# chapter 17 (33)

## Macroeconomics: Events and Ideas

## Chapter Objectives

Students will learn in this chapter:

- Why classical macroeconomics wasn't adequate for the problems posed by the Great Depression.
- How Keynes and the experience of the Great Depression legitimized macroeconomic policy activism.
- What monetarism is and its views about the limits of discretionary monetary policy.
- How challenges led to a revision of Keynesian ideas and the emergence of the new classical macroeconomics.
- The elements of the modern consensus, and the main remaining disputes.

## Chapter Outline

**Opening Example:** The opposing points of view prevailing before and during the Great Depression regarding the ability of monetary policy to move an economy out of a recession or a depression, are used to contrast the current consensus among economists of the effectiveness of monetary policy.

### I. Classical Macroeconomics

**A.** Money and the Price Level

1. The classical macroeconomic model emphasized the long-run effects of monetary policy on the aggregate price level, and ignored the short-run effects on aggregate output.

**B.** The Business Cycle

1. The quantitative measurement of business cycles was pioneered by the American economist Wesley Mitchell during the first quarter of the 1900s.
2. At the time of the Great Depression there was no consensus among economists as to what types of policies should be used to move the economy out if its slump.

### II. The Great Depression and the Keynesian Revolution

**A.** Keynes's Theory

1. *Definition*: The school of thought that emerged out of the works of John Maynard Keynes is known as **Keynesian economics**.

2. In 1936 Keynes's book, *The General Theory of Employment, Interest, and Money*, was published, outlining his explanation of the factors that led to the Great Depression.
3. Keynesian macroeconomic theory assumes that the short-run aggregate supply curve is positively sloped, while classical macroeconomic theory assumes that the short-run aggregate demand curve is vertical.
4. According to Keynesian economic theory, changes in the money supply and changes in fiscal policy can cause the aggregate demand curve to shift, thus affecting aggregate output, as well as the aggregate price level in the short run.

**B.** Policy to Fight Recessions

1. *Definition*: **Macroeconomic policy activism** is the use of monetary and fiscal policy to smooth out the business cycle.
2. Keynesian economics provides a theoretical basis for the use of monetary and fiscal policies to affect the state of the macroeconomy.
3. Today, there is broad consensus among economists about the usefulness of monetary and fiscal policies to alter the state of the business cycle.

## III. Challenges to Keynesian Economics

**A.** The Revival of Monetary Policy

1. In 1963, Milton Friedman and Anna Schwartz published their book, *A Monetary History of the United States, 1867–1960*, which showed that, historically, business cycles in the United States had been affected by fluctuations in the money supply.
2. The research of Friedman and Schwartz persuaded many economists to believe that monetary policy should play an important role in managing the economy.

**B.** Monetarism

1. *Definition*: **Monetarism** asserted that GDP will grow steadily if the money supply grows steadily.
2. Following the publication of *A Monetary History of the United States* in 1963, Milton Friedman led a movement aimed at eliminating macroeconomic policy activism and maintaining the importance of monetary policy.
3. *Definition*: When the central bank changes interest rates or the money supply based on its assessment of the state of the economy, it is engaging in **discretionary monetary policy**.
4. *Definition*: A **monetary policy rule** is a formula that determines the central bank's actions, such as targeting a slow, steady rate of growth of the money supply.
5. *Definition:* The **velocity of money** is the ratio of nominal GDP to the money supply.

**C.** Inflation and the Natural Rate of Unemployment

1. Milton Friedman, as well as other economists, claimed that the trade-off between unemployment and inflation would not hold true over an extended period of rising prices, since once inflation was embedded in peoples' expectations, inflation would continue even with high unemployment. This is known as the **natural rate hypothesis,** or the nonaccelerating inflation rate of unemployment.

2. The natural rate hypothesis gained support among economists after it successfully explained the high rates of unemployment and inflation that occurred simultaneously in the United States in the 1970s.
3. The natural rate hypothesis limits the goals that can be achieved with macroeconomic policies.

D. The Political Business Cycle

1. *Definition*: A **political business cycle** results when politicians use macroeconomic policies to serve political ends.
2. In an effort to increase the probability of gaining reelection some incumbent politicians in the United States have sought to use expansionary macroeconomic policies to lower the unemployment rate in an election year, which results in a higher rate of inflation following the election.

**IV. Rational Expectations, Real Business Cycles, and New Classical Macroeconomics**

A. *Definition*: **New classical macroeconomics** is an approach to the business cycle that returns to the classical view, that shifts in the aggregate demand curve affect only the aggregate price level, and not aggregate output.

