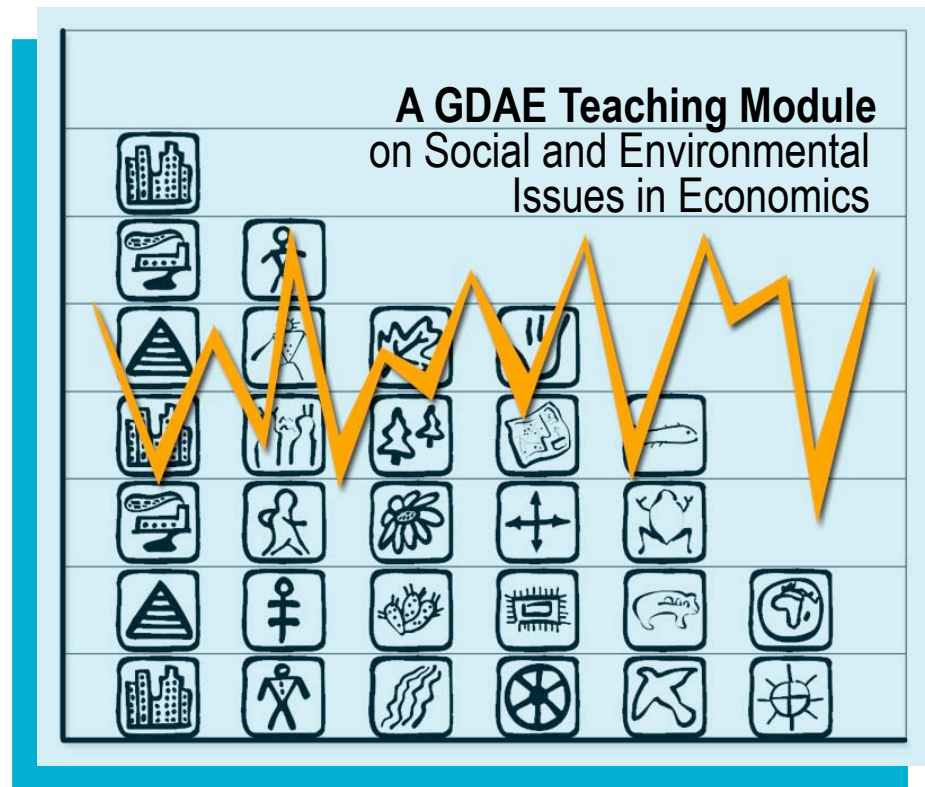


# Economics in Context: Goals, Issues, and Behavior

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# Economics in Context: Goals, Issues, and Behavior

Why are you taking an economics course? You have various goals in your life. You probably want to get a challenging and rewarding job. No doubt you also want good relationships with your friends and family. You might hope to live in a community with agreeable social interaction and good environmental quality. In some small way, taking this course is part of your effort toward reaching those goals. You may be taking economics because of personal or professional interest, or because it is a requirement for your program of study. In either case, we hope that after taking this course you will be better able to progress toward your goals—and to choose them in such a way that you will be glad if you achieve them.

## 1. Your Starting Point

Economics is the study of the way people organize their efforts to sustain life and enhance its quality. Individuals engage in four essential economic activities: resource maintenance; production of goods and services; distribution of goods and services; and consumption of goods and services. Economists study how individuals engage in these activities and how their social coordination is achieved. The terms *social organization* and *social coordination* are used here in the broad sense to mean “involving a number of people.”

| **economics:** the study of the way people organize themselves to sustain life and enhance its quality

| The four essential economic activities are resource maintenance and the production, distribution and consumption of goods and services

Economics offers to help people meet personal, business, and social goals. Of course, this is not the only discipline to make such a claim. As an example, suppose you are especially concerned with the problem of global climate change, caused in large part by the emission of greenhouse gases from human activities. If you want a broad perspective on the issue, you might major in environmental studies. If you want to help develop new low-emission energy technologies, you could focus on science or engineering. If you want to work on policies, you might study political science or international relations. But how does a society determine how much time and money will be devoted to energy research and how much to other activities, such as combating deforestation? And how much time and money should go to taking action on climate change, as opposed to completely different activities, such as providing health care or manufacturing computers? What salary does a researcher in a university lab earn, compared to that of one who works for an oil company or to people in other kinds of work? How are the prices of fuels determined? Are there ways to bring down the levels of emissions using taxes, or other policies that change economic incentives? Who will gain financially, and who will lose, from implementation of various policies? These are the kinds of questions into which economics provides unique insight.

## 2. The Goals of Economic Activity

Social scientists often make a distinction between two kinds of questions. **Positive questions** concern issues of fact, or “what is.” **Normative questions** have to do with goals and values, or “what should be.” For example, “What is the level of poverty in our country?” is a positive question, requiring descriptive facts as an answer. “How much effort should be given to poverty reduction?” is a normative question, requiring analysis of what it is we value and what goals should be set. However, both of these questions require a definition of poverty; positive and normative issues are inevitably intertwined in efforts to reach such a definition. In fact, life rarely offers us neat distinctions between “is” and “ought”; more often we have to deal with a mixture of the two.

**positive questions:** questions about how things are

**normative questions:** questions about how things should be

Defining poverty is both a positive and a normative task. For example, it requires us to decide whether poverty should be defined in terms of people's opportunities in life, or only with respect to what they have made of those opportunities; whether a definition should look only at what people possess as private property, or should also take into account access to goods and services that are provided by the society.

In discussing goals we have clearly begun with a normative question. This is because, unless we understand what economic activity is *for*, it is unclear why anyone should put out any effort to study it! Even from a strictly positive point of view, understanding normative issues is critical for understanding economic activity. That is because all economic actions are taken by human beings, whose actions are significantly affected by their goals and values.

### 2.1 Intermediate and Final Goals

A useful way to look at goals is to rank them in a kind of hierarchy. Some are **intermediate goals**; that is, they are not ends in themselves but are important because they are expected to serve as the means to further ends. The goals that are sought for their own sake, rather than because they will lead on to something else, are called **final goals**. For example, you might strive to do well in your courses as an intermediate goal, toward the final goal of getting a good job.

**intermediate goal:** a goal that is desirable because its achievement will bring you closer to your final goal(s)

**final goal:** a goal that requires no further justification: it is an end in itself

Is a good job an end in itself, or is it also a means to some other end?  
People may reasonably differ on such questions.

