Answers to Selected Critical Analysis Questions
CHAPTER 1: THE ECONOMIC APPROACH

2. Production of scarce goods always involves a cost; there are no free lunches. When the government provides goods without charge to consumers, other citizens (taxpayers) will bear the cost of their provision. Thus, provision by the government affects how the costs will be covered, not whether they are incurred.

4. For most taxpayers, the change will reduce the after-tax cost of raising children. Other things being constant, one would predict an increase in the birthrate.

5. False. Intentions do not change the effect of the policy. If the policy runs counter to sound economics, it will lead to a counterproductive outcome even if that was not the intention of the policy. Bad policies are often advocated by people with good intentions.

7. Raising the price of new cars by requiring safety devices, which customers would not have purchased if given the choice, slows the rate of sales for new cars. Thus, the older, less safe cars are driven longer, partially offsetting the safety advantage provided by the newer, safer cars. Also, drivers act a bit differently—they may take more risks—when they believe the safety devices will provide protection should they have an accident. In fact, economist Gordon Tullock says that the greatest safety device of all might be a dagger built into the center of the steering wheel, pointed directly at the driver’s chest!

8. Money has nothing to do with whether an individual is economizing. Any time a person chooses, in an attempt to achieve a goal, he or she is economizing.

9. Positive economics can help one better understand the likely effects of alternative policies. This will help one choose alternatives that are less likely to lead to disappointing results.

10. Association is not causation. It is likely that a large lead, near the end of the game, caused the third team to play more, rather than the third team causing the lead.

14. This is a question that highlights the importance of marginal analysis. In responding to the question, think about the following. After pollution has already been reduced substantially, how much will it cost to reduce it still more? If the quality of air and water were already high, how much gain would result from still less pollution?

CHAPTER 2: SOME TOOLS OF THE ECONOMIST

2. This is an opportunity cost question. Even though the productivity of brush painters has changed only slightly, rising productivity in other areas has led to higher wages in other occupations, thereby increasing the opportunity cost of being a house painter. Because people would not supply house painting services unless they were able to meet their opportunity costs, higher wages are necessary to attract house painters from competitive (alternative) lines of work.

4. The statement reflects the view that “exchange is a zero sum game.” This view is false. No private business can force customers to buy. Consumers purchase various goods and services from businesses because they gain by doing so. If they did not gain, they would not continue to purchase items from a business. Similarly, the business firms also gain from their production and sale activities. Mutual gain provides the foundation for voluntary exchange, including that between business firms and their customers.

8. Yes. This question highlights the incentive of individuals to conserve for the future when they have private ownership rights. The market value of the land will increase in anticipation of the future harvest as the trees grow and the expected day of harvest grows closer. Thus, with transferable private property, the tree farmer will be able to capture the value added by his planting and holding the trees for a few years, even if the actual harvest does not take place until well after his death.
9. In general, it sanctions all forms of competition except for the use of violence (or the threat of violence), theft, or fraud.

11. If consumer demand for beef fell, the profitability of cattle herding would fall as well. Many cattle farmers would let their cattle herds dwindle and quit keeping cattle altogether. The result would be a smaller population of cattle, not a larger one. Because cattle are privately owned, an increase in their value in human consumption results in more cattle being kept, whereas a decrease would result in fewer cattle. To “save the cows,” you should eat more beef!

12. Those who get tickets at the lower price gain, whereas those who are prevented from offering a higher price to ticket holders may not get a ticket even though both the prospective buyer and some ticket holders would have gained from the exchange at the higher price. Ticket holders may simply break the law or may sell at the regulated price only to buyers willing to provide them with other favors. Price controls, if they are effective, always reduce the gains from trade.

17. The opportunity cost of those individuals will rise, and they will likely consume less leisure.

CHAPTER 3: SUPPLY, DEMAND, AND THE MARKET PROCESS

1. Choices (a) and (b) would increase the demand for beef; (c) and (d) would affect primarily the supply of beef, rather than the demand; (e) leads to a change in quantity demanded, not a change in demand.

4. Prices reflect marginal value, not total value. The marginal value of a good is the maximum amount a consumer would be willing to pay for a specific unit. The height of the demand curve reflects the value that consumers place on each unit. The total value is the total benefit consumers derive from all units consumed. The area under the demand curve for the number of units consumed reflects the total value. Water provides an example of a good with high total value but low marginal value. With regard to the last question, are there more nurses or professional wrestlers?

8. Neither markets nor the political process leaves the determination of winners and losers to chance. Under market organization, business winners and losers are determined by the decentralized choices of millions of consumers who use their dollar votes to reward firms that provide preferred goods at a low cost and penalize others who fail to do so. Under political decision making, the winners and losers are determined by political officials who use taxes, subsidies, regulations, and mandates to favor some businesses and penalize others.

10. a. Profitable production increases the value of resources owned by people and leads to mutual gain for resource suppliers, consumers, and entrepreneurs.

   b. Losses reduce the value of resources, which reduces the well-being of at least some people. There is no conflict.

