*Macroeconomics, 6e, Global Edition* **(Williamson)**
**Chapter 1   Introduction**

1.1   Multiple-Choice Questions

1) In 2014, the per-capita GDP in the United States, in 2005 dollars, was about
A) $17,500.
B) $27,500.
C) $50,000
D) $47,500.
Answer:  C
LO:  1.2: Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 1914.
Difficulty:  easy
Classification:  concept
AACSB:  application of knowledge

2) Which of the following topics is *NOT* a primary concern of macroeconomists?
A) fluctuations in the level of economic activity
B) differences in standards of living across countries
C) relative wages of skilled and unskilled workers
D) unemployment
Answer:  C
LO:  1.1: State the two focuses of study in macroeconomics, the key differences between microeconomics and macroeconomics, and the similarities between microeconomics
Difficulty:  moderate
Classification:  concept
AACSB:  analytical thinking

3) Primarily, macroeconomists use microeconomic principles to study
A) business cycles and trends in the stock market.
B) long-run economic growth and antitrust policies.
C) trends in the stock market and long-term economic growth.
D) long-run economic growth and business cycles.
Answer:  D
LO:  1.1: State the two focuses of study in macroeconomics, the key differences between microeconomics and macroeconomics, and the similarities between microeconomics
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

4) Which is a question of interest in this book?
A) What causes growth in the long term?
B) How should a labor contract be structured?
C) How should a government be elected?
D) What is the impact of government provided health care?
Answer:  A
LO:  1.1: State the two focuses of study in macroeconomics, the key differences between microeconomics and macroeconomics, and the similarities between microeconomics
Difficulty:  difficult
Classification:  concept
AACSB:  analytical thinking

5) Which is a question of interest in this book?
A) Where is the stock market heading?
B) What is the optimal inflation rate?
C) How are stock options priced?
D) What are commodity futures?
Answer:  B
LO:  1.1: State the two focuses of study in macroeconomics, the key differences between microeconomics and macroeconomics, and the similarities between microeconomics
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

6) Over the course of the twentieth century, the typical American
A) remained equally as rich.
B) became twice as rich.
C) became five times as rich
D) became ten times as rich.
Answer:  D
LO:  1.2: Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 1914.
Difficulty:  easy
Classification:  application
AACSB:  analytical thinking

7) Which of the following assertions is false?
A) The Great Depression was a typical business cycle.
B) Very rapid growth occurred during World War II.
C) Real GDP per capita dipped about 30% during the Great Depression.
D) On average, the U.S. economy grows at a rate of 2.1%.
Answer:  A
LO:  1.2: Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 1914.
Difficulty:  moderate
Classification:  application
AACSB:  application of knowledge

8) The business cycle component of the log of real per-capita GNP is equal to
A) log of actual real GNP - log of trend GNP.
B) log of trend GNP ÷ log of actual real GNP.
C) log of trend GNP - log of actual real GNP.
D) log of actual real GNP ÷ log of trend GNP.
Answer:  A
LO:  1.2: Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 1914.
Difficulty:  easy
Classification:  concept
AACSB:  analytical thinking

9) For the study of economic growth, it is most helpful to examine movements in _____; for the study of business cycles, it is most helpful to examine movements in _____.
A) trend GNP; trend GNP
B) trend GNP; deviations from trend in GNP
C) deviations from trend in GNP; trend GNP
D) deviations from trend in GNP; deviations from trend in GNP
Answer:  B
LO:  1.2: Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 1914.
Difficulty:  difficult
Classification:  application
AACSB:  application of knowledge

10) A useful macroeconomic model
A) is extremely realistic.
B) is simple.
C) never generates testable hypotheses.
D) provides a lot of intricate details.
Answer:  B
LO:  1.3: Explain why models are useful in macroeconomics.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

11) Macroeconomic models are
A) never wrong.
B) accurate descriptions of the economy.
C) simple abstractions of reality.
D) consistent with all economic data.
Answer:  C
LO:  1.3: Explain why models are useful in macroeconomics.
Difficulty:  easy
Classification:  concept
AACSB:  application of knowledge

