NAME ______________________ DATE ____________ CLASS ________

# Reading Essentials and Study Guide

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## Chapter 13: Economic Instability

**Lesson 1** Business Cycles and Economic Instability

## ESSENTIAL QUESTION

***What are the causes and consequences of instability in the economy?***

## Reading HELPDESK

### Academic Vocabulary

**series** group of related things or events

### Content Vocabulary

**business cycles** systematic changes in real GDP marked by alternating periods of expansion and contraction

**business fluctuations** changes in real GDP marked by alternating periods of expansion and contraction that occur on an irregular basis

**recession** decline in real GDP lasting at least two quarters or more

**peak** point in time when real GDP stops expanding and begins to decline

**trough** point in time when real GDP stops declining and begins to expand

**expansion** period of uninterrupted growth of real GDP, industrial production, real income, and employment lasting for several years or more; recovery from recession

**trend line** growth path the economy would follow if it were not interrupted by alternating periods of recession and recovery

**depression** state of the economy with large numbers of unemployed, declining real incomes, overcapacity in manufacturing plants, and general economic hardship

**depression scrip** currency issued by towns, chambers of commerce, and other civic bodies during the Great Depression of the 1930s

**leading economic indicator** statistical series that normally turns down before the economy turns down or turns up before the economy turns up

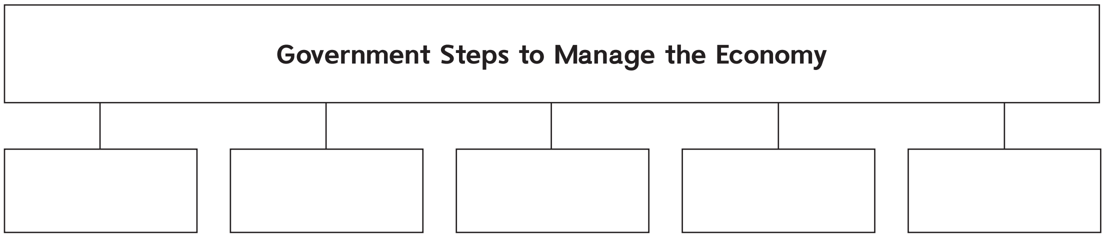
**Dow Jones Industrial Average (DJIA)** an index of 30 representative stocks used to monitor price changes in the overall stock market

**leading economic index (LEI)** monthly statistical series that uses a combination of ten individual indicators to forecast changes in real GDP

**econometric model** macroeconomic expression used to describe how the economy is expected to perform in the future

## TAKING NOTES: *Key Ideas and Details*

Use a graphic organizer like the one below to identify steps the government took after the Great Depression to help avoid another severe downturn.




## Business Cycles: Characteristics and Causes

**Guiding Question** *Why are ups and downs in the business cycle normal?*

*Economic growth is beneficial for almost everyone, but we cannot take it for granted. In the normal course of events, a downturn in the business cycle temporarily interrupts economic growth. The* ***business cycle*** *is the regular ups and downs of real GDP, or GDP measured in constant prices. Irregular rises and falls in real GDP, known as* ***business fluctuations****, interrupt growth too. Economists understand the basic features of an expansion or a recession, the phases of the business cycle. But no one theory seems to explain all past cycles or predict future ones. This is because each seems to be a little different from the last.*

### Phases of the Business Cycle

*A business cycle has two distinct stages. They are both discussed below and illustrated in* ***Figure 13.1.***

- **Recession**—Real GDP declines for at least two quarters in a row, or six months consecutively in a **recession**. It begins when the economy reaches a **peak**—the point where real GDP stops going up. It ends when the economy reaches a **trough**, the turnaround point where real GDP stops going down.
- **Expansion**—After the trough, the economy moves into the second phase, called **expansion**. This is a period of recovery from a recession that involves increases in real GDP, industrial production, real income, and employment, and lasts for several years or more. Expansion continues until the economy reaches a new peak, and a new cycle begins.

If the business cycle did not occur, the economy would follow a steady growth path called a **trend line**. As Figure 13.1 shows, the economy leaves and returns to its trend line as it passes through phases of recession and expansion. Recessions in figures like 13.1 are usually shaded.

If a recession becomes very severe, it may turn into a **depression**, with large numbers of people out of work, acute shortages, and excess capacity in factories. Most experts agree that the Great Depression of the 1930s was the only depression the United States saw during the twentieth century.

