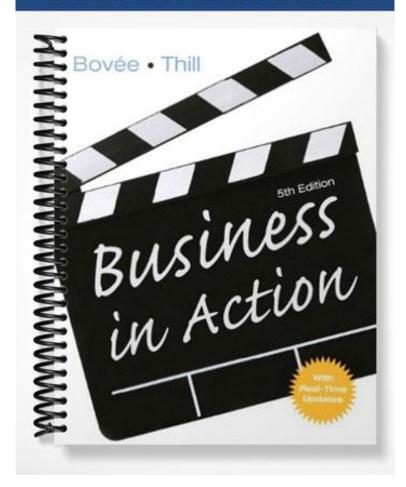
# **SOLUTIONS MANUAL**



# Chapter 2: UNDERSTANDING BASIC ECONOMICS

## **Chapter Overview**

This chapter introduces important micro- and macro-economic concepts such as demand versus supply, competition, monetary and fiscal policies, inflation, and economic indicators. It distinguishes among major economic systems and discusses ways of measuring economic activity. It also covers the debate over deregulation and identifies key roles that government play in the economy.

## **Classroom Activities**

#### Break-out Group Discussion: Capitalism vs. Socialism

Goal: Ask students to discuss the pros and cons of both capitalism and socialism and to come away with the understanding that each system has its own benefits and shortcomings.

Time Limit: 15 minutes.

#### Details:

- 1. Break students into groups of five--Have students count one to five sequentially and form the groups accordingly, i.e. all one's form Group 1, etc. (2 minutes)
- 2. Ask each group to come up with the top pros and cons of capitalism or socialism. Sample list items include capitalism's efficient self-adjusting market mechanism via "demand vs. supply", encouragement of hard work and entrepreneurship, lower taxes, higher income disparity, and generally poorer records in the public sector such as education, healthcare and social welfare, and socialism's generally better records in education, healthcare and social welfare, lower income disparity, higher taxes and less incentive for hard work and entrepreneurship. Use examples of countries and regions to illustrate such differences, e.g. U.S. and Hong Kong for capitalism, and France and Canada for socialism (10 minutes)
- 3. Ask representatives/speakers from each group to present their results to the whole class, either verbally or written (on the blackboard). (3 minutes)

Summary: Instructor summarizes the top pros and cons for both capitalism and socialism, and concludes that the best system tends to be a mixed system that incorporates the beneficial elements of both systems.

## In-Class Activity: GDP vs. GNP

Goal: Help students differentiate between Gross Domestic Product (GDP) and Gross National Product (GNP).

Time Limit: 10 minutes.

#### Details:

- 1. Draw a table with three columns and four rows on the blackboard with the following column headings respectively: "Scenarios", "Which Country's GDP" and "Which Country's GNP".
- 2. Lists the following three scenarios under the column heading "Scenarios".
  - A. An American banker working in London
  - B. A Chinese factory worker in a Coca Cola bottling plant in Shanghai
  - C. An Australian volunteer in South Africa
- Ask students to pair up and recreate the content of the blackboard in their notebooks. They then need to populate the rest of the table by listing the names of countries under the two column headings corresponding to GDP and GNP.
- 4. Make it clear to students that the main difference between GDP and GNP is that GDP considers *where* the production occurs and GNP considers *who* is responsible for the production. For instance, in Scenario A, the goods and services produced by an American banker in London should be classified as the GDP of United Kingdom (UK) and the GNP of United States (US).

Hint: GNP excludes the value of production from foreign-owned businesses within a nation's boundaries (Scenario B). Volunteering is not a component of GDP or GNP (Scenario C).

## Video Case

## **End-of-Chapter**

Behind The Scenes
The Push for Grid Parity at Suntech Power

Critical Thinking Questions

1. What effect are feed-in tariffs likely to have on electricity users who don't adopt solar? Is this outcome fair? Why or why not?

Feed-in tariffs will likely raise the electricity rates in the short term for users who don't adopt solar because individual suppliers are often paid above-market rates for their power by some governments. This outcome is fair because feed-in tariffs are intended to spur the growth of solar in the short term. Over the long run, high adoption rates of solar, combined with technical advances and production efficiencies will drive down the cost of solar energy.