12. The supply curve is constructed under the assumption that other things are held constant. A reduction in the supply of oranges such as would occur under adverse weather conditions would lead to both a higher price and smaller total quantity supplied. This is perfectly consistent with economic theory.

14. Questions for thought: What happened to the cost of producing calculators during the period? How would this affect the supply curve and price of the calculators?

17. Business firms do have a strong incentive to serve the interest of consumers, but this is not what motivates them. Instead, they are motivated by self-interest and the pursuit of income, but they must provide consumers with a quality product if they are going to be successful. Good intentions are not required for people to engage in actions that are helpful to others.
CHAPTER 4: SUPPLY AND DEMAND: APPLICATIONS AND EXTENSIONS

1. An increase in demand for housing will also increase the demand for the resources required for its production, including the services of carpenters, plumbers, and electricians. This will lead to higher wages and an increase in employment for people in these groups.

4. Agreement of both buyer and seller is required for an exchange. Price ceilings push prices below equilibrium and thereby reduce the quantity sellers are willing to offer. Price floors push prices above equilibrium and thereby reduce the quantity consumers wish to buy. Both decrease the actual quantity traded in the market.

6. **a. Decreases; b. Increases; c. Decreases; d. Increases**

11. The deadweight loss is the loss of the potential gains of buyers and sellers emanating from trades that are squeezed out by the tax. It is an excess burden because even though the exchanges that are squeezed out by the tax impose a cost on buyers and sellers, they do not generate tax revenue (because the trades do not take place).

14. The employment level of low-skilled workers with large families would decline. Some would attempt to conceal the presence of their large family in order to get a job.

16. No. As the tax rate approaches the revenue maximum point, the higher rates substantially reduce the number of trades that take place. This is why the higher rates do not raise much additional revenue. As rates increase toward the revenue maximum point, the lost gains from trade are large and the additions to revenue are small. Thus, rates in this range are highly inefficient.

17. **a.** The quantity of cigarettes sold legally will decline sharply. The evidence is consistent with this view. After the tax hike was instituted, the number of cigarette-tax stamps issued by the city of New York fell by approximately 50 percent.
    **b.** Because the quantity of cigarettes sold legally in New York City will decline sharply, the revenues raised from the tax may actually decline.
    **c.** Internet purchases will increase. Approximately 80 percent of the cigarettes sold through the Internet are from Indian reservations, which are exempt from state sales tax.
    **d.** The incidence of smoking by New Yorkers may not decline very much because there are good substitutes available for cigarettes purchased in New York City, namely cigarettes purchased through the Internet or in states with a lower cigarette tax. Thus, the cost of smoking for New Yorkers may not rise very much. Predictably, the tax will lead to a sharp increase in both the legal purchase and illegal smuggling of cigarettes into New York City from localities (such as Virginia and North Carolina) that impose a much lower tax on cigarettes.

CHAPTER 5: DIFFICULT CASES FOR THE MARKET AND THE ROLE OF GOVERNMENT

1. When payment is not demanded for services, potential customers have a strong incentive to attempt a “free ride.” However, when the number of nonpaying customers becomes such that the sales revenues of sellers are diminished (and in some cases eliminated), the sellers’ incentive to supply the good is thereby reduced (or eliminated).

4. The antimissile system is a public good for the residents of Washington, D.C. Strictly speaking, none of the other items is a public good because each could be provided to some consumers (paying customers, for example) without being provided to others.
9. By reducing output below the efficient level, sellers of toasters would no longer produce or exchange some units of the good, despite the fact that the consumers value the marginal units more than it costs to produce them.

11. A public good reflects the characteristics of the good, not the sector in which it is provided. Elementary education is not a public good because it is relatively easy to exclude nonpaying customers and establish a one-to-one link between payment for and receipt of the good.

14. A government intervention would be efficient if the benefits from the intervention exceeded the cost of the intervention. All opportunity costs (such as tax money required, resources utilized, and deadweight losses) would need to be considered in the comparison. A government intervention would be considered inefficient if the costs exceeded the benefits.

CHAPTER 6: THE ECONOMICS OF COLLECTIVE DECISION MAKING

2. Corporate officers, although they surely care about the next few months and the profits during that time, also care about the value of the firm and its stock price. If the stock price rises sufficiently in the next few months—as it will if investors believe that current investments in future-oriented projects (planting new trees, for example) are sound—then the officers will find their jobs secure even if current profits do not look good. Rights to the profits from those (future) trees are salable now in the form of the corporation’s stock. There is no such mechanism to make the distant fruits of today’s investments available to the political entrepreneurs who might otherwise fight for the future-oriented project. Only if the project appeals to today’s voters, and only if they are willing to pay today for tomorrow’s benefits, will the program be a political success. In any case, the wealth of the political official is not directly enhanced by his or her successful fight for the project.