## Causes of the Business Cycle

*A business cycle begins when the economy reaches a peak and begins to slide into a recession. Economists have offered several possible causes for the business cycle.*

- **External shocks—**One potential cause is external shocks, such as wars at home or abroad, or an increase in oil prices. Some shocks drive economic growth up: for example, when Great Britain discovered North Sea oil in the 1970s. Other shocks can be negative, as when high oil prices hit the United States in mid-2005. Either way, the shocks may temporarily knock the economy off its long-term growth trend line.
- **Changes in investment spending**—Changes in capital expenditures are also important. When the economy is expanding, businesses expect future sales to be high, so they may build new plants or buy new equipment. That response creates jobs and income for suppliers, but after a while, companies may decide they have expanded enough, or too much, and cut back on spending. The cutbacks can lead to layoffs and a recession.
- **Changes in monetary policy**—Some economists point to the Federal Reserve System's policies on interest rates. For example, loans are easy to get when "easy money" policies (Fed policies that promote low interest rates) are in effect. Easy money encourages the private sector to borrow and invest. This stimulates the economy for a short time. When the stimulus stops, however, the economy stops growing and recession sets in.
- **Fiscal-policy shocks**—Fiscal policy is the federal government's spending and taxation measures. A sudden change in either spending or taxation may affect activity somewhere else in the economy, triggering a recession. For example, threats by elected officials to shut down government activity because of political disagreements can cause uncertainty and worry in the economy.
- **Speculation and "bubbles"**—Expectations about the future have always been important. Speculation over the expected profitability of Internet stocks in 2000 became known as the "dot-com bubble." (A *bubble* is a rush to invest in a particular product or stock because people believe there will be high profits.) When the bubble burst, the stock market crashed. The economy went into a mild recession in 2001. When a housing bubble burst in 2006–07, that dampened consumer buying power, and the Great Recession followed in 2008–09.

## Exploring the Essential Question

*Many events, such as speculation on the value of stocks or even the bursting of the housing or Internet bubbles, directly affect only a limited number of people, but indirectly affect many more. Imagine how dropping a rock into a pond sends ripples far beyond the drop point. How might economic events send ripples throughout the entire economy and bring about recessions?*

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Finally, in many cases, several factors seem to work together to create a cycle. In these situations, a disturbance in one part of the economy seems to have an impact elsewhere, leading to either recession or expansion.

**Reading Progress Check**

***Summarizing*** What are thought to be the causes of business cycles?

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## Business Cycles in the United States

**Guiding Question** *How did the Great Depression change the role of government in the economy?*

*Economic activity in the United States followed an irregular course throughout the twentieth century. The worst downturn was the Great Depression of the 1930s. Business cycles have been milder since then, but they are still important.*

### The Great Depression

*The stock market crash on October 29, 1929 was known as "Black Tuesday." This day marked the beginning of the Great Depression, one of the darkest periods in American history. Between 1929 and 1933, real GDP declined nearly 50 percent, from approximately $103 billion to $55 billion. At the same time, the number of people out of work rose nearly 800 percent—from 1.6 million to 12.8 million. During the worst years of the Depression, one of every four workers was unemployed. Even workers with jobs suffered. The average manufacturing wage plunged from 55 cents an hour in 1929 to 5 cents an hour by 1933.*

Many banks across the country failed. Federal bank-deposit insurance did not exist at the time, so depositors were not protected. To keep panicked people from rushing to pull their money out of the bank, all at once, the federal government declared a "bank holiday" in March 1933. Every bank in the country had to close. Although the bank holiday lasted for only a few days, about a quarter of the banks never reopened.

The Federal Reserve System allowed the size of the money supply to fall by about one-third. Official paper currency was in such short supply that people began using **depression scrip**, an unofficial currency issued by towns, counties, chambers of commerce and other civic bodies. Billions of dollars of this scrip were used to pay teachers, firefighters, police officers, and other city employees.

### Causes of the Great Depression

*A huge gap in the distribution of income was one important cause of the Great Depression. Poverty kept workers from stimulating the economy by spending. The rich, meanwhile, devoted much money to activities like stock-market speculation that did not make the economy grow.*

Easy credit also played a role. Many people borrowed heavily in the late 1920s to buy stocks. Then, as interest rates rose, it was difficult for them to repay their loans. When the crunch came, heavily indebted people had nothing to fall back on.

Global economic conditions also played a part. During the 1920s, the United States made many loans to other countries to help support international trade. When the United States had to pull back on this lending, foreign buyers purchased fewer American goods.

International trade wars made a bad situation even worse. The U.S. put high tariffs, or fees, on foreign goods coming into the U.S. The goal was to protect domestic jobs. Foreign countries then responded with high tariffs on the goods we sold to them, which hurt manufacturing jobs in our industries.