2. If a particular government believes that solar is a more desirable energy source than nonrenewables such as coal and gas, why wouldn't it simply grant solar energy utilities monopoly rights?

Because monopoly typically has the effect of reducing competition and raising prices.

# 3. Does it make sense for Suntech to acquire ailing competitors during a deep recession? Why or why not?

It would make sense for Suntech to acquire ailing competitors if it can structure an all-stock deal and conserve much needed cash during a recession. Another advantage of acquiring during a deep recession is the lower-than-usual acquisition price.

#### Learn More Online

Students' responses will depend, in large part, on the material currently posted on the website.

### **Test Your Knowledge**

Questions for Review

# 1. Why is the economic concept of scarcity a crucial concept for businesspeople to understand?

The economic concept of scarcity is a crucial concept for businesspeople to understand because scarcity creates competition for resources and forces trade-offs on the part of every participant in the economy. First, businesses and industries compete with each other for the resources they need, including materials, employees and customers. Second, given this universal scarcity of resources, businesses are constantly forced to make trade-offs, such as deciding how much money to spend on advertising a new product versus how much to spend on the materials used to make it, or deciding how many employees to have in sales versus customer support.

#### 2. Why are knowledge workers a key economic resource?

Economists agree that the seven key industries of the next few decades will be microelectronics, biotechnology, composite materials, telecommunications, civilian aviation, robotics, and computers. All of these are brainpower industries. Tomorrow's workers will be freelancers, contractors, and analysts-for-hire, and their work will be brain intensive instead of labor intensive. Thus, countries with the greatest supply of knowledge workers and ones with economic systems that give workers the freedom to pursue their own economic interests will have the greatest advantage in the global marketplace.

# 3. Does the United States have a purely free-market economy or a mixed economy?

The U.S. has a mixed economy.

#### 4. Why is government spending an important factor in economic stability?

In an attempt to foster economic stability, the government can levy new taxes or adjust the current tax rates, raise or lower interest rates, and regulate the total amount of money circulating in our economy. These government actions have two facets: monetary policy and fiscal policy. Monetary policy involves adjusting the nation's money supply by increasing or decreasing interest rates to help control inflation. Fiscal policy involves changes in the government's revenues and expenditures to stimulate or dampen the economy. Government spending is indeed an important factor in U.S. economic stability. For one thing,

the U.S. federal and state governments are responsible for supplying and maintaining such *public goods and services* as the highways, military, public water works, fire and police protection, and so on. The U.S. government gets money to provide such public goods by collecting a variety of taxes.

5. Why might a government agency seek to block a merger or acquisition? To preserve competition, a government agency may stipulate requirements companies must meet to gain approval of a proposed merger or acquisition. If the governmental agency thinks a proposed merger or acquisition might restrain competition, it may deny approval altogether.

Questions for Analysis

### 6. Why is competition an important element of the free-market system?

The need to compete for customers keeps prices down, encourages cost-cutting techniques, and promotes a diversity of goods to cater to diverse and changing consumer preferences. Because competition responds to customer demands, products that are low quality or dangerous will be removed from the market, while products or services that are quality, fairly priced, and meet consumers needs will stay on the market. Because companies will not receive money for goods that the consumer does not find worthwhile, the system is considered to be "self-regulating."

### 7. Why do governments intervene in the free-market system?

Governments intervene in free-market systems to influence prices and wages or to change the way resources are allocated. This practice of limited intervention is called mixed capitalism, which is the economic system of the United States. Under mixed capitalism, the pursuit of private gain is regarded as a worthwhile goal that ultimately benefits society as a whole.

#### 8. How do countries know if their economic systems are working?

Economic indicators are statistics such as interest rates, unemployment rates, and housing data, GNP, GDP, CPI, etc. A country's professional economists sort and interpret these data to monitor and measure the country's economic performance and predict its future performance.

#### 9. Are the fluctuations in the business cycle predictable?

No, such fluctuations are rarely predictable.

# 10. ETHICAL CONSIDERATIONS: The risk of failure is an inherent part of free enterprise. Does society have an obligation to come to the aid of entrepreneurs who try but fail? Why or why not?

