

roles for government, and globalization. The list of changes that have come with capitalism could be expanded, but the set of transformations discussed here establishes the basic point of the chapter: capitalism generates perpetual change.

It could be argued that the rise of capitalism was not so much the cause as it was the effect of the changes outlined in this chapter. Might not advances in science and technology have led to the development of capitalism? Or could the population explosion have been the cause and capitalism the consequence?

Science and population growth are undoubtedly important, but before capitalism they did not have cumulative effects. Scientific knowledge and technology were more advanced in the Islamic world and China, for example, than they were in Europe before 1500. But neither Islamic science and mathematics nor the Chinese inventions of gunpowder, magnetic compasses, cast iron, moveable type, canal locks, and machines for keeping time led to sustained technological progress or industrial development. It is also true that periods of rapid population growth have accompanied short periods of economic expansion throughout the 100,000 or so years of human existence, but as Figure 1.6 shows, it was not until the advent of capitalism that rapid population growth became the rule rather than the exception.

In the last 500 years virtually all traditional patterns of life and livelihood have been disrupted and reconstructed. The world and the world's peoples have been shaken up and remade. In the chapters to follow we discuss the reasons why capitalism is such a powerful source of change and why it affects not only the economy but also politics, beliefs, and many other dimensions of social life.

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CHAPTER 2

People, Preferences, and Society

Parents everywhere are sometimes late in picking up their children at day care centers, thereby inconveniencing the staff. An experiment, carried out in Haifa, Israel, was designed to find a solution to the problem of tardy parents. At six randomly chosen centers a fine was imposed for lateness, and a few other centers were selected to serve as a “control group” (nothing was changed at these centers). Staff at the centers with the newly instituted fines expected that punctuality would improve. Contrary to these expectations, however, there was an *increase* in tardiness when the fines were imposed: the number of parents picking up their kids late more than doubled. Even more striking was the fact that when the fines were revoked, the parents’ higher rate of tardiness persisted. Meanwhile, the amount of parental lateness at the centers in the control group did not change.

The economists who designed the Haifa experiment were quite surprised by the results. Most economists assume that people seek monetary gain and try to avoid losses. From this perspective, the day care centers’ fines should have given the parents an incentive to be more punctual. But the plan backfired. After analyzing the results, the designers of the experiment concluded that the imposition of the fines must have unintentionally suggested to the parents a new way of thinking about their behavior. Whereas before the experiment lateness had been seen as a violation of a *moral obligation* (to pick up the kids on time), after the imposition of the fines being late could be viewed as a *choice* between picking up the kids on time and paying a price (the fine) for being late. And under the new system many parents were apparently willing to pay the price. The designers of the experiment titled their report “A Fine Is a Price.” Their main finding was that imposing the fines had signaled to the parents that they were now in a marketlike relationship to the day care staff—one in which they could *buy* lateness. Once the fines had been

introduced, revoking them could not restore the initial situation; it just lowered the “price of lateness” to zero.¹

Why were the economists who designed the day care experiment surprised by its results? It was because they took it for granted, as have most economists until very recently, that people care little about others, act only to promote their self-interest, always seek opportunities for personal gain, even at the expense of others, and abide by the moral standards of their community only when it serves their own purposes.

Economic man (*Homo economicus*) refers to the assumption that human beings are calculating, amoral, and self-interested.

Self-interest refers to a disposition to consider only how one’s actions will affect oneself, not how they may affect others.

The assumption that people are calculating, amoral, and governed by a self-interested predisposition is referred to as the *Homo economicus*, or “economic man,” assumption. To say that people are governed by a *self-interested* disposition means that they consider only how their actions will affect themselves, not how their actions will affect others.

One of the truly radical ideas in economics is the idea that given the right laws and institutions, individual selfishness can be harnessed to serve the public good. The accompanying box contains statements by Adam Smith, the founder of economics, and his influential 18th-century contemporary, David Hume, expressing this hopeful thought (see box, “A Constitution for Knaves”).

The economic man assumption, of course, leaves out a lot. While it is certainly true that selfish behavior is common, so are acts of compassion, selflessness, and altruism. People show concern for their friends’ well-being, volunteer for military duty, care for their infants or aged parents, risk their lives for strangers, and forgo opportunities to steal even when no one is looking. When such acts are motivated by a concern for others—or for what happens to others—they are not self-interested acts. We might better call them *other-regarding* because they are motivated by a regard for others. (Self-interested behaviors are, of course, *self-regarding*.)