B. Rational Expectations

1. *Definition*: **Rational expectations** is the view that individuals and firms make decisions optimally, using all available information.

C. Real Business Cycles

1. *Definition*: According to **real business cycle theory**, fluctuations in the rate of growth of total factor productivity cause the business cycle.

**V. The Modern Consensus**

A. There is strong consensus among economists and other policy makers that while monetary policy is effective in stabilizing the economy, it cannot be used to reduce the unemployment rate below the natural rate.

B. There is broad consensus among economists and other policy makers that with the exception of extraordinary situations, discretionary fiscal policy should not be used.

C. There is strong consensus among economists and other policy makers that central banks should be independent of the government.

D. There is little consensus as to whether central banks should have formal inflation targets, what these targets should be, and how to deal with asset prices.

# Teaching Tips

## Classical Macroeconomics

### *Creating Student Interest*

Ask students to recall one of the most famous classical economists, Adam Smith. Explain to students that the classical macroeconomic theories that prevailed prior to the introduction of Keynesian economics were based on the free-market concepts extolled centuries earlier by Adam Smith.

### *Presenting the Material*

In presenting the classical macroeconomic model, emphasize the crucial assumption of flexible wages and prices in the economy. Also discuss that while prior to the 1930s most economists believed that changes in the money supply did affect short-run aggregate output and prices, they tended to put very little emphasis on short-run economic fluctuations. Finally, explain that while economists and other policy makers were aware that the economy did not grow smoothly over time, they had not formally begun to track the business cycle until after the 1920s. Yet, despite the ability to discern that the economy was in a severe recession and later fell into a depression in the late 1920s, which lasted through the 1930s, economists were not in consensus as to how to respond to this economic slowdown.

## The Great Depression and the Keynesian Revolution

### *Creating Student Interest*

The nature of macroeconomics is that, if a currently accepted theory fails to adequately explain present reality, this model is abandoned for the next new theory. This was certainly the case when the classical model was abandoned in favor of the Keynesian model after the classical model failed to explain the occurrence of the Great Depression.

### *Presenting the Material*

Discuss the differences in the short-run aggregate supply curve in the classical model and the Keynesian model. Demonstrate graphically the differing impacts of a change in aggregate demand in the short run, using both models. Also discuss the concept of macroeconomic policy activism and stress the fact that the Keynesian macroeconomic model, unlike the classical macroeconomic model, provides strong justification for macroeconomic policy activism.

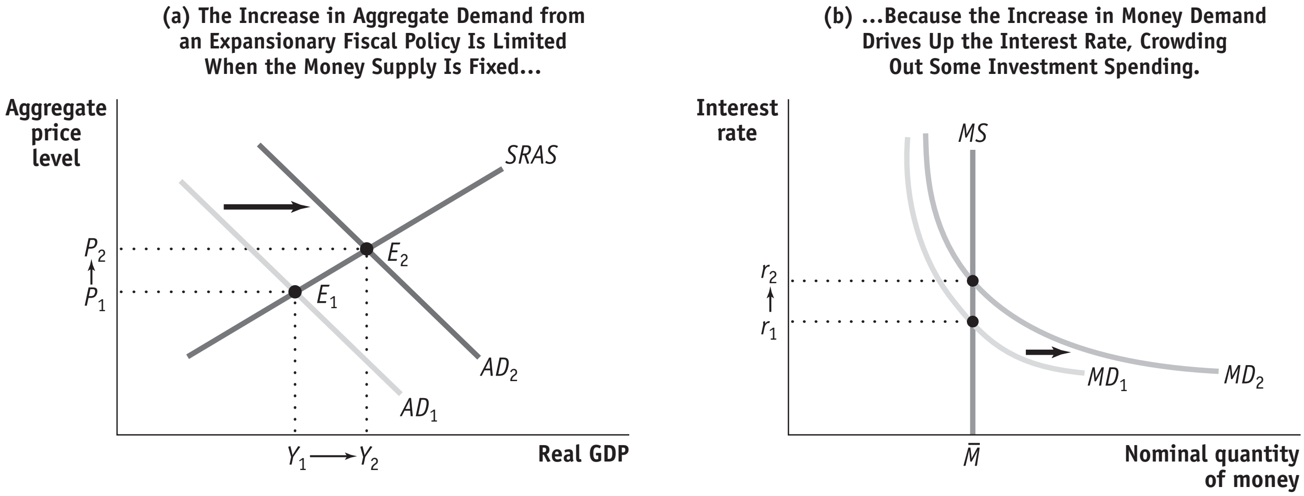
## Challenges to Keynesian Economics

### *Creating Student Interest*

Ask students if they know who Milton Friedman is and why he is considered an important economist. Provide students with background on Friedman, such as the fact that he pioneered the study of monetarism, won the Nobel Prize in economics in 1976, and writes extensively on the benefits of free markets to consumers and businesses.