Students' answers will vary, but may reflect some of the following concerns:

- Entrepreneurs willing to face risks of failure are a vital force in capitalist economies
- Such entrepreneurs will be rewarded handsomely when they become successful
- Many such entrepreneurs are involved in multiple ventures and may use earnings from successful ventures to fund, develop or improve ventures that are less successful

#### **Questions For Application**

# 11. How might government and education leaders work with business to minimize structural unemployment?

Government and education leaders might work with businesses to provide educational opportunities and training programs that would best match workers' skills with the current needs of employers in an effort to minimize structural unemployment.

# 12. How would a decrease in Social Security benefits to the elderly affect the economy?

First it would lower government spending and perhaps reduce the national debt. While many might see this as an economic boost, all things being equal, a decrease in government spending would also reduce the amount of money in the economy. For example, because of the circular flow, the elderly would have less money to spend so businesses that cater to the needs of the elderly might be hurt and the employees of those businesses might lose their jobs and so on. In order for the economy to stay balanced, the decrease in money spent by the government on Social Security would have to be substituted by an infusion of money into the economy from another source. Plus the multiplier effect of that change would have to be analyzed.

# 13. If you wanted to increase demand for your restaurant but are unable to lower prices or increase advertising, what steps might you take?

Applying the law of demand vs. supply, you may want to relocate your restaurant to a neighborhood/area where there are not as many other restaurants, i.e. where there is less supply. There will be less competition and you may even be able to raise your price slightly without driving customers away.

# 14. Concept Integration. What effect might the technological environment, discussed on page 11 in Chapter 1, have on the equilibrium point in a given market?

Student answers may vary; however, the following provides a possible scenario:

Technological advances may help reduce the cost of producing goods and services and therefore increasing the supply for a given market at every price, thus moving the equilibrium point as well.

#### **Practice Your Knowledge**

Sharpening Your Communication Skills

The subprime mortgage crisis (see page 000 in Chapter 20) that helped throw the economy into a recession in December 2007 bewildered a lot of people. In a brief paragraph (no more than 100 words), explain what a subprime mortgage is and why these loans helped trigger the recession.

Student answers will vary but they should define subprime mortgages, which are home loans for borrowers with low credit scores. They should also address the high risk and high default nature of such loans. Students need to mention that half of

subprime mortgages are Adjustable Rate Mortgages, which are especially vulnerable to payment shock when low initial rates expired.

## Building Your Team Skills

Economic indicators help businesses and governments determine where the economy is headed. You may have noticed news headlines such as the following, each of which offers clues to the direction of the U.S. economy:

- 1. Housing Starts Lowest in Months
- 2. Fed Lowers Discount Rate and Interest Rates Tumble
- 3. Retail Sales Up 4 Percent Over Last Month
- 4. Business Debt Down from Last Year
- 5. Businesses Are Buying More Electronic Equipment
- 6. Local Economy Sinks as Area Unemployment Rate Climbs to 9.2 Percent
- 7. Telephone Reports 30-Day Backlog in Installing Business Systems

Is each item good news or bad news for the economy? Why? What does each news item mean for large and small businesses? Report your team's findings to the class as a whole. Did all the teams come to the same conclusions about each headline? Why or why not? With your team, discuss how these different perspectives might influence the way you interpret economic news in the future.

## 1. Housing Starts Lowest In Months

This indicates that consumers are not very confident about the future, so they are "staying put" rather than building new houses.

#### 2. Fed Lowers Discount Rate And Interest Rates Tumble

This headline indicates that aggregate demand is slow. In order to boost the economy and encourage firms to invest more, the Fed lowers the discount rate and other interest rates follow.

#### 3. Retail Sales Up 4 Percent Over Last Month

Increase in sales indicates a healthy economy with employment rates rising and rising consumer confidence as a result. Some inflationary pressure may result.

#### 4. Business Debt Down From Last Year

This indicates that business owners are less confident and less willing to take on debt.

#### 5. Businesses Are Buying More Electronics Equipment

This headline indicates that businesses are replacing labor with machines.

### 6. Local Economy Sinks as Area Unemployment Rate Climbs to 9.2 Percent

This indicates that high unemployment rate often contributes to lower consumer spending, resulting in a shrinking local economy.

