

CHAPTER 15

CAPITAL STOCKS AND RESOURCE MAINTENANCE

Principles of Economics in Context (Goodwin et al.)

Chapter Overview

This chapter deals with the concepts associated with resource maintenance and capital stocks. The text examines the five types of capital that underlie economic activity: natural, human, social, manufactured, and financial capital. This chapter focuses primarily on definitions and concepts, rather than on graphic or numerical problems.

Chapter Objectives

After reading and reviewing this chapter, you should be able to:

1. Define the difference between stocks and flows.
2. Define the five types of capital.
3. Discuss the limitations of substitutability with respect to natural capital.
4. Describe why social capital is important for economic activities.
5. Distinguish between the two types of financial capital.
6. Understand the importance of sustaining capital stocks.

Key Term Review

capital
investment
stock-flow diagram
manufactured (or produced) capital
social capital
physical capital
renewable resource
substitutability
fixed manufactured capital
inventories
equity finance
loan
interest

stock
flow
natural capital
human capital
financial capital
intangible capital
nonrenewable resource
sustainable socioeconomic system
depreciation
social organization
debt finance
principal

Active Review

Fill in the Blank

1. Assets that are tangible are known as _____ capital.
2. Manufactured goods that yield a flow of productive services over an extended period of time are known as _____ manufactured capital.
3. Gary's Gasoline Station is for sale. Gary hopes to get a good price for the station in part because he has built up a good reputation with customers. The good will of Gary's customers is a form of _____ capital.
4. Financial capital exists in two forms: _____ finance and _____ finance.
5. A system that maintains its resources such that at least the same level of well-being can be maintained over time is known as a _____.
6. Stocks of materials or goods that are not currently being used or sold but are expected to be used or sold in the foreseeable future are known as _____.

True or False

7. A stock-flow diagram shows how flows change over time.
8. The stock of relationships that facilitate economic transactions is known as human capital.
9. A fishery is an example of a renewable natural resource.
10. An obsolete computer is an example of depreciation.
11. Eating nutritious food can be considered an investment in human capital.
12. Buying furniture using cash is an example of equity finance.
13. Social capital can only increase over time.
14. The number of fish sold per day at Big City Fish Shop is an example of a stock.
15. The principal is the original amount of a loan plus interest.
16. Planting trees can be considered investment.
17. The number of students enrolled in your economics class is an example of a stock.

Short Answer

18. Name the five forms of capital.

19. Alice is good at learning foreign languages, and has already studied Latin and Greek. She decides to sign up for an intensive summer course in intermediate German. Describe the scenario using the terms " human capital stock" and "investment."

20. Describe the difference between equity and debt finance.

Self Test

1. Which of the following is an example of a stock?

- a. The number of haircuts you got last year
- b. The amount of water that passes over a waterfall per second
- c. The number of screwdrivers sold by a hardware store each week
- d. The number of fish produced at a hatchery each day
- e. The number of goldfish in the pet store's aquarium

2. Which of the following is an example of investment?

- a. A business sponsors an educational program for its employees.
- b. A farmer sets aside seeds to plant next year.
- c. A group of neighbors construct a new day care facility.
- d. A worker puts half her paycheck into a savings account.
- e. All of the above.

3. Which of the following statements is *false*?
- a. A nonrenewable resource is a stock that diminishes as it is used over time.
 - b. Renewable resources can be eliminated through over-use.
 - c. Financial capital refers to purchasing power, or money.
 - d. Natural capital refers to both renewable and nonrenewable resources.
 - e. Human capital refers to buildings, machines, and inventories of produced goods.
4. Which of the following would be referred to as social capital?
- a. money in the bank
 - b. heavy machinery
 - c. one person's training in engineering
 - d. a forest
 - e. trust and mutual understanding
5. Which of the following activities would be described as a resource maintenance effort?
- a. Limiting use of fossil fuels in an effort to limit global warming
 - b. Harvesting fish at a high rate
 - c. Extracting oil from known oil reserves
 - d. Using a well-designed machine to process leather for shoes
 - e. Selling seeds on the international market
6. Which of the following is *not* an example of manufactured capital?
- a. roads
 - b. computers
 - c. a plow
 - d. a primitive digging stick
 - e. a fresh-water spring
7. A city government builds a new road. After five years the road develops some potholes, making it less useful. This decline in the value of the road over time is an example of
- a. fixed inventory
 - b. flows of capital services
 - c. depreciation
 - d. substitutability
 - e. a renewable resource

