Chapter 1

What Is Economics?

Building On What You Know

You already know more about economics than you may think you do. Do you buy things? If you do, you are a consumer. If you put some of your money aside in a bank, you are a saver. You may earn money by doing household chores or working at a part-time job. This means you are a producer. As a producer, you exchange your labor for an allowance or wages. As a participant in the economy, you are ready to study economics.

"What is *economics*?" Here is a short answer. **Economics** is a social science that studies how people, acting individually and in groups, decide to use scarce resources to satisfy their wants. Economics is a social science because it involves the study of people. It is scientific because it uses many tools of analysis to explain how the economy works. The United States is blessed with ample resources—plentiful land, water, minerals, and so on; educated and skilled people; a history of creative inventions to reduce hard labor; and creative business people. Yet, it is a simple fact of economic life that people want more than our resources can provide. This condition of scarcity actually forces individuals and groups to make choices about how to use resources, all of which have alternative uses. How people choose to satisfy their wants and why they make the decisions they do is an ongoing concern of economics.

Human Wants

Imagine that a magic genie has promised you that you can have anything you want forever—cars, houses, clothes, jewels, trips, concert tickets, and more. If this were the case, you wouldn't have to study economics. However, it is unlikely that you will meet a magic genie. Like most people, you can't have everything you want.

People have both physical wants and psychological wants. Physical wants, such as food, clothing, and housing, occur over and over. At a basic level, meeting physical wants is necessary to maintaining a healthy, safe life. These basic wants change as people grow older. You don't eat the same food or wear the same clothes that you did when you were an infant. Psychological wants aren't necessary to existence, but satisfying psychological wants makes people feel better, perhaps even happier. Psychological wants reflect our own tastes and are often influenced by our culture. Think about your own wants for wearing up-to-date clothes, attending the latest movie, or even owning a special car.

1. economics

Physical wants and psychological wants often become mixed in our minds. We don't really think much about sorting them out. We want more and more things—things beyond our basic physical needs. Our wants change over time as we acquire tastes for new products. Our wants are influenced by our friends and advertising. Rarely do we stop to decide which are physical wants and which are psychological wants.

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People make choices based on physical and psychological wants.