4. The problem is not so much that the “wrong guys” won the last election as it is the incentive structure confronted by political decision makers. Even if the “right people” were elected, they would be unlikely to improve the efficiency of government, at least not very much, given the strong incentive to support special interest and shortsighted policies and the weak incentives for operational efficiency when decisions are made by the political process.

6. True. Because each individual computer customer both decides the issue (what computer, if any, will be purchased) and bears the consequences of a mistaken choice, each has a strong incentive to acquire information needed to make a wise choice. In contrast, each voter recognizes that one vote, even if mistaken, will not decide the congressional election. Thus, a voter has little incentive to search for information to make a better-informed choice.

8. It is difficult for the voter to know what a candidate will do once elected, and the rationally ignorant voter is usually unwilling to spend the time and effort required to understand issues because the probability that any single vote will decide the issue is exceedingly small. Special-interest voters, in contrast, will know which candidate has promised them the most on their issue. Also, the candidate who is both competent and prepared to ignore special interests will have a hard time getting these facts to voters without financial support from special-interest groups.

   Each voter has an incentive to be a “free rider” on the “good government” issue. Interestingly, controlling government on behalf of society as a whole is a public good. As in the case of other public goods, there is a tendency for too little of it to be supplied.

10. No. The government is merely an alternative form of organization. Government organization does not permit us to escape either scarcity or competition. It merely affects the nature of the competition. Political competition (for example, voting, lobbying, political contributions, and politically determined budgets) replaces market competition. Neither is there any reason to believe that government organization modifies the importance of personal self-interest.

12. When the welfare of a special-interest group conflicts with that of a widely dispersed, unorganized majority, the legislative political process can reasonably be expected to work to the benefit of the special interest.

16. The presence of the sugar price supports and highly restrictive import quotas reflect the special-interest nature
of the issue. Even though there are far more sugar consumers than growers, politicians apparently gain more by supporting the sugar growers and soliciting their political contributions than by representing the interests of consumers. Government action in this area has almost certainly reduced the income levels and living standards of Americans.

CHAPTER 7: CONSUMER CHOICE AND ELASTICITY

1. Revenue will rise (fall) if students who enroll pay more (less) extra revenue than is lost due to lower enrollment. Revenue will remain the same if those who enroll pay just enough more to offset the loss from reduced enrollment. A price elasticity of −1.2 implies that raising tuition rates would reduce tuition revenue.

2. If your opportunity cost of time is more than $10, it will make sense to take the plane. Thus, Mary will take the plane and Michele the bus.

3. It is likely that the income effect of cigarette price changes is much larger for low-income smokers than for high-income smokers, perhaps because expenditures on cigarettes are a larger proportion of the household budget for those with lower incomes. Thus, the income effect will be larger for this group.

6. Both income and time constrain our ability to consume. Because, in a wealthier society, time becomes more binding and income less binding, time-saving actions will be more common in a wealthier society. As we engage in time-saving actions (fast food, automatic appliances, air travel, and so on) in order to shift the time restraint outward, our lives become more hectic.

9. All three statements are true.

10. The answer to the first question is “No.” Even for things we like, we will experience diminishing returns. Eventually, the cost of additional units of pizza will exceed their benefits. And, in answer to the second question, perfection in any activity is generally not worth the cost. For example, reading every page of this text three, four, or five times may improve your grade, but it may not be worth it. One function of a text is to structure the material (highlighted points, layout of graphs, and so on) so that the reader will be able to learn quickly (at a lower cost).

11. Carole

12. a. -1.59; elastic
   b. -1.54; elastic

CHAPTER 8: COSTS AND THE SUPPLY OF GOODS

1. The economic profit of a firm is its total revenue minus the opportunity cost of all resources used in the production process. Accounting profit often excludes the opportunity cost of certain resources—particularly the equity capital of the firm and any labor services provided by an owner-manager. Zero economic profit means that the resources owned by the firm are earning their opportunity cost—that is, the rate of return is as high as the highest valued alternative forgone. Thus, the firm would not gain by pursuing other lines of business.

2. a. The amount paid for the course is a sunk cost. It is not directly relevant to whether one should attend the lectures.
   b. There is an opportunity cost of one’s house even if it is paid for. c. The decline in the price of the stock is a sunk cost and therefore it is not directly relevant to whether or not to sell at this time.
   d. There is an opportunity cost of public education even if it is provided free to the consumer.

5. True. If it could produce the output at a lower cost, its profit would be greater.

7. At low output, the firm’s plant (a fixed cost) is underutilized, implying a high average cost. As output rises toward the designed output level, average cost falls, but then rises as the designed or optimal output for that size plant is surpassed and diminishing returns set in.
11. Because owners receive profits, clearly profit maximization is in their interest. Managers, if they are not owners, have no property right to profit and therefore no direct interest in profit maximization. Because a solid record of profitability tends to increase the market value (salary) of corporate managers, they do have an indirect incentive to pursue profits. However, corporate managers may also be interested in gaining power, having nice offices, hiring friends, expanding sales, and other activities, which may conflict with profitability. Thus, owners need to provide incentives for managers to seek profits and to monitor the results.