### ***Adam Smith and the goal of wealth***

Adam Smith (1723–1790) emphasized the word “wealth” in the title of his famous book, *An Inquiry into the Nature and Causes of the Wealth of Nations* (published in 1776). Wealth is often defined as the value of all the material assets owned by an individual, or, more in more technical terms, whatever confers the ability to produce and procure valued goods and services. Is **wealth** really what economics is about? Those who seek to enhance their nation's wealth generally do so because they have a notion that a wealthier country is in some way stronger, better, safer, or happier. Here the relevant final goals might be strength, virtue, safety, or happiness. Similarly, an individual might seek wealth as an intermediate goal leading to such final goals as security, comfort, power, status, or pleasure.

| **wealth:** whatever confers the ability to produce and procure valued goods and services

The variety of final goals held by different individuals is sometimes used as a reason for viewing the accumulation of material success as the sole purpose of economics. Implicitly or explicitly, this position rests on the argument that material wealth is a nearly universal intermediate goal because it can be used to pursue so many final goals. However, over the past two centuries the power of human beings to achieve their material goals has enormously increased. Vast numbers of people on earth today enjoy a material standard of living that greatly exceeds the most optimistic hopes of their ancestors of a century or two ago. We are thus in a position to know more than earlier generations did about whether or not material wealth has served to meet more fundamental human goals.

Very few people, we suppose, would actually prefer to live in the manner of their distant ancestors. However, we are coming to recognize that there are costs as well as benefits to the continual expansion of human control over a finite material world, and to emphasizing wealth in our human relations. Looking at the complex fallout of our achievements—including environmental degradation, stresses felt by families, and other social ills—it is clear that promotion of material wealth without concern for the ends to which wealth is used, or for the consequences of the manner in which wealth is pursued, may in fact work *against* the final goals we most desire.

### ***Recent trends and the goal of efficiency***

In recent times (the past seventy years or so) many economic thinkers have focused on **efficiency** as a key goal in economic policymaking. An efficient process is one that uses the *minimum value of resources* to achieve the desired result. Put another way, efficiency is achieved when the *maximum value of output* is produced from a given set of inputs. Given this focus, economists have seen their role as advising policymakers on how to make the economy as efficient as possible.

| **efficiency:** the use of resources in a way that does not involve any waste. Inputs are used in such a way that they yield the highest

| possible value of output, or a given output is produced using the lowest possible value of inputs.

An appealing aspect of the goal of efficiency is that it is apparently one that everyone can agree on. Who in their right mind would argue *for* wasting resources, or for having *less* of something good when more is possible at the same cost? Because it seems so obvious that efficiency is a good thing, aiming for efficiency is often thought of as a purely technical and scientific exercise. This is not actually the case, however, because taking efficiency as a goal involves a very important normative judgment: Some standard of *value* must be adopted before the definition of efficiency can begin to be applied.

Generally, in recent times, the standard of value adopted by economists has been that of *market* value. Using this standard, an economist would say that resources are being used most efficiently when the outputs they produce can be sold for the highest possible monetary sums. This is similar to the goal of adding to material wealth, discussed above. “More is always better,” it is assumed, where the “more” is composed of things that can be sold on markets.

Other standards can, however, be used instead. Many things we value are *not* bought and sold in markets—for example, health, fairness, and ecological sustainability. Policies directed towards producing the highest value of *these* outputs from given inputs may be quite different from policies designed simply to maximize the market value of production. Likewise, focusing only on minimizing the monetary costs of inputs may lead to actions with high social and environmental costs. Too much emphasis on efficiency in market value terms can lead to neglect of other, perhaps more urgent, considerations.

The following Economics in the Real World feature, “Goals Beyond Efficiency,” is only one illustration of the possibility that other values may sometimes be more important than market values – and that, therefore, other goals may sometimes outweigh the goal of maximizing the monetary value of production.

## 2.2 Components of Well-being

How do we begin the task of describing goals? First, we introduce here the term **well-being** as a shorthand term for the broad goal of promoting the sustenance and flourishing of life, while recognizing that this broad goal has numerous, qualitatively distinct, and sometimes changing components. We will support our understanding of well-being by noting something that all living things have in common: our nature has been shaped, to an important extent, by the process of evolution. This force has instilled in all living things a preference for survival and the things that are essential for survival, along with an aversion to pain, hunger, thirst, and other sensations that signal a threat to survival.

| **well-being:** a shorthand term for the broad goal of promoting the sustenance and flourishing of life

### ***Economics in the Real World: Goals Beyond Efficiency***

The point that efficiency in market terms is rarely the only important goal is vividly illustrated in a story that a now eminent economist always tells at the first meeting of a new class.

Right after he left graduate school, this young man's first job was to advise the government of a rice-growing country on where it should put its research efforts. He was told that two modern techniques for rice milling had been developed elsewhere; either one would require a sizable (and approximately equal) investment to make it useful for the prevailing rice varieties and other conditions of this country. He was asked to calculate which of the two available technologies should be selected for development. The young economist analyzed the requirements for producing a ton of rice under each of the two competing technologies. Each of them used a mixture of labor, machinery, fuel, and raw materials. He calculated the monetary costs for these inputs, and, finding that Technology A could produce a ton of rice at slightly less cost than Technology B, he recommended that the government invest in the more "efficient" Technology A.

Returning a few years later, the economist was horrified to discover the results of his work. It turned out that the traditions of that country included strict norms for the division of labor: specifically, what work women were allowed to do and what was defined as men's work. Technology B would have been neutral in this regard, maintaining the same ratio of "male jobs" to "female jobs" as had existed before. Technology A, however, eliminated most of the women's work opportunities. In a society where women's earnings were a major support for food and education for children, the result was a perceptible decline in children's nutrition levels and school attendance.

Asked to determine which technology was best, the young economist had not asked "best for what?" Instead, he made an implicit assumption that the only final goal was the maximization of consumption and that the only intermediate goal he had to worry about was efficiency in resource use. He has subsequently told several generations of economics students, "Nobody told me to look beyond efficiency, defined in terms of market costs—but I'll never neglect the family and employment effects again, even when my employer doesn't ask about them."

*What sorts of alternative standards of value does this story suggest?*

Evolution has operated not upon individuals but upon gene pools. Thus, especially in the more complicated life forms, the survival imperative works to motivate behavior that will enhance group survival. Among most animals, instinct plays an important role in motivating survival-oriented behavior. In the human species, part of this role is also played by values and built-in goals. Thus most individuals feel motivated to preserve their own lives, and they enjoy feelings of health, happiness, and comfort, which are the opposite of the pain and distress that signal threats to individual survival. At the same time, it is normal for human beings to hold values that would lead them to preserve the

health of the society in which they live, as well as the health of the environment, on which, ultimately, the future survival of their species depends.

Even though the inherited preference for individual and group survival can explain quite a lot of human motivation, most people do not accept it as an adequate explanation for all of our most cherished values and goals. We distinguish between the things that make life possible (survival issues) and the things that we, as conscious beings, feel make life worth living (quality-of-life issues). There is abundant evidence that when the things that make life worth living are removed, many individuals go against the dictates of survival and find some way, direct or indirect, to end their lives. (See the Economics in the Real World feature, “Goals Beyond Survival.”)