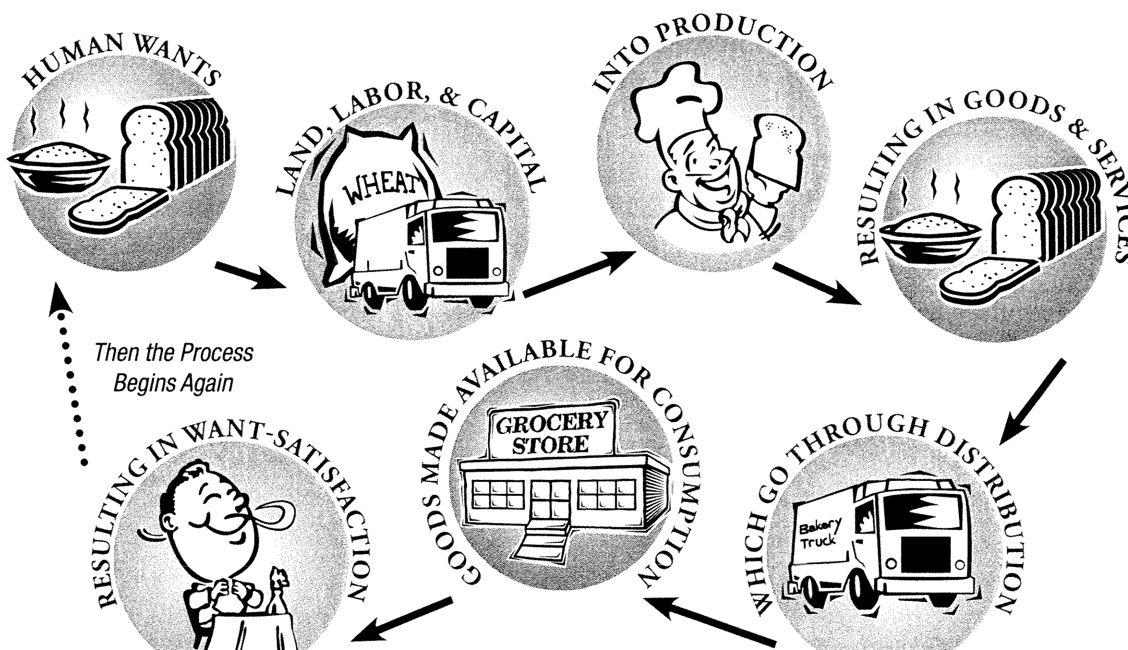
The Want-Satisfaction Chain

Trying to satisfy people's wants is a complex process. In an economy, millions of people work in thousands of businesses to produce and distribute goods and services to satisfy people's wants. Think of the steps of the process of want-satisfaction like links in a chain, as shown in Figure 1-1 below.

Think Critically

The authors suggest that only a few physical wants are necessary to life. What physical wants do you believe absolutely must be satisfied? Justify your answers.

Figure 1-1: Want-Satisfaction Chain



Check Your Understanding

Number the sentences in the text that describe the steps shown in the want-satisfaction chain diagram. Make Human Wants number 1. Write key phrases in the margins to help you remember the meaning of the steps.

The process begins with a human want. For example, suppose you want a loaf of bread to make toast for breakfast or sandwiches for lunch. First, bread requires farmers to combine the economic resources of land, labor, and capital to produce wheat. Once wheat is produced, it must be milled into flour, which also uses economic resources. The flour is combined with yeast, water, perhaps sugar, and other ingredients. It is then baked and packaged. Here is the important point. For any good or service, economic resources must be combined in a process of *production*. **Production** is a process that combines economic resources so the result is a good or service that is available for sale. (We will study economic resources in more depth later in this chapter.)

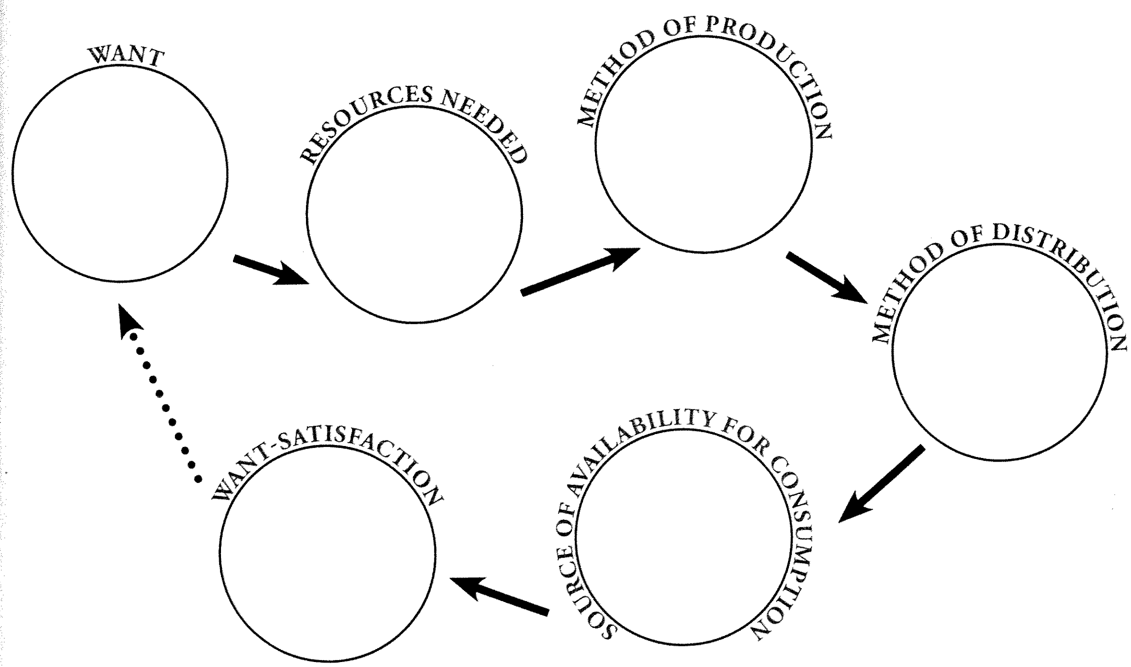
Is the want for bread now satisfied? No, not yet. The production process of bread-making only results in bread, an economic good. Somehow the bread needs to be distributed. It has to be made available to you and others who want bread. Bread, as well as other economic goods, must go through **distribution**—the process of getting a product or service to consumers—before the human want can be satisfied.

