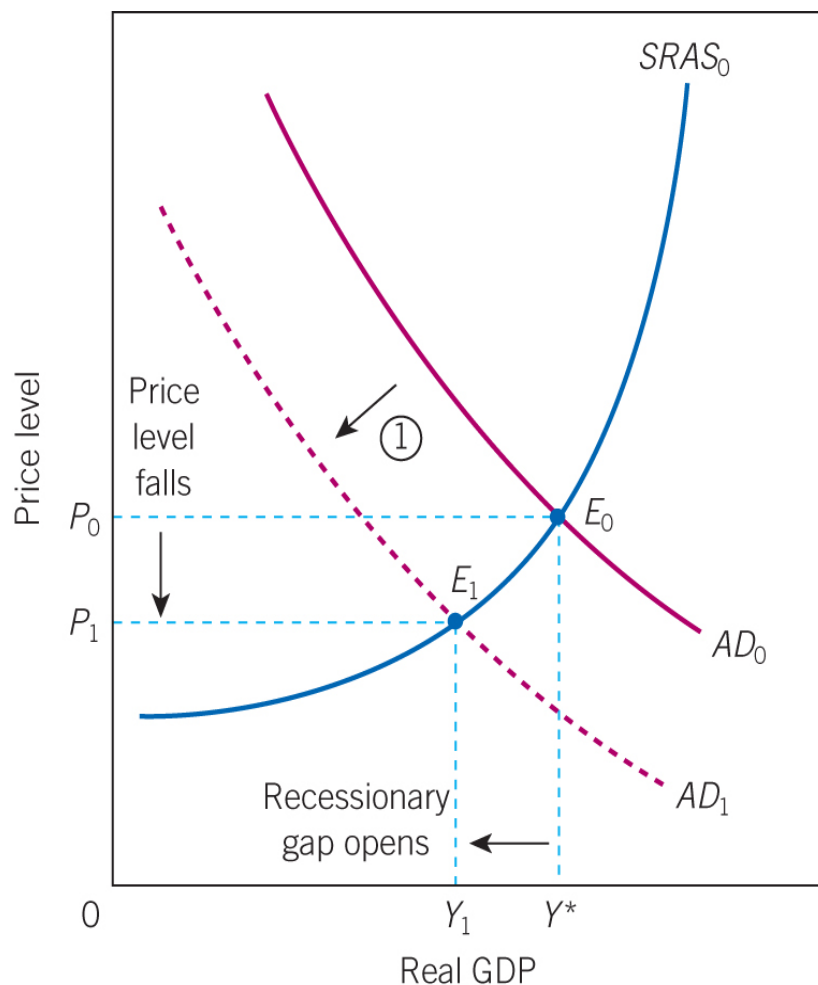
Reduction in government spending

- Short run
 - Government spending is part of AE
 - AD shifts to the left
 - Price level decreases
 - Real money stock increases
 - Interest rate declines

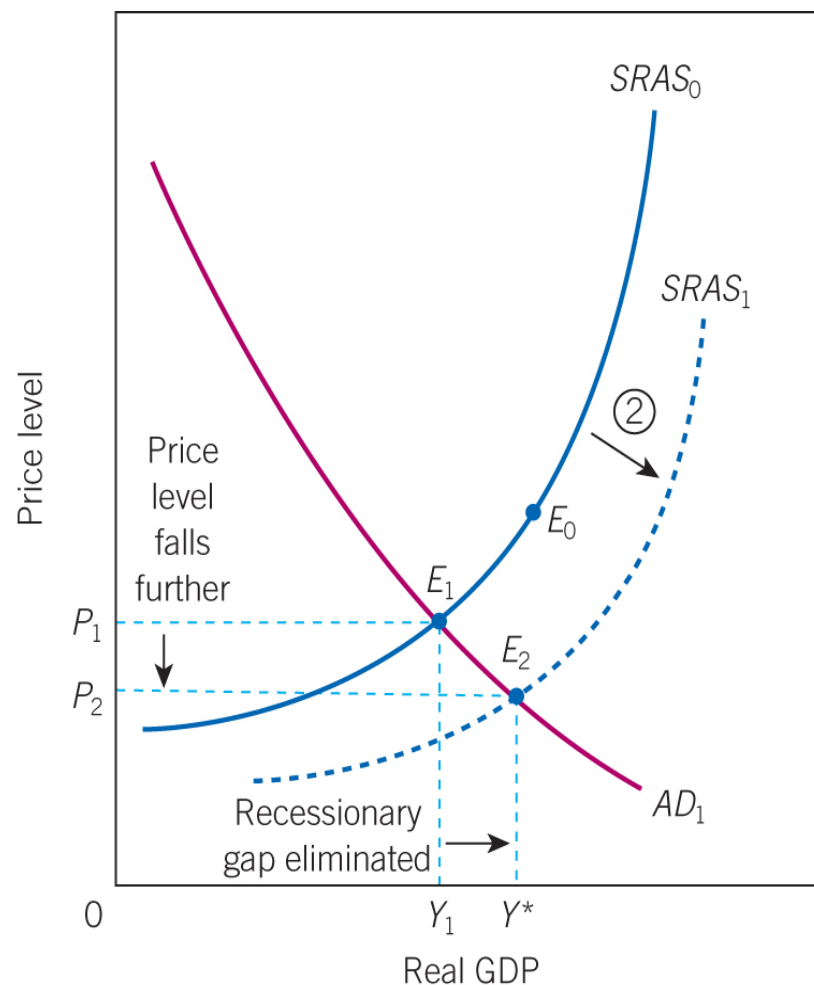
Reduction in government spending

- Long run:
 - Factor prices adjust
 - AS curve shifts to the right
 - Price level declines further
 - Interest rate declines further