12. a. The interest payments; b. The interest income forgone. The tax structure encourages debt rather than equity financing because the firm’s tax liability is inversely related to its debt/equity ratio.

14. Check list. Did your marginal cost curve cross the $ATC$ and $AVC$ curves at their low points? Does the vertical distance between the $ATC$ and $AVC$ curves get smaller and smaller as output increases? If not, redraw the three curves correctly. See Exhibit 6b.

17. $2,500: the $2,000 decline in market value during the year plus $500 of potential interest on funds that could be obtained if the machine were sold new. Costs associated with the decline in the value of the machine last year are sunk costs.

18. Because they believe they will be able to restructure the firm and provide better management so that the firm will have positive net earnings in the future. If the firm is purchased at a low enough price, this will allow the new owners to cover the opportunity cost of their investment and still earn an economic profit. Alternatively, they may expect to sell off the firm’s assets, receiving more net revenue than the cost of purchasing the firm.

CHAPTER 9: PRICE TAKERS AND THE COMPETITIVE PROCESS

1. In a highly competitive industry such as agriculture, lower resource prices might improve the rate of profit in the short run, but in the long run, competition will drive prices down until economic profit is eliminated. Thus, lower resource prices will do little to improve the long-run profitability in such industries.

2. The market price will decline because the profits will attract new firms (and capital investment) into the market and supply will increase, driving down the price until the profits are eliminated.

5. a. Increase; b. Increase; c. Increase; firms will earn economic profit; d. Rise (compared with its initial level) if coffee is an increasing-cost industry, but return to initial price if it is a constant-cost industry; e. Increase even more than it did in the short run; f. Economic profit will return to zero.

6. a. Decline; b. Increase; c. Decline; d. Decline

9. Competition virtually forces firms to operate efficiently and produce goods and services that consumers value highly relative to cost. Firms that fail to do so will find it difficult to compete and eventually losses will drive them from the market.

11. a. The reduction in supply led to higher prices. b. Because demand is inelastic, the total revenue from sales increased. c. Overall, the profitability of farming increased, although some of the producers that were hardest hit by the drought experienced losses because of their sharp reduction in output.

15. b. Six or seven tons—$250 profit; c. seven or eight tons—$600 profit; d. five or six tons—$50 loss. Because the firm can cover its variable cost, it should stay in business if it believes that the low ($450) price is temporary.

CHAPTER 10: PRICE-SEARCHER MARKETS WITH LOW ENTRY BARRIERS

3. The amount of variety is determined by the willingness of consumers to pay for variety relative to the cost of providing it. If consumers value variety highly and the added costs of producing different styles, designs, and sizes is low, there will be a lot of variety. Alternatively, if consumers desire similar products, or if variation can be
produced only at a high cost, little variety will be present. Apparently, consumers place a substantial value (relative to cost) on variety in napkins but not in toothpicks.

4. The tax would increase the price of lower quality (and lower priced) automobiles by a larger percentage than higher quality automobiles. Consumers would substitute away from the lower quality autos after their relative price had increased. This substitution would increase the average quality of automobiles sold. Because the funds from the tax would be rebated to citizens through the lottery, one would expect this substitution effect to dominate any possible income effect.

7. No. A firm that maximizes total revenue would expand output as long as marginal revenue is positive. When marginal costs are positive, the revenue-maximizing price would be lower (and the output greater) than the price that would maximize the firm’s profits.

8. In any of these cases, the answer is competition. To survive, a given type and size of firm must be able to produce at a low cost. Those firms with high per-unit cost will be driven from the market.

10. Building the new resort is more risky (and less attractive) because if the market analysis is incorrect, and demand is insufficient, it probably will be difficult to find other uses for the newly built resort. If the airline proves unprofitable, however, the capital (airplanes) should be extremely mobile. However, the resort would have one offsetting advantage: If demand were stronger than expected, and profits larger, it would take competitors longer to enter the market (build a new resort), and they would be more reluctant to make the more permanent investment.

12. In a competitive setting, only the big firms will survive if economies of scale are important. When economies of scale are unimportant, small firms will be able to compete effectively.

14. Competition provides the answer. If McDonald’s fails to provide an attractively priced, tasty sandwich with a smile, people will turn to Burger King, Wendy’s, Dairy Queen, and other rivals. If Wal-Mart does not provide convenience and value, people will turn to Kmart, Target, and other retailers. Similarly, as recent experience has shown, even a firm as large as General Motors will lose customers to Ford, Honda, Toyota, Chrysler, Volkswagen, and other automobile manufacturers if it fails to please the customer as much as rival suppliers do.