Once a good or product is distributed, it is available for *consumption*. Since you want bread for yourself and your family, you choose to buy it, probably at a grocery store. After you buy the bread and eat it, your want is satisfied. **Consumption**, using a product or service, completes the want-satisfaction chain.

Is our story complete? Not really. The bread satisfies you only temporarily. When you become hungry again and there is no bread in the house, the want-satisfaction process begins all over.

Creating Your Own Want-Satisfaction Chain

List several products you want. Choose one product from the list that you know something about. In the blank diagram below, create a want-satisfaction chain to show the specific steps necessary to satisfy your want for the product you chose. Do some product research if you need more information.



What is the greatest obstacle in satisfying your want? ______________________________

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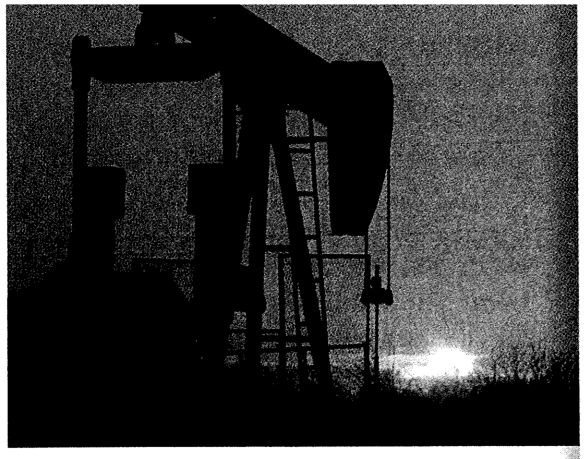
2. production **3. distribution** **4. consumption**

Resources: The First Step in Satisfying Wants



An oil derrick is an example of a capital resource.

In studying the want-satisfaction chain, you learned that resources are the basic elements used to produce goods and services. There are three types of productive resources: natural, human, and capital. Natural resources are unaltered gifts of nature, such as soil, minerals, timber, and fresh water. These resources are referred to as **land**. Human resources, or **labor**, are the physical and mental efforts people use to create goods and services. **Capital** resources are the buildings, tools, and machines people create and use to produce final goods and services. Final goods and services are sold to consumers. A truck that delivers gasoline to a service station is capital. So, too, are a computer and a telephone that delivers information. Producing any good or service requires land, labor, and capital. Economists call land, labor, and capital resources the **factors of production**.

Economists call *entrepreneurship* the fourth factor of production. **Entrepreneurship** is the imagination, innovative thinking, and management skills needed to start and operate a business. Entrepreneurs are willing to take risks—risks in the hope of making profit. Entrepreneurs are important to the success of a business and the U.S. economy. Our economy offers many people the opportunity to become entrepreneurs.

As we look around us, we see ample amounts of the productive resources of land, labor, and capital. Entrepreneurship is not as easy to see, but there is plenty of it around us as well. However, when these resources are put to use in an economy, they come with a cost or a price. This means that the factors of production are scarce as you will learn in the next section.

Show Your Understanding

Create a graphic organizer to show the relationship among factors of production: land, labor, capital, and entrepreneurship. Use the space below.

Scarcity and Opportunity Cost

You may have heard the saying, "People are never satisfied." The saying provides a key to greater understanding of the want-satisfaction chain. In the chain, satisfaction is linked to people's recurring wants. There is usually a gap between what people want and the resources available to meet those wants. Economists call the gap *scarcity*. **Scarcity** means that an inequality exists between wants and the resources available to satisfy them.