### ***Economics in the Real World: Goals Beyond Survival***

A simple view of evolution might suggest that the survival imperative would always prevail over any other motives. Even among animals this is not true, as illustrated by stories of dogs that lie down and die when they have lost their master or of birds courting danger as they try to lure a predator away from their nest. Many famous stories of human heroism also illustrate human choices for quality of life over life itself, or the sacrifice of present survival for the sake of future generations. A true story of such a choice occurred during World War II, when Leningrad (now St. Petersburg) was under siege and starvation was widespread. A researcher at the university who had been developing improved strains of seeds locked himself in his laboratory. At the end of the war his starved body was found there, among the containers of seed corn he had protected for coming generations.

In Table 1 we present one possible list of final goals of economic activity, summarizing the careful reflection of a number of thinkers, but without attempting to represent a final consensus. The first three goals on this particular list relate to individual concerns; the last five involve social concerns that are likely to affect individual behavior through the medium of socially developed values. Some of the listed goals relate to making life possible (e.g., goal (a)), and some relate to making life worthwhile (e.g., goal (c)); and yet others involve both types of concerns. You may believe that some of the elements on this list are less important than others or could even be omitted. Or you may believe that other components are important and should be added. Normative analysis is not something that is set in stone forever; rather, it develops with reflection, discussion, and changing circumstance. In any case, it is clear that any reasonable discussion of the quality of life must go beyond simple notions of wealth or efficiency.<sup>1</sup>

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<sup>1</sup> Simplicity has sometimes been sought by inventing a single concept that is thought to cover all possible final goals. That was what the utilitarian philosophers, starting with Jeremy Bentham (1748–1832), attempted when they used the word “utility” for anything people might desire, ignoring the possibility of qualitative difference and incommensurability (that is, a lack of comparability) that might exist among various human goals.



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Table 1. A Sample List of Final Goals

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- (a) **Satisfaction of basic physical needs**, such as for bodily survival, growth, health, procreation, security, rest, and comfort.
  - (b) **Happiness**, including feelings of contentment, pleasure, self respect, peace of mind, etc.
  - (c) **Realization of one's potential**, including opportunities for physical, intellectual, moral, social, and spiritual striving and development.
  - (d) **Fairness** in the distribution of life possibilities. Individuals and cultures differ in how they assess the "fair share" of society's resources and opportunities for each person, but the goal of fairness is universal.
  - (e) **Freedom** in economic and social relations. This means permitting individuals to make as many small and large life choices for themselves as are possible within the limits of responsible relations with others (and the limits of their decision-making capacity, as in the case of children).
  - (f) **Participation** in social decision making. Individuals should have the opportunity to participate in the processes in which decisions are made that affect the members of society as a collectivity and thereby define and regulate the society.
  - (g) **A sense of meaning** in one's life; a reason or purpose for one's efforts
  - (h) **Good social relations**, including satisfying and trustful relations with intimates, friends, family, business associates, and fellow citizens, along with respectful and peaceful relations among nations
  - (i) **Ecological balance**, such that natural resources and the natural environment are sustained over the long run, for the well-being of present and future generations.
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### 2.3 Economics and Well-being

Economic activity, of course, is not the only ingredient that goes into creating well-being. Economics cannot make you fall in love, for example, or prevent your being in a car accident. But economic factors may help to determine whether your job leaves you with the time and energy to date, whether your car has seat belts, and whether you have access to medical treatment. A well-functioning economy is one that operates to increase the well-being of all its members.

We have suggested for your consideration (in Table 1) one plausible list of final goals to be taken into account in guiding economic activity. The interrelations of these goals with each other, and with economic activity, are extensive and complex. Economic activities are often necessary to promote our final goals, but economic activities can also sometimes create “ill-being” instead of well-being, whether because of conflicts between goals or because of unintended consequences. On the other hand, some economic activities, directed toward one goal, have consequences that *add to* the achievement of other goals. For example, work that is felt to contribute something positive in the world can make a significant difference to people's happiness and their ability to realize their potential, at the same time as it brings in the income that permits the satisfaction of basic needs.

### ***Conflicts between goals***

If the goal of immediate enjoyment is given too much emphasis, economic activity can actually decrease health and long-term happiness. A supermarket checkout counter offers a good example: some magazines will attempt to sell you pleasure in the form of recipes for chocolate cake, and nearby is a case of health-damaging cigarettes. Temptations to easy happiness may make us unhealthy—even when we are fully informed about the consequences and are trying hard to weigh the relative importance of our goals. Other goals can also be in conflict. For example, one current public health debate concerns whether people with contagious, antibiotic-resistant tuberculosis should be *required* to accept hospital services—in locked wards, if necessary. In this case, we see that the social goal of a physically healthy population and the goal of freedom seem to require opposite approaches. Likewise, an employer may need to decide between trying to pressure an employee to produce the largest possible quantity of some product (perhaps one very important for well-being) and wanting to help employees realize their intellectual and social potential on the job.

### ***Unintended negative consequences***

An **economic actor**, or **economic agent**, is an individual, group, or organization engaged in one of the four essential activities discussed at the beginning of this reading—resource maintenance or the production, distribution, or consumption of goods and services. Such activity, while aimed at accomplishing one thing, may also produce unintended side effects that cause harm in some way, such as polluting the air or water, or needlessly wasting resources. No one creates such harms intentionally, but they may result as the *unintended* consequences of the pursuit of other goals. If the harm affects mainly the economic actors who are doing the activity, it is likely that the actors will take the harm they suffer into account when deciding whether to continue the activity. But what if the action harms mainly the environment or people other than the economic actors themselves? Economists call harmful effects **negative externalities** when they mostly affect the environment or people other than the ones directly involved in the activity.

**economic actor (economic agent):** an individual, group, or organization that is involved in the economic activities of resource

| maintenance or the production, distribution, or consumption of goods and services

| Economic actors are not only those who are actually producing, maintaining, consuming, etc. They may also include, for example, legislators whose decisions affect the kinds of economic activity that are possible, or activists who aim to prevent certain types of economic activity.

| **negative externalities:** harmful side effects, or unintended consequences, of economic activity that affect persons, or entities (such as the environment) that are not among the economic actors directly responsible for the activity

One example of a negative externality is a manufacturing firm's dumping of pollutants in a river, decreasing water quality downstream. Other examples of negative externalities include your "consuming" music so loudly that it disturbs your neighbors, and an employer setting up work schedules that have a negative impact on the families of the employees. If economic activities affected only the actors directly involved in decision-making about them, we might be able to think about economic activity primarily in terms of individuals making decisions for their own benefit. But we live in a social and ecological world, in which actions, interactions, and consequences are generally both widespread and interknit. The idea of "negative externalities" reminds us of this fact.

