

## >> **Macroeconomics: The Big Picture**

**Krugman/Wells**

# WHAT YOU WILL LEARN IN THIS CHAPTER

- An overview of macroeconomics, the study of the economy as a whole, and how it differs from microeconomics
- The importance of the **business cycle** and why policy-makers seek to diminish the severity of business cycles
- What **long-run growth** is and how it determines a country's standard of living

# WHAT YOU WILL LEARN IN THIS CHAPTER

- The meaning of **inflation** and **deflation** and why **price stability** is preferred
- What is special about the macroeconomics of an **open economy**, an economy that trades goods, services, and assets with other countries

# Macroeconomics vs. Microeconomics

Let's begin by looking more carefully at the difference between microeconomic and macroeconomic questions.

<b>MICROECONOMIC QUESTIONS</b>	<b>MACROECONOMIC QUESTIONS</b>
Go to business school or take a job?	How many people are employed in the economy as a whole?
What determines the salary offered by Citibank to Cherie Camajo, a new Columbia MBA?	What determines the overall salary levels paid to workers in a given year?

# Macroeconomics vs. Microeconomics

<b>MICROECONOMIC QUESTIONS</b>	<b>MACROECONOMIC QUESTIONS</b>
What determines the cost to a university or college of offering a new course?	What determines the overall level of prices in the economy as a whole?
What government policies should be adopted to make it easier for low-income students to attend college?	What government policies should be adopted to promote full employment and growth in the economy as a whole?
What determines whether Citibank opens a new office in Shanghai?	What determines the overall trade in goods, services and financial assets between the U.S. and the rest of the world?

# Macroeconomics vs. Microeconomics

- **Microeconomics** focuses on how decisions are made by individuals and firms and the consequences of those decisions.
- *Example:* How much it would cost for a university or college to offer a new course — the cost of the instructor's salary, the classroom facilities, the class materials, and so on. Having determined the cost, the school can then decide whether or not to offer the course by weighing the costs and benefits.

# Macroeconomics vs. Microeconomics

- **Macroeconomics** examines the *aggregate* behavior of the economy (i.e. how the actions of all the individuals and firms in the economy interact to produce a particular level of economic performance as a whole).
- *Example:* Overall level of prices in the economy (how high or how low they are relative to prices last year) rather than the price of a particular good or service.

# Macroeconomics vs. Microeconomics

- In macroeconomics, the behavior of the whole macroeconomy is, indeed, ***greater than the sum*** of individual actions and market outcomes.
- Example: Paradox of thrift: when families and businesses are worried about the possibility of economic hard times, they prepare by cutting their spending.
- This reduction in spending depresses the economy as consumers spend less and businesses react by laying off workers.
- As a result, families and businesses may end up worse off than if they hadn't tried to act responsibly by cutting their spending.



# Macroeconomics: Theory and Policy

- In a **self-regulating economy**, problems such as unemployment are resolved without government intervention, through the working of the invisible hand.
- According to **Keynesian economics**, economic slumps are caused by inadequate spending and they can be mitigated by government intervention.
- **Monetary policy** uses changes in the quantity of money to alter interest rates and affect overall spending.
- **Fiscal policy** uses changes in government spending and taxes to affect overall spending.

## **Why George W. Bush Wasn't Herbert Hoover**

- Herbert Hoover didn't do much to fight the Great Depression. At the time, conventional wisdom dictated that the government take a hands-off approach to the economy.
- Leading economists, including Joseph Schumpeter, offered similar advice. "Remedial measures which work through money and credit. Policies of this class are particularly apt to produce additional trouble for the future."
- Under President George W. Bush: The 2004 *Economic Report of the President* stated "Strong fiscal policy actions by this Administration and the Congress, together with the Federal Reserve's simulative monetary policy," the report declared, "have softened the impact of the recession and have also put the economy on an upward trajectory."