To discover the inequality, compare wants with resources. The comparison can be stated in a simple formula:

SCARCITY = Wants > Available Resources

The symbol > means "greater than." It is a shorthand way to state the relationship between wants and resources. If, and only if, wants are greater than available resources, then the resources in question are scarce.

For example, a resource, such as water, can be plentiful and still be scarce. It may not be available at the precise time and place it is needed. Water covers about 70 percent of Earth's surface. Yet, everyone has been caught in need of water at some time.

Pause to Think

What images pop into your mind when you hear the word scarce?

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Read to find out how economists think about scarcity. Draw a box around the sentences that explain economists' meaning of scarcity.

5. land 6. labor 7. capital 8. factors of production 9. entrepreneurship 10. scarcity

A resource is not scarce simply because there is little of it in existence. A resource is scarce only when there is not enough of it to meet the need for it. A very high-scoring basketball player represents a resource that is pretty rare. Because professional basketball needs high-scorers, this kind of player is considered a scarce resource.

If a small amount of a resource exists, but it is not wanted, it is not scarce. An actor may be very gifted with a unique talent. If theatre or movie businesspeople do not want the actor's talent, the actor's resource is not scarce. In order for a resource to be scarce, the demand for the resource must be greater than the amount of resource available. Another example might be a rare jewel. If there is no demand for the jewel, the jewel is not scarce.

Scarce resources have not always been scarce. Today, oil is a scarce resource. When turned into gasoline, people agree to pay more and more for it. Two hundred and fifty years ago, oil was not scarce. Why? There was no demand for it. The first successful internal combustion gasoline engines were not built until the late 1800s.

Check Your Understanding

Indicate whether the following statements are true (T) or false (F).

1. All things are scarce.

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2. All things produced with scarce resources are scarce.

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3. All scarce things today have always been scarce.

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4. Anything having an opportunity cost is scarce.

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5. Anything sold for a price is scarce.

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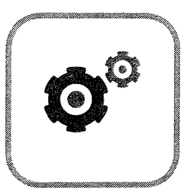
Opportunity Cost

Because resources are scarce they can only be used one way at a time. For example, if a farmer chooses to use land to grow corn, that land cannot be used to grow soybeans. If you choose to work after school at a bookstore, you cannot use your time to participate in the school debate team. If a family decides to go on a trip, the family cannot use the trip money to purchase a new flat-screen television.

These are examples of alternatives given up when a choice is made. Scarcity forces us to think about our alternatives. Economists have a special term for the highest valued alternative that is given up. It is called *opportunity cost.* **Opportunity cost** is the highest valued alternative given up as a result of making a choice. The farmer's opportunity cost of growing corn is giving up growing soybeans. Your opportunity cost of working in the bookstore is giving up participating in the school debate team. The family's opportunity cost of taking a trip is giving up having a flat screen television.

Economists think of all costs as opportunities given up. Still, economists most often use the phrase "opportunity cost" to remind us of the most-valued opportunity we sacrifice when we make a choice. How people make choices leads us to the economic way of thinking.

What's Your Opportunity Cost?



Suppose you are given $100. What three things, each costing about $100, would you like to buy?

1. ______________________________
2. ______________________________
3. ______________________________

Now arrange the three items to show your first, second, and third choices. Which items are your opportunity cost?

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11. opportunity cost

The Economic Way of Thinking

John Maynard Keynes, a famous British economist writing in the 1930s, said this about economics: *"It (economics) is a method...an apparatus of the mind, a technique of thinking..."* In other words, Keynes is saying economics is a way of thinking. Understanding the economic way of thinking will help you understand much of economic behavior. Here are the key ideas.

Show Your Understanding

As you read each key idea, write one example of a way that the idea operates in your life. Use the lines below and on the next page for your answers. Make sure your examples are different from those in the text.

Scarcity Forces People to Choose

You learned about scarcity in the previous section. Without the scarcity problem, there would be little need for people to make choices. But scarcity is a fundamental fact of life. Making choices is something individuals, businesses, and governments are forced to do. Therefore, choice-making is an initial step in explaining much of human behavior and in understanding economics.

