

DISCUSSION QUESTION

Name:

Instructor:

Course:

On June 29, 2015, most major stock market indexes around the world experienced significant declines. In the U.S., the Standard & Poor's-500 stock index fell 2.09%. This was not only the largest decline in 2015, it also wiped out all of the gains for the year and cost investors more than \$250 billion in lost equity. The primary reason for these declines was concern over a Greek debt crisis and the potential that Greece will be forced to exit the Euro (the European Union currency). Greece is not a major trading partner with the U.S. The total value of all imports and exports between the U.S. and Greece in 2014 was equal to approximately \$1.8 billion. Sources: Greek debt crisis: <http://nyti.ms/1HuLvNh>

Balance of trade statistics: <https://www.census.gov/foreign-trade/balance/c4840.html>

Why would a Greek default impact U.S. investors and potentially impact the entire U.S. economy? Why wouldn't the impact be confined to Greece or to the Eurozone?

PEER GROUP PROBLEM SOLVING

Name:

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Suppose an economy's aggregate demand function is given by (in billions):

$$Y = 19,000 - 25,000\pi$$

Where Y is output and π is inflation. The initial inflation rate is 0.05 (5%). Potential output is 18,000.

- a) What is the output level in the short-run? What does the output gap equal? Is the output gap expansionary or recessionary?

- b) According to the AS-AD model, how will the economy get back to its potential level of output in the long-run?

- c) What is the inflation rate in the long run equilibrium (when output is at its potential level)?

IN-CLASS EXPERIMENT / ACTIVE EXERCISE

Have students form groups of four or five and consider the following:

The U.S. economy has had periods of relatively high or low inflation and unemployment. Use the AS-AD model to explain the following events. For each scenario, assume initial short-run equilibrium in the AS-AD model. Which curve (the AS or AD) will shift to produce these conditions? It may be helpful for students to draw separate graphs for each scenario.

- a) In the late 1960s, the Vietnam War led to an economic condition of relatively high inflation and low unemployment.
- b) In the 1970s, the Organization of Petroleum Exporting Countries (OPEC) instituted an oil embargo to the U.S. which led to high inflation and high unemployment.
- c) In the late 1990s, the IT revolution began to take place, resulting in relatively low inflation and low unemployment.
- d) The Great Recession began in the late 2000s, leading to relatively low inflation and high unemployment.

SOLUTIONS AND INSTRUCTOR NOTES

Discussion Question

On June 29, 2015, most major stock market indexes around the world experienced significant declines. In the U.S., the Standard & Poor's-500 stock index fell 2.09%. This was not only the largest decline in 2015, it also wiped out all of the gains for the year and cost investors more than \$250 billion in lost equity. The primary reason for these declines was concern over a Greek debt crisis and the potential that Greece will be forced to exit the Euro (the European Union currency). Greece is not a major trading partner with the U.S. The total value of all imports and exports between the U.S. and Greece in 2014 was equal to approximately \$1.8 billion. Sources: Greek debt crisis: <http://nyti.ms/1HuLvNh>

Balance of trade statistics: <https://www.census.gov/foreign-trade/balance/c4840.html>

Why would a Greek default impact U.S. investors and potentially impact the entire U.S. economy? Why wouldn't the impact be confined to Greece or to the Eurozone?

Greece, like the U.S., is a part of the globalized economy. A Greek default would impact earnings and asset balances for domestic and foreign banks exposed to Greek debt and Greek equities. This could result in a tightening of credit, decreased liquidity in the financial system, and broad losses in the financial markets. This would directly impact the U.S. economy through decreased investment and a negative wealth effect.

Peer Group Problem Solving

Suppose an economy's aggregate demand function is given by (in billions):

$$Y = 19,000 - 25,000\pi$$

Where Y is output and π is inflation. The initial inflation rate is 0.05 (5%). Potential output is 18,000.

- a) What is the output level in the short-run? What does the output gap equal? Is the output gap expansionary or recessionary?

The short run output is found by substituting the inflation rate (5%) into the AD equation. Doing this, we arrive at:

$$Y = 19,000 - 25,000 \times 0.05$$

$$Y = 19,000 - 1,250$$

$$Y^* = 17,750$$

Because potential output is 18,000 there is a recessionary output gap equal to 250.

- b) According to the AS-AD model, how will the economy get back to its potential level of output in the long-run?

The AS-AD model predicts that when there is a recessionary output gap, there will be a decrease in inflation, which will cause the economy to move downward along the AD

curve (due to the interest rate, wealth, and net export effects) until it reaches the potential level.

- c) What is the inflation rate in the long-run equilibrium (when output is at its potential level)?

In the long run, the equilibrium inflation rate and output level are given where AD equals the potential output level. This is found by substituting the potential output (18,000) into the AD equation.

$$Y = 19,000 - 25,000\pi$$

$$18,000 = 19,000 - 25,000\pi$$

$$-1000 = -25,000\pi$$

$$\pi = 0.04$$

Thus, inflation is 4% in long-run equilibrium.

In-Class Experiment / Active Exercise

Have students form groups of four or five and consider the following:

The U.S. economy has had periods of relatively high or low inflation and unemployment. Use the AS-AD model to explain the following events. For each scenario, assume initial short-run equilibrium in the AS-AD model. Which curve (the AS or AD) will shift to produce these conditions? It may be helpful for students to draw separate graphs for each scenario.

The purpose of this activity is to get students to consider how shifts in AD and AS affect inflation and unemployment. After students have had approximately five minutes to consider and discuss the questions ask for volunteers to discuss their answers in front of the class or call on groups randomly. Here are some things to consider for each question:

- a) In the late 1960s, the Vietnam War led to an economic condition of relatively high inflation and low unemployment.

This is consistent with a rightward shift of the AD curve. As AD rises, the price level rises and unemployment falls.

- b) In the 1970s, the Organization of Petroleum Exporting Countries (OPEC) instituted an oil embargo to the U.S. which led to high inflation and high unemployment.

This is consistent with a leftward shift of the AS curve. High oil prices were a major contributor to a decreasing AS Curve.

- c) In the late 1990s, the IT revolution began to take place, resulting in relatively low inflation and low unemployment.

This is consistent with a rightward shift of the AS curve. The information-technology boom was a major contributor to an increasing AS Curve.

- d) The Great Recession began in the late 2000s, leading to relatively low inflation and high unemployment.

This is consistent with a leftward shift of the AD curve. The Financial Crisis was a major contributor to a decreasing AD Curve.

For more in-class experiment and active learning ideas, visit www.econedactive.com.