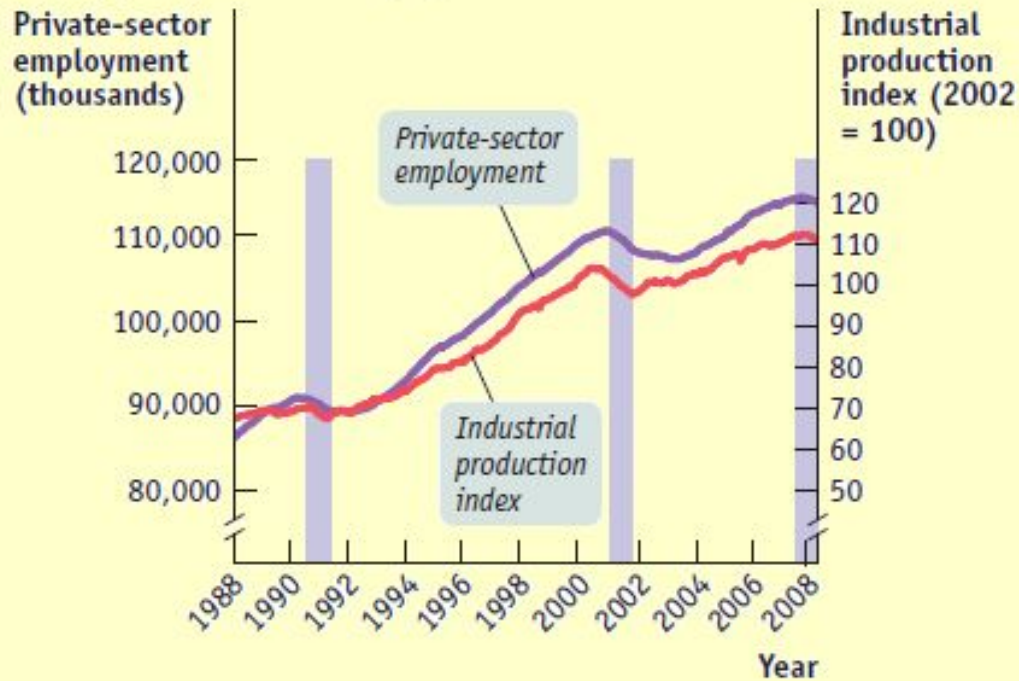
# ▶ ECONOMICS IN ACTION

- The boost to the economy given by fiscal policy and the Federal Reserve's interest rate cuts reduced the severity and duration of the 2001 recession.

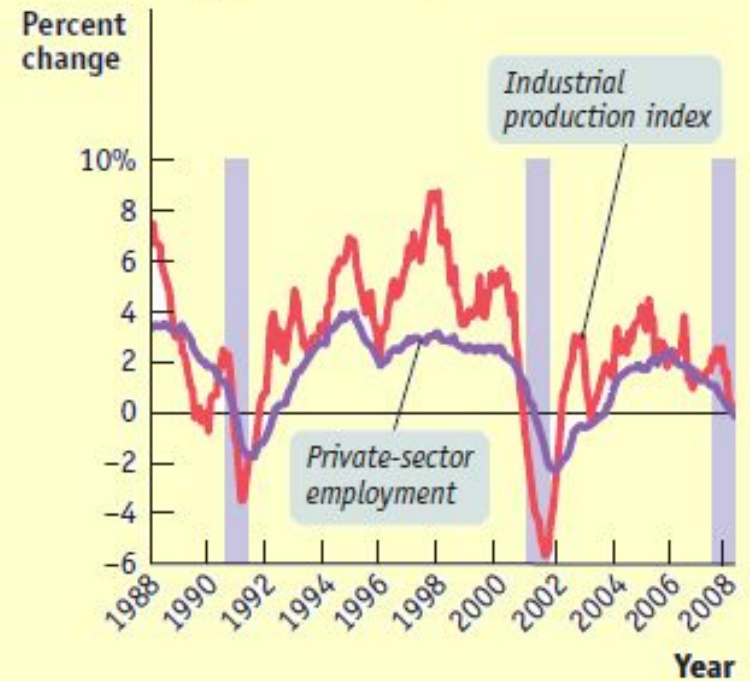


# Growth, Interrupted, 1988-2008

(a) Private-Sector Employment and Industrial Production Index



(b) Percent Change from Year Earlier



# The Business Cycle

- The **business cycle** is the short-run alternation between economic downturns and economic upturns.
- A **depression** is a very deep and prolonged downturn.
- **Recessions** are periods of economic downturns when output and employment are falling.
- **Expansions**, sometimes called *recoveries*, are periods of economic upturns when output and employment are rising.