The key to whether an act is self-interested is its motivation. The deciding factor is whether the act is motivated by a concern for others, not whether it produces happiness in the actor. For example, many generous people take pleasure in helping others in need. But this pleasure does not make them selfish people: since they act from unselfish motives they are *not* self-interested. Not all other-regarding acts are as admirable as helping others and obeying moral codes, however. Hurting another person out of spite, jealousy, or intolerance of his or her religion or race is also other-regarding. Such an act is intended (based on a motive) to make something bad happen to someone else, just as generous actions seek good outcomes for others.

Also left out of the economic man assumption is the fact that people change. *Homo economicus* is believed to be a “natural” phenomenon, and, accordingly, the type of (self-interested) behavior associated with it is assumed to have been prevalent in every kind of society, unchanging across the entire span of human history, and sure to be characteristic of any future economic system.

¹ Uri Gneezy and Aldo Rustichini, “A Fine Is a Price,” *Journal of Legal Studies*, vol. 29, no. 1, 2000, pp. 1–17.



A CONSTITUTION FOR KNAVES

The great 18th-century philosopher-economists Adam Smith and David Hume thought that the key to a well-ruled society was not to deny self-interest (which they thought to be impossible) but to find a way to harness selfish motives to serve socially valued objectives:

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.

—Adam Smith, *The Wealth of Nations* (1776), book I, chapter II

Political writers have established it as a maxim, that in contriving any system of government . . . every man ought to be supposed to be a knave and to have no other end, in all his actions, than his private interest. By this interest we must govern him, and, by means of it, make him, notwithstanding his insatiable avarice and ambition, cooperate to public good.

—David Hume, *Essays: Moral, Political and Literary* (1742)

It is well known, however, that people frequently change as a result of experiences they have in the economy. For example, a long but unsuccessful job search can turn a confident and happy person into a depressed and violent threat to his or her family or community. Even a whole group’s culture can change when its way of making a living is altered. For example, when the sons and daughters of farmers become office or factory workers, it is quite likely that they will develop new patterns of behavior, discover new wants, and be guided by different values.

In this chapter we consider various ways in which economists attempt to explain individual behavior. A common starting point is that people make choices and do things for reasons—even if not always for good reasons, and even if their reasoning does not always correctly anticipate the outcomes of their actions. Thus, behavior is seen as intentional, or goal seeking.

The main idea of this chapter is that *while the intentional view of behavior is essential to understand why people do what they do, economic man is a fictional character. Real humans are diverse (some selfish, others generous) and versatile (sometimes brave, other times cowardly), and their values, tastes, habits, and beliefs are very much the product of their upbringing, work experience, and national, ethnic, and cultural backgrounds.* This main idea is expressed in five key points.

1. Explaining behavior requires taking into consideration an individual’s *constraints* (limits on his or her actions), *preferences* (evaluations of outcomes), and *beliefs* (understandings of how particular actions may bring about specific outcomes).

2. Laboratory experiments as well as ordinary observations of daily life show that selfishness is but one of our motives. We are also generous, even toward those we do not know, and we are willing to reward those who treat us well and to punish those who treat us or others badly, even if such actions are costly to us in terms of lost income or missed opportunities for personal gain.
3. People are similar in many respects the world over, reflecting our common genetic inheritance, and these commonalities are sometimes termed *human nature*. But in other respects our behaviors differ greatly, reflecting differences in the things we have learned from others in our society; such differences are termed *cultural differences*.
4. Families, schools, neighborhoods, and workplaces all play a part in the processes by which we come to have our particular values, desires, and beliefs.
5. All animals *compete* with other members of their species, but humans are unique in the extent to which we can also *cooperate* with those to whom we are not related. We have become the “cooperative species” because throughout history cooperative people prospered, and their cooperative behaviors were copied by others, in part because groups that succeeded in cooperating survived and grew, eclipsing groups that did not.

Aggregate, or population-level, outcomes refer to the economic totals, averages, and relationships that are generally studied by economists.

