

SECTION

3

READING STUDY GUIDE WITH ADDITIONAL SUPPORT

Analyzing Production Possibilities**Before You Learned**

People consider several different factors, including incentives, utility, benefits, and costs when they make economic choices.

Now You Will Learn

Economists study economic choices using simplified models, such as the production possibilities curve (PPC).

Economic Terms

- **economic model:** A simplified representation of a complex economic situation; one such model is a production possibilities curve
- **efficiency :** The condition in which economic resources are being used to produce the maximum amount of goods and services possible
- **underutilization:** The condition in which economic resources are not being used to produce the maximum amount of goods and services possible
- **law of increasing opportunity cost:** An economic generalization stating that as production switches from one product to another, increasing amounts of resources are needed to increase the production of the second product

As You Read

Take notes to help you understand meaning and importance of production possibilities curves.

Analyzing Production Possibilities	
PPC	shows impact of scarcity

ANALYZING PRODUCTION POSSIBILITIES, *CONTINUED***Graphing the Possibilities**

Economists use production possibilities curves (PPCs) to study how scarcity affects amounts of goods and services a society produces. A production possibilities curve is a line graph. The line graph is a plot of amounts of two products. Quantities of one product are plotted on the vertical axis and quantities of the other are plotted on the horizontal axis. The curve represents the maximum amount of the two products that can be produced.

Each PPC is an economic model—a simplified representation—based on specific assumptions. These assumptions are: only two products are shown; resources cannot be increased; resources are used to their full capacity; technology is fixed.

1. What does a production possibilities curve (PPC) show?

What We Learn from PPCs

A PPC illustrates the following important concepts about production. Because the PPC assumes that all resources are used to their full capacity, each point along the curve represents efficiency. Efficiency is the condition in which economic resources are used to produce the largest quantities of goods and services. Any point within the curve represents underutilization of resources. Underutilization is the condition in which a fewer goods and services are produced that is possible.

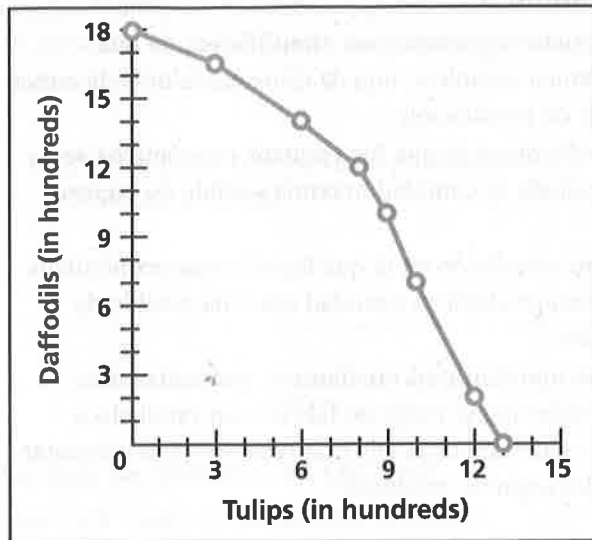
Switching production from one product to the other involves increasing opportunity costs. The law of increasing opportunity states that as production switches from one product to the other, increasingly more resources are needed to step up the production of the second product. In other words, each additional unit of the second product costs more to make than the last. This explains why the PPC has a bow shape.

2. A PPC shows the production of bran muffins and bread rolls. What is the opportunity cost of making more bran muffins?

Changing Production Possibilities

Over time, economic conditions often change. More resources may become available and technology may improve. With an increase in resources, or more efficient use of resources, more of both products can be produced. As a result, the PPC shifts to the right, or outward. Economists refer to this increase in total output as economic growth.

3. If new immigrants bring skills for producing a set of goods more efficiently, what will happen to the PPC for those goods?

ANALYZING PRODUCTION POSSIBILITIES, *CONTINUED***APPLICATION****Mark It Up!**

- Reread your notes on “What We Learn from PPCs.” **Underline** the vocabulary terms and their definitions. Think about how these terms relate to a PPC.
- Use the letter *E* to label any point representing efficiency, the letter *I* to label any point representing a production possibility that can’t be met, and the letter *U* to label any point representing underutilization.
- How many daffodils are produced when no tulips are grown?

- How many tulips are produced when 1,000 daffodils are grown?