All Choices Involve Alternatives

People must give up something important in order to gain something important. People think about their **benefits**, or gains, as well as their **costs**, or losses, in making choices. People try to maximize their benefits and minimize their costs in making economic decisions. For example, if you want to buy some new clothes, you are likely to shop for the best bargain (a benefit) as well as the appropriate style of clothing (also a benefit). You will try to keep your cost as low as possible for an acceptable outfit.

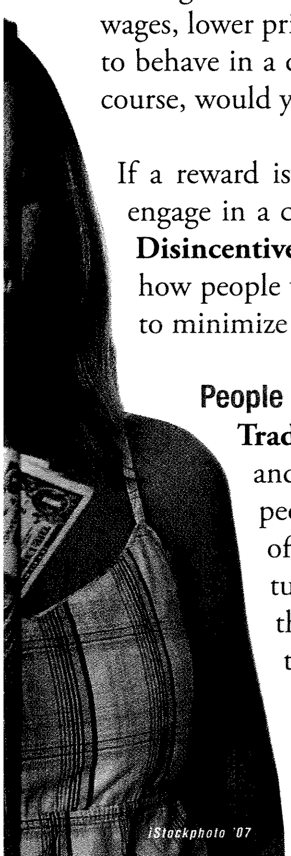
People Try to Make Good Choices

People try to make the best choices they can. People usually don't try to make bad or poor choices. Because people value their time and money, they try to make good choices.

People Respond to Incentives

People respond to *incentives* when making choices. **Incentives** are positive rewards for making some kind of choice or behaving in a certain way. An incentive might be higher wages, lower prices, praise, or a good grade. If a reward is increased, more people are likely to behave in a desired way. If you were promised $100 for receiving an "A" grade in this course, would you consider this an incentive to study hard?

If a reward is withdrawn or becomes negative, fewer people will pursue a choice or engage in a certain behavior. A negative or withdrawn reward is called a disincentive. **Disincentives** often relate to such things as fines or punishment. Economists can predict how people will respond to incentives and disincentives because they know people try to minimize costs and maximize benefits.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People Gain When They Trade Voluntarily

Trade is exchanging something for something else. Buying and selling goods and services constitute trade. In the U.S. economy, nobody has to trade. Yet, all people trade. When people trade, they believe that they gain. They are better off. Voluntary trade is a foundation of a market economy. If you trade your tuna sandwich for a ham and cheese sandwich with your friend at lunch, you think you are better off as a result of the trade. So does your friend, or the two of you wouldn't trade. If you buy a CD or a soft drink, you exchange or trade your money for these products. You would not buy the products if you did not think you would gain something.

12. benefits 13. costs 14. incentives 15. disincentives 16. trade

Choices Are Future Oriented

You cannot choose to change a choice made in the past. Many people have bought a product they found out they did not like, such as a piece of clothing or an appliance. People make choices based on an assessment of what they think is right for them in the future. People operate with limited information about the future and are likely to make mistakes about future choices. How do you know your new DVD player will continue to work? What do you know about the quality of a used car that you are thinking about buying? You must make the best choice based on the information you have.

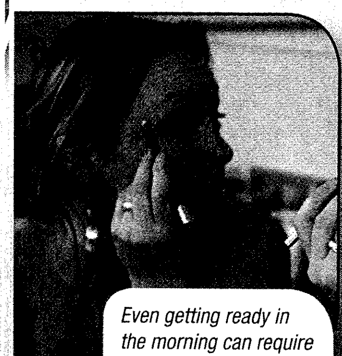
Our Choices Are Influenced by the Choices of Others

We live in a very large social system, and we are dependent on one another. Others' choices affect us. For example, the actions of foreign oil producers to hold back on the production of oil cause a rise in gasoline prices. The action of the banking system to increase interest rates will cause mortgage rates to increase and result in higher mortgage payments.

Applying the Economic Way of Thinking

The key ideas above are the foundation for the economic way of thinking. All economic study involves choices, but economic choices do not necessarily involve money. For example, you may make the choice to give your time to clean up a park or to take care of a sick friend. You've made an economic choice, but it doesn't require you to pay or receive money.