17. a. Total revenue: $0; $8,000; $14,000; $18,000; $20,000; $20,000; Total cost: $0; $5,000; $10,000; $15,000; $20,000; $25,000; Economic profit: $0; $3,000; $4,000; $3,000; $0; $5,000 (loss).

b. Marginal revenue: $8,000; $6,000; $4,000; $2,000; $0; Marginal cost: $5,000; $5,000; $5,000; $5,000; $5,000.

c. Profit-maximizing price: $7,000.

d. Rod will sell two boats at the profit-maximizing price of $7,000.

e. Rod’s economic profits will be $4,000 per week. Sales volume will be 2.

f. Yes, boats 1 and 2 are the only boats for which marginal revenue is higher than marginal cost.

g. Because of the existence of economic profit, more boat dealers will open up in the area. This will result in more competition and lower prices. The entry will continue until boat dealers’ economic profits fall to zero.

h. When demand is elastic, lowering price increases total revenue; thus, Rod’s demand is elastic between the prices of $9,000 and $5,000. When demand is unitary elastic, lowering price leaves revenue unchanged; thus, Rod’s demand is unitary elastic between the prices of $5,000 and $4,000. One could also assume that Rod’s demand would eventually become inelastic below a price of $4,000 because the elasticity of demand keeps falling as one moves down along a demand curve. When this happens, Rod’s total revenue will begin to fall as he continues to lower price. For example, at a price of $3,000, Rod may sell six boats per week, resulting in only $18,000 in revenue, which is less than the revenue Rod receives at a price of $4,000.
CHAPTER 11: PRICE-SEARCHER MARKETS WITH HIGH ENTRY BARRIERS

1. The statement is true. Profits cannot exist in the long run without barriers to entry because without barriers new entrants seeking the profits would increase supply, drive down price, and eliminate the profits. But barriers to entry are no guarantee of profits. Sufficient demand is also a necessary condition.

3. No; No; No.

8. Because use of product variation and quality improvements to obtain a larger share of the market will be more difficult to monitor and control than a simple price reduction.

11. Reductions in the cost of transportation generally increase competition because they force firms to compete with distant rivals and permit consumers to choose among a wider range of suppliers. As a result, the U.S. economy today is generally more competitive, in the rivalry sense, than it was hundred years ago.

12. The stock price, when the uncle bought the stock, no doubt reflected the well-known profits of Microsoft. The previous owners of the stock surely would not have sold it at a price that failed to reflect its high expected rate of future profit. Thus, there is no reason to believe that the stock purchase will earn a high rate of return for the uncle.

13. a. $15, profit = $110,000; b. $10.

CHAPTER 12: THE SUPPLY OF AND DEMAND FOR PRODUCTIVE RESOURCES

3. a. Five; b. $350; c. Four. The firm will operate in the short run, but it will go out of business in the long run unless the market prices rise.

4. Yes. General increases in the productivity of the labor force will cause a general increase in wages. The higher general wage rates will increase the opportunity cost of barbering and cause the supply of barbers to decline. The reduction in the supply of barbers will place upward pressure on the wages of barbers, even if technological change and worker productivity have changed little in barbering.

6. The job opportunities outside of teaching are more attractive for people with math and science training than for those with English and history degrees. Therefore, the same salary that attracts a substantial number of English and history teachers will be insufficient to attract the required number of math and science teachers.

8. No. The dressmaker needs to employ more capital and less labor because the marginal dollar expenditures on the former are currently increasing output by a larger amount than the latter.

10. Other things being constant, a lengthy training requirement to perform in an occupation reduces supply and places upward pressure on the earnings level. However, resource prices, including those for labor services, are determined by both demand and supply. When demand is weak, earnings will be low, even though a considerable amount of education may be necessary to perform in the occupation. For example, the earnings of people with degrees in English literature and world history are generally low, even though most people in these fields have a great deal of education.

12. a. MP 14; 12; 11; 9; 7; 5; 4. TR 70; 130; 185; 230; 265; 290; 310. MRP 70; 60; 55; 45; 35; 25; 20. b. 4; c. Employment would decline to 3.

CHAPTER 13: EARNINGS, PRODUCTIVITY, AND THE JOB MARKET

2. U.S. workers are more productive. By investing in human capital, the laborers are somewhat responsible, but the superior tools and physical capital that are available to U.S. workers also contribute to their higher wages.

6. Although this statement, often made by politicians, sounds true, in fact, it is false. Output of goods and services valued by consumers, not jobs, is the key to economic progress and a high standard of living. Real income cannot be high unless real output is high. If job creation were the key to economic progress, it would be easy to create millions of jobs. For example, we could prohibit the use of farm machinery. Such a prohibition
would create millions of jobs in agriculture. However, it would also reduce output and our standard of living.

8. The opportunity cost of leisure (nonwork) for higher wage workers is greater than it is for lower wage workers.

9. False. Several additional factors, including differences in preferences (which would influence time worked, the trade-off between money wage and working conditions, and evaluation of alternative jobs), differences in jobs, and imperfect labor mobility, would result in variations in earnings.

10. Scenarios (a), (b), (e), and (f) will generally increase hourly earnings; (c) and (d) will generally reduce hourly earnings.