Economics is about *totals* (the output of an economy or the number of unemployed people, for instance) and *averages* (per capita income, for example). It is also about *relationships*—the power of employers over workers, the price of bread relative to the typical wage, the distribution of income between rich and poor, and so on. These totals, averages, and relationships are sometimes called *aggregate, or population-level, outcomes*.

Economics is not about what particular individuals do, but economists need to know how individuals behave in order to explain totals, averages, and relationships. In most cases it is difficult to understand aggregate, or population-level, outcomes without understanding why people do what they do. Hence, individual behavior comes in as part of an explanation of the larger picture.

CONSTRAINTS, PREFERENCES, AND BELIEFS

To explain why people do what they do, economists make use of three terms: *constraints*, *preferences*, and *beliefs*. An example will elucidate the meaning of each of these terms. Imagine that you are planning to drive across the country and are going to purchase a used car for the trip. You will need to pick out the car, decide how long you want to spend on the road, and select the kind of accommodations you will stay in while traveling.

Constraints are the limits on the actions that an individual or a society can take.

Constraints put limits on the various actions available for you to take. Such constraints might include physical limitations (one cannot travel in a car from Massachusetts to California in less than two days);

your own capacities (you cannot drive for more than 12 hours at a stretch without going to sleep); your social relationships to others (the availability of friends you might ask to go with you); facts about institutions or your own ethical rules (you may not want to buy your car from a dealer you know is corrupt); and your wealth and capacity to borrow (you have a limited bank account and possess little that might serve as collateral in return for a loan). Constraints will limit your actions in such a way that you will face what is called a *trade-off*: achieving more of one thing means getting less of something else. Given your budget—limited by your wealth plus what you can borrow—you can buy a better car if you are willing, say, to give up staying at upscale motels.

Preferences are the relative values you place on various outcomes that your actions might bring about. For instance, as you plan your car trip to California you might assign different degrees of importance to comfortable nights in upscale accommodations, fatigue from all-nighters on the road, ownership of a decent car at the end of the trip, and arrival in California by a certain date.

Preferences are the relative values one places on the various outcomes that one's actions might bring about.

Your *beliefs* are your understandings of the actions necessary to bring about a particular outcome. (Note that this is a particular usage of the term *belief*, the broader definition of which refers to a conviction regarding the truth of something.) For example, you may believe that getting to California without a breakdown requires buying a better car.

Beliefs are one's understandings of the actions necessary to bring about particular outcomes.

Information about constraints, preferences, and beliefs is generally sufficient to explain why a particular set of actions was taken. Continuing the road trip example: You bought a seven-year-old Honda Civic because you could not afford an Accord and you believed that the Civic would probably get you there. Also, you asked a friend to join you so that you

could drive straight through, enjoy his company, and surprise your parents by getting home early.

In sum, individuals make choices to take various actions (within their constraints); they seek to bring about the outcomes they desire (according to their preferences); and they base their choices on their understandings (beliefs) about how certain actions may bring about the desired outcomes. The important thing to note here is that behavior involves choosing. The choices that the driver in the above example made may have been quite limited due to constraints such as a lack of wealth, but that does not mean that the actions taken were not choices. It may also be that the choices made were bad choices (the seven-year-old Civic might not have been adequate to get her all the way to California), but, in any case, choices were made.

We stress the element of choice because some views of behavior see choice as unimportant or even nonexistent. Such views are based either on the argument that individuals are not free (their constraints dictate a particular action) or that they are creatures of habit or conformity. There certainly are situations in which we are not free: the choice between “your money or your life!” is not much of a choice. It may also be the case that we sometimes repeat our past actions (out of habit) or copy (conform to) the actions of others without considering alternative possibilities. Habit and conformity certainly play a part in our behavior: just think of what you ate for breakfast this morning or what you wore to the last social event you attended. But views of behavior as coerced, habitual, or conformist fail to recognize the important elements of choice in most of what we do.

The constraints, preferences, and beliefs approach to understanding human behavior has therefore been widely accepted, not only in economics but in other social sciences as well. However, no theory can explain anything by itself. To explain behavior we need to know facts about the particular constraints, preferences, and beliefs pertaining to a given situation, and such facts will differ from person to person and among groups. Men and women face different constraints, for example, as do members of different classes, races, ethnic groups, and nationalities.