The economic way of thinking helps us look for clues to answer all kinds of puzzling economic questions. Here are a few. *Why are farmlands turned into housing projects? Why don't cities build high-speed rail systems to cut down on huge traffic jams? Why do people continue to buy gasoline when the price per gallon keeps increasing? Why won't teenagers babysit for $2 per hour? Why don't students keep the school lunch room clean? Why don't all students always try their best in their school courses?*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Even getting ready in the morning can require trade-offs.

What Are They Thinking?

Select one of the puzzling questions above, and use the economic way of thinking to help you answer the question. Use the economic terms from the seven key ideas above in your explanation.

Question: ____

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Explanation: ______________________________

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Why don't cities build high-speed rail systems to cut down on huge traffic jams?

Thinking at the Margin

Because resources are scarce and because we must make careful choices about how to use our resources, economists have developed special ways to analyze and discuss choices. As you have learned, every choice involves benefits and costs. Economists, however, focus on *marginal* benefits and marginal costs. **Marginal** simply means the extra or additional costs or benefits of a decision.

For example, you may style your hair each morning. How long you spend combing or brushing depends on the marginal (additional) benefit you get. A look in the mirror tells you it may be a while before your hair looks just right. The benefit of spending a few additional minutes exceeds the additional cost of your time, so you continue styling.

Soon, however, your hair begins looking the way you want it to look. So the benefit of spending additional time on your hair decreases. Meanwhile, if you're running out of time for breakfast and you don't want to be late for school, your marginal cost of spending additional time in front of the mirror goes up.

As long as you think the marginal benefit is greater than the marginal cost, you keep styling your hair. But at some point, the additional benefit is no longer worth the extra time cost. In essence, you aren't making an all-or-nothing choice: to style or not to style. Instead, you decide how much time to spend combing and brushing and how much time to spend on something else. *You are thinking at the margin.*

Other choices are similar. If you have a car, for example, your decision about buying gasoline is not between buying a full tank or no gas at all. Instead, you decide how much additional money to spend on gasoline versus additional spending on something else. You are using marginal thinking based on the marginal benefits and marginal costs you expect.

Check Your Understanding

Underline and number two examples in the text of people thinking at the margin. Explain why the examples demonstrate marginal thinking.

1. ______________________

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2. ______________________

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What Am I Thinking?

Think of a choice that you currently have, or will have in the near future, that does not involve the immediate exchange of money. It might involve use of your time, knowledge, or skills.

Describe the choice alternatives. ______________________

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Describe the costs and benefits of each alternative.
Alternative ______________ Costs ______________ Benefits ______________
Alternative ______________ Costs ______________ Benefits ______________
Alternative ______________ Costs ______________ Benefits ______________
Benefits ______________
What choice do you expect to make? ______________________

Describe the marginal costs and benefits that help you make your choice. ______________

____

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17. marginal

Information and Uncertainty

Making choices isn't easy, because information about the costs and benefits of a choice is scarce. When we shop for cars, for example, we want information about what's available. But shopping, too, has opportunity costs because it requires spending time and money. So we shop as long as we think acquiring more information is worthwhile, or in economic terms, as long as our marginal benefit exceeds our marginal cost. Still, information is scarce; we seldom collect all that is available when making a choice. As a result, we may not be fully aware of the benefits or opportunity costs of our decisions.

Furthermore, choices made today can have costs and benefits tomorrow, yet the future is uncertain. You might decide to go to a party but have a terrible time and wish you had never gone.

Despite the scarcity and cost of information and the uncertainty of the future, we must make choices. When doing so, we usually try to make the choices we think are best. This doesn't mean that we behave like human computers, constantly calculating and rationally weighing every possible cost and benefit. It means only that we try, with scarce information and uncertainty, to make decisions we think will make us better off. Economic thinking is a rational way of looking at these choices. By using ideas such as marginal cost and marginal benefit, we can better understand the causes and consequences of the many choices people make in a world full of scarcity.

Does this cartoon illustrate someone weighing marginal costs and marginal benefits to make a sensible shopping choice? Why or why not?