12) What characterizes a competitive equilibrium?
A) Markets are rationed.
B) Governments stay out of the market.
C) Economic agents are price-takers.
D) It is costly to experiment with policies.
Answer:  C
LO:  1.3: Explain why models are useful in macroeconomics.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

13) What do we assume about households and firms?
A) They act irrationally.
B) They do what the government tells them to do.
C) They look after each other.
D) They optimize.
Answer:  D
LO:  1.3: Explain why models are useful in macroeconomics.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

14) According to the *Lucas critique*, the effects of changes in economic policy
A) can be determined by looking at macroeconomic data.
B) cannot always be predicted by looking at historical macroeconomic relationships.
C) are easy to predict.
D) do not require macroeconomic theory.
Answer:  B
LO:  1.4: Discuss how microeconomic principles are important in constructing useful
macroeconomic models.
Difficulty:  difficult
Classification:  concept
AACSB:  analytical thinking

15) Which aspect of macroeconomics generates the most controversy?
A) economic growth
B) the causes of business cycles
C) supply and demand
D) competitive equilibrium
Answer:  B
LO:  1.5: Explain why there is disagreement among macroeconomists, and what they disagree
about.
Difficulty:  moderate
Classification:  application
AACSB:  application of knowledge

16) According to Keynesian coordination failure theory, the primary causes of business cycles are
A) shocks to aggregate demand.
B) monetary factors.
C) technology shocks.
D) waves of self-fulfilling optimism and pessimism.
Answer:  D
LO:  1.5: Explain why there is disagreement among macroeconomists, and what they disagree about.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

17) The macroeconomic models that are most supportive of the role of government policy aimed at smoothing business cycles are
A) real business cycle models.
B) endogenous growth models.
C) Keynesian models.
D) Solow growth models.
Answer:  C
LO:  1.5: Explain why there is disagreement among macroeconomists, and what they disagree about.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

18) Adam Smith's *Wealth of Nations* emphasized
A) how free markets produce socially efficient outcomes.
B) that Scotland produced several key technological innovations.
C) that the government should intervene to smooth business cycles.
D) the existence of externalities.
Answer:  A
LO:  1.6: List the 12 key ideas that will be covered in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

19) Improvements in a country's standard of living are brought about in the long run by
A) technological progress.
B) growth in the population.
C) constructing more machines and buildings.
D) immigration policy.
Answer:  A
LO:  1.6: List the 12 key ideas that will be covered in this book.
Difficulty:  difficult
Classification:  concept
AACSB:  analytical thinking

20) Tax cuts
A) may have no effect, if people take account of future taxes.
B) always stimulate economic activity.
C) will surely make the government default on its debts.
D) cause the government to borrow less.
Answer:  A
LO:  1.6: List the 12 key ideas that will be covered in this book.
Difficulty:  easy
Classification:  application
AACSB:  application of knowledge

21) Credit markets are
A) bad, as they cause people to accumulate debt.
B) not important for the financial crisis.
C) important, but given too little attention in the past by some macroeconomists.
D) markets that work perfectly.
Answer:  C
LO:  1.6: List the 12 key ideas that will be covered in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

22) Monetary policy in the United States is determined by
A) The Securities Exchange Commission.
B) The United States Treasury.
C) The Federal Reserve System.
D) Wall Street.
Answer:  C
LO:  1.6: List the 12 key ideas that will be covered in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

23) Considering the future
A) is irrelevant to macroeconomics.
B) is key to macroeconomic modelling.
C) has a limited impact on macroeconomic analysis.
D) matters only under special circumstances.
Answer:  B
LO:  1.6: List the 12 key ideas that will be covered in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

24) The Fisher relation is
A) the negative relationship between unemployment and vacancies.
B) trend growth in real GDP.
C) a positive relationship between the nominal interest rate and inflation.
D) the Phillips curve.
Answer: C
LO: 1.6: List the 12 key ideas that will be covered in this book.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge

25) A trade-off between aggregate output and inflation
A) is theoretically possible, but has never been observed in practice.
B) sometimes exists, but is unstable.
C) sometimes exists, and is stable.
D) is not theoretically possible, and is not observed in practice.
Answer: B
LO: 1.6: List the 12 key ideas that will be covered in this book.
Difficulty: moderate
Classification: application
AACSB: analytical thinking

26) A measure of productivity is
A) the interest rate.
B) the inflation rate.
C) aggregate output divided by employment.
D) the growth rate of aggregate output.
Answer: C
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: difficult
Classification: concept
AACSB: application of knowledge

27) Productivity growth in the 2010-2015 period has been
A) as high as at any point since World War II.
B) historically low.
C) twice as high as growth in real GDP.
D) negatively correlated with inflation.
Answer: B
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: easy
Classification: application
AACSB: application of knowledge

28) The unemployment rate in 2015
A) was at its peak for the period 2000-2015.
B) was increasing.
C) was lower than the average unemployment rate from 2000-2015.
D) was at its lowest point since 1990.
Answer:  C
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

29) The Beveridge curve shifted outward during what period?
A) during the Great Depression
B) during the Great Moderation
C) after January 2008
D) between January 2000 and December 2007
Answer:  C
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  difficult
Classification:  concept
AACSB:  analytical thinking

30) The major contributor to the long-run improvement of a country's standard of living is
A) low inflation.
B) growth in government.
C) population growth.
D) technological progress.
Answer:  D
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  easy
Classification:  application
AACSB:  application of knowledge

31) More government spending
A) can compete with private spending and cause crowding out.
B) is always beneficial.
C) lowers the government deficit.
D) increases the government surplus.
Answer:  A
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  analytical thinking

32) Over the long run, taxes and government expenses have
A) remained relatively stable.
B) decreased.
C) increased.
D) drifted apart.
Answer:  C
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

33) In the 2008-09 recession, the government deficit
A) stayed roughly constant.
B) decreased.
C) increased.
D) would have increased if the government had intervened.
Answer:  C
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  moderate
Classification:  application
AACSB:  application of knowledge

34) The period between the 1981-1982 recession and the 2008-2009 recession is
A) the productivity slowdown.
B) the Beveridge controversy.
C) the Great Recession.
D) the Great Moderation.
Answer:  D
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  easy
Classification:  application
AACSB:  analytical thinking

35) The real interest rate is
A) set by the Federal Reserve.
B) equal to the rate of inflation minus the nominal rate of interest.
C) equal to the nominal rate of interest minus the rate of inflation.
D) less important for decision making than the nominal rate of interest.
Answer:  C
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

36) The real interest rate is
A) always positive.
B) always negative.
C) variable.
D) zero.
Answer: C
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: difficult
Classification: concept
AACSB: application of knowledge

37) When there is positive inflation
A) the nominal interest rate is approximately equal to the real interest rate.
B) the real interest rate is greater than the nominal interest rate.
C) the nominal interest rate is greater than the real interest rate.
D) the real interest rate is negative.
Answer: C
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge

38) An increase in energy prices is a likely cause of
A) Great Depression.
B) Korean War inflation.
C) the recession in 1973-1975.
D) the Great Moderation.
Answer: C
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: concept
AACSB: analytical thinking

39) Which period was not a recession in the United States?
A) 1974-1975
B) 1990-1991
C) 1984-1985
D) 2001
Answer: C
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge

40) Which was the deepest recession in the United States *before* the recession of 2008-09?
A) 1978-1979
B) 1981-1982
C) 1990-1991
D) 2001
Answer:  B
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  difficult
Classification:  application
AACSB:  application of knowledge

41) A likely explanation for the 2008-2009 recession is
A) an increase in energy prices.
B) financial market problems.
C) a drastic reduction in government expenses.
D) an increase in taxes.
Answer:  B
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  easy
Classification:  concept
AACSB:  analytical thinking

