

## . What Seven Principles Guide an Economic Way of Thinking?

People often think of economics as a limited field of study concerned with money, taxes, banking, and trade. These subjects *are* central to economics. But in studying them, economists have developed principles that apply to much more than money or business. Taken together, these principles represent an economic way of thinking about the wider world. This way of thinking can help you see ordinary events in a new way—sort of like putting on a special pair of glasses. Try looking for these principles as you take an imaginary summer road trip. Try to see events along the way as an economist might see them.

### Principle 1: Scarcity Forces Tradeoffs

This first principle recognizes that although our desires for things are unlimited, the resources needed to fulfill our desires are scarce. Because of this **scarcity** of resources, there will never be enough of everything to satisfy everyone completely. We will always be forced to make choices as to what we want most. Whenever you choose one thing over another, you are making a **tradeoff**. You are giving up one thing to get another that you want even more. The **scarcity-forces-tradeoffs principle** reminds us that limited resources force people to make choices and face trade-offs when they choose.

Economists have another name for the scarcity-forces-tradeoffs principle: the **no-free-lunch principle**. This name stems from the observation that every choice—even that of accepting a free lunch—involves tradeoffs. Even if the lunch was free to you, someone had to pay for the meal. And in making that choice, that someone had to go without something else. Looked at in this way, there is no such thing as a “free” lunch.

You may not realize it, but you make choices all the time based on the scarcity-forces-tradeoffs principle. What, for example, should you do next summer? Should you get a job at the mall? The pay might be good, but the work might be boring. Should you find an internship in a career area that interests you? The pay might be low, but the experience could be valuable. Should you volunteer to help build housing for the homeless? Although there is no pay, you would like working with your hands and helping others. Time is scarce. You can take only one of these jobs. Will it be good pay, valuable work experience, or a sense of satisfaction from helping others? The tradeoff for choosing one alternative is giving up the other two.

Now consider another option for the summer after you graduate—a road trip with your best friend to follow your favorite band on tour. How might the scarcity-forces-tradeoffs principle come into play if you were to buy a used car for the trip? Say you find two cars that fit your budget. One is a luxury sedan that averages 15 miles per gallon of gas. The other is an economy model that gets nearly twice the mileage of the large sedan. You cannot buy both. In making a choice, you will have to trade off roominess for good gas mileage or the other way around.

### Principle 2: Costs Versus Benefits

The scarcity-forces-tradeoffs principle forces us to make choices. But how do we decide which alternative to choose? Economists assume that individuals make choices based on the expected costs and benefits. The **costs** of something are what you spend in money, time, effort, or other sacrifices to

get it. The **benefits** are what you gain from something in terms of money, time, experience, or other improvements in your situation. The **costs-versus-benefits principle** tells us that people choose something when the benefits of doing so are greater than the costs.

To calculate costs and benefits, economists use a tool known as a **cost-benefit analysis**. This analysis might begin with a formal listing of the costs and benefits involved in a choice, as shown in Figure 1.3. Or it might be a quick, informal assessment of the costs and benefits. Either way, the analysis should lead to a calculation of which side “outweighs” the other. For example, what are the costs of sleeping an hour longer on a school day? Would you not take a hot shower? Would you lose out on study time? What benefits might you gain? Would you get needed rest or have more energy? A rational choice is one in which the benefits are greater than the costs.

Think about how the costs-versus-benefits principle might come into play during your proposed road trip. Each evening, you and your friend face the choice between pitching a tent at an inexpensive campground or paying more for a motel room with a soft bed and a shower. Your decision would depend on your own analysis of the costs and benefits of each arrangement. The choice here is personal. Do the benefits of renting a motel room outweigh the higher cost?

### Principle 3: Thinking at the Margin

Most everyday choices involve thinking in terms of a little more of this or a little less of that, rather than all or nothing. For example, you may find yourself having to decide whether to study one more hour, buy one more shirt, or eat one more slice of watermelon. In economic terms, when we decide to add (or subtract) one more unit to (or from) what we already have, we are thinking “at the margin.” The **margin**, in this case, is the border or outer edge of something. The **thinking-at-the-margin principle** tells us that most of the decisions we make each day involve choices about a little more or a little less of something rather than making a wholesale change.

Making decisions at the margin involves comparing marginal costs and benefits. The **marginal cost** is what you give up to add one unit to an activity. The **marginal benefit** is what you gain by adding one more unit. Suppose you have just spent two hours studying for an economics test. Should you study another hour or go to bed? The answer depends on whether you think the marginal benefit of the extra hour of sleep—maybe doing a bit better on the test—will exceed the marginal cost of that hour—perhaps being less well rested for the test.

Now think about your road trip. You and your friend have organized your trip around all six cities where your favorite band is performing. But then the band announces that it is extending its tour to one more city. The added concert is not in your plans, but you would really hate to miss it. Here is a decision you must make at the margin. Is the marginal benefit of attending the seventh concert worth the added costs in time and money?



#### Principle 4: Incentives Matter

As we have seen, costs and benefits influence our behavior. That is, they act as an **incentive**, something that motivates a person to take a particular course of action. The **incentives-matter principle** simply says that people respond to incentives in generally predictable ways.

When economists want to understand why people do what they do, they start looking for incentives. This principle led Landsburg to write, “Most of economics can be summarized in four words: ‘People respond to incentives.’” Levitt and Dubner would agree:

*Incentives are the cornerstone of modern life. And understanding them—or, often, ferreting them out—is the key to solving just about any riddle, from violent crime to sports cheating to online dating.*

—Steven D. Levitt and Stephen J. Dubner, *Freakonomics*, 2006

Why, for example, would hundreds of people stand in line on a city sidewalk in the heat of summer for several hours just to get a concert ticket? Certainly they would not behave this way without some sort of powerful incentive.