#### 7. Telephone Reports 30-Day Backlog in Installing Business Systems

This indicates growth in the economy, as businesses are growing. Inflationary pressure.

## **Expand Your Knowledge**

Discovering Career Opportunities

Thinking about a career in economics? Find out what economists do by reviewing the *Occupational Outlook Handbook* in your library or online at www.bls.gov/oco/. This is an authoritative resource for information about all kinds of occupations. Search for "economists" then answer these questions:

1. Briefly describe what economists do and their typical working conditions. Economists study how society distributes scarce resources such as land, labor, raw materials, and machinery to produce goods and services. They conduct research and prepare surveys to collect data and then figure out what the data mean. They also forecast how the economy might change in the future. Economists study topics such as prices, jobs, taxes, interest rates, and the stock market.

Most economists are concerned with practical applications of economic policy. Economists devise methods and procedures for obtaining the data they need. Some economists work for government agencies and assess economic conditions in the United States or abroad, in order to estimate the economic effects of specific changes in legislation or public policy. Other economists work for businesses and help them to figure out what to sell and at what

Economists and market and survey researchers have structured work schedules. They often work alone, writing reports, preparing statistical charts, and using computers, but they also may be an integral part of a research team. Most work under the pressure of deadlines and tight schedules, which may require overtime. Their routine may be interrupted by special requests for data, as well as by the need to attend meetings or conferences. Frequent travel may be necessary.

# 2. What is the job outlook for economists? What is the average salary for starting economists?

Employment of economists and market and survey researchers is expected to grow more slowly than the average for all occupations through 2014. Employment growth should be the fastest in private industry, especially in management, scientific, and technical consulting services. Rising demand for economic analysis in virtually every industry should stem from the growing complexity of the global economy, the effects of competition on businesses, and increased reliance on quantitative methods for analyzing and forecasting business, sales, and other economic trends. Some corporations choose to hire economic consultants to fill these needs, rather than keeping an economist on staff. This practice should result in more economists being employed in consulting services. However, job growth will be limited as firms increasingly employ workers to perform more specialized tasks with titles that reflect the specific duties of the job instead of the general title of economist. In addition, few new jobs are expected in government, but the need to replace experienced workers who transfer to other occupations or who retire or leave the labor force

for other reasons will lead to job openings for economists across all industries in which they are employed.

Economists held about 15,000 jobs in 2006. Average annual wage and salary earnings of economists were \$79,620 in 2006. The middle half earned between \$55,740 and \$103,500 in 2006. The lowest-paid 10 percent earned less than \$42,280. The highest-paid 10 percent earned more than \$136,550.

The Federal Government recognizes education and experience in certifying applicants for entry-level positions. The starting salary for economists having a bachelor's degree was about \$24,667 a year in 2005; however, those with superior academic records could begin at \$30,567. Those having a master's degree could qualify for positions at an annual salary of \$37,390. Those with a Ph.D. could begin at \$45,239, while some individuals with experience and an advanced degree could start at \$54,221. Starting salaries were slightly higher in selected geographical areas where the prevailing local pay was higher. The average annual salary for economists employed by the Federal Government was \$89,441 a year in 2005.

# 3. What training and qualifications are required for a career as an economist? Are the qualifications different for jobs in the private sector as opposed to those in the government?

Graduate education is required for many private sector economist and market and survey research jobs, and for advancement to more responsible positions. Economics includes many specialties at the graduate level, such as advanced economic theory, econometrics, international economics, and labor economics. Students should select graduate schools strong in specialties in which they are interested. Undergraduate economics majors can choose from a variety of courses, ranging from microeconomics, macroeconomics, and econometrics, to more philosophical courses, such as the history of economic thought.

In the Federal Government, candidates for entry-level economist positions must have a bachelor's degree with a minimum of 21 semester hours of economics and 3 hours of statistics, accounting, or calculus.

Market and survey researchers may earn advanced degrees in economics, business administration, marketing, statistics, or some closely related discipline. Some schools help graduate students find internships or part-time employment in government agencies, economic consulting firms, financial institutions, or marketing research firms prior to graduation.

