Solutions for Economics 12th Edition by Slavin

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Solutions

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CHAPTER 1 –
A Brief Economic History of the United States
Solutions Manual

Answers to Multiple-Choice Questions

1.	d	25.	c
2.	c	26.	c
3.	b	27.	f
4.	a	28.	d
5.	d	29.	a
6.	d	30.	a
7.	e	31.	c
8.	d	32.	e
9.	c	33.	b
10.	c	34.	b
11.	b	35.	d
12.	a	36.	b
13.	b	37.	c
14.	c	38.	c
15.	a	39.	d
16.	c	40.	a
17.	c	41.	c
18.	b	42.	b
19.	e	43.	b
20.	b	44.	a
21.	b	45.	a
22.	a	46.	b
23.	c	47.	c
24.	d	48.	d

Answers to Fill-In Questions

1. 1933
2. 9
3. December 2007
4. the United States
5. 25
6. Lyndon Johnson
7. 500
8. 3
9. a plenitude of land in comparison with amount of labor (or, a scarcity of labor).
10. government spending on World War II (the New Deal did not do the job)

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11. 12
12. 1875 (give or take a couple of years)
13. G.I. bill of rights
14. 20th
15. 7
16. $787 billion in economic stimulus bill
17. 35 percent to 21 percent

Answers to Questions for Further Thought and Discussion

1. *Describe, in as much detail as possible, the impact of the Great Depression on the lives of those who lived through it. If you know anyone who remembers the 1930s, ask them to describe those times.*

   Some of the things that typify those times were the breadlines, soup kitchens, hobo jungles, Hoovervilles, widespread unemployment and poverty. Also prominent were the New Deal, the collapse of the banking system, the foreclosed mortgages, and, perhaps most significant, the loss of hope by millions of Americans of ever making a decent living.

2. *What were the main agricultural developments over the last two centuries?*

   1834: Cyrus McCormick's mechanical reaper, which quadrupled output of farm workers by 1860.

   Late 1840s: John Deere began manufacturing steel plows.

   Other 19th century innovations: Appleby twine binder, the Marsh brothers' harvesting machine, the Pitts thresher, and Eli Whitney's cotton gin.

   Early 20th century: Gasoline-powered tractor

   Two other (nontechnological) developments were the federal government's willingness to give away 160-acre plots to anyone who would farm that land and, beginning in the 1930s, the federal government paid farmers hundreds of billions of dollars in price-support payments.

3. *How have wars affected our economy? Use specific examples.*

   The Civil War ended slavery, upon which much of Southern agriculture had been based. It also ensured that Northern industry would continue to be protected from European competition by high protective tariffs. In addition, General Sherman's army laid waste to a wide swath of the South.

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World War I and World War II were followed by long economic booms set off mainly by pent-up consumer demand for housing and cars. These wars, in addition to the Korean War and the Vietnam War, set off periods of inflation. Wars also sped up our rate of economic growth and reduced unemployment.

4. *Inflation has been a persistent problem for most of the 20th century. What were some of its consequences?*

   High rates of inflation led to credit tightening by the Federal Reserve, causing recessions in 1980 and 1981, as well as in other years. Inflation in the early 1970s—especially the quadrupling of oil prices—pushed us into a recession in 1973. During World War II, the Korean War, and again in the early 1970s, the federal government instituted price controls to fight inflation. Some critics thought the cure was worse than the sickness.

5. *In what ways were the 1990s like the 1920s, and in what ways were the two decades different?*

   In both decades there were economic booms, very low unemployment and inflation, and a rapidly rising stock market. The 1920s ushered in the era of mass consumption, the automobile became commonplace, and most homes were wired for electricity and telephones. In the 1990s, perhaps the only major new household appliance was the PC. The 1920s was a decade of mass production; the 1990s was a decade of customized production. Perhaps the greatest difference between the decades was that the 1929 stock market crash led to the Great Depression of the 1930s, while the New Economy that began to take off in the 1990s has continued to soar well into the new millennium.

6. *When our country was being settled, there was an acute shortage of agricultural labor. Over the last hundred years, millions of Americans have left the farms. How have we managed to feed our growing population with fewer and fewer farmers?*

   The main reason our farmers rapidly became more productive was the major technological innovations of the second half of the 19th century (outlined in the answer to question 2). The vast expansion of the railroads during this period opened huge markets for agricultural products.