Moreover, two important aspects of the constraints, preferences, and beliefs approach have not yet been mentioned. The first is that preferences are not necessarily selfish: there is no reason to say that people must always be self-interested. The person driving across the country in our earlier example may have wanted to arrive early not for selfish reasons but to please her parents. Second, we have not said anything about where preferences come from. Was her concern for her parents' happiness an expression of "human nature"—an expression of a genetically transmitted trait? Or was it the result of her happy childhood? Was her lack of status consciousness (indicated by her purchase of the seven-year-old Civic) derived from a considered decision not to throw money away, or was it the result of a vague awareness that her cash-strapped friends would have frowned on the purchase of as nice a car as an Accord?

The view of preferences adopted in this book is fundamentally different from the one that prevails in the neoclassical school of economics, an approach to understanding the economy that appears in many textbooks and is discussed in detail in the next chapter. Neoclassical economists build their theories on the *Homo economicus* assumption that people have entirely self-interested preferences. They assume that people care about outcomes that involve themselves but not those that affect others. They also assume that everyone is this way and that everyone knows that everyone is this way: everyone is an economic man and everyone knows that everyone is an economic man.

In addition, neoclassical economists generally do not ask where preferences come from. Rather, they take preferences as "given," meaning that the preferences that guide economic decision making are thought to be simply there, possibly as an expression of human nature, or possibly due to advertising, socialization, or other factors that are of no concern to economists. Moreover, neoclassical economists usually view preferences as being *exogenously* determined, formed by forces *outside* the economy.

Because the neoclassical approach is out of line with many scientifically determined and widely known facts regarding human behavior, we take a different view. As we have said, in our understanding of the economy preferences are not necessarily selfish. More important, we do not assume that preferences are exogenously determined. Rather, we view them as *endogenously* determined, that is, determined mostly by processes *internal* to the economy. In the next section we set forth our reasons for doubting the assumption that preferences are entirely selfish. Later in the chapter we explore the question of where preferences come from.

"ECONOMIC MAN" RECONSIDERED

Nobody would pick *Homo economicus* for a housemate, a spouse, a friend, or (if we could choose them) a parent or a child. The economics Nobel Laureate Amartya Sen (see Chapter 4) has called economic man a "rational fool." But the implications of the concept are

actually worse than Sen suggests: mental health professionals use the term *sociopath* to refer to a person whose behavior is governed entirely by calculation of self-interest. Sociopaths have no sense of right and wrong, and they lack any concern for the well-being or pain of others.

It is not surprising, then, that since the inception of neoclassical economics in the late 19th century, even its adherents have sometimes had difficulty with the assumption that human beings are motivated solely by self-interest. A founder of the neoclassical approach, F. Y. Edgeworth, wrote: "The first principle of economics is that every agent is actuated only by self-interest." In his next sentence, however, he cautioned that this "first principle" is strictly applicable only in situations of "contract and war."² With regard to war, Edgeworth was not entirely right: bravery under fire often is not based exclusively on self-interest. And with regard to contracts, sometimes a handshake is a handshake, even if one party could benefit by violating the unwritten contract.

Just how wrong the assumption of universal selfishness is has recently been revealed in a series of what are called behavioral experiments. Subjects, usually students, often economics or business majors, are invited to volunteer to play a game in which they can win real money. They are anonymously paired for a single interaction. One (usually chosen randomly) is termed the "proposer," the other, the "responder." The proposer is provisionally awarded some money referred to as the "pie," the amount of which is known to both participants. The game is explained to both participants in advance as follows: The proposer is to decide how much of the pie to share with the responder; the proposer then offers a certain proportion of the pie to the responder, and the responder decides whether to accept or to reject the offer. If the responder accepts, the responder gets the offered portion, and the proposer keeps the rest. If the responder rejects the offer, both get nothing. The pie is often a small sum, such as \$10, but the game has been played in the U.S. for \$100 and in Indonesia with a pie equal to three months' salary. This experiment is called the "ultimatum game," the proposer's offer being the ultimatum that can be either accepted or rejected.

How would "economic man" play this game? As the proposer, he would reason that the responder (assumed also to be an economic man) would accept *any* offer greater than zero, for rejecting an offer of even one penny would deprive the responder of a penny. For an economic man a penny is better than nothing, no matter how it is acquired. This being the case, the proposer would decide to offer a penny (or the smallest amount possible), anticipating that it will be accepted.