### *Presenting the Material*

Discuss the challenge monetarism posed to Keynesian economic theory in the 1960s as well as the concept of *monetarism*. Also present graphical analysis of the effect of expansionary fiscal policy when the money supply is fixed, as shown in panels (a) and (b) in Figure 17-4 (Figure 33-4) in the text.




It is also important to explain the differences between discretionary monetary policy and a monetary policy rule followed by the Fed. Finally, discuss the historical relationship between the rate of inflation and the natural rate of unemployment, as well as the use of macroeconomic policies to serve political ends, also known as the political business cycle.

## Rational Expectations, Real Business Cycles, and New Classical Macroeconomics

### *Creating Student Interest*

Introduce students to the concept of rational expectations by asking them whether before making an important decision that will impact some variables in the future, they would look at only previous outcomes of that variable, or also take into consideration all other relevant information. Clearly, better choices can be made using all available information. Explain that, in a very similar way, the macroeconomic theory known as *rational expectations* assumes that all individuals and firms make decisions optimally by using all available information.

### *Presenting the Material*

This section outlines various macroeconomic theories that developed in response to various challenges made to the Keynesian model in the 1950s and 1960s. Begin by defining the term *new classical macroeconomics* and explain how it relates to the business cycle and the classical macroeconomic view that shifts in the aggregate demand curve affect only the aggregate price level, not output. Also discuss the concepts of rational expectations and real business cycle theory as yet two more post-Keynesian macroeconomic models.

## The Modern Consensus

### *Creating Student Interest*

Ask students to vote for the macroeconomic theory they judge the best to be followed. Record the students' choices on the board and determine if there is consensus among these votes. Explain that it is often very hard to have consensus when evaluating macroeconomic theories.

### *Presenting the Material*

The discussion of modern consensus on macroeconomic policy is greatly facilitated by Table 17-1 (Table 33-1) in the text. It provides a quick summary of how several key issues are addressed by classical macroeconomic theory, Keynesian macroeconomics, and monetarism, along with the modern consensus. When covering the topic of discretionary monetary policy discuss the topic of inflation targeting and how policy makers deal with changes in asset prices.

**Five Key Questions About Macroeconomic Policy**

| | Classical macroeconomics | Keynesian macroeconomics | Monetarism | Modern consensus |
|---|---|---|---|---|
| Is expansionary monetary policy helpful in fighting recessions? | No | Not very | Yes | Yes, except in special circumstances |
| Is fiscal policy effective in fighting recessions? | No | Yes | No | Yes |
| Can monetary and/or fiscal policy reduce unemployment in the long run? | No | Yes | No | No |
| Should fiscal policy be used in a discretionary way? | No | Yes | No | No, except in special circumstances |
| Should monetary policy be used in a discretionary way? | No | Yes | No | Still in dispute |

## Common Student Pitfalls

- **The shape of a business cycle.** Students may mistakenly believe that the business cycle typically takes the shape of a sine curve that has a regular period and high amplitude. In other words, it has ups and downs that are equal in magnitude and longevity. This is usually not the case. Show students a graph of real GDP over time, to make it clear that actual business cycles in the United States do not possess the deep peaks and valleys of a sine curve.
- **Where do theories come from?** Students may think that new economic theories simply appear out of thin air. Explain it is usually the case that economic researchers develop new theories in response to the fact that the prevailing macroeconomic theory no longer applies to current economic conditions and data.

## Case Studies in the Text

### Economics in Action

*When Did the Business Cycle Begin?*—This EIA looks at the chronology of past U.S. business cycles and explains the reasons why official data goes back only to 1854.

Ask students the following questions:

1. What group of researchers officially studies the U.S. business cycle? (Answer: The National Bureau of Economic Research, established in 1920 by economist Wesley Mitchell, is the official group that tracks the business cycle in the United States.)
2. How far back in time has the National Bureau of Economic Research tracked the U.S. business cycle? (Answer: The National Bureau of

Economic Research has tracked the U.S. business cycle back to 1854. There are constraints to how far back in time the business cycle can be analyzed, primarily due to limited data, inaccuracy of data, and the infrequency of business cycles occurring prior to the mid-1850s.)