## Recovery and Legislative Reform

*The Great Depression finally ended after ten years, when real GDP returned to its 1929 high. The economy recovered partly because of increased government spending and partly on its own. The massive spending during World War II was another huge stimulus that further boosted the economy after 1940.*

The country was so shaken by the Great Depression that from 1933 to 1940 many reforms were put in place to protect people during such a disaster and to prevent another one. Federal regulations and institutions were established to make working, banking, investing, and retirement safer. There were so many changes that we can't mention them all. Some of the more important ones include:

- **Social Security**—The Social Security Act was passed in 1935 as a way to help people who were retired from work.
- **Minimum wage**—The minimum wage, originally set at 25 cents an hour in 1938, was designed to guarantee most workers a minimum hourly wage.
- **Unemployment programs**—Several new unemployment programs gave relief to people who were temporarily out of work.
- **Securities and Exchange Commission (SEC)**—The SEC was created to require companies that sold securities to fully disclose the truth about their business, the securities they were selling, and the risks involved in investing. This made public stock ownership much safer.
- **Federal Deposit Insurance Corporation (FDIC)**—The FDIC was created to provide modest bank insurance on deposits. Because there was no such insurance during the Great Depression, when banks failed people lost their money.

These reforms seemed to help so much that most economists today think that it would be unlikely, if not impossible, for another Great Depression to occur.

## Business Cycles after World War II

*Business cycles became much more moderate after World War II. Recessions became shorter and expansions lengthened. The average recession lasted about ten months and expansions about fifty-four months.*

After the early 1980s, recessions occurred less often. A record peacetime expansion during the Reagan presidency began in November 1982 and lasted almost eight years. That was followed by a longer and more prosperous expansion during the Clinton years from 1991 to 2001. In fact, this period of uninterrupted economic growth is the longest peacetime expansion in U.S. history. Aside from a very brief and mild recession in 2001, our most recent recession began with the housing market collapse that began in 2007.

## The Great Recession of 2008–2009

*The Great Recession of 2008–09 started in December of 2007 and lasted until June of 2009, a total of 18 months. It was the longest and deepest recession in the United States since the Great Depression. Real GDP dropped about 4.5 percent and did not recover its 2007 high until mid-2011, nearly four years later.*

The impact on workers was perhaps the most devastating of all. The percentage of working people who were unemployed more than doubled between October 2007 and October 2009. More than 8,159,000 people lost their jobs. While the economy added a few thousand jobs every month after the recovery began, it took almost six and a half years before the total number of people employed in December 2007 was reached.

Many people who lost their jobs after October 2007 also lost their houses and their cars. Others were forced to use their retirement savings or went deeply into debt just to cover everyday expenses.

The Great Recession of 2008–2009 created terrible economic havoc, and served as a harsh reminder of how seemingly small changes in the economy can have a painful, widespread effect.

### Reading Progress Check

***Inferring*** What impact did the Great Depression have on the United States?

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# Predicting the Next Business Cycle

**Guiding Question** *How do leading economic indicators help us predict downturns and upturns in the economy?*

*Economists have several ways to predict business cycles. Some use the statistical* ***series*** *known as "leading economic indicators." Others rely on a tool called "econometric modeling."*

## Using Leading Economic Indicators

*A change in even a single statistic may suggest a change in future GDP. For example, people often work fewer hours just before a recession. So the length of the average workweek is considered one of the* ***leading economic indicators****. Another useful measure is the* ***Dow Jones Industrial Average (DJIA)****, made up of 30 stock prices that as a group represent large companies in the United States. Studying the DJIA was useful in predicting the last two recessions, but that hasn't always been true. Because no single measure has been completely reliable, economists like to combine several. The* ***leading economic index (LEI)*** *is a monthly statistical series that uses ten indicators to forecast changes in real GDP and the general direction of the U.S. economy.*

The LEI is shown in **Figure 13.2.** As you can see, the LEI turned down before each of the seven recessions shown. The average time between a dip in the index and the onset of a recession is about eight or nine months. However, the warning time for the Great Recession, maybe because of its severity, was closer to 20 month.

## Using Econometric Models

*An **econometric model** is a mathematical model. It uses algebra equations to describe how the economy acts. Most models start with an "output-expenditure" model:*

$$GDP = C + I + G + (X - M)$$

To see how we use it, suppose that a survey of consumers (the C in the equation) reports that every year households spend a fixed amount of money, called **a**, along with 95 percent of their disposable personal income, or DPI. We could express this as **C = a + .95(DPI)** and then substitute this equation into the output-expenditure model to get:

$$GDP = a + .95(DPI) + I + G + (X - M)$$

This process is repeated until each term in the model is expanded and the equation contains many more variables, or inputs. Forecasters then put in the latest values for the variables on the right side of the equation and solve for GDP.

Over time, actual changes in the economy are compared to the model's predictions. The model is then updated by changing some of the equations. Some models now give reasonably good forecasts for up to nine months in the future.

### Reading Progress Check

***Analyzing*** Why are short-term econometric models more accurate than long-term models?

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