Incentives come in many forms, both positive and negative. Teachers use points and grades as positive incentives to encourage students to complete their assignments. Honor societies and awards are also positive incentives used by schools to motivate students to achieve their highest levels.

Governments use negative incentives, such as fines and jail time, to discourage people from breaking laws. You are reminded of this one morning when your road trip hits a speed trap. While driving along, you suddenly see a police motorcycle with flashing lights behind you. The officer tells you that you were driving 65 miles per hour in a 50-mile-per-hour zone. Worse yet, you were in a construction zone, where fines are doubled. Your decision to ignore the speed limit signs will cost you a hefty \$150 fine. You decide that is more than enough incentive for you to watch your speed from now on.



#### Principle 5: Trade Makes People Better Off

Why doesn't your family make all its own clothes, build all its own furniture, grow all its own food, and produce its own medicines? Adam Smith answered that question two centuries ago:

*It is the maxim of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy. The taylor [tailor] does not attempt to make his own shoes, but buys them of the shoemaker. The shoemaker does not attempt to make his own clothes, but employs a taylor.*

—Adam Smith, *The Wealth of Nations*, 1776

As Smith understood, none of us is equally skilled at doing everything. Nor should we try to be. It makes more sense to concentrate on what we do best and then trade with others for what they do best. The **trade-makes-people-better-off principle** tells us that by focusing on what we do well and then trading with others, we will end up with more and better choices than by trying to do everything for ourselves.

Your road trip gives you a firsthand appreciation of this principle when you run into car trouble. One morning, you turn the key and nothing happens. Neither you nor your friend is a mechanic, so you push the car to the nearest gas station and look for help. The mechanic on duty quickly diagnoses the problem as a dead battery. You offer to trade your two tickets for that night's concert for a new battery. The mechanic agrees, and your car is soon running again. You are disappointed about missing the concert, but everyone involved agrees that trading the battery for the tickets makes you all better off than you were that morning.

### **Principle 6: Markets Coordinate Trade**

When you think of markets, you probably conjure up the image of a supermarket or farmers market. Economists take a more expansive view of markets. To them, a **market** is any arrangement that brings buyers and sellers together to do business with each other. A market can exist in a single place, like a weekend flea market. Or it can exist in cyberspace, such as an online auction site.

When markets operate freely, or with limited government interference, buyers and sellers can trade with each other until both are satisfied with their sales and purchases. The result is an efficient market that serves everyone's interests without guidance from a person or an institution. The **markets-coordinate-trade principle** states that markets usually do better than anyone or anything else at coordinating exchanges between buyers and sellers.

Just how markets do all this coordination was not clear to people in Adam Smith's day. He used the metaphor of an **invisible hand** guiding human affairs to explain this mystery. On your road trip, you feel the invisible hand at work when you visit a supermarket. As you push your cart through the aisles, you see fresh mangos from Mexico, bananas from Belize, shrimp from Thailand, cheese from France, and salmon from Alaska. You wonder how a grocery store manages to stock its shelves with so many fresh foods from around the world at prices you are willing to pay. The answer is simple: markets coordinate trade with remarkable efficiency.



## Principle 7: Future Consequences Count

In general, people are shortsighted. They tend to make decisions by looking only at the immediate costs and benefits. But decisions made today often have longer-term effects that should also be considered. The **future-consequences-count principle** tells us that decisions made today have consequences not only for today but also in the future.

**Key Concept**

**Seven Principles of Economic Thinking**  
Each stop on this road trip illustrates one of the seven principles of economic thinking. The trip begins with a tradeoff between comfort and economy in a car and ends with the long-term consequence of a speeding ticket—higher insurance rates.

**1 Scarcity Forces Tradeoffs**  
"Economy or comfort?"

**2 Cost Versus Benefits**  
"Which one?"

**3 Thinking at the Margin**  
"Is it worth the time and money?"

**4 Incentives Matter**  
"I'll never speed again."

**5 Trade Makes People Better Off**  
"This is a good deal."

**6 Markets Coordinate Trade**  
"Bananas from Belize!  
Mangoes from Mexico!"

**7 Future Consequences Count**  
"I'll definitely never speed again!"

To economist Henry Hazlitt, this principle separates the good economist from the bad. He wrote,

*The bad economist sees only what immediately strikes the eye; the good economist also looks beyond. The bad economist sees only the direct consequences of a proposed course; the good economist looks also at the longer and indirect consequences . . . The art of economics consists in looking not merely at the immediate but at the longer effects of any act or policy.*

—Henry Hazlitt, *Economics in One Lesson*, 1979

Part of thinking like an economist involves trying to imagine all the possible consequences of a decision. But nothing about doing this is easy. Consider a law passed in 1968 in Vermont that banned roadside billboards and other large signs in order to protect the state's scenic beauty. Since then,

businesses have instead built sculptures, including a giant squirrel in red suspenders and a 19-foot-high genie, to attract the attention of passersby.

The result of the Vermont law was an example of what economists call the **law of unintended consequences**. This law says that actions of people and governments always have effects that are not expected, or that are “unintended.” Economists spend much of their time trying to predict these unintended consequences.

Your decision to take a road trip had a variety of consequences—some intended, others not. In the short term, you found out what it was like to be on your own, away from your family. You learned a lot about being independent, handling difficult situations, and making your own way in the world. When you open your insurance bill months later, however, you realize that your trip has had a long-term, unintended consequence. The cost of your insurance has gone up because one day last summer you chose to ignore a speed limit sign.