*The End of the Great Depression*—This EIA explains how expansionary fiscal policy bought about by spending for World War II ended the depression and provided evidence in support of Keynesian policy recommendations.

Ask students the following questions:

1. What policy did many economists think was necessary in order to move the U.S. economy out of the Great Depression? (Answer: In the 1930s, economists believed that large levels of government spending were necessary in order to move the U.S. economy out of the Great Depression.)
2. What was the cause of the large-scale government spending that ultimately moved the U.S. economy out of the Great Depression? (Answer: The extremely large levels of government spending on a military build-up before entering World War II, moved the U.S. economy out of the Great Depression.)

*The Fed's Flirtation With Monetarism*—This EIA chronicles the Fed's move toward monetarism in the 1970s and its move back to discretionary monetary policy in the early 1980s.

Ask students the following questions:

1. What does it mean to say that the Fed turned to monetarism? (Answer: This statement means that the Fed followed the practice of announcing target ranges for several measures of the money supply and it stopped setting targets for interest rates.)
2. When did the Fed turn to Monetarism? (Answer: The Fed turned to monetarism in the late 1970s and early 1980s largely due to the high rate of inflation during this period.)

*Total Factor Productivity and the Business Cycle*—This EIA discusses the relationship between total factor productivity and the business cycle.

Ask students the following questions:

1. Is there complete consensus among economists about the effect of total factor productivity and the state of the business cycle in the United States? (Answer: No, there is no complete consensus among economists about the effect of total factor productivity on the state of the business cycle.)
2. Why is there a lack of complete consensus among economists regarding the real business cycle theory? (Answer: Some economists question, for example, to what extent recessions are caused by lower total-factor productivity growth, or conversely, to what extent lower total factor productivity growth is caused by recessions.)

*After the Bubble*—This EIA uses the stock market bubble that popped in 2001 to present the debate over whether or not the Fed should be concerned about asset prices. The evidence from the stock market bubble did not settle the debate, which once again came up during the housing bubble that popped in 2006.

Ask students the following questions:

1. How did the Fed respond to the plunge in stock prices in 2001 that accompanied the U.S. economy into recession? (Answer: In response to

the recession that began in 2001 and after the plunge in stock prices, the Fed aggressively and repeatedly cut the interest rate in an effort to stimulate the economy.)

2. Why was there concern among economists that the Fed had lowered interest rates too much between 2001 and 2003? (Answer: Economists became concerned when the repeated lowering of interest rates by the Fed between 2001 and 2003 reduced interest rates to just 1%, causing some to fear a liquidity trap.)

## For Inquiring Minds

*The Politics of Keynes*—This FIM explains the relationship (both perceived and real) between Keynes's ideas and political ideology.

*Supply-Side Economics*—This FIM outlines the origins, basic principles, and evidence of the effectiveness of supply-side economics.

# Activities

### **Who Cares About the Business Cycle?** (15 minutes)

Pair students and ask them to formulate a list of three parties in the economy who would be interested in knowing the phase of the business cycle that the economy is in and how they can use this information.

Possible answers:

- Furniture manufacturers want to know if the economy was nearing a recession so they could lower their production of output.
- Laborers want to use the information that the economy is in an expansionary phase of the business cycle to justify their demands for higher wages.
- Investors in the stock market use information regarding a recession to adjust their stock portfolios.
- Economic researchers working for the president want to know what state of the business cycle the economy is in to formulate appropriate economic policies for the economy.

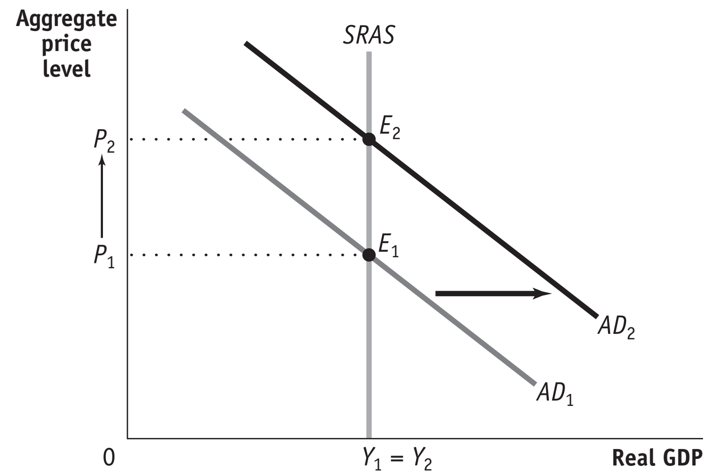
### **Classical versus Keynesian Macroeconomics** (10 minutes)

Pair students and ask them to complete the following exercises.