Reduction in government spending



(i) Autonomous falls in aggregate demand



(ii) Induced shift in aggregate supply

Reduction in government spending

- Composition of output
- $AD = C + I + G + NX$
- Is there a change in the composition of output in the long run?
- Suppose that the economy is closed, i.e. $NX = 0$

Composition of output

- $Y = C + I + G$
- Consumption:
 - no change
 - function of disposable income
- G goes down
- Investment increases

Reduction in government spending

- Short run
 - Decrease in output
 - May lead to decrease in investment (ambiguous)
- Long run
 - Output returns to natural level
 - Interest rate is lower
 - Increase in investment

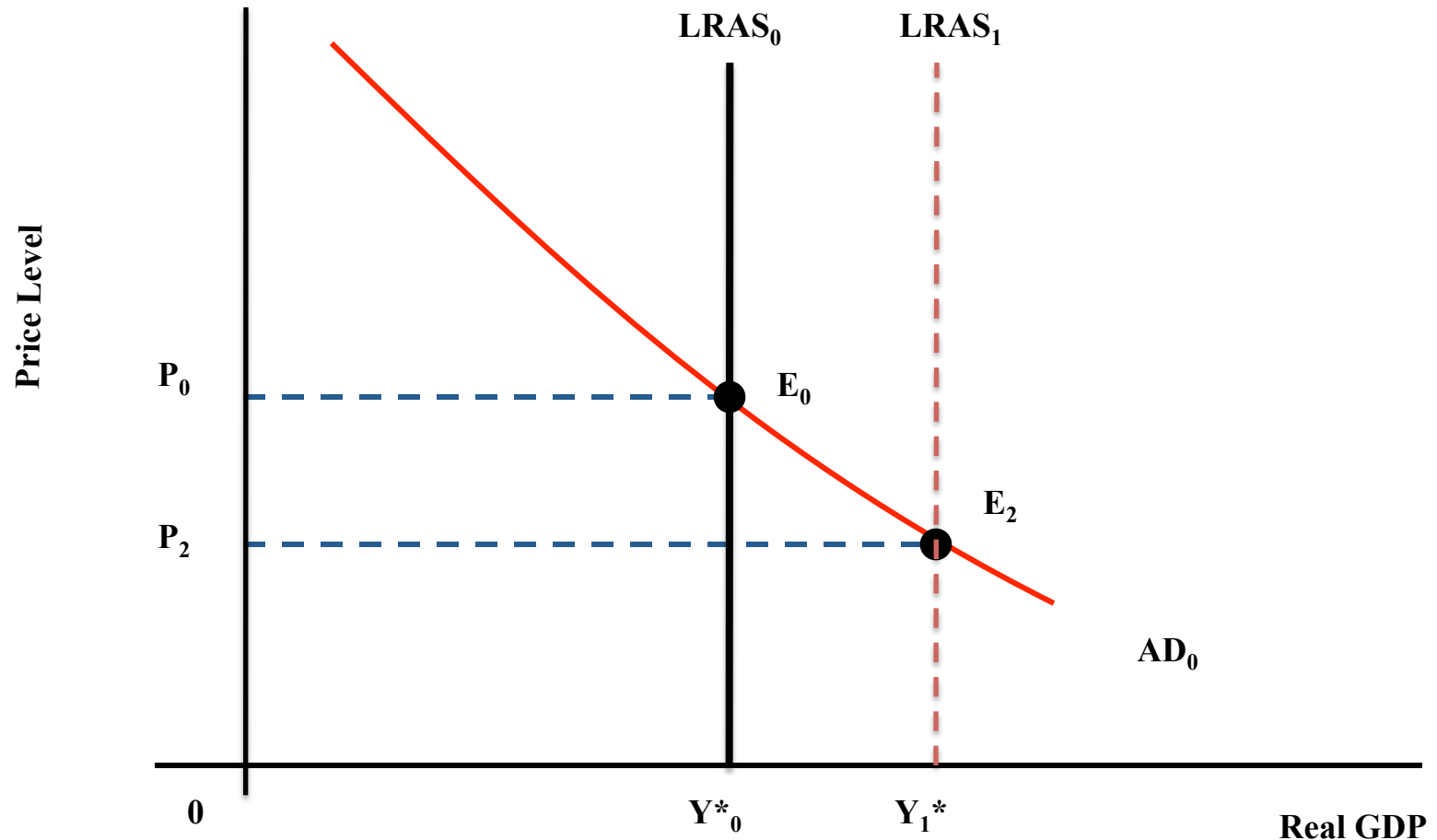
The Oil Prices

- Analyze the impact of a permanent decrease in the oil prices on the economy in the short run and in the long run.
- (Think 5 mins)

Decrease in oil prices

- Short run:
 - Reduction in price of an intermediate input
 - AS curve shifts to the right
- Long run
 - Positive impact on long run output

Permanent decrease in the oil prices



Summary

	<i>Short Run</i>			<i>Long Run</i>		
	Output Level	Interest Rate	Price Level	Output Level	Interest Rate	Price Level
Monetary expansion	Increase	Decrease	Increase (small)	No change	No change	Increase
Deficit reduction	Decrease	Decrease	Decrease (small)	No change	Decrease	Decrease
Decrease in oil price	Increase	Decrease	Decrease	Increase	Decrease	Decrease

Table from: Blanchard, Macroeconomics, 5th edition