In addition to courses in business, marketing, and consumer behavior, marketing majors should take other liberal arts and social science courses, including economics, psychology, English, and sociology. Because of the importance of quantitative skills to economists and market and survey researchers, courses in mathematics, statistics, econometrics, sampling theory and survey design, and computer science are extremely helpful.

Whether working in government, industry, research organizations, marketing, or consulting firms, economists and market and survey researchers with bachelor degrees usually qualify for most entry-level positions as a research assistant, administrative or management trainee, marketing interviewer, or any of a number of professional sales jobs. A master's degree usually is required to qualify for more responsible research and administrative positions. Many businesses, research and consulting firms, and government agencies seek individuals who have strong computer and quantitative skills and can perform complex research. A Ph.D. is necessary for top economist or marketing positions in many organizations. Many corporation and government executives have a strong background in economics or marketing.

A master's degree is usually the minimum requirement for a job as an instructor in junior and community colleges. In most colleges and universities, however, a Ph.D. is necessary for appointment as an instructor. A Ph.D. and extensive publications in academic journals are required for a professorship, tenure, and promotion.

Aspiring economists and market and survey researchers should gain experience gathering and analyzing data, conducting interviews or surveys, and writing reports on their findings while in college. This experience can prove invaluable later in obtaining a full-time position in the field, since much of their work, in the beginning, may center on these duties. With experience, economists and market and survey researchers eventually are assigned their own research projects.

Those considering careers as economists or market and survey researchers should be able to pay attention to details because much time is spent on precise data analysis. Patience and persistence are necessary qualities since economists and market and survey researchers must spend long hours on independent study and problem solving. At the same time, they must work well with others, especially market and survey researchers, who often oversee interviews for a wide variety of individuals. Economists and market and survey researchers must be able to present their findings, both orally and in writing, in a clear, concise manner.

#### Developing Your Research Skills

Some career paths have higher unemployment risks during the ups and downs of economic fluctuations. Research three business careers that should be relatively "recession proof" in the coming years, meaning employment doesn't drop dramatically during a recession (or may even increase during a recession). Summarize your findings in a one-page report.

Student answers may vary but three likely such careers are healthcare, education and green technology.

#### Improving Your Tech Insights: Data Mining

To find a few ounces of precious gold, you dig through a mountain of earth. To find a few ounces of precious information, you dig through mountains of data using *data mining*, a combination of technologies and techniques that extract important customer insights buried within thousands or millions of transaction records. (Data mining has

many other uses as well, such as identifying which employees are most valuable to a firm.)

Data mining is an essential part of *business intelligence* because it helps extract trends and insights from millions of pieces of individual data (including demographics, purchase histories, customer service records, and research results). Data mining helps marketers identify who their most profitable customers are, which goods and services are in highest demand in specific markets, how to structure promotional campaigns, where to target upcoming sales efforts, and which customers are likely to be high credit risks, among many other benefits. You may hear the term *business analytics* used in this context as well, describing efforts to extract insights from databases.

Research one of the commercially available data mining or business analytics systems. You might start with *Intelligent Enterprise* magazine (www.intelligententerprise. com), or check out a company such as Angoss (www.angoss.com; click on "Sales & Marketing"). In a brief e-mail message to your instructor, describe how the system you've chosen can help companies market their goods and services more effectively.

Student answers will vary depending on the magazines or companies they pick.

## **CHECKPOINTS**

LEARNING OBJECTIVE 1: Define *economics*, and explain why scarcity is central to economic decision making.

#### **Critical thinking:**

(1) Why is entrepreneurship considered a factor of production?

Entrepreneurship is considered a factor of production because it is finite, just like the other four factors of production, in that not everyone has the spirit of innovation, the initiative, and the willingness to take the risks involved in creating and operating businesses. Like the other four factors, entrepreneurship can also be used to satisfy society's needs.

(2) If you had an unlimited amount of money, would you ever need to make tradeoffs again? Why or why not?

Students' responses will vary depending on personal opinions but points to consider include the fact that economics is defined in terms of scarcity, and scarcity makes trade-off a necessity.

## It's your business:

(1) Did you consider opportunity cost when you chose the college or university you are currently attending?

Students' responses will vary depending on personal experiences.