But this is not what usually happens when the ultimatum game is played with real people for real money. Before we tell you what *does* happen, however, think about what you would offer if you were a proposer with \$100 to share, in some proportion, with a responder. Also try to imagine the lowest offer you would accept if you were the responder.

The ultimatum game has been played in hundreds of experiments with university students as subjects in all parts of the world. Few play the game as economic man would. In experiments conducted with students in the U.S., Japan, Israel, Germany, Russia, Slovakia, Slovenia, Indonesia, and many other countries, the vast majority of proposers offer between 40 and 50 percent. The most common offers are typically half of the pie. Equally striking is the fact that offers of 25 percent or less are frequently rejected.

²F. Y. Edgeworth, *Mathematical Psychics: An Essay on the Application of Mathematics to the Moral Sciences* (London: C. Kegan Paul, 1881), p. 104.



COKE VS. THE "JUST PRICE"

The Coca-Cola Company has tested a vending machine that automatically raises the price of a soda on hot days. Doing this does not require rocket science, just a thermostat and a computer chip. The company's chairman and chief executive at the time, M. Douglas Ivester, noting that the desire for a cold drink goes up with the temperature, concluded: "So it's fair that it should be more expensive." Airlines charge more when the demand is high, so why should Coke not do the same? "The machine will simply make this process automatic," Ivester explained.

Not everyone agrees. A Pepsi spokesman, no doubt seeking a competitive edge, took the high road: "We believe that machines that raise prices in hot weather exploit consumers who live in warm climates." Another beverage executive wondered: "What's next? A machine that X-rays people's pockets to find out how much change they have and raises the price accordingly? . . . It's another reason to move to Sweden!"

Apparently the price of a Coke—or that of any other commodity—is not, for some people at least, only something to be left to the market (or to the influence of large corporations). Economics Nobel Prize winner Daniel Kahneman (a psychologist by training) and his collaborators asked consumers if they thought it was fair for stores to raise the price of snow shovels during winter storms. The answer: they did not.

The Coca-Cola Company's new machine strikes at least some people as unfair because they think that when two parties engage in a mutually beneficial exchange—one, say, that increases a company's profits while quenching a consumer's thirst—the distribution of the benefits and burdens should not violate ethical norms. This idea can be traced to Thomas Aquinas, the medieval Catholic philosopher, and his concept of a "just price." Most economists think the idea of a just price is a nonsensical expression—like a "yellow logarithm." They would side with Coke. But judging from the reception that Coke received, they have not persuaded everyone yet.

Source: Constance Hayes, "Coke Tests Vending Unit That Can Hike Prices in Hot Weather," *New York Times*, October 28, 1999.

These experiments show that neither the proposers nor the responders behave like economic man. A responder is often willing to pay a price, rejecting a low offer and ending up with nothing, to punish a proposer who makes an unacceptably low offer. Many have interpreted this behavior as evidence of a *preference for reciprocity*—a tendency to be generous toward another person as long as you are treated well by the other person but a

willingness to pay good money to punish someone who has crossed or insulted you, even if you will never see that person again.

While the responders' behavior is understood as reciprocity, the behavior of proposers seems to be more complex than a simple preference for reciprocity would suggest. It is possible that their high offers could reflect unconditional generosity toward the responders or a concern for their well-being irrespective of any behavior on the responders' part. If this is the correct interpretation, the proposers can be said to have *altruistic* preferences—preferences that lead them to act to benefit others at some cost to themselves (even with no expectation that reciprocal benefits will be received later).

An alternative interpretation is that a proposer could have well-informed beliefs and be motivated by selfish preferences. Suppose the proposer believes that the responder will not play the game like an economic man, one willing to accept a penny. If the proposer believes that the responder will reject low offers, then making a 50–50 offer could be nothing more than self-interest guided by prudence.

All we can say for sure in interpreting the most frequent outcomes of the ultimatum game is that neither the proposers nor the responders behave like economic man. Even the self-interested but prudent proposer just described does not believe that the responder is an economic man. And in virtually all cases the proposers assume that the responders will depart from the assumption of perfect selfishness.