# The Business Cycle

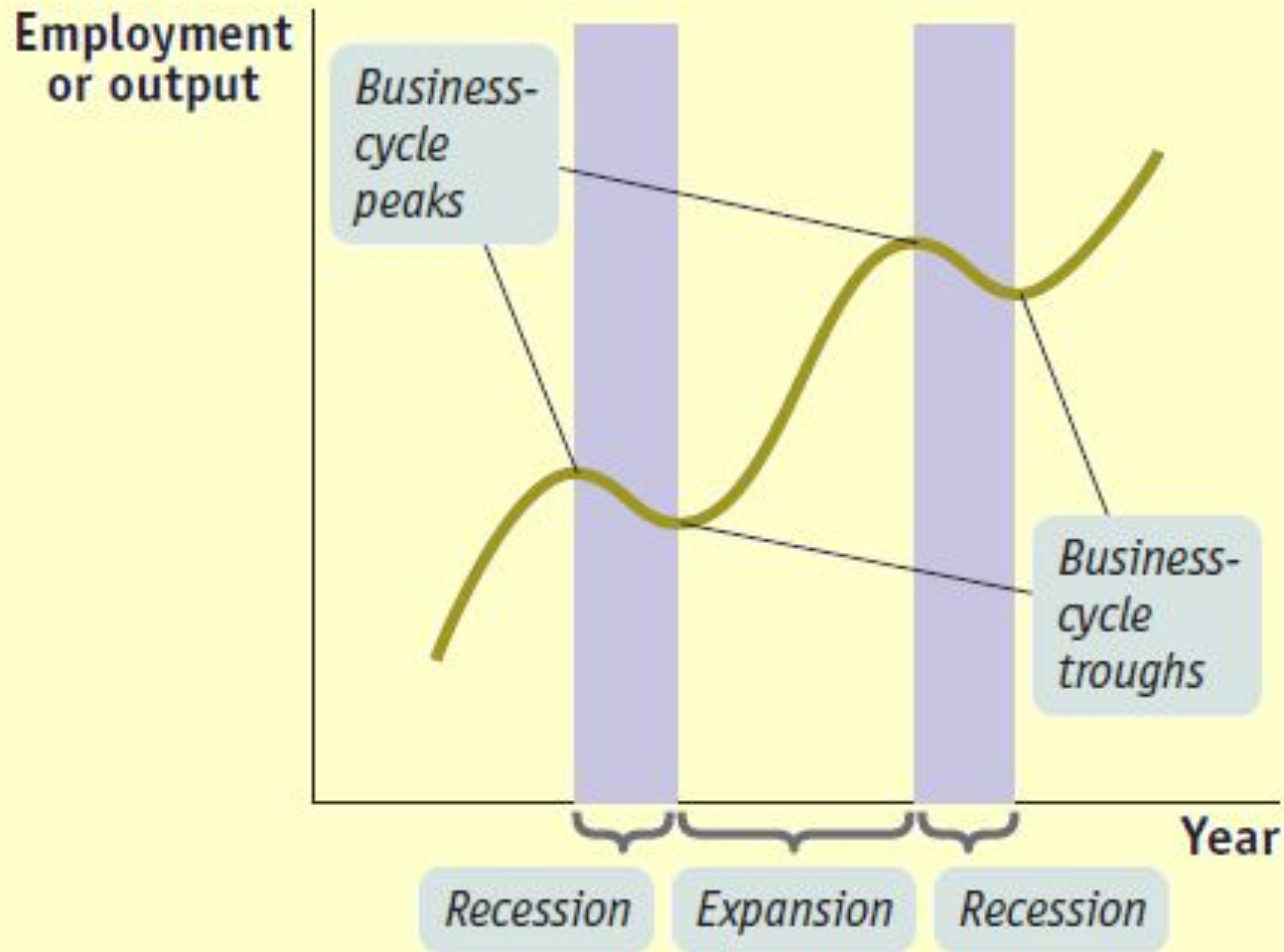
- The point at which the economy turns from expansion to recession is a **business-cycle peak**.
- The point at which the economy turns from recession to expansion is a **business-cycle trough**.

# The Business Cycle

Business-Cycle Peak	Business-Cycle Trough
<i>no prior data available</i>	December 1854
June 1857	December 1858
October 1860	June 1861
April 1865	December 1867
June 1869	December 1870
October 1873	March 1879
March 1882	May 1885
March 1887	April 1888
July 1890	May 1891
January 1893	June 1894
December 1895	June 1897
June 1899	December 1900
September 1902	August 1904
May 1907	June 1908
January 1910	January 1912
January 1913	December 1914
August 1918	March 1919
January 1920	July 1921
May 1923	July 1924
October 1926	November 1927
August 1929	March 1933
May 1937	June 1938
February 1945	October 1945
November 1948	October 1949
July 1953	May 1954
August 1957	April 1958
April 1960	February 1961
December 1969	November 1970
November 1973	March 1975
January 1980	July 1980
July 1981	November 1982
July 1990	March 1991
March 2001	November 2001
December 2007	To be determined