7. *Today America has the world's largest economy as well as a very high standard of living. What factors in our economic history helped make this possible?*

   We can start with our vast land area, which provided enough acreage for virtually anyone who wanted to own a farm. Our fledgling industries were protected from foreign competition by a high protective tariff as well as a wide ocean. The railroads, rivers, as well as a system of canals, made a national market possible, and, in addition, connected our farmers and manufacturers to world markets. American manufacturers were helped by foreign investors, enabling us to expand our industrial output much faster. Most significant, the United States

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was a single national market using a single currency, with no internal barriers like protective tariffs to inhibit the movement of goods and services between states. The federal government, which initially intervened in our economy mainly to provide tariff protection to manufacturers, did not interfere with the industrialization process. Later, beginning with the New Deal during the Great Depression, the government did intervene to stimulate the economy, to fight inflation, and to provide a social safety net to most Americans.

8. *List the main ways the "new economy" (since the early 1990s) differs from the "old economy."*

   The new economy differs from the old economy in four basic ways: faster rates of technological change and productivity growth, and lower inflation and unemployment. It is marked by deregulation, lower tax rates, and a growing federal government budget surplus (as opposed to huge deficits). It is a time of economic boom and rapidly rising stock prices. It is an expansion that set an all-time record of 107 consecutive months in February 2000. The 1990s was the decade of computerization in both households and businesses, and the beginning of the age of the Internet.

9. *To what degree has the U.S. economy recovered from the Great Recession?*

   Answers should include references to the unemployment rate, total employment (and/or employment by sector), the rate of economic growth, and the current state of the economy, e.g. consumer and business optimism.

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CHAPTER 2—
Resource Utilization
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Answers to Multiple-Choice Questions

1.	c	19.	b
2.	b	20.	d
3.	b	21.	b
4.	c	22.	c
5.	a	23.	c
6.	b	24.	b
7.	c	25.	d
8.	a	26.	a
9.	b	27.	b
10.	c	28.	d
11.	c	29.	b
12.	a	30.	d
13.	b	31.	a
14.	a	32.	b
15.	c	33.	d
16.	b	34.	c
17.	a	35.	d
18.	d		

Answers to Fill-In Questions

1. underemployed
2. scarcity
3. unlimited; limited
4. the opportunity cost of producing additional units of this good increases
5. increasing costs
6. The sacrifice of not buying the jacket.
7. five percent
8. (1) blue laws; (2) child labor laws; and (3) Americans' preference for daylight weekday work hours.
9. underemployment; less than full production; inefficient allocation of resources.
10. production possibilities frontier or curve
11. within (or inside)
12. (1) improving the level of technology and (2) increasing the amount of resources.

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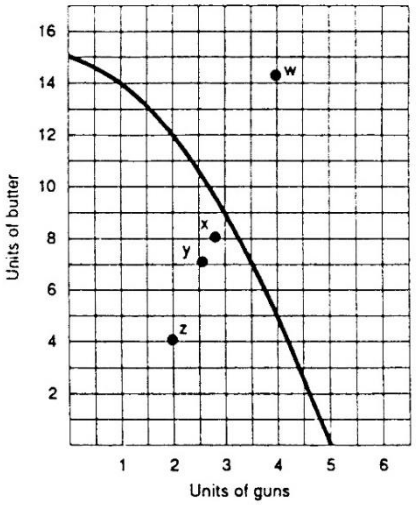
Answers to Problems

1. No—Point C is on the production possibilities frontier which indicates that the economy is currently operating at full capacity, which precludes producing more of both goods in the near term.

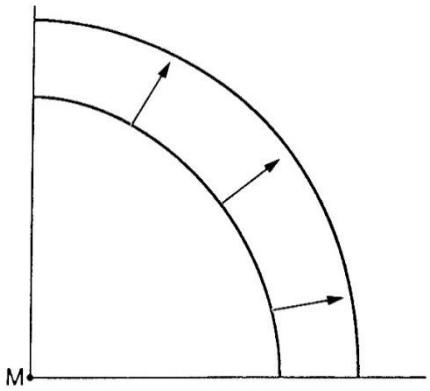
2. Yes—Point M is below the production possibilities frontier which indicates that the economy is currently below capacity, meaning producing more of both goods in the near term should be feasible.