### *Unintended positive consequences*

Externalities, however, are not always negative. **Positive externalities** are *beneficial* effects of economic activity that accrue largely to persons or entities that are not among the economic actors directly involved in the activity. Whether intended or unintended, many activities that advance one goal can also advance another.

| **positive externalities:** beneficial side effects, or unintended consequences, of economic activity that accrue largely to persons or entities that are not among the economic actors directly involved in the activity

Good social relations and fairness were listed earlier as commonly held final goals. A social environment in which these goals have been achieved is also an important means to other economic ends. For one thing, good social relations reduce **transaction costs**, which are the costs of arranging economic activities. For example, if a manufacturer wants to buy a supply of rubber hose, she needs to search for a supplier, bargain for a deal, make a contract, and see that the contract is carried out. The transaction costs will be high if information about suppliers is hard to get or if the manufacturer and the supplier do not trust each other. In the case of lack of trust, before money can be exchanged for rubber hose, it may be necessary to spend time and money on many meetings, lawyers, reams of contracts, and even action by the courts or police. On the other hand, if information is easily available, and if the two parties trust each other and have shared expectations, agreements are much less costly to reach and may be sealed by a simple handshake. The questions of good social relations and common

standards of fairness may be particularly acute when the parties have different national and cultural backgrounds or speak different languages. These issues are critically important in relations among workers and managers. Activities that increase social understanding and foster appropriate, shared standards of fairness and honesty have “positive externalities” in that they create a better environment for other economic activities.

| **transaction costs:** the costs of arranging economic activities

Other examples of positive externalities include parents raising children to become productive contributors to society (rather than violent criminals), and a person planting for his own enjoyment a flower garden that also pleases passers-by. A government might undertake actions to maintain pure water resources out of concern for citizens’ health, but in the process it also increases recreation opportunities and reduces expenditures that would otherwise have had to be made by industries and cities for water purification. Positive externalities are the *good* side of being enmeshed in a web of economic relations!

### Discussion Questions

1. You have evidently made a decision to dedicate some of your personal resources of time and money to studying college economics. Which of the goals listed in Table 1 has been most important to you (and perhaps to your family or community, if they were involved) in making this decision? Do any of the other goals figure in this decision? If you were to write up a list of your own final goals, how would it differ from Table 1?
2. Certain drugs act on the nervous system to produce intense, temporary feelings of happiness. Some of these are addictive, and cause people to lose all ambition except that of getting another dose of the drug. Do these drugs add to well-being? Discuss.

## **3. The Issues that Define Economics**

In discussing goals we have addressed the question of what economics is *for*—what is its purpose? Now we will summarize what economics is *about*: what activities it covers, and what questions it addresses.

### 3.1 The Four Essential Economic Activities

We think of an activity as “economic” when it touches on one or more of four important tasks.

1. **Resource maintenance** means tending to, preserving, or improving the natural, manufactured, human, and social resources that form the basis for the preservation and quality of life. Forestry projects that raise timber for future use are a commonly mentioned example of such activity, but there are many others. Child care and education

prepare people for future activities, as well as directly supporting and nurturing us. Other examples of resource management include figuring out how much oil to extract from an oil field now, and how much to leave for later; maintaining the transportation infrastructure (subways, roadways, etc.) of a city; and, in a factory, keeping the machinery in good repair and maintaining the necessary knowledge, skill levels, and morale of the employees.

| **resource maintenance:** the management of natural, manufactured, human, and social resources in such a way that their productivity is sustained

2. **Production** is the conversion of some of these resources into usable products, which may be either goods or services. Goods are tangible objects, like bread or books, whereas services are intangibles, like TV broadcasting, teaching, or haircuts. Popular bands producing music, recording companies producing CDs, local governments building roads, and individuals producing cooked meals are all engaged in the economic activity of production.

| **production:** the conversion of resources into goods and services

3. **Distribution** is the sharing of products and resources among people. In contemporary economies, distribution activities take two main forms: **exchange** and **transfer**. When you hand over money in exchange for goods and services produced by other people, you are engaging in exchange. People are generally much better off if they specialize in the production of some limited range of goods and services, and meet at least some of their other needs through exchange, than if they to produce everything they need themselves. Distribution also takes place through one-way transfers, in which something is given with nothing specific expected in return. Local school boards, for example, distribute education services to child and teenage students in their districts, tuition-free. Households transfer the income and goods they receive among the various household members.

| **distribution:** the sharing of products and resources among people

| **exchange:** trading one thing for another

| **transfer:** giving something, with nothing specific expected in return

4. **Consumption** refers to the process by which goods and services are, at last, put to final use by people. In some cases, such as eating a meal or burning gasoline in a car, goods are literally “consumed” in the sense that they are used up and are no longer available for other uses. In other cases, such as enjoying art in a museum, the experience may be “consumed” without excluding others or using up material resources.

| **consumption:** the final use of a good or service

Most real-world economic undertakings involve more than one of the four essential economic activities. The trucking industry, for example, can be seen both as

“producing” the “service” of making goods more conveniently available and as playing a role in physically “distributing” produced goods.

In particular, the activity of resource maintenance often overlaps with the other three economic activities (production, consumption, and distribution). For example, the production of paper using recycled materials can be classified as both production, because a good is being produced, and resource maintenance, because the impact on natural resources is minimized. As another example, you may decide to distribute a memo to your co-workers via e-mail rather than regular mail to save on paper, thus engaging in resource maintenance as part of the distribution process.

Of course, not all production, consumption, and distribution activities can also be classified as resource maintenance. Consuming grossly unhealthy food does not aid in maintaining human resources. Printing out e-mail for a quick reading on single-sided paper with no recycled content would not be considered a resource-maintaining activity.

A final point on the relationship between resource maintenance and the other economic activities is that sometimes resource maintenance means *not* engaging in production, consumption, or distribution. For example, people who make voluntary decisions to minimize their unnecessary consumption are maintaining resources. While this may look like inactivity, including resource maintenance as an economic activity implies that minimizing some kinds of consumption can contribute to well-being. As another example, deciding not to distribute a minor memo to your co-workers may save everyone involved valuable time resources. (One might well turn around a familiar phrase, to make it read “Don’t just do something. Stand there!”)

### 3.2 The Three Basic Economic Questions

The four economic activities that we have listed give rise, in turn, to the three basic economic questions:

1. *What* should be produced, and *what* should be maintained? (What kinds of products should be made, and how much of each? What resources need to be preserved?)
2. *How* should production and maintenance be accomplished? (By whom, and using what kinds of resources, technologies and methods?)
3. *For whom* should economic activity be undertaken? (What are the principles and practices that will determine how the produced goods and services are distributed among different people?)