# The Business Cycle





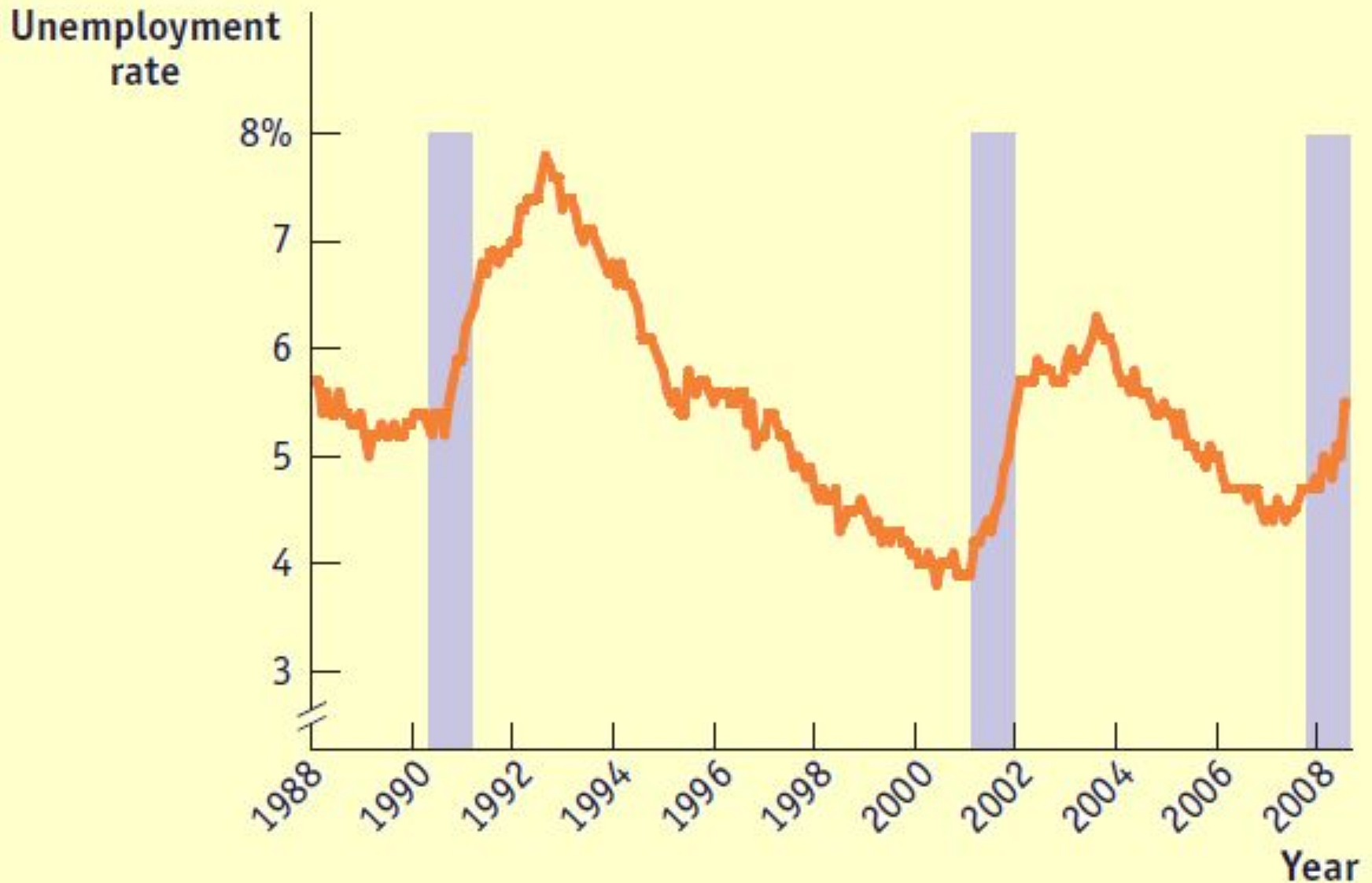
# The Business Cycle

- What happens during a business cycle, and what can be done about it?
- The effects of recessions and expansions on unemployment
- The effects on aggregate output
- The possible role of government policy

### Defining Recessions and Expansions

- In many countries, economists adopt the rule that a recession is a period of at least 6 months, or two quarters, during which aggregate output falls.
  - sometimes too strict
- In the U.S., the task of determining when a recession begins and ends is assigned to an independent panel of experts at the National Bureau of Economic Research (NBER). They look at a number of economic indicators, with the main focus on employment and production, but ultimately the panel makes a judgment call.
  - sometimes controversial