3. No—Point J is above the production possibilities frontier which indicates that it is currently above the economy's capacity to produce. Economic growth may make it feasible to achieve at some point in the future, but it would most likely take years rather than months.

4. A sample graph would look like the following:



5. Substantial economic growth is exhibited by a sizable rightward shift of the production possibilities frontier.



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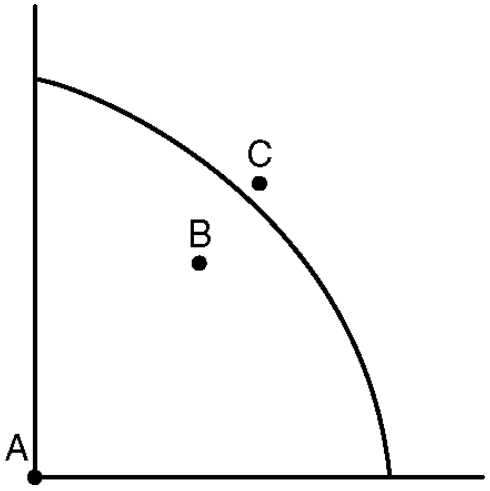
6. 100% employment is shown at point M in the graph above. It is assumed that any level of production requires the use of some resources. In order for all resources to be unemployed, there can be no production of any good.

7.



8. 2 units of butter, 1 unit of guns: The opportunity cost of more of any item is the required sacrifice of other items that must be incurred. Since there are only two goods here, the cost of more of one is the associated loss in the other. Movement from B to C adds a gun but requires a reduction of (14 – 12) = 2 units of butter.

9. Finding opportunity cost from a production possibilities frontier is simply a matter of comparing the coordinates of the designated points.

   a) Movement from point B (170 DVDs, 50 Cameras) to point C (160 DVDs, 80 Cameras) leads to 30 more cameras at a loss/sacrifice of 10 DVDs.

   b) Movement from point D (150 DVDs, 100 cameras) to point C (160 DVDs, 80 cameras) leads to 10 more DVDs at loss/sacrifice of 20 cameras.

   c) Movement from point B (170 DVDs, 50 cameras) to point A (180 DVDs, 0 cameras) leads to 10 more DVDs at loss/sacrifice of 50 cameras.

   d) Movement from point C (160 DVDs, 80 cameras) to point D (150 DVDs, 100 cameras) leads to 20 more cameras at loss/sacrifice of 10 DVDs.

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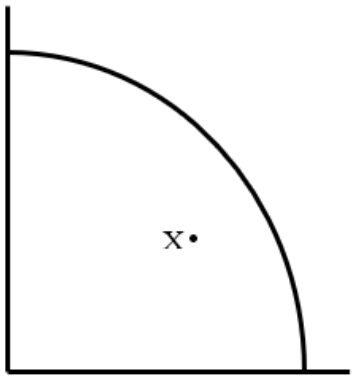
10. Moving from point E toward point A, we give up increasing amounts of digital cameras for each gain of 10 DVD players. The opportunity cost of moving from E to D is 10 digital cameras; from D to C, 20 digital cameras; from C to B, 30 digital cameras and from B to A, 50 digital cameras.

11.



Answers to Questions for Further Thought and Discussion

1. *If you were in a position to run our economy, what steps would you take to raise our rate of economic growth?*

   Increase our savings rate, build more and better capital, have a larger and more skilled labor force, and improve the technology. The federal government could sponsor more basic research, which would boost our technology. Much of our technological advance over the last six decades has come from research funded by the military. A recent application is the Internet. Our labor force could be increased in size and quality by increased immigration. Employers have been clamoring to raise immigration quotas for skilled workers. We could also try to improve our educational system.

2. *Under what circumstances can we operate outside our production possibilities curve?*

   The most common circumstance has been during wartime when workers are more willing to work overtime, work at night and on weekends, and everyone is more willing to put forth that extra effort to help win the war. During times of great prosperity, such as in the last four or five years, we have reduced our unemployment rate well below the full employment rate of 5 percent.

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3. *Give an example of an opportunity cost for an individual and for a nation.*

   Individual opportunity cost: If you spend the evening before an exam at a concert, you are giving up 15 points on your exam grade. If you buy a pair of jeans, you would not be able to buy 2 CDs.

   National opportunity cost: By building a highway, the nation gave up a new aircraft carrier. By providing $10 billion to hire new teachers, there was $10 billion less available for a tax cut.