For example, the rather small social organization we call a family faces the problem of how much of its economic resources (money, credit, etc.) to use now and how much to preserve for future use. Suppose members of a family decide to spend some of their money on a dinner party. They will have to decide "what" foods to prepare. The "how?" question includes who is going to cook, and what recipes to use. Asking "for

whom?" means deciding who will be invited for dinner and how to take into account the food preferences and needs of the various individuals.

The complexity of decision making and the number of people involved rises steeply as we move to higher levels of economic organization, but the questions remain the same. Businesses, schools, community groups, governments, governments, and international economic alliances all have to settle the questions of *what, how, and for whom*.

### Discussion Questions

1. The admissions office at your college decides who will be admitted and who will not be. Is this an economic activity? Of what kind? (There may be more than one correct answer.)
2. Imagine that an engineer, an artist, and an economist are all observing the construction of a new office building. What aspects of the process might the economist notice, and what words might she use to describe what is going on? How will her description differ from that of the engineer and the artist?

## **4. Motivation and Behavior**

What motivates people, and how do these motivations translate into economic behavior? Economists generally make an assumption of **purposeful** or **instrumental behavior**. Such behavior is motivated by particular goals, and actions are undertaken as means to those ends. Most often, we assume that these goals are conscious and—at least from a person’s own perspective—are intended to advance individual and/or social well-being. Though there are situations where people act randomly, unconsciously, or out of an intent to harm others, economic theory has mainly been developed in relation to conscious, purposive behavior.

| **purposeful or instrumental behavior:** actions taken with the expectation that these acts will lead to desired goals

### 4.1 Intrinsic and Extrinsic Motivations

A first distinction to be drawn concerning goals is to note that people act from both extrinsic and intrinsic motivations.

We say that an action is **extrinsically motivated**, or motivated by “outside” forces, to the extent that the action is taken for a reason that lies outside of a person’s character and his or her relation to the activity itself. Usually these reasons have to do with either reward or punishment. Money is obviously one of the primary extrinsic motivators. You may work, run a business, make a deal, or study economics because you believe these activities will bring you financial rewards.

Besides having financial motivations, people may also undertake activities because they fear the consequences of doing otherwise, or in the hope of gaining some other extrinsic reward, such as high social status or increased power. You may produce a superior economics term paper, for example, because you fear your parents' reaction if you do poorly this semester, or because they have promised you a nice trip if you do well. A government official may decline a bribe out of fear of going to jail. Business leaders may seek the power and status that comes with a larger firm size.

| **extrinsic motivation:** impetus to an activity that arises from reasons "outside" the person and the activity, such as doing something for a reward in terms of money, status, or power or to avoid punishment

People frequently use extrinsic motivators to try to change the behavior of others. Economists talk about the various **incentives** set up by systems of reward and punishment. Employers offer monetary bonuses or "employee of the week" certificates to encourage good work. The government offers tax rebates to encourage energy conservation and fines the worst polluters. Your university may try to discourage underage drinking by imposing monetary fines or other penalties or tie scholarship money to maintenance of a certain grade point average. In all these cases, the organizations are relying on monetary or nonmonetary incentives to change behaviors by acting on extrinsic motivation.

| **incentive:** a reward or punishment that motivates action

Traditionally, economists have paid a great deal of attention to incentives, and to financial incentives in particular. Because of this emphasis, economists are often able to point out where incentives exist and may have effects on behavior, even when the incentives have been created *unintentionally* and are unnoticed by other analysts.

For example, suppose a civic group is concerned about teens who don't finish high school, and so it creates a center for dropouts. The center offer dropouts individualized instruction, paid child care, and a weekly monetary stipend. The civic group's intent, of course, is simply to support dropouts and help them finish their schooling. But what *incentives* does this create for those students who are still in school but are considering dropping out? These current students will have an increased *incentive to drop out* in order to qualify for the center's greater benefits. In this case, creating a program to solve a problem could cause the problem to increase! The civic group might do more good by devoting some of its resources to improving the support services provided at the school itself.

The attention that economists give to incentives can play a valuable role in evaluating the wisdom of various policies, whether in communities, businesses, or elsewhere. The focus on extrinsic motivations and financial incentives needs to be put in context, however, by also considering other reasons for people's actions.



People are **intrinsically motivated**, or motivated by “inside” forces, to the extent that the reason for action lies in the person or in the activity itself. Intrinsic motivations include direct enjoyment of the activity itself, as well as ethical values such as honesty and loyalty. They also involve issues of identity, such as the feeling of “who you are” or “what our organization is about.” Intrinsic motivations are what make you *want* to do something, without respect to rewards or threats from the outside.

**intrinsic motivation:** impetus to do an activity that arises from reasons “inside” the person, such as doing the activity for enjoyment or out of ethical values or identity

You may produce a superior economics term paper because you enjoy learning or because you feel you “owe it to yourself” always to do your best. A government employee may resist a bribe because it is the honest thing to do. A company leader may authorize an aggressive action less out of concern with profits or status than because of the personal enjoyment he or she gets from feeling smarter than the competition, or he or she may decline to market a harmful good because doing so would go against the company’s core values. Most people choose their work partly on the basis of extrinsic motivations like money and status, but also partly on the basis of intrinsic motivations concerning what they like to do, what kind of person they want to be, and what kind of mark they want to leave on the world. Often both extrinsic and intrinsic motivations are at work.

To some extent, intrinsic motivations can also be used by some people to influence the behavior of others, although this is not as straightforward as simple reward and punishment. Some employers are able to encourage superior work effort by creating an atmosphere in which employees feel that they are valued contributors to a socially important project. When employees are intrinsically motivated to want to make a social contribution, the need for external rewards and punishments is lessened.

At least one college claims to have found a new way to discourage student drinking, based on the fact that some drinking is motivated by an intrinsic desire to identify with “the crowd.” Anonymous surveys tend to show heavy or binge drinking to be much less popular than students *think* it is. Publishing the results of these surveys, and thus changing the perception of what “the crowd” is doing, has led, it is claimed, to decreases in alcohol violations at Hobart and William Smith College. With better information, apparently what students choose based on their own desire to “fit in” becomes more responsible, even if extrinsic rewards and punishments remain unchanged.<sup>2</sup>

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<sup>2</sup> This program, and the press coverage it has received, is described at <http://academic.hws.edu/alcohol/>.