42) Asymmetric information is:
A) information revealed by economic agents turns out to be wrong.
B) inflation forecasts are systematically to high or too low.
C) some economic agents have more information than others.
D) the government knows less about the economy than households and firms.
Answer:  C
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

43) Interest rate spreads
A) decrease during a financial crisis.
B) are of little concern.
C) reflect risk in credit markets.
D) have been roughly constant over time.
Answer:  C
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

44) Collateral
A) includes the stock of housing.
B) is important for inflation.
C) is a key part of government finance.
D) was not important during the financial crisis.
Answer:  A
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  moderate
Classification:  application
AACSB:  application of knowledge

45) The U.S. current account surplus
A) is higher than in 1960.
B) is irrelevant.
C) is equal to taxes minus government spending.
D) was negative in 2015.
Answer:  D
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  easy
Classification:  concept
AACSB:  application of knowledge

1.2   True/False Questions

1) True or False: Antitrust policy is a key topic of interest for macroeconmists.
Answer:  FALSE
LO:  1.1: State the two focuses of study in macroeconomics, the key differences between microeconomics and macroeconomics, and the similarities between microeconomics
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

2) True or False: The Great Depression was one of the two most important American business cycle events of the twentieth century.
Answer:  TRUE
LO:  1.2: Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 1914.
Difficulty:  moderate
Classification:  application
AACSB:  application of knowledge

3) True or False: Over the twentieth century, growth in per-capita GNP was highest during the 1980s.
Answer: FALSE
LO: 1.2: Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 1914.
Difficulty: difficult
Classification: concept
AACSB: analytical thinking

4) True or False: As an aid in studying business cycles, it helps to separate real GDP per capita into its seasonal and trend components.
Answer: FALSE
LO: 1.2: Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 1914.
Difficulty: easy
Classification: concept
AACSB: application of knowledge

5) True or False: A good macroeconomic model captures all the important details in the U.S. economy.
Answer: FALSE
LO: 1.3: Explain why models are useful in macroeconomics.
Difficulty: moderate
Classification: application
AACSB: analytical thinking

6) True or False: In macroeconomic models, consumers optimize.
Answer: TRUE
LO: 1.3: Explain why models are useful in macroeconomics.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge

7) True or False: The development most responsible for the wide-spread introduction of macroeconomic models built upon solid microeconomic foundations was the work of John Maynard Keynes.
Answer: FALSE
LO: 1.4: Discuss how microeconomic principles are important in constructing useful macroeconomic models.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge

8) True or False: The Lucas critique refers to the disagreement about models of economic growth.
Answer: FALSE
LO: 1.4: Discuss how microeconomic principles are important in constructing useful macroeconomic models.
Difficulty: easy
Classification: application
AACSB: application of knowledge

9) True or False: According to real business cycle theory, the primary causes of business cycles are technology shocks.
Answer: TRUE
LO: 1.5: Explain why there is disagreement among macroeconomists, and what they disagree about.
Difficulty: difficult
Classification: concept
AACSB: application of knowledge

10) True or False: What is produced and consumed in the economy is determined jointly by government policies and the economy's productive capacity.
Answer: FALSE
LO: 1.6: List the 12 key ideas that will be covered in this book.
Difficulty: moderate
Classification: concept
AACSB: analytical thinking

11) True or False: Business cycles are similar, but they can have many causes.
Answer: TRUE
LO: 1.6: List the 12 key ideas that will be covered in this book.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge

12) True or False: A tax cut is not a free lunch.
Answer: TRUE
LO: 1.6: List the 12 key ideas that will be covered in this book.
Difficulty: easy
Classification: application
AACSB: application of knowledge

13) True or False: The Fisher relation is a positive relationship between the deviation of aggregate output from trend and the inflation rate.
Answer: FALSE
LO: 1.6: List the 12 key ideas that will be covered in this book.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge

14) True or False: Unemployment, at the aggregate level, is part of a well-functioning economy.
Answer: TRUE
LO: 1.6: List the 12 key ideas that will be covered in this book.
Difficulty: difficult
Classification: concept
AACSB: analytical thinking