8. Hal's Hardware has a backup supply of 100 cans of paint thinner in its warehouse. The cans of paint thinner, which Hal's Hardware is holding until they can be used, are
- an inventory
 - a flow
 - fixed manufactured capital
 - renewable resources
 - financial capital
9. Which of the following is an example of fixed manufactured capital?
- A delivery truck.
 - Oil reserves.
 - A chemical compound that will be incorporated into a product.
 - Nails that will be used to build a playground.
 - Both a and d are correct.
10. Which of the following would be considered a type of social capital?
- technology
 - good nutrition
 - roads
 - factories
 - financial assets
11. Which of the following statements is *false*?
- Crude oil stocks are natural capital.
 - Mutual understanding is a type of social capital.
 - Knowledge about how to operate a machine is intangible capital.
 - Physical capital is synonymous with natural capital.
 - Education is an investment in human capital.
12. A farmer takes a course to learn about crop rotation methods. In taking this course, she is investing in
- substitutable capital
 - human capital
 - natural capital
 - nonrenewable resources
 - fixed manufactured capital

13. Which of the following is an example of a stock of natural capital?
- a. The number of trucks owned by a company.
 - b. The new growth in a forest over a year.
 - c. The knowledge you have gained from your past education.
 - d. The amount of oil in an underground reserve.
 - e. Efforts to remove the effects of pollution from a river.
14. A diagram that shows how flows change the level of a stock over time is known as a(n)
- a. flow chart
 - b. flow diagram
 - c. stock-flow diagram
 - d. input-output model
 - e. capital stock diagram
15. Which of the following forms of capital would be likely to increase if there is an influx of new funding for literacy training?
- a. human capital
 - b. social capital
 - c. stock capital
 - d. financial capital
 - e. physical capital
16. Which of the following activities is an example of maintaining a capital stock?
- a. Replenishing soil quality through crop rotation.
 - b. Harvesting a crop of corn.
 - c. Withdrawing money from a checking account.
 - d. Paying a phone bill.
 - e. None of the above.
17. Which of the following is an example of an inventory?
- a. A freezer full of ice cream to be served at a party next week.
 - b. Taking out a loan from a bank.
 - c. A shopping cart.
 - d. A house that is for sale by the owner.
 - e. Both a and b are true.

18. The possibility of using one resource instead of another is known as
- a. the precautionary principle
 - b. substitutability
 - c. sustainability
 - d. manufacturing advantage
 - e. comparative advantage
19. Manufactured goods that yield a flow of productive services over an extended period of time are referred to as
- a. capital services
 - b. capital flows
 - c. fixed manufactured capital
 - d. manufactured flows
 - e. inventories
20. Suppose you buy a new printer for your business using money you've earned as profits. What is this an example of?
- a. inventory finance
 - b. fixed finance
 - c. debt finance
 - d. flow finance
 - e. equity finance

Answers to Active Review Questions

1. physical
2. fixed
3. social
4. equity; debt
5. sustainable socioeconomic system
6. inventories
7. False
8. False
9. True
10. True
11. True
12. True
13. False
14. False
15. False
16. True
17. True
18. Natural, manufactured, human, social, financial.
19. Alice's innate abilities and prior training, which contribute to her ability to learn a new language, are part of her *human capital stock*. Taking the German course is an *investment* that will increase her stock of knowledge.
20. Equity finance is using one's own funds to make productive investments. Debt finance is taking out a loan (i.e., temporarily borrowing another's funds, on the condition that it be paid back with interest) to make investments.

Answers to Self Test Questions

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| 1. e | 11. d |
| 2. e | 12. b |
| 3. e | 13. d |
| 4. e | 14. c |
| 5. a | 15. a |
| 6. e | 16. a |
| 7. c | 17. a |
| 8. a | 18. b |
| 9. a | 19. c |
| 10. a | 20. e |