### ***Economics in the Real World: Normative Interpretations of Motivations***

Some people have the impression that doing something for extrinsic reasons (like money or status) is always bad, or at least not praiseworthy. If motivation by profit or the regard of others plays a part in someone's behavior, is that person selfish, materialistic, and vain? Maybe not. Some amount of money is necessary for life in a contemporary economy. People who look for higher-paying jobs or more profitable markets in order to support themselves and their loved ones need not be selfishly motivated. Likewise, people who seek some amount of status, say by asking for a job promotion, may just be making a reasonable request based on their valuable contributions. Excessive seeking of wealth and fame can certainly cause problems, but some amount of money and social respect are necessary for living in this world.

On the other hand, are intrinsic motivations (like enjoyment, ethics, and identity) always good? People who look down on extrinsic motivations often think so. But let's consider an example. Some racists are intrinsically motivated. They discriminate, or even engage in violence, on the basis of their belief that excluding people from another identity group from jobs or neighborhoods is "the right thing to do."

Some conservative economists have argued that a *greater* attention to financial gain would improve society. In a case of such racial discrimination in housing, you can see their point: a landlord interested only in the color green won't worry about whether the hand holding the cash is black or white. (On the other hand, discriminatory acts can also be motivated by financial gain, so this argument should not be taken too far.)

Both intrinsic and extrinsic motivations are important in economic life, and both can serve to promote social well-being or its opposite.

#### 4.2 Self-Interest, Altruism, and the Common Good

Whose interests do people care about? In a famous statement from *The Wealth of Nations*, written in 1776, Adam Smith declared, "It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, *but from their regard to their own interest.*"<sup>3</sup>

Many people coming after Smith have interpreted these words in a special way. They have assumed that if people in an exchange economy just follow their own **self-interest**, acting in the way that most benefits them as individuals, the goal of societal well-being will follow automatically. Many economists of the 20<sup>th</sup> century read Smith's words out of context and saw them as clever proof that there is no need to for people to think "benevolently" about each other or about society as a whole. This has been used as an ethical justification for following unfettered economic self-interest.

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<sup>3</sup> *The Wealth of Nations*, 1776, Book I, Chapter 2. Emphasis in original.

**self-interested motivation:** motive for action based on the goal of improving one's own well-being

Adam Smith, among others, would have disagreed with this extreme view. (His other most notable work, *The Theory of Moral Sentiments*, addressed at great length the need to take into account the welfare of others). Exchange may fail to promote social well-being for a number of reasons. People may be badly informed. The situation may entail positive and negative externalities not taken into account in individual self-interested decisions. And, as also pointed out by all major philosophical and religious teachings, purely self-interested decisions are often at odds with basic ethical concerns.

The opposite of pure self-interest would be pure **altruism**. In this case, you simply desire to help other people, with no thought about yourself. A soldier who throws himself on a grenade to save his comrades or a mother who pushes her child out of the way of an oncoming car and is crushed herself are classic—and extreme—examples of altruism.

**altruistic motivation:** motive for action that is especially concerned with the well-being of others

Perhaps more relevant to economics is the fact that much economic behavior may be motivated by a desire to advance the **common good**—the general good, of which one's own interests are a part. Advancement of the common good means seeing your own well-being as connected to the larger well-being of society. For example, even as children we find that learning to share, and not always grabbing or whining for the best toy, leads to more prolonged games and a much more pleasant social environment for everyone—including us. Social theorist Howard Margolis points out that in many social situations people act according to a rule he calls being "neither selfish nor exploited." That is, people are often willing to participate in the creation of social benefits, as long as they feel that others are also contributing.

**motivation according to interest in the common good:** motive for action with the goal of improving social well-being, including one's own well-being

More and more, economists are realizing that a well-functioning economy cannot rely only on self-interest; it also depends on a culture that includes taking into account the common good. Without such values as honesty, for example, even the simplest transaction would require elaborate safeguards or policing.

If everyone in business cheated whenever they thought they could get away with it, business would grind to a halt. If everyone in the government took bribes, meaningful governance would disappear. In addition, people have to learn to work together to overcome problems of externalities. In regard to children or the ill, who cannot take care of themselves through market exchange, some "benevolence" is obviously in order as well. Self-interest may indeed, in some cases, serve the common good, but it cannot be the only motor for an economy that serves the well-being goals of the society. Indeed,

self-interest alone cannot even be efficient. Imagine if you were afraid to put down your money before having in your hands the merchandise you wished to purchase—and the merchant was afraid that as soon as you had what you wanted you would run out of the store without paying. Such a situation would require police in every store—but what if the police also operated with no ethic of honesty?

Fortunately, recent experimental research on human behavior demonstrates that people really *do* pay attention to social norms, and they are willing to reward those who follow the norms and to punish people who violate them, even when this has a cost in terms of their narrow self-interest.

In the “Ultimatum Game,” for example, two people are told they will be given a sum of money, say \$20, to share. One person gets to propose a way of splitting the sum. For example, this first person may offer to share \$10 with the second person, or only \$8 or \$3, and plan to keep the rest. The second person can’t offer any input to this decision but gets to decide whether to accept the offer or reject it. If the second person rejects the offer, both people will walk away empty-handed. If the offer is accepted, they get the money and split it as planned.

If the two individuals act only from narrow financial self-interest, then the first person should offer the second person the smallest possible amount—say \$1—in order to keep the most for himself or herself. The second person should accept this offer because, from the point of view of pure financial self-interest, \$1 is better than nothing.

In fact, researchers find that deals that vary too far from a 50/50 split tend to be rejected. People would rather walk away with nothing than be treated in a way they perceive to be unfair! In the context of social relations, even the most selfish person will gain by serving the *common* good and thus walking away with close to \$10, rather than just looking at his or her own potential gain and quite possibly ending up with nothing.

Concern for the atmosphere we all breathe, and concern about poverty that contributes to crime and violence, are examples of real-world cases in which serving the common good may lead to better living for yourself and your family. In such cases, the assertion attributed to Adam Smith should be turned around: concern for the common good may be the best way of serving your own self-interest!

#### 4.3 Behavior: Habit, Constraint, or Choice?

What did you eat at your last meal? *Why did you eat that, in particular?* Because economists want to explain economic behavior, we need to pay attention to why people act the way they do. Take a minute and think about your answer to the second question.