# The U.S. Unemployment Rate



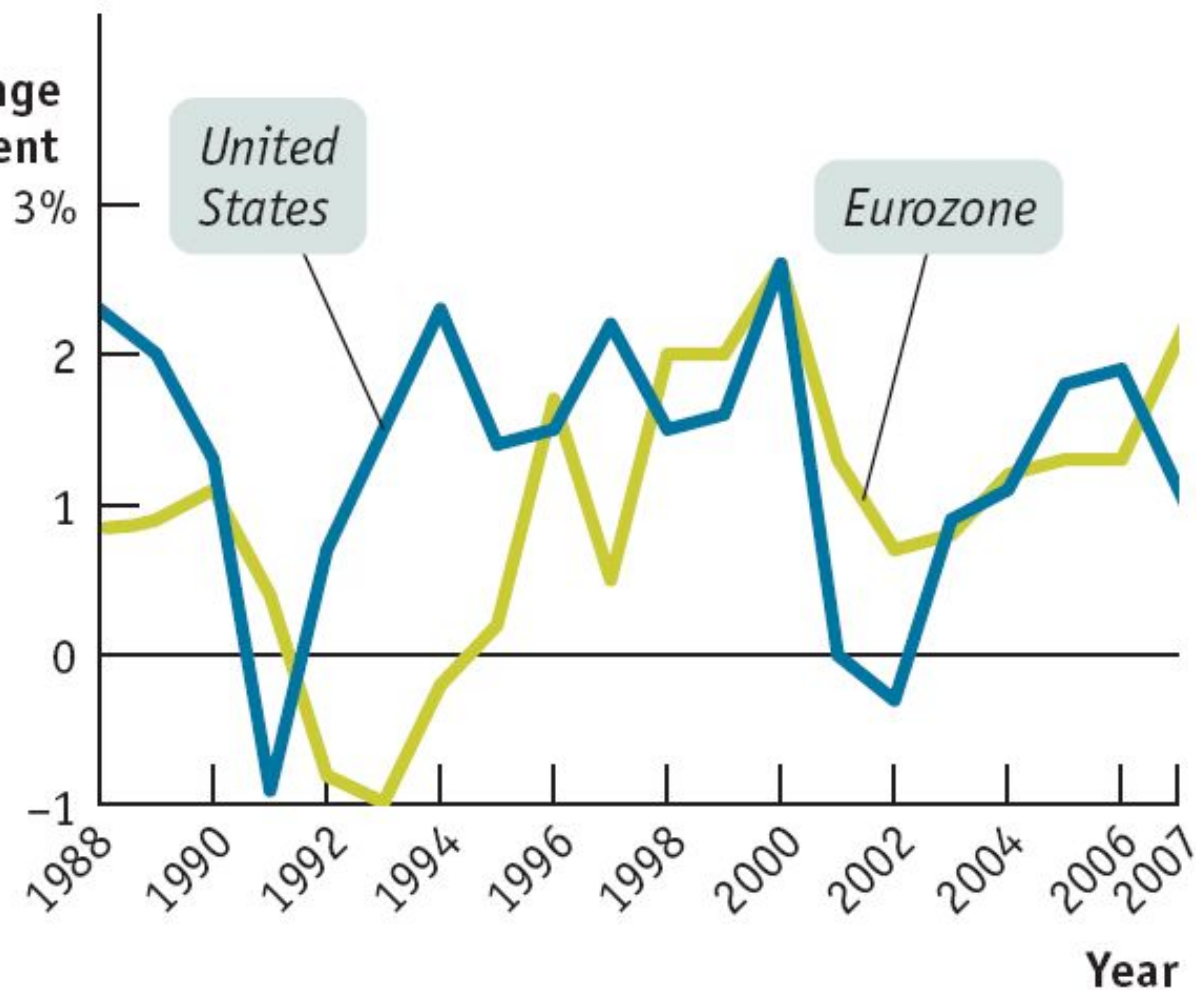
# Taming the Business Cycle

- Policy efforts undertaken to reduce the severity of recessions are called **stabilization policy**.
- One type of stabilization policy is ***monetary policy***: changes in the quantity of money or the interest rate.
- The second type of stabilization policy is ***fiscal policy***: changes in tax policy or government spending, or both.