4. *Would it be harder for a nation to attain full employment or full production? Explain.*

   Full employment is one of several conditions needed to attain full production. The other involves an efficient allocation of our resources. There would be no underemployment of resources, no employment discrimination, no misallocation of resources, and we would use the best available technology.

5. *Could a nation's production possibilities frontier ever shift inward? Discuss whatever might cause such a shift to occur.*

   A nation's production possibilities frontier could shift inward if its productive capacity declined—if the quantity or quality of its labor force declined, if the quantity or quality of its capital declined, or if it used a lower level of technology. The populations of several Western European countries have been declining for years, and in the United States, our birth rate has fallen so low that our population would have been falling if several million immigrants had not been moving here each year. During a war or a depression, the stock of capital usually falls. And if an economy could not afford much new investment, it is possible that older, less productive technology might be used. For example, if we could not afford the investment, we would continue to use our older computers, and perhaps even buy older computers from other countries because we could not afford the newer ones. Indeed, we do export some of our older, obsolete capital to less developed countries.

6. *What is the opportunity cost you incurred by going to college?*

   This is one you can answer a lot better than me, but I'll try. It might be not holding a full-time job, not spending several hours a day watching Netflix, or it might be not lying on the beach, surfing, partying, or just hanging out. Maybe you're giving up a career playing major league baseball or being a rock star.

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7. *Although the United States is one of the world's wealthiest nations, some of the federal government's budget decisions are severely constrained by scarcity. Can you think of one such decision that was in the recent economic news?*

   I'm at too much of a disadvantage to do more than guess at what would be in the recent economic news—possibly giving up a big tax cut to pay down the national debt, or maybe giving up a national health insurance plan to shore up Social Security.

8. *Why is scarcity central to economics?*

   If there were no scarcity of economic resources, we could produce as much as we needed or wanted, and there would be no need to economize.

9. *Can you think of any decision you have recently made that incurred opportunity costs?*

   Anything that involves giving up the next best alternative. For me it was revising this book instead of writing another book.

10. *Do you know any entrepreneurs? What do they do?*

    You would choose business owners and describe how they run their businesses.

11. *Why is entrepreneurship central to every business firm?*

    A firm cannot run by itself. Someone is needed to hire the land and labor, supply or raise the capital, and to make the major decisions. Business firms do not just spring up by themselves. Entrepreneurs recognize business opportunities and are able to take advantage of them by starting companies, running them, and building them into profitable enterprises.

12. *Explain the law of increasing costs, using a numerical example.*

    The law of increasing costs: As the output of one good expands, the opportunity cost of producing additional units of this good will entail larger and larger opportunity costs. If we were producing bushels of wheat and neckties and we were to keep expanding wheat production, we would need to give up increasing numbers of neckties. For example, if we were to increase wheat production by

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one bushel increments from 1 bushel to 5 bushels, we would have to give up producing 2, 5, 9, 17, and 30 neckties, respectively.

13. *Discuss the three concepts upon which the law of increasing cost is based.*

(1) The law of diminishing returns: if units of a resource are added to a fixed proportion of other resources, eventually marginal output will decline.

(2) Diseconomies of scale: inefficiencies that crop up as a firm continues to expand

(3) Factor suitability: As output expands, we hire land, labor, and capital that is less and less suitable (because we hire the most suitable factors first).

14. *Practical Application: Underemployment of college graduates is a growing problem. If you were appointed to the board of trustees of your college, what measure would you suggest to alleviate this problem for the graduates of your school?*

A substantial number of alumni own businesses or work for sizeable companies and should be invited to recruit graduating seniors. Also, intern programs could be set up with these companies.

Recent graduates should be contacted about any available positions in their companies. And then, too, the names of the school's most prominent graduates could be used in ads placed in trade journals such as *The American Banker* and *Computer World.*

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CHAPTER 1
A Brief Economic History of the United States

A. After studying this chapter, the student should be able to

1. Summarize America's economic development in the 19th century.
2. Describe the effect of the Great Depression on our economy and evaluate the New Deal measures to bring about recovery.
3. Discuss the impact of World War II on our economy.
4. List and discuss the major recessions we had since World War II.
5. Summarize the economic highlights of each decade since the 1950s.
6. Differentiate the "new economy" from the "old economy."
7. Assess America's place in history.