Violations of the selfishness assumption are not confined to these experiments, and neither are they limited to such dramatic but exceptional examples as heroism in warfare. Most people do not steal or cheat on their taxes even when they are sure they can get away with it. And in all of the richest nations in the world (Canada, the U.S., and the European countries, for example), large majorities vote for income transfers to the poor, knowing that these programs require higher taxes on most income-earners. Even in the U.S., where such programs are relatively unpopular, there is substantial support for income transfers to the poor, even among rich and upwardly mobile people who will probably never be able (or have the need) to benefit directly from such transfers.

However, we cannot conclude from our recitation of the above facts that people are not selfish. What is probably true is something like Abraham Lincoln's assertion about people being fooled: being selfish is what some of the people are all of the time and what all of the people are some of the time. But the rest of the people, the rest of the time, are sometimes altruistic, sometimes reciprocal, sometimes spiteful, occasionally vengeful, and so on. To reiterate the key point: when students or others participate in experiments such as the ultimatum game, the fraction of players that consistently act selfishly is quite small; it is almost always less than a half and often as low as a quarter.

HUMAN NATURE AND CULTURAL DIFFERENCES

One undeniable lesson from the experiments—not a terribly surprising one—is that people differ. This lesson is important because it reinforces what we know from our own observations, namely, that assuming everyone is selfish (or generous, or spiteful, for that matter) ignores the facts. Not only do people differ one from another; their behavior differs (again, not surprisingly) from one society to another. To some extent this is due to the

particular requirements of making a living in each society—people in Kansas farm, people in Iceland fish. But does the extent to which people resemble economic man vary from one society to another?

One of us (Bowles) and a team of anthropologists and economists designed a set of experiments to explore the connections (if any) between how people make their living and their preferences. We conducted our experiments in 15 societies in Africa, Asia, and Latin America where people live in sharply contrasting ways. In some, hunters and gatherers live in ways not very different from the ways in which our early human ancestors lived before the domestication of animals and plants. In others, herders and farmers use technologies that have been in use thousands of years to make a living from their animals and plants. Most of the groups we studied live in inaccessible places such as the New Guinea highlands and the Peruvian part of the Amazon, and they have very limited connections with modern governments or the world of markets. None of the groups we studied was large; most were settlements of less than 100 people and had had little contact with the outside world. For this reason, and because they have so little else in common, we call them “small-scale societies.”³

The results of the experiments surprised us. When the ultimatum game was played among the Au and Gnau peoples in Papua, New Guinea, for example, offers of more than half of the pie were common. (Such offers were almost never encountered in experiments conducted with American students.) Even more interesting was the observation that in these societies high and low offers were rejected with equal frequency. (Most 50–50 offers were accepted.) This unusual result probably occurred because competitive gift-giving is a means of establishing status in these and many other New Guinea societies. We reasoned that proposers making high offers (offering more than half) may have been seeking to enhance their status, while those rejecting these offers were simply refusing (albeit at a high price) to accept a lower status. The frequent rejection of low offers was probably due to a sense that accepting them would mark the responders as already being of a low status.

In contrast, when the game was played among the Machiguenga forest agriculturalists in Amazonian Peru, the average offer was 27 percent of the pie. Nearly three-fourths of all the Machiguenga offers were less than 25 percent, and only one offer was rejected! This was a pattern strikingly different from the results of the other experiments we conducted. We were left wondering: if the Machiguenga were really so stingy (as suggested by the frequency of low offers and the infrequent rejection of them), why did they offer more than a penny?

Analysis of our experiments in the 15 small-scale societies led us to the following conclusions. First, and most important, is that typical behaviors vary significantly from group to group. The subjects in some groups were much more generous (and willing to punish stinginess) than were American, European, and other students, and some were much less so. Second, in no group did we find “economic man” behavior to be typical. Third, variations in behavior from one group to another seemed to reflect differences in how people in each group make their living. For example, the Aché people in Paraguay acquire some kinds of food (meat and honey) by hunting and gathering, and these foods are shared equally among

³ Joe Henrich, Robert Boyd, Samuel Bowles, Ernst Fehr, and Herbert Gintis, *Foundations of Human Reciprocity: Economic Experiments and Ethnographic Evidence in 15 Small-scale Societies* (Oxford: Oxford University Press, 2004).

all group members. When playing the ultimatum game, almost all Aché proposers offered about half of the pie, and *none* of their offers was rejected. (This behavior differs, of course, from that of the Machiguenga and other groups such as American students.)