11. Hourly wages will be highest in B because the higher wages will be necessary to compensate workers in B for the uncertainty and loss of income during layoffs. Annual earnings will be higher in A in order to compensate workers in A for the additional hours they will work during the year.

CHAPTER 14: INVESTMENT, THE CAPITAL MARKET, AND THE WEALTH OF NATIONS

1. All the changes would increase interest rates in the United States.

4. No. The average outstanding balance during the year is only about half of $1,000. Therefore, the $200 interest charge translates to almost a 40 percent annual rate of interest.

6. Hints: Which has been considered to be more risky—purchasing a bond or a stock? How does risk influence the expected rate of return?

8. 6 percent.

10. a. Mike; b. Yes, people who save a lot are able to get a higher interest rate on their savings as the result of people with a high rate of time preference; c. Yes, people who want to borrow money will be able to do so at a lower rate when there are more people (like Alicia) who want to save a lot.

11. They are helped. This question is a lot like prior questions involving Alicia and Mike. Potential gains from trade are present. If obstacles do not restrain trade, the low-income countries will be able to attract savings (from countries with a high saving rate) at a lower interest rate than would exist in the absence of trade. Similarly, people in the high-income countries will be able to earn a higher return than would otherwise be possible. Each can gain because of the existence of the other.

12. a. Approximately $1.277 million; b. Yes; c. The lottery earnings are less liquid. Because there is not a well-organized market transforming lottery earnings into present income, the transaction costs of finding a “buyer” (at a price equal to the present value of the earnings) for the lottery earnings “rights” may be higher than for the bond, if one wants to sell in the future.

14. No. The present value of the $500 annual additions to earnings during the next ten years is less than the cost of the schooling.

16. Consider the following when answering this question: Whose money is being invested by each of the two entities? If a private investment project goes bad, who is hurt? If a private project is successful, who reaps the gain? Answer the same two questions for political officials.

CHAPTER 15: INCOME INEQUALITY AND POVERTY

2. Differences in family size, age of potential workers, nonmoney “income,” taxes, and cost-of-living among areas reduce the effectiveness of annual money income as a measure of economic status. In general, high-income families are larger, are more likely to be headed by a prime-age worker, have less nonmoney income (including
leisure), pay more taxes, and reside in higher-cost-of-living areas (particularly large cities). Thus, money income comparison between high- and low-income groups often overstates the economic status of the former relative to the latter.

4. If there were no intergenerational mobility, the diagonal numbers would all be 100 percent. If there were complete equality of opportunity and outcomes, the numbers in each column and row would be 20 percent.

6. No. The increase in marginal tax rates will reduce the incentive of the poor to earn income. Therefore, their income will rise by $1,000 minus the reduction in their personal earnings due to the disincentive effects of the higher marginal tax rates.

7. 67 percent

CHAPTER 16: GAINING FROM INTERNATIONAL TRADE

2. Availability of goods and services, not jobs, is the source of economic prosperity. When a good can be purchased cheaper abroad than it can be produced at home, a nation can expand the quantity of goods and services available for consumption by specializing in the production of those goods for which it is a low-cost producer and trading them for the cheap (relative to domestic costs) foreign goods. Trade restrictions limiting the ability of Americans to purchase low-cost goods from foreigners stifle this process and thereby reduce the living standard of Americans.

4. Statements (a) and (b) are not in conflict. Because trade restrictions are typically a special-interest issue, political entrepreneurs can often gain by supporting them even when they promote economic inefficiency.

6. True. The primary effect of trade restrictions is an increase in domestic scarcity. This has distributional consequences, but it is clear that, as a whole, a nation will be harmed by the increased domestic scarcity that accompanies the trade restraints.

8. a. No. Americans would be poorer if we used more of our resources to produce things for which we are a high-opportunity-cost producer and less of our resources to produce things for which we are a low-opportunity-cost producer. Employment might either increase or decrease, but the key point is that it is the value of goods produced, not employment, that generates income and provides for the wealth of a nation. The answer to (b) is the same as (a).

10. In thinking about this issue, consider the following points. Suppose that the Japanese were willing to give products such as automobiles, electronic goods, and clothing to us free of charge. Would we be worse off if we accepted the gifts? Should we try to keep the free goods out? What is the source of real income—jobs or goods and services? If the gifts make us better off, doesn’t it follow that partial gifts would also make us better off?

12. Although trade reduces employment in import-competing industries, it expands employment in export industries. On balance, there is no reason to believe that trade either promotes or destroys jobs. The major effect of trade is to permit individuals, states, regions, and nations to generate a larger output by specializing in the things they do well and trading for those things that they would produce only at a high cost. A higher real income is the result.