# GLOBAL COMPARISON

## Global Comparison: International Business Cycles

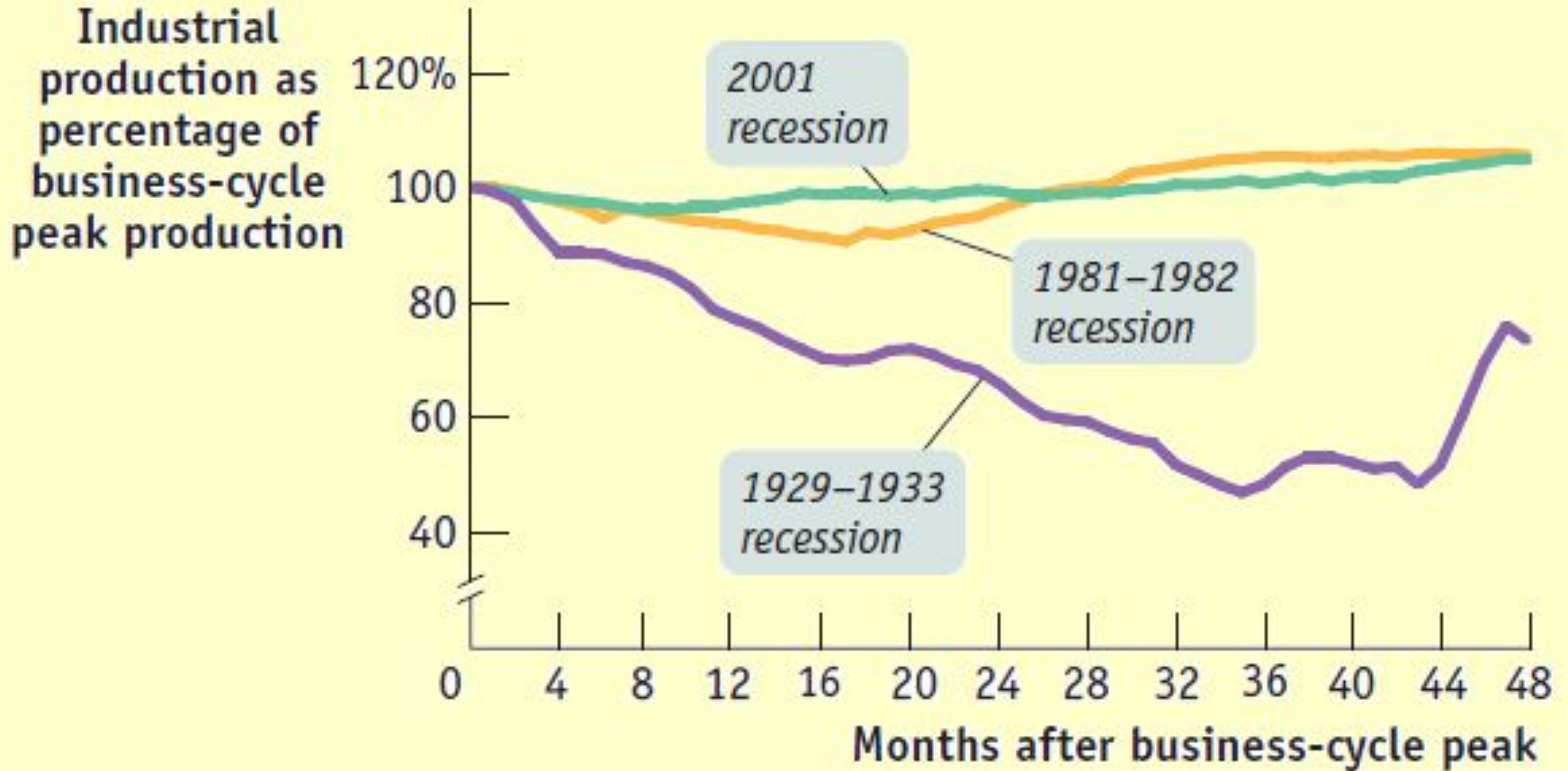
Annual percent change in employment



## **Comparing Recessions**

- In particular, some recessions have been much worse than others.
- Comparing three historical recessions:
  - Terrible slump of 1929–1933
  - 1981–1982 recession—generally considered the worst economic slump since the Great Depression
  - Relatively mild 2001 recession
- These recessions differed in duration: the first lasted 43 months; the second, 16 months; the third, only 8 months.
- Even more important, however, they differed greatly in depth.

## Comparing Recessions



## **Comparing Recessions**

- The 1929–1933 recession hit the economy vastly harder than either of the post–World War II recessions.
- The 1981–1982 recession did eventually reduce industrial production by about 10%, although production then staged a rapid recovery.
- In 2001, the decline in industrial production was very modest.
- By Great Depression standards, or even those of the 1980s, the 2001 recession was very mild.



# Long-Run Economic Growth

- **Long-run economic growth** is the sustained upward trend in the economy's output over time.
- A country can achieve a permanent increase in the standard of living of its citizens only through long-run growth.
- A central concern of macroeconomics is what determines long-run economic growth.

# Long-Run Economic Growth

- In 1905, we find that life for many Americans was startlingly primitive by today's standards.
- Americans have become able to afford many more material goods over time thanks to long-run economic growth.

# Long-Run Economic Growth

Real GDP per capita (2000 dollars)

\$40,000

30,000

20,000

10,000

1900  
2000

1910  
2007

1920

1930

1940

1950

1960

1970

1980

1990

Year



## When Did Long-Run Growth Start?

- Long-run growth is a relatively modern phenomenon.
- From 1000 to 1800, real aggregate output around the world grew less than 0.2% per year, with population rising at about the same rate.
- Economic stagnation meant unchanging living standards. For example, information on prices and wages from such sources as monastery records shows that workers in England weren't significantly better off in the early eighteenth century than they had been five centuries earlier.
- However, long-run economic growth has increased significantly since 1800.
- In the last 50 years or so, real GDP per capita has grown about 3.5% per year.

