**CHAPTER 12 MACROECONOMICS: A BIRD’S-EYE VIEW OF THE ECONOMY**

**Answers to Review Questions**

1. The catastrophic economic collapse of the 1930s convinced economists and policymakers that there were major gaps in their understanding of how the economy works, and of how government policy can be used to address problems such as high unemployment. Understanding the Depression also seemed to require studying the economy at the national level, rather than at the level of individual firms, consumers, and markets. Hence the Depression provided a major motivation for the creation of *macroeconomics*, the study of national economic performance and the policies used to improve that performance.

Learning Objective: 12-01

AACSB: Reflective Thinking

Bloom’s: Remember

1. On average, citizens of the United States, together with those of other industrialized nations (such as Japan and the Western European countries), today enjoy a very high standard of living, particularly in comparison with the poorest developing nations. This high standard of living is the result of strong economic growth in the industrialized countries over the past century or more. For example, output per person in the United States is currently about seven times what it was a century ago. This large increase in output per person is reflected in major changes in the way the typical person lives, not only in terms of access to consumer goods, but also in terms of other measures of quality of life, such as levels of health and education.

Learning Objective: 12-01

AACSB: Reflective Thinking

Bloom’s: Remember

1. Average labor productivity is output per employed worker. Because the amount we can consume is determined by the amount that we produce, increases in output per worker are a principal source of improvements in living standards. In the United States, output per employed worker has increased by more than five times in the past century. (The fact that output per person has risen even faster reflects the fact that a higher proportion of the population has a job today than in the past.)

Learning Objective: 12-01

AACSB: Reflective Thinking

Bloom’s: Remember

1. False. Economic growth does not proceed at a constant rate but sometimes slows down or speeds up for a time. Slowdowns in economic growth are called *recessions* (or, in particularly severe cases, *depressions*), and speedups in economic growth are called *expansions* (particularly rapid speedups are called *booms*). The causes of recessions and expansions are an important question in macroeconomics.

Learning Objective: 12-01

AACSB: Reflective Thinking

Bloom’s: Understand

1. False. Objective analysis of the issues can often resolve debates about the likely effects of a proposed policy (*positive* analysis). But objective analysis does not address the question of whether a policy *should* be enacted (a *normative* question). Determining whether a policy should be enacted usually involves debates about personal values (for example, as to whether the likely consequences of the policy are desirable), which cannot be resolved by purely objective analysis.

Learning Objective: 12-02

AACSB: Reflective Thinking

Bloom’s: Understand

1. a. Structural

b. Fiscal

c. Monetary

d. Fiscal

e. Structural

Learning Objective: 12-02

AACSB: Reflective Thinking

Bloom’s: Understand

1. Baseball statistics calculated for the individual, the team, or the league are used to answer different questions. For example, an individual player’s batting average is useful for assessing the player’s performance. The team’s batting average provides information about the performance of the team’s batting coach or of the team management (which assembled the team). League batting statistics give information about the broad effects of changes in rules, styles of play, etc. For example, when league home run totals skyrocketed in 2000, the question arose as to whether the ball had become livelier, or whether other changes (such as league expansion) were responsible for the increased offense. Calculating statistics for groups of players (teams, leagues) is an example of aggregation. As in macroeconomics, aggregation of statistics permits a “bird’s-eye view” of developments and trends.

Learning Objective: 12-03

AACSB: Reflective Thinking

Bloom’s: Understand

#### Answers to Problems

1. Slowing population growth and an increased share of retired people both imply slower growth in the number of people employed. If average labor productivity (output per employed worker) continues to grow at earlier rates, total output will still grow more slowly than before, because of slower growth in the number of workers. If average labor productivity stagnates, then total output will grow very slowly or even decline.

Living standards depend not on total output but on output divided by the total population. Slowing population growth reduces total output but also the number of people who share that output. So slower population growth in itself should not affect living standards. However, a reduced share of the population that is working, all else equal, will reduce output per person, lowering living standards. Slower productivity growth will only worsen this problem.

Learning Objective: 12-01

AACSB: Reflective Thinking

Bloom’s: Understand

1. It is possible, if the decline in average labor productivity (output per worker) is offset by an increased share of the population that is employed. For a simple example, suppose an economy has two people, one of whom is working. The one worker produces 10 units of output, so average labor productivity is 10. Output per person (10/2) is 5. Now suppose that average labor productivity drops to 8 but both people are working. Then total output is 16 and output per person is 8, so average living standards (output per person) rise even though average labor productivity (output per employed worker) has fallen.

Learning Objective: 12-01

AACSB: Reflective Thinking

Bloom’s: Understand

1. Answers will vary.

Learning Objective: 12-01

AACSB: Reflective Thinking

Bloom’s: Understand

1. a. Positive (a statement about what is likely to happen)

b. Normative (a statement about what is likely to happen)

c. Positive

d. Positive

e. Normative (depends on views about the fairness of the tax code)

Learning Objective: 12-02

AACSB: Reflective Thinking

Bloom’s: Understand

1. a. Microeconomist (operations of an individual firm)

b. Microeconomist (behavior of an individual market)

c. Macroeconomist (behavior of the economy as a whole; uses aggregation to study a broad trend)

d. Macroeconomist (behavior of the economy as a whole)

e. Macroeconomist (behavior of a broad macroeconomic aggregate, consumer spending)

Learning Objective: 12-03

AACSB: Reflective Thinking

Bloom’s: Understand