14. The quota reduces the supply of sugar to the domestic market and drives up the domestic price of sugar. Domestic producers benefit from the higher prices at the expense of domestic consumers (see Exhibit 9). Studies indicate that the quota expanded the gross income of the 11,000 domestic sugar farmers by approximately $130,000 per farm in the mid-1980s, at the expense (in the form of higher prices of sugar and sugar products) of approximately $6 per year to the average domestic consumer. Because the program channels resources away from products for which the United States has a comparative advantage, it reduces the productive capacity of the United States. Both the special-interest nature of the issue and rent-seeking theory explain the political attractiveness of the program.

16. True. If country A imposes a tariff, other countries will sell less to A and therefore acquire less purchasing power in terms of A’s currency. Thus, they will have to reduce their purchases of A’s export goods.
SPECIAL TOPICS

SPECIAL TOPIC 1: GOVERNMENT SPENDING AND TAXATION

1. Taxes reduce economic efficiency because they eliminate some exchanges and thereby reduce the gains from these transactions. Because of (a) the deadweight losses accompanying the elimination of exchanges and (b) the cost of collecting taxes, the costs of additional tax revenue will be greater than the revenue transferred to the government. Studies indicate that it costs between $1.20 and $1.30 for each dollar of tax revenue raised by the government.

5. As we discussed in Chapter 6, the political process works better when there is a close relationship between who pays for and who benefits from government programs. An increase in the number of people who pay no income taxes is likely to weaken this relationship. Whereas those with low incomes pay payroll taxes, the revenues from this tax are earmarked for the finance of the Social Security and Medicare programs. Thus, expansions in government are financed primarily by the personal income tax. In the future, exemption of large numbers of people from this tax is likely to make it more difficult to control the growth of government. If you do not have to help pay for more government spending, why would you oppose it?

SPECIAL TOPIC 2: THE INTERNET: HOW IS IT CHANGING THE ECONOMY?

2. Airline tickets can be “transported” electronically; groceries cannot. Customers can observe the ticket information online, but they cannot observe the condition of fruits, vegetables, and other grocery products via the Internet.

SPECIAL TOPIC 3: THE ECONOMICS OF SOCIAL SECURITY

2. The pay-as-you-go Social Security system will face a crisis sometime around 2018, when the inflow of tax revenue will be insufficient to cover the promised benefits. Although the Social Security Trust Fund has bonds, they are merely an IOU from the Treasury to the Social Security Administration. To redeem these bonds and provide additional funds to finance Social Security benefits, the federal government will have to raise taxes (or pay the interest on additional Treasury bonds it sells), or cut other expenditures, or both. Thus, the presence of the SSTF bonds does not do much to alleviate the crisis.

SPECIAL TOPIC 4: THE STOCK MARKET: ITS FUNCTION, PERFORMANCE, AND POTENTIAL AS AN INVESTMENT OPPORTUNITY

1. History shows that in the U.S. stock market, fairly high returns can be gained at a relatively low risk by people who hold a diverse portfolio of stocks in unrelated industries for a period of twenty years or more. An indexed equity mutual fund is an option that would allow a person to purchase a diverse portfolio while keeping commission costs low.

3. The expectation of high profits in the future drove up the price of the stock, despite the lack of a dividend payment in the first years of the firm. Investors are equally happy with high dividends or the equivalent in rising stock value due to the firm’s retaining its profits for further investment.

5. Investors are buying such a stock for its rising value (price), which reflects expected future earnings and dividends.
SPECIAL TOPIC 5: THE CRISIS OF 2008: CAUSES AND LESSONS FOR THE FUTURE

3. The less equity the owner has in his or her house, the more likely he or she will default. This is particularly true in the United States because most home mortgages here are nonrecourse loans: the owner is not responsible for the debt beyond turning the property over to the lender in case of default. The lender has no legal claim on assets of the borrower beyond the asset that was mortgaged. Thus, when the value of a house falls below the outstanding loan, the borrower will often gain by simply abandoning the property. This is precisely what many have done in recent years.

5. The incentive to evaluate the borrower’s creditworthiness carefully is reduced. If the mortgage originator had to keep the loan until it was repaid, there would be greater incentive for the lender to evaluate the creditworthiness of the borrower more diligently.

SPECIAL TOPIC 6: LESSONS FROM THE GREAT DEPRESSION

5. The statement reflects a failure to recognize the secondary effects of limiting imports. If we buy less from foreigners, they will have fewer dollars that are required for the purchase of our exports. Therefore, a reduction in imports will also reduce exports and there is no reason to expect any net increase in employment. Instead, trade restraints lead to less output and lower incomes.

SPECIAL TOPIC 7: THE ECONOMICS OF HEALTH CARE

2. Health insurance benefits are a component of the employee’s compensation package. Unless the employer values the services of the employee by an amount greater than or equal to the total cost of the employee’s compensation, the worker will not be hired. Thus, like other components of the compensation package, health insurance benefits are earned by employees.

4. Medicare and Medicaid increased both total health care spending and the share of that spending paid by a third party. Both of these factors increased the demand for and prices of medical services, thereby making them more expensive for people who do not qualify for these programs.