B. Ideas for use in class

Getting started

1. This first chapter sets Slavin's *Economics* apart from most other textbooks. It begins with economic history so that students see how economic institutions and economic policies have changed over time. Explain the approach to students, emphasizing:

   - Students come to the course with varying backgrounds in U.S. history. This chapter provides everyone with a common level of knowledge necessary for the remainder of the course.

   - In order to understand today's economic issues, we need to know: Why do we have our current economic institutions? What policies have been tried in the past? What worked? What didn't?

2. Gauge how much your students already know about economic history. Starting off with a quiz likely will frighten students—and perhaps the results will distress you, the instructor. Instead, use a creative approach to find out what students have learned in previous courses and what they still need to learn.

   Ask students what questions have puzzled them about the U.S. economy. Prompt them to use higher level critical thinking questions such as: How did…?, and Why would…?, rather than What is…? And When did…?. If all the questions are about the current economy, prompt students to think historically by asking why the current situation arose.

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Active learning strategies

1. Students may feel overwhelmed by the names, dates, and events described in the chapter. Construct a time line in which the *links* between events are highlighted. For example, the national railroad network, constructed between 1850 and 1890, enabled mass production and mass consumption; the Great Depression ended only with U.S. entry in World War II; oil price increases preceded stagflation of the 1970s; the bursting of the dot-com bubble and the new bubble in real estate (housing) prices; the Great Recession; Affordable Care Act; and Trump tax cuts. There are many more event-pairs described in the chapter.

   Draw a large timeline on the board. Make sure students understand that the scale underneath needs to be consistent; for example, a 10-year time span always needs to be the same distance apart. Some students with weak quantitative reasoning skills will not know this.

   In teams of two, students receive two pieces of paper each with one of the two connected events. Ask students to decide which event came first and its approximate time frame. Students tape the two pieces of paper on the timeline for other students to see and, if necessary, correct. Some of the U.S. presidents and their impact on the economy are described in the chapter. Have students add relevant presidential administrations to the timeline.

2. Break down the chapter's historical presentation into time periods (for example, pre-Civil War, reconstruction, and so on). Assign one time period to a group of four students. Within that group each student has one of the following tasks: What new terms are presented in the section (define them)?; What was the main idea in this section?; What questions remain unanswered?; and provide a visual representation of the ideas in the section (such as a timeline or concept map).

   Because this is a short chapter, work completed in small groups need not be reported to the entire class; that would be tedious and time-consuming.

C. Homework questions and projects

1. The chapter introduces several policy issues that will be in the news during the course. Ask students to update these policies: how have they been changed? What are the current debates about the policy? Students could examine:
   - The Affordable Care Act
   - Dodd Frank Wall Street Reform and Consumer Protection Act
   - Trump tax cuts
   - Trans-Pacific Partnership Act and NAFTA
   - Current unemployment rate

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- Time since the last recession

2. For updated summaries and wry commentary on research on economic history see Brad DeLong's course and blog.

   Extensive further research is possible for this chapter. For overviews see:

   "Symposium: Looking Backward at Economics and the Economy," *Journal of Economic Perspectives*, 14(1) Winter 2000.

   Alfred D. Chandler, Jr., *Strategy and Structure: Chapters in the History of the American Industrial Enterprise.*

   Robert L. Heilbroner and Aaron Singer, *The Economic Transformation of America: 1600 to the Present.*

3. U.S. economic history can be compared with that of other nations. On the Internet, country by country economic analyses are available at the CIA factbook.

   For a provocative historical approach see David Landes, *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor.*

   For a long-term anthropological approach see Jared Diamond, *Guns, Germs and Steel.*

4. The chapter presents the U.S. economy as successful in some ways yet facing problems in other ways. For an introduction to the debate about the current U.S. economy—is it half-full or half empty? —see two contrasting views:
   For an optimistic view of U.S. economic equality, see Michael Cox, *Myths of Rich and Poor: Why We're Better Off than We Think.* For a view critical of U.S. economic equality, see Lawrence Mishel, *The State of Working America.*

5. For research on economic growth by the 2018 Nobel Prize winner in economics, Paul Romer, see MyIDEAS.

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CHAPTER 2
Resource Utilization

A. After studying this chapter, the student should be able to

1. Define economics.
2. Identify the central fact of economics and explain how it relates to the economic problem.
3. Name the four economic resources and explain how they are used by the entrepreneur.
4. Explain and apply the concept of opportunity cost.
5. Describe and distinguish among the concepts of full employment, full production, and underemployment.
6. Describe the concept of the production possibilities curve and how it is used.
7. Identify and explain the three concepts upon which the law of increasing costs is based.
8. Define and explain productive efficiency.
9. Identify and explain the factors that enable an economy to grow.