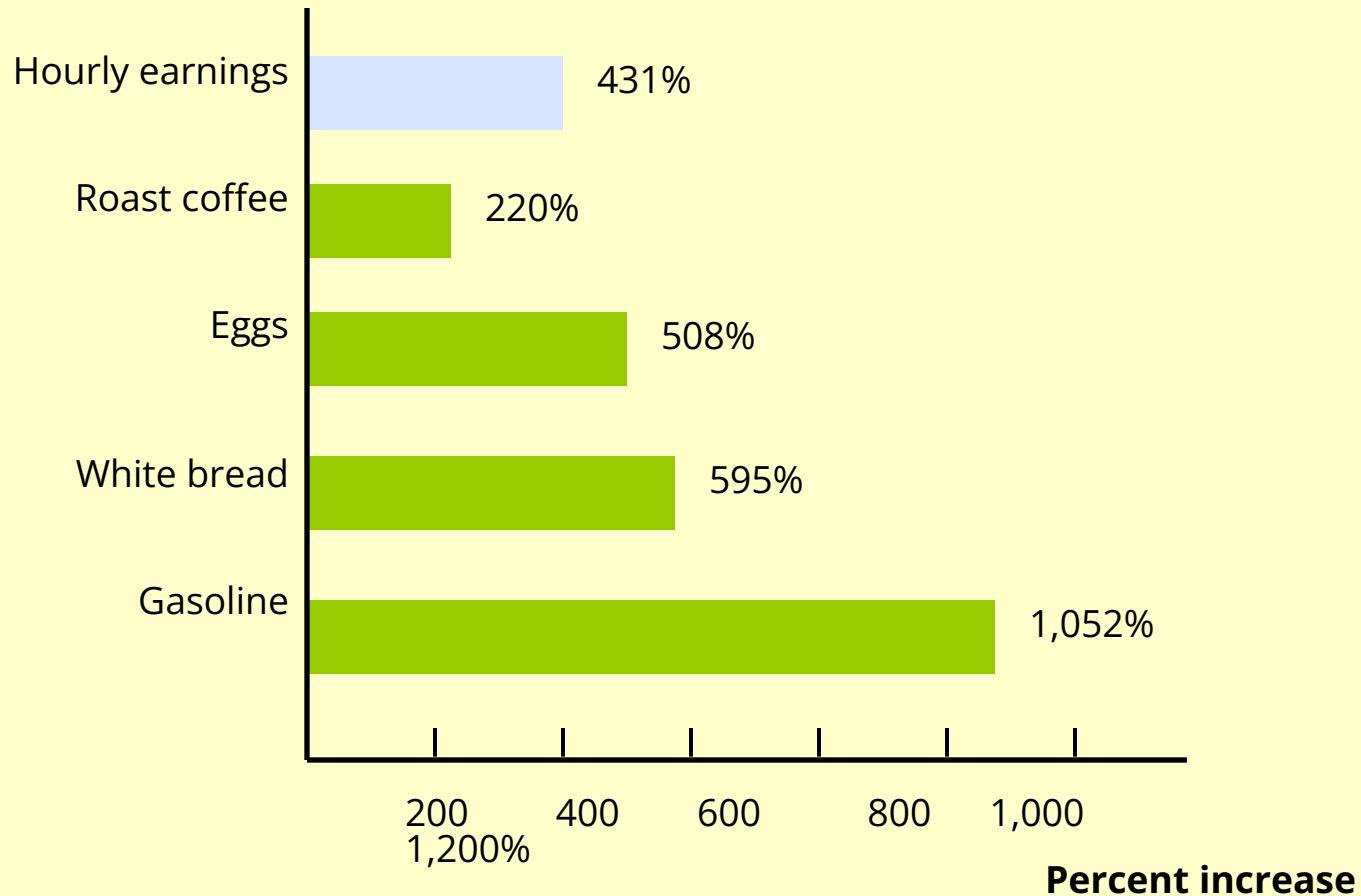
## **A Tale of Two Colonies**

- One of the most informative contrasts in long-run growth is between Canada and Argentina.
- Economic historians believe that the average level of per capita income was about the same in the two countries as late as the 1930s.
- After World War II, however, Argentina's economy performed poorly, largely due to political instability and bad macroeconomic policies.
- Meanwhile, Canada made steady progress. Thanks to the fact that Canada has achieved sustained long-run growth since 1930, but Argentina has not, Canada today has almost as high a standard of living as the United States—and is about three times as rich as Argentina.

# Inflation and Deflation

- A rising aggregate price level is **inflation**.
- A falling aggregate price level is **deflation**.
- The **inflation rate** is the annual percent change in the aggregate price level.
- The economy has **price stability** when the aggregate price level is changing only slowly.