15) True or False: The Beveridge curve is a positive relationship between the inflation rate and the nominal interest rate.
Answer: FALSE
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: application
AACSB: application of knowledge

16) True or False: Unemployment is good from a social point of view because it keeps the least efficient workers out.
Answer: FALSE
LO: 1.6: List the 12 key ideas that will be covered in this book.
Difficulty: easy
Classification: concept
AACSB: application of knowledge

17) True or False: A government deficit occurs when the government spends more than what it gets in taxes.
Answer: TRUE
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge

18) True or False: Government debt is different from individual debt because the government can always tax to reduce it.
Answer: TRUE
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: concept
AACSB: analytical thinking

19) True or False: Real interest rates were negative during most of the 1980s.
Answer: FALSE
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge

20) True or False: The most likely explanation of the recession of 1981-1982 was that it was due to a financial crisis.
Answer: FALSE
LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: application
AACSB: application of knowledge

1.3 Essay Questions

1) Microeconomists and macroeconomists take some common approaches to studying economic problems, but there are also important differences in what these two types of economists do. Discuss.
Answer: At one time macro and micro were approaches in very different ways, but since the 1970s, macroeconomists have adopted an approach in which they build macroeconomic models from microeconomic principles. Thus, the methodological approaches in micro and macro have become more similar over time. However, microeconomists and macroeconomists study very different problems. In microeconomics the focus is on individual economic actors and markets, and how they behave. However, in macroeconomics the focus is on large economic units — countries, governments, central banks — and how they behave.
LO: 1.1: State the two focuses of study in macroeconomics, the key differences between microeconomics and macroeconomics, and the similarities between microeconomics
Difficulty: easy
Classification: concept
AACSB: analytical thinking

2) Macroeconomists are interested in two types of phenomena: economic growth and business cycles. Explain how macroeconomists manipulate economic data in order to study these two problems.
Answer: A typical approach macroeconomists take is to separate the trend component from the business cycle component in macroeconomic time series data. For example, suppose that we are interested in the trend and cyclical components of real GDP per capita. First, we would take the natural logarithm of the time series. Then, we would fit a trend to the natural logarithm, and measure the cyclical component of real GDP per capita as the deviation of the actual time series from the trend. This then gives us some idea of the trend growth component and the business cycle component of real GDP per capita that we want to understand.
LO: 1.2: Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 1914.
Difficulty: moderate
Classification: application
AACSB: application of knowledge

3) Explain why macroeconomists like to build models.
Answer: In macroeconomics, in contrast to the natural sciences, for example, it is difficult or impossible to run experiments to test theories. As an alternative, macroeconomists find it useful to construct artificial apparatuses — models — on which they can run artificial experiments. The basic idea is to build the model, fit it to the data in some sense, and then ask how the model responds to changes that mimic the real-world experiments we would actually like to run.
LO: 1.3: Explain why models are useful in macroeconomics.
Difficulty: moderate
Classification: application
AACSB: analytical thinking

4) Why do macroeconomists build models based on microeconomic principles? Discuss.
Answer: In part macroeconomists are interested in understanding the consequences of changes in government policy. But, when government policy changes, the behavior of individuals changes in response to the policy. Therefore, we cannot accurately predict the results of a policy change just from looking at historical macroeconomic relationships. That is, the Lucas critique comes into play. If we build up macroeconomic models from microeconomic behavior, we have the structure we need to accurately predict the results of changes in policy.
LO: 1.4: Discuss how microeconomic principles are important in constructing useful macroeconomic models.
Difficulty: difficult
Classification: application
AACSB: application of knowledge