B. Ideas for use in class

Getting started

1. Many of the terms in this chapter will be familiar to students—but not in their technical economic meaning. For example, scarcity, production (meaning services in addition to goods), and full employment are terms likely to be misinterpreted students. Stress that colloquial understanding is not wrong; instead economists want to use these terms in a more precise manner. For example, full employment does not mean 0% unemployment.

2. Connect the terms labor, land, capital, and entrepreneurship to student experience. These terms are relatively easy to understand, so students likely will be able to provide correct examples. All students will participate if you use a think-pair-share activity in which students first think privately of an example, then share it with a partner. Finally, ask a few students to report their examples.

   Students may wonder why economists bother to differentiate production resources into these seemingly obvious categories. Point out that one important task for economists is to determine *which* of these resources is most scarce so that production bottlenecks can be altered. Ask: Which resource is scarcest on your campus? In the United States? In China? In India? In Mexico?

3. This chapter introduces the first graph in the textbook. Show students why graphs are a helpful device for illustrating economic concepts. Begin by explaining the production possibilities curve in words. Point out that this description may be difficult to follow. Then show the same ideas in a simple table with a few entries. Finally, draw the

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production possibilities curve. Point out that the graph shows the concept visually and has the added advantage of representing all possible combinations inputs, not just the few that were listed in the table.

Active learning strategies

1. Although most students will be able to read the graphs presented in this chapter, they may not fully understand all the underlying assumptions. Ask students to draw a production possibilities curve from a table of data. Make certain that they are able to select the correct labels and choose a reasonable scale for each axis. Suggest that students use a full piece of paper so that errors are not hidden in a tiny graph.

2. Students can construct a production possibilities curve based on their own experience. For the two outputs use their learning of two subjects. The constraining resource is their time in one week. Spending all one's time on one subject will lead to the most learning in that subject, but none in the other subject.

   This application can be used to show the law of increasing costs because the first hour of study will bring about more learning that the next hour of study and so on.

3. There are many examples that illustrate opportunity cost based on student experience, most importantly the decision to attend college. Ask students to brainstorm the cost of attending college. Likely they will focus on out of pocket expenses such as tuition and books. However, for many students the largest cost by far is foregone earnings, both what could have been earned during the time spent in school and the lost opportunity for promotion if the student could work full-time. Consider a follow-up project using the sources cited below.

4. For an historical case study of the "guns versus butter" trade-off, examine the relative position of the U.S. and the former Soviet Union during the Cold War. The U.S. spent an average of 6% of national output on armaments, while the Soviet Union spent 20% of national output on armaments. What was the opportunity cost for each country?

5. Students can think that the "guns vs. butter" example is focused on how government spends its money on the military vis-à-vis other programs. Emphasize that you are modeling the economy as a whole. Thus other good examples of trade-offs that can be graphed on a production possibilities curve include: manufactured goods vs. services; private goods and services vs. public sector goods and services; investment goods vs. consumption goods.

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C. Homework questions and projects

1. In this activity (Starting Point: Teaching and Learning Economics - Creating and interpreting a production possibilities curve) students construct a production possibilities curve for damaged crops after a 2017 Georgia hurricane

2. Students can analyze the impact on production of a shorter or longer work week. See recent political disputes in Europe on the work week, and articles about the U.S. work week (see The State of Working America*).*

3. The trade-offs between military and civilian spending are often in the news. For competing estimates of the Iraq war costs, see Lawrence Lindsay's *What a President Should Know…but Most Learn Too Late,* and Joseph E. Stiglitz and Linda J. Bilmes *The Three Trillion Dollar War: The True Cost of the Iraq Conflict*.

3. The benefits and costs of a college education can be studied in several ways:

   - Examine opinions and evidence on the returns to college education. See The Chronicle of Higher Education: Are Too Many Students Going to College?
   - Students can study the relative pay of different professions, including differences by major at O*NET Online.

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