# Inflation and Deflation



## **A Fast (Food) Measure of Inflation**

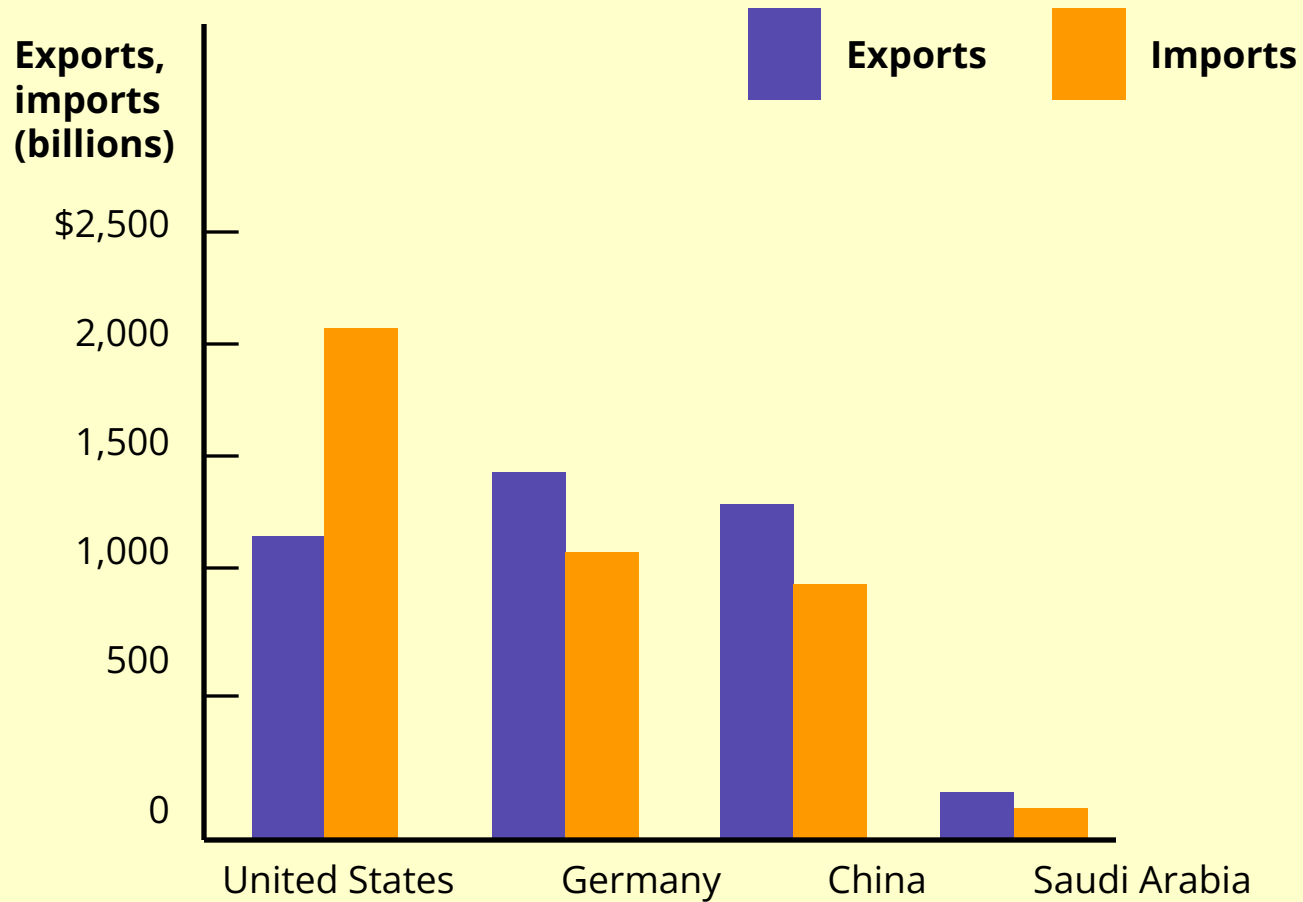
- McDonald's opened in 1954: Hamburgers cost only 15 cents—25 cents with fries.
- Today a hamburger at a typical McDonald's costs five times as much—between \$0.70 and \$0.80.
- Is this too expensive?
- No. In fact, a burger is, compared with other consumer goods, a better bargain than it was in 1954.
- Burger prices have risen about 400%, from \$0.15 to about \$0.75, over the last half century. But the overall consumer price index has increased more than 600%.
- If McDonald's had matched the overall price level increase, a hamburger would now cost between 90 cents and \$1.00.



# International Imbalances

- An **open economy** is an economy that trades goods and services with other countries.
- A country runs a **trade deficit** when the value of goods and services bought from foreigners is more than the value of goods and services it sells to them.
- It runs a **trade surplus** when the value of goods and services bought from foreigners is less than the value of the goods and services it sells to them.

# International Imbalances



## **Estonia's Miraculous Trade Deficit**

- The Soviet Union broke up into 15 independent countries in 1991. Many of these countries experienced hard economic times in the years that followed.
- The small nation of Estonia, however, thrived.
- Economists routinely talk of an Estonian economic “miracle.”
- You might think that such a successful economy would run a big trade surplus, exporting much more than it imports.
- In fact, Estonia runs trade deficits that are small in dollar terms because it's a small country (just 1.3 million people), but are large compared with the size of the economy.
- In fact, relative to the size of its economy, Estonia's trade deficit in 2007 was almost three times that of the United States.

## **Estonia's Miraculous Trade Deficit**

- Why does Estonia run such large trade deficits?
- Because it's so successful!
- The success of the economy has led to high rates of investment, much of it by companies based in other European countries.
- As we've just suggested, trade deficits are high when investment spending is high compared with savings.

1. Macroeconomics is the study of the behavior of the economy as a whole. Macroeconomics differs from microeconomics in the type of questions it tries to answer and in its strong policy focus. **Keynesian economics**, which emerged during the Great Depression, advocates the use of **monetary policy** and **fiscal policy** to fight economic slumps. Prior to the Great Depression, the economy was thought to be **self-regulating**.
2. One key concern of macroeconomics is the **business cycle**, the short-run alternation between **recessions**, periods of falling employment and output, and **expansions**, **periods** of rising employment and output. The point at which expansion turns to recession is a **business-cycle peak**. The point at which recession turns to expansion is a **business-cycle trough**.

3. Another key area of macroeconomic study is **long-run economic growth**, the sustained upward trend in the economy's output over time. Long-run economic growth is the force behind long-term increases in living standards and is important for financing some economic programs.
4. When the prices of most goods and services are rising, so that the overall level of prices is going up, the economy experiences **inflation**. When the overall level of prices is going down, the economy is experiencing **deflation**. In the short run, inflation and deflation are closely related to the business cycle. In the long run, prices tend to reflect changes in the overall quantity of money. Because inflation and deflation can cause problems, economists and policy makers generally aim for **price stability**.

5. Although comparative advantage explains why **open economies** export some things and import others, macroeconomic analysis is needed to explain why countries run **trade surpluses** or **trade deficits**. The determinants of the overall balance between exports and imports lie in decisions about savings and investment spending.

# The End of Chapter 6

coming attraction:

**Chapter 7:**

**Tracking the Macroeconomy**