5) What do macroeconomists disagree about, and on what issues do they tend to agree? Explain.
Answer: Macroeconomists tend to disagree about the causes of business cycles. For example, Keynesian economists tend to think that business cycles result from the stickiness in wages and prices, or from coordination failures, and they think that government intervention to smooth business cycles is a good idea. However, real business cycle theorists think that business cycles are caused by aggregate shocks to productivity, and these macroeconomists therefore think that government intervention to smooth business cycles can at best make things worse. But, macroeconomists tend to agree about what models are useful in studying economic growth, and about the causes of long run growth. For example, the Solow growth model is a common approach to studying economic growth, which predicts that long run improvement in standards of living comes from technological change.
LO: 1.5: Explain why there is disagreement among macroeconomists, and what they disagree about.
Difficulty: easy
Classification: application
AACSB: analytical thinking

6) What is the role of unemployment in a well-functioning economy?
Answer:  Unemployment is obviously painful for the individuals involved. An unemployed person uses up time and effort with no compensation, in the hopes of gaining employment, and could be experiencing economic hardship in the process. But, for society as a whole, unemployment is a necessary evil. Unemployed workers are seeking matches with firms which have job vacancies, and those unemployed workers are quite diverse, as are the job vacancies, in terms of skill requirements. It takes time for society to obtain good matches between workers and jobs, which make the aggregate economy more productive in the long run. Thus, unemployment actually can help efficiency, and implies that an economy can yield benefits for all.
LO:  1.6: List the 12 key ideas that will be covered in this book.
Difficulty:  difficult
Classification:  concept
AACSB:  analytical thinking


7) Are tax cuts necessarily a good thing for the economy as a whole? Explain.
Answer:  There are conditions under which tax cuts have no effect at all. The Ricardian equivalence theorem says that there are conditions under which consumers who get tax cuts receive no net gain in their wealth from a tax cut, and therefore do not alter their spending. As a result, the tax cut will not matter for prices, quantities, or economic welfare. A consumer understands that, when he or she receives a tax cut, that the government must fund the cut through borrowing, and that the government debt must be paid off with future taxes. The loss in wealth from future taxes just offsets the gain in wealth from the current tax cut.
LO:  1.6: List the 12 key ideas that will be covered in this book.
Difficulty:  moderate
Classification:  application
AACSB:  application of knowledge


8) Describe two key relationships between inflation and other economic variables, and explain their importance.
Answer:  The key relationships are the Phillips curve and the Fisher relation. The Phillips curve is a positive relationship between inflation and the deviation of aggregate output from trend, and the Fisher relation is a positive relationship between the inflation and the nominal interest rate. The Phillips curve might suggest that a central bank can increase inflation by reducing output, perhaps by lowering the nominal interest rate. Neo-Fisherism, however, suggests that increasing the nominal interest rate causes inflation to rise, through the Fisher relation.
LO:  1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty:  moderate
Classification:  concept
AACSB:  application of knowledge

9) Explain what the Beveridge curve is, and why it is important.

Answer: The Beveridge curve is the observed negative relationship observed between the vacancy rate — job openings as a percentage of job openings plus employment — and the unemployment rate. The Beveridge curve was observed to shift during the 2008-2009 recession, and this shift has persisted over time. This shift is perhaps an indication of mismatch in the U.S. labor market — a mismatch between the skills of unemployed workers and the skills needed to fill job openings.

LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: concept
AACSB: application of knowledge


10) Explain the role of interest rate spreads in the financial crisis and recession of 2008-2009.

Answer: The recession of 2008-2009 is usually attributed to the financial crisis, which culminated in the financial disruption in the fall of 2008. The financial crisis created substantial uncertainty, which we can characterize as a situation of asymmetric information. In financial markets, asymmetric information can lead to default premia on assets, for example on corporate debt. Then if we look at the difference between interest rates on corporate debt of different riskiness, such "spreads" should increase in times when asymmetric information frictions increase. In particular, during the financial crisis, we observed increases in these spreads. Increases in spreads also occurred in previous recessions, but the increase in spreads during the financial crisis and the Great Depression were particularly large.

LO: 1.7: List the key observations that motivate questions we will try to answer in this book.
Difficulty: moderate
Classification: application
AACSB: analytical thinking