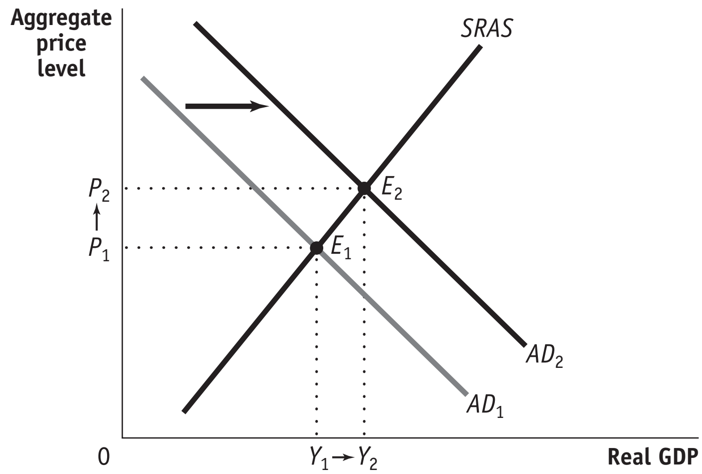
1. From the classical macroeconomic perspective, graphically demonstrate the effect of an increase in government spending on the equilibrium level of aggregate output and the equilibrium aggregate price level in the short run.
2. From the Keynesian macroeconomic perspective, graphically demonstrate the effect of an increase in government spending on the equilibrium level of aggregate output and the equilibrium aggregate price level in the short run.

Answers:

1.




2.




### **Pinning Down Fed Policy Today** (15 minutes)

Pair students and ask them to answer the following questions.

1. Does the Fed follow a policy of monetarism today? Explain your response.
2. Does the Fed engage in discretionary monetary policy today? Explain your response.

Answers:

1. Today, the Fed does not follow a policy of monetarism. This is because the Fed does not set a target rate of growth of the money supply.
2. Today, the Fed does follow discretionary monetary policy. This is because the Fed, especially in recent times, has actively adjusted interest rates and the money supply in response to the state of the macroeconomy.

### **Debating Macroeconomic Theories** (25 minutes)

Divide the class into two teams. Assign one team the task of defending rational expectations as the preferred type of macroeconomic theory. The other team will be assigned the duty of defending real business cycle theory as the superior macroeconomic theory. Also select spokespersons for each team. Allow the teams sufficient time to prepare their arguments and formulate their criteria for evaluation of the theory. Ensure that students have ample time to engage in debate. The instructor will decide the winner of the debate.

### **Comparing Macroeconomic Policies** (15 minutes)

Pair students and ask them to answer the following thought/opinion questions.

1. Ask students to rank each of the five key questions regarding macroeconomic policies listed in Table 17-1 (Table 33-1) in the text from most important (ranked number 1) to least important (ranked number 5) and provide a rationale for their rankings.
2. Should the Fed once again engage in cutting interest rates if stock prices plunge in the future? Explain your response.

Answers:

1. Answers will vary. One possible response is as follows:

| Ranking | Key Question |
|---|---|
| 1 | Is expansionary monetary policy helpful in fighting recessions? |
| 2 | Should monetary policy be used in a discretionary way? |
| 3 | Can monetary and/or fiscal policy reduce unemployment in the long run? |
| 4 | Should fiscal policy be used in a discretionary way? |
| 5 | Is fiscal policy effective in fighting recessions? |

   Rationale for rankings: Government should play a very limited role in the economy.

2. According to one theory, if stock prices should plunge in the future the Fed should cut interest rates in order to stimulate the economy. This should be done to offset the resulting adverse wealth effect on consumption and aggregate demand.

## Web Resources

The following website contains the text of a 2007 speech by vice chairman of the Federal Reserve Donald Kohn on the success and failure of monetary policy since 1950. The speech addresses the effectiveness of the Fed's flirtation with monetarism in the 1970s. Go to: http://www.federalreserve.gov/newsevents/speech/kohn20070921a.htm.