Perhaps your first thought was that you had “the usual”—you ate those particular foods because that is what you usually eat. In this case, we would say that your behavior arose largely from habit. Behavior that arises from habit or custom tends to be fairly slow-changing and is often related to social roles, family, cultural institutions, and the like. Your particular eating habits are probably related to, for example, your particular

age, sex, and ethnic background and where you grew up. **Habitual behavior** is often performed repetitively and fairly automatically, without conscious thought. You may think that the only “normal” breakfast in the world is cereal and milk. Or you may think, on the contrary, that the only “normal” breakfast is rice and fish. In neither case have you given a lot of thought to what you eat.

| **habitual behavior:** repetitive behavior that involves minimal thought and is often based on social custom

Or perhaps you explained your eating in terms of “what the cafeteria was serving” or “what I could afford.” In this case, we would say that your behavior reflected the **constraints** that you faced. You may have wanted to eat something quite different, but you faced limits on your behavior. In a small way, someone else had power over you. The cafeteria manager’s decisions strongly determined your behavior. You knew the police would arrest you if you left a restaurant or grocery store without paying. In this case, the level of your economic resources was important to your behavior. The more you have—in terms of time, money, and transportation—the more you can go where you want and eat whatever you want, freer of constraints.

| **constrained behavior:** behavior of a person subject to limits set by others, who usually have some power over the person

Or, lastly, did you think carefully about what you were going to eat, making conscious choices between one item and another, based on factors like your personal taste preferences, your goals concerning weight, and/or what you know about nutrition? This would be an example of **choice behavior**, in which the important factors are your motivations, your knowledge, and your decision-making capabilities.

| **choice behavior:** behavior selected by a person from a range of alternatives, generally involving the person’s conscious deliberation

Actual behavior may arise from habit, constraint, choice, or combinations of all three factors.

#### 4.4 Rationality, Goals, and Information

Traditionally, economists have tended to be especially interested in choice behavior. Given this emphasis, the question “How do people choose?” arises. Economists generally assume that people have the capacity to make **rational choices**.

| **rational choices:** thoughtful choices that would normally be expected to move people toward their goals

In common speech, when we use terms like “rational” or “reasonable” to describe an action, we mean both that the *goal* of the action is rational and that the *process* leading to the action was intelligent, appropriate, and thoughtful. It is not particularly rational, in the sense of “sane,” for example, for a person to base all his actions on the goal of being a rock star if he has no talent, or to have a goal of committing a heinous murder. These goals would generally be considered crazy because they are not related to achievable

states of personal and social well-being. Or an action could be judged irrational if the goal is reasonable but the actions taken are not. For example, it is not irrational for a person to have a goal of maintaining a healthy and attractive body weight. Yet a young woman suffering from the mental illness of anorexia may act on the basis of a belief that her body looks grotesquely fat, while in fact she is emaciated. The anorexic's weight loss may be based on the underlying goal of wanting to be attractive, but in fact her judgment is distorted by a neurotic perception.

Do choices that are rational, in the sense of deriving from a thoughtful and appropriate process, *always* lead toward the desired goals? Perhaps not. Because the information base on which we make our choices is imperfect, and because the processes of human reasoning and group decision-making are also often imperfect, we can only say that rational choices will normally *be expected to* move individuals and organizations towards their goals. Rationality means that people weigh the costs and benefits of alternative actions, relative to their goals, when faced with a significant decision—not that people always make perfect decisions.

For example, a company may, after doing the necessary research, rationally decide to manufacture a new line of electronics, believing that this will improve the financial condition of the firm. However, without the management of the company knowing it, someone else may have just invented another product that will make this firm's new product immediately obsolete. The company's decision will be unfortunate, in retrospect. But it was not *irrational*, if it was based on good reasoning and was based on all the information the management could reasonably be expected to seek out and take into account. The problem was that the information the company had was incomplete.

#### 4.5 Optimization vs. Bounded Rationality

We have worded our discussion of rationality rather carefully so far, trying not to claim too much. However much more ambitious claims have sometimes been made, making this a rather contentious topic. In particular, rational behavior is used in the traditional model, as we will soon see, to mean behavior that *best* moves a person towards his or her goals. This kind of behavior is called **optimizing**.

**optimize:** to choose that option, out of all available options, that best achieves what is desired

In 1978, Herbert Simon, a psychologist, won the Nobel Memorial Prize in economics by zeroing in on the question of information, with some surprising results. He pointed out that optimization is normally not possible for human beings, because it requires making the best decision out of the entire universe of possible choices. "Universe" here does not mean planets and stars, but rather the largest possible imaginable set of choices. Your "universe" of possible breakfasts, for example, includes everything from cereal to snake meat.

Under most circumstances it is not feasible to gather the information that is needed in order to identify the entire range of possibilities. Could someone at least

identify the optimum point at which to cease gathering additional information? Simon showed that complete knowledge is required even in order to identify that optimum point. Moreover, the effort to find out what additional information might be out there, and to gather it, can be very costly in time, effort, and money.

Accordingly, Simon said, people rarely optimize: instead they do what he called **satisficing**; they choose a level of outcome that would be satisfactory and then seek an option that at least reaches that standard.

| **satisfice**: to choose a level of outcome that would be satisfactory and then seek an option that at least reaches that standard

Satisficing can be done in a way that resembles the search for an optimum outcome. If an individual finds that the "satisfactory" level was set too low, a search for options that meet that level will result in a solution more quickly than expected, or perhaps even multiple solutions; the level may then be adjusted to a tougher standard. Conversely, if the level is set too high, a long search will yield nothing, and the satisficer may lower his or her expectations for the outcome. Even with such adjustments, however, satisficing is not the same as optimizing.

Another explanation for behavior has been called **meliorating**, which may be defined as starting from the present level of achievement and continuously attempting to do better. A simple example is the fisherman who has found a whole school of haddock but only wants to keep one for his supper. When he catches the second fish he compares it to the first one, keeps the larger, and throws the other back. At the end of the day, the fish he takes home will be the largest of all those caught. (An attempt to perform the same exercise with choosing friends, instead of fish, may not work out so well. Why not?)

| **melioration**: starting from the present level of achievement and continuously attempting to do better

One result of using melioration as the real-world substitute for theoretical optimization is its implication that *history matters*: people view each successive choice in relation to their previous experience. It is commonly observed, for example, that people are reluctant to accept a situation they perceive as inferior to previous situations. This psychological "path-dependency" (that is, where you are going depends on where you have been) is relevant to feelings about rising prices, and even more so to attitudes toward declining wages.

Satisficing and meliorating may both be included under the term "**bounded rationality**." The general idea is that, without surveying all possible options, people adopt some more-or-less arbitrarily defined subset of the universe to consider. Usually these subsets consist of the options immediately evident, along with others specifically sought out through some simple decision rule. For example, when deciding what to spend his money on, an individual may at one time confine his consideration to "major expenditures," such as a college education or an apartment; at another time he might

contemplate "expenditures on food"; and at another time he might sit down to work out budget categories—e.g., "How much should I spend on food each month, how much should I devote to entertainment, and how much shall I set aside for a major need like an apartment?" In your breakfast decision, you probably limited your choices to a narrow subset of possible foods.

**bounded rationality:** the identification of some arbitrarily defined subset of information to consider when making decisions

The concept of bounded rationality thus limits the universe to which decision making is to be applied. Within this limited universe, processes such as satisficing and meliorating are rational behaviors that would normally be expected to move people toward their goals.