6. Personal choices exert a major impact on health care expenditures. Individuals who smoke, consume alcohol, and eat excessively; fail to exercise and control their weight; use recreational drugs; and engage in other risky behavior will have higher health care cost. Under systems in which all are charged the same premium, the incentive to adopt a healthy lifestyle is reduced. Persons who make choices that promote good health are forced to subsidize those who do not. This perverse incentive structure also pushes health care costs upward.

8. The incentive to purchase insurance when you are healthy will be reduced.

SPECIAL TOPIC 8: SCHOOL CHOICE: CAN IT IMPROVE THE QUALITY OF EDUCATION IN AMERICA?

2. The incentive is weak to keep costs low because the suppliers (public schools) don’t face competition from rivals. Because consumers cannot take their funding and go elsewhere, they are in a weak position to discipline the district schools that are not doing a good job. Furthermore, a lower quality of service can often be used as an argument for more government funding. Economics indicates that an absence of competitive forces will lead to higher costs and lower quality of the product or service supplied. There is no reason to expect that education will be an exception.
SPECIAL TOPIC 9: EARNINGS DIFFERENCES BETWEEN MEN AND WOMEN

2. a. The average years of work experience of women relative to men would decline because many of the women entering the labor force would have little prior work experience.
   
b. The average hours of work of women would also decline because many of the married women would be looking for part-time employment and hours that were complementary with their historic household responsibilities.
   
c. The increased labor force participation of married women would cause the female/male earnings ratio to fall.

4. Not necessarily. Compared with married men, single men tend to be younger, have fewer dependents, be more likely to drop out of the labor force, and be less likely to receive earnings-enhancing assistance from another person. All these factors will reduce their earnings relative to married men.

SPECIAL TOPIC 10: DO LABOR UNIONS INCREASE THE WAGES OF WORKERS?

1. If the union is able to raise the wages of the farm workers: (a) the cost of Florida oranges will rise, causing supply to decline and price to rise in the long run; (b) profits of the Florida orange growers will decline in the short run, but in the long run they will return to the normal rate; (c) mechanization will be encouraged; and (d) the employment of fruit pickers will decline—particularly in the long run.

3. If only part of an industry is unionized, if the union pushes up the wages of the unionized firms, this will increase their cost and make it difficult for them to compete effectively with their nonunion rivals. Thus, the union will be unable to increase wages much without experiencing a substantial reduction in the employment of its members.

5. False. Competition constrains both employers and employees. Employers must compete with other employers for labor services. To gain the labor services of an employee, an employer must offer a compensation package superior to one that the employee can get elsewhere. If the employer does not offer a superior package, the employee will work for a rival employer or choose self-employment. Similarly, employees must compete with other employees. Therefore, their ability to demand whatever wage they would like is also restrained. Thus, competition prevents both the payment of low (below-market) wages by employers and the imposition of high (above-market) wages by employees.

6. Not necessarily. Adjustment must be made for differences in (a) the productivity characteristics of the union and nonunion workers and (b) the types of jobs they occupy (for example, work environment, job security, likelihood of layoff, and so on). Adjustment for these factors may either increase or reduce the $1.50 differential.

7. Remember, union members compete with other workers, including less-skilled workers. An increase in the minimum wage makes unskilled, low-wage workers more expensive. A higher minimum wage increases the demand for high-skilled employees who are good substitutes for the low-skilled workers. Union members are overrepresented among the high-skilled group helped by an increase in the minimum wage. Therefore, although union leaders will generally pitch their support for a higher minimum wage in terms of a desire that all workers be paid a “decent wage,” the effect of the legislation on union members suggests that self-interest rather than altruism underlies their support for the legislation.

SPECIAL TOPIC 11: ARE WE RUNNING OUT OF RESOURCES?

2. When demand expands in resource markets, prices send signals and provide the incentives that will reduce future demand relative to supply. These forces will avoid lasting shortages.

5. If any resource, including water, is bought and sold, then market signals will automatically be provided to signal the desires of users to have, and the abilities of suppliers to supply, more. A market provides productive incentive to all concerned. Users conserve more when a market price rises, suppliers provide more, and there is greater incentive to develop and use substitutes for the higher priced resource. If markets are not
used to allocate a resource, these benefits will be lost.

SPECIAL TOPIC 12: DIFFICULT ENVIRONMENTAL CASES AND THE ROLE OF GOVERNMENT

1. The ITQ would allow fishers to fish at their own speed without fear of losing their quota to others.

3. The cost of stopping the buildup would be very large. Avoiding the buildup would be very costly. That large opportunity cost could accomplish instead much else that would help future generations. The forecasted risks are only speculatively the result of the buildup and would occur mostly far in the future. And a warmer world has advantages as well as disadvantages.

4. In a market with strong property rights in place, a polluter would have to be concerned about harming others and being sued by them for damages. Without strong property rights in place, regulation might help. Or it might not. In any case, regulators need information available only in a market to judge how tightly to regulate if the regulator is seeking efficiency.