(2) What trade-offs did you make in order to read this chapter at this exact moment in your life? (Think about the decisions you made to get to a point in your life where you're taking a business course.)

Students' responses will vary depending on personal experiences.

# **LEARNING OBJECTIVE 2: Differentiate among the major types of economic systems.**

#### **Critical thinking:**

(1) Why are no economies truly free, in the sense of having no controls or restrictions?

Because in all economies, local, state, national and even international governments intervene in the economy in various degrees, including taxing and price controls

(2) What are some possible risks of privatizing basic services such as the transportation infrastructure?

Some possible risks include the private entities that are in control of transportation infrastructure may sacrifice infrastructure quality and safety to minimize costs and maximize profits. They may also be entities controlled by foreign governments that may not be friendly towards the U.S. or even become hostile both politically and militarily.

#### It's your business:

(1) What is your emotional reaction to the terms *capitalism* and *socialism*? Explain why you feel the way you do.

Students' responses will vary depending on personal opinions.

(2) Would you rather pay lower taxes and accept the fact that you need to pay for many services such as health care and education or pay higher taxes with the assurance that the government would provide many basic services for you? Why? Students' responses will vary depending on personal opinions.

## LEARNING OBJECTIVE 3: Explain the interaction of demand and supply.

#### **Critical thinking:**

(1) How does the interaction of demand and supply keep a market in balance, at least approximately and temporarily?

The interaction of demand and supply keep a market in balance through the equilibrium point.

(2) If the prices of complementary products for a given product go up, what effect is this increase likely to have on demand for that product?

This increase will likely reduce the demand for that product.

#### It's your business:

(1) Are there any products or brands you are so loyal to that you will purchase them at almost any price? Will you accept cheaper substitutes? Students' responses will vary depending on personal opinions.

(2) Have you ever purchased something simply because it was on sale? Why? Students' responses will vary depending on personal experiences.

# LEARNING OBJECTIVE 4: Identify four macroeconomic issues that are essential to understanding the behavior of the economy.

#### **Critical thinking:**

(1) Are colleges and universities an example of pure competition or monopolistic competition? Why?

They are monopolistic competition since they offer products that can be distinguish from competing products in at least some smack way, such as strengths in certain majors or areas.

(2) Are monopolies always harmful to consumers? Why or why not? Not necessarily. There are some government sanctioned monopolies such as utilities and the U.S. Post Service, which are not really harmful to consumers.

#### It's your business:

(1) What state of the business cycle is the economy currently in? Is this influencing your career plans?

Students' responses will vary depending on personal experiences and opinions.

(2) Have you ever been unemployed (at a time when you were actively looking for work)? Which of the four categories of unemployment would you have fallen under? Students' responses will vary depending on personal experiences and opinions.

# LEARNING OBJECTIVE 5: Outline the debate over deregulation, and identify four key roles that governments play in the economy.

#### **Critical thinking:**

(1) Would it be wise for the government to put price controls on college tuition? Why or why not?

Students' responses will vary depending on personal opinions as well as how much of a role they think government should play in the economy.

(2) Under what conditions, if any, should the federal government step in to rescue failing companies?

Students' responses will vary depending on how much of a role they think government should play in private industries.

#### It's your business:

(1) How do you benefit from competition among the companies that supply you with the goods and services you need?

Students' responses will vary depending on personal opinions

(2) Does this competition have any negative impact on your life? Students' responses will vary depending on personal opinions

# LEARNING OBJECTIVE 6: Identify the major ways of measuring economic activity.

#### **Critical thinking:**

- (1) Why would anyone bother to monitor lagging indicators? Lagging indicators are important since they provide confirmation that something (such as a recession) has occurred in the past.
- (2) Why is GDP considered a more accurate measure of a country's economic health than GNP?

GDP is considered a more accurate measure since it includes goods and services produced within a country's borders, and enables a nation to evaluate its economic policies and to compare its current performance with prior periods or with the performance of other nations.

## It's your business:

- (1) In your multiple economic roles as a consumer, employee, and investor, is inflation a good thing, a bad thing, or both? Explain your answer. Students' responses will vary depending on personal opinions.
- (2) How is the federal budget deficit likely to affect you? What about your children as they grow up?

Students' responses will vary depending on personal opinions.