### ***Economics in the Real World: Can Habits Be Rational?***

Earlier, we contrasted acting from choice with acting largely out of habit. Can it be *rational* to have a habit? The answer is "Maybe." Some habits work in opposition to rational choice. Your habits of eating, for example, or smoking, may not be in line with what you would rationally want to choose if you were actually to compile the relevant information and then sit down and carefully weight the costs and benefits of your decisions. You might realize that your diet is higher in fat, or more boring, than serves your goals. Or you might be in the habit of studying a particular way, when, if you took the time to explore, you might find another method that would serve you much better. Your life could be improved by making such an effort at deliberate, rational evaluation.

On the other hand, very few people are going to ask for a full nutritional breakdown of every bite that goes into their mouths, or spend all their time studying techniques for studying! It would, in fact, be *irrational* to go to such extremes. Why? Gathering information, and processing it by evaluating all the options is itself a time-consuming task. Habits can at times be a rational way of dealing with these costs of making conscious, deliberate decisions.

For example, you might try to maximize your progress toward your health goals by having extended consultations with a dietician and following a rigid nutrition plan. But you might rationally move in the direction of meeting your health goals—while still moving towards your other goals as well—by simply adopting a habit like eating more fruit!



## 4.6 Now or Later?

One last dimension of motivation and behavior is crucially important. What time frame do people consider when they have the chance to make significant choices about how they are going to behave?

At one extreme, you probably know someone who has the attitude “Life is short, and tomorrow is uncertain, so let’s have a good time now.” Economists would tend to say that this person has a very **high time discount rate**, meaning that in his or her mind, future benefits are very much discounted or diminished, when weighed against the pleasures of today. Such an individual will tend to save little, spend a lot, and not expend much effort worrying about the future.

**high time discount rate:** the economist’s phrase for describing a strong preference for present benefits over those in the future

You might also know people who seem to live by the attitude “I’ve got to work hard and prepare now; enjoying myself will have to wait for later.” Economists would say that people like this have very **low time discount rates** if by their current work they are gaining benefits for tomorrow. The later benefits loom large (that is, are *not* “discounted”) in their decisions. Such individuals will tend to scrimp and save and expend a lot of effort planning for the future.

**low time discount rate:** the economist’s phrase for describing a strong concern with future benefits, even if getting them is costly in the present

Time discount rates are important in all sorts of situations. Economists usually assume that anyone investing in a college education has a relatively low time discount rate, since present pain is involved in forgoing income or relaxation in order to study for some expected future gain. Company leaders with high time discount rates may concentrate on making this quarter’s financial statement look good, whereas those with more concern about the future will look toward longer-term goals. In deciding on environmental regulations, people working at government agencies are forced to make decisions about how much weight to put on the welfare of future generations. The lower the adopted discount rate, the more important safeguarding the well-being of future generations appears.

There is no one “right” time discount rate. An extreme disregard for the future is probably irrational in most cases. But in some circumstances—say, for a person diagnosed with a fatal disease, or who faces a high probability of being killed in street violence—it may be understandable.

Extreme concern for the future is also irrational if it means that an individual never gets around to enjoying the benefits of his or her labors, during a whole lifetime. However, strong arguments can be made for taking the future very seriously when discussing actions with significant multigenerational consequences, such as

environmental policies. The question of “now or later” is important in many economic decisions.

### Discussion Questions

1. Suppose you are looking for a job. Compare what you might end up with if your behavior primarily reflects:
  - a. extrinsic motivations, self-interest, constraint, and a high time discount rate.
  - b. intrinsic motivations, interest in the common good, choice, and a low time discount rate.
  
2. Would you describe yourself, in general, as a person who tries to optimize, as a satisficer, or as a meliorator? Would you say that your own educational history (what schools you’ve gone to, what subjects you’ve taken, etc.) has been guided by *rational choice*? That is, has it been characterized by information gathering and deliberation? Or have you tended to rely more on habit or felt bound by constraints? Or has your behavior sometimes even been random?

## **Review Questions**

1. What is the difference between positive and normative questions?
2. What is the difference between final and intermediate goals?
3. How does the goal of efficiency relate to the goal of wealth?
4. What is meant by an economic actor?
5. Define negative and positive externalities, and give examples of each.
6. What is a transaction cost?
7. Name the four essential economic activities.
8. Name the three basic economic questions.
9. What is the basic assumption that economists make about behavior?
10. What kind of motivation is manipulated by reward and punishment? What is the other main kind of motivation?
11. Does acting according to your narrow self-interest always bring about the best result for you? For society? Explain.
12. There are three major factors that can be invoked to explain people’s actual behavior. What are they?
13. What does it mean to say that someone chooses “rationally”?
14. How do economists describe people’s preferences concerning current vs. future benefits?

## **Exercises**

1. In each of the following, indicate which of the four essential economic activities is taking place.
  - a. Katar, an executive at Acme Manufacturing, directs the cleaning up of one of the company's old industrial waste dumping sites.

- b. Mr. Ridge plants a garden in his yard.
- c. Ms. Fuller hands an unemployed worker a bag of groceries at a local non-profit food pantry.
- d. Private Hernandez, a recent recruit, eats lunch on the army base.

2. Match each concept in Column A with an example in Column B.

Column A

- a. transaction cost
- b. negative externality
- c. an essential economic activity
- d. normative statement
- e. intermediate goal
- f. final goal

Column B

- i. making money
- ii. the stress put on a marriage by a difficult situation at work
- iii. the airfare, time, and other expenses involved in holding a business meeting
- iv. "Students should study more."
- v. production
- vi. living the best life one can

3. For each of the following cases, describe the motivations for action using the terms extrinsic or intrinsic; self-interest, altruism, or common good; habit, constraint, or choice; and high or low time discount rate. (More than one term in each group may apply.)

- a. Richard buys a lottery ticket every day, because he hopes to win the jackpot and buy himself a nice car. His mother thinks he should be saving his money instead.
- b. Prasashd had hoped to become an artist, but had to drop out of art school for lack of funds. He is now opening a bicycle shop, hoping to earn enough money to bring a number of his relatives to the United States in the next five years.
- c. Olga's legal firm takes on one *pro bono* case per month (that is, a case where the client, usually poor, doesn't have to pay). Olga personally resents this "waste" of her firm's resources, but she is resigned to it because it is the custom of legal firms in her town. She also reasons that although she could save money right now by quietly refusing to take such cases, over time, as word got around, the reputation of her firm would become damaged and she would lose paying customers.
- d. An Le has decided to become an environmental activist, even though the pay is low and the hours long, because she can't stand being on the sidelines while, as she puts it, "future generations are in danger."

4. Describe a situation in which you made a decision you later regretted. Explain whether the decision was irrational or was rational but based on poor information.