Another example of how a particular group’s economic circumstances affect its typical behavior comes from Indonesia. There the Lamalera whale hunters need to hunt in large crews, and they divide their catch according to strict sharing rules (see p. 547 in Chapter 20). When they played the ultimatum game, the average offer was 58 percent of the pie.

Why do people play the ultimatum game so differently from one society to another? We know that the players in each society, from Orma herders in Kenya to Aché hunters in Paraguay, face the same constraints in the experiments. Therefore, the answer must be either that the players’ beliefs vary or that their preferences differ. If it is their preferences, where do the differences come from?

Some of our preferences are influenced by our genes and are hence thought of as reflecting our “nature.” Thus, we sometimes say that a certain person is generous or stingy (or something else) “by nature.” To take another example, the taste for sweet or fatty foods seems universal and is probably genetically transmitted. But most food tastes vary greatly among countries, and genetic differences between human populations are not great enough to account for such variations. Spain, Italy, and France are famous for their distinctive national cuisines, but the crops grown in each of these countries can be grown in others, and there are no relevant genetic differences between their populations. Why do the Italians eat pasta while the French prefer bread or potatoes? These tastes are not inherited genetically. Rather, they are *learned* from parents, neighbors, and others.

Preferences that are learned from others—passed on from parents, elders, teachers, heroes, competitors, neighbors, or friends rather than being genetically transmitted just from parents—are part of what is called *culture*. We define culture as aspects of behavior that we learn from others.

As noted earlier, beliefs influence our behavior because our choices of actions to take are based in part on our understandings (beliefs) regarding cause-and-effect relationships. Since our beliefs are either learned from others or gathered from our own experiences, they, too (like preferences), are part of our culture. Similarly, learned skills, transmitted to us by parents, schools, friends, neighbors, and others, are part of the culture in which we are situated.

Culture and *human nature* have long been controversial terms: is it “nature” or “nurture” that explains why some people lead and others follow? Is it “genes” or “environment” that make some rich and others poor?

What is not controversial is that people do not differ much genetically from group to group. *Within* any group, of course—whether it is citizens of the U.S., the Aché people of Paraguay, or Italians—the genetic differences are very large. Researchers have found, however, that such within-group differences are much greater than the differences between a typical person in a certain group and one in some other group. For example, if you were to pick two Americans at random, even ones who share the same skin color or height, the genetic differences between them would most likely be huge in comparison to the differences, say, between the average American and the average Aché.

Behaviors, however, are another matter. People behave very differently in different societies. (Recall the varying results of the ultimatum game played in different societies.) Behaviors differ mainly because cultures are very different from one country or group to

another: what we learn from others as we grow up and even when we are adults varies greatly from place to place. That is why the preferences and beliefs of the peoples studied by the authors differ so much. The culture of Lamalera whale hunters (who on average offered more than half of the pie) is different from that of the Machiguenga forest agriculturalists (who offered barely more than a quarter), which in turn is different from that of the Tanzanian Hadza hunter-gatherers (who rejected almost half of low offers)—and all of these cultures are different from that of the Ecuadorian forest people, the Tsimane (who rejected none). Why do people learn such different things from one culture to another?

THE ECONOMY PRODUCES PEOPLE

As explained in Chapter 5, the economy produces more than just goods and services; it also produces people. We call the creation of goods and services “production” and the production of people “reproduction” (see Figure 5.1). The term *reproduction* comprises not only biological procreation but also all the processes entailed in the formation of an individual, including what happens in families, schools, and all the other institutions in which parents, teachers, caregivers, spouses, and others combine their labor with other inputs to raise and support each new generation. Societies accomplish the tasks of reproduction in various ways, and some of the differences in methods of reproduction result from differences in the way people make their livings (production). This is what we mean when we say that the economy produces people.

As we have seen, ultimatum game experiments can provide information about the relationship between an economy and a culture. In our small-scale society experiments individual choices appeared to reflect everyday life, especially the way people made their living. For example, we saw that the Aché, who acquire much of their food by hunting and gathering and then share it, tended to divide the pie equally, sometimes offering more than half of it to the responders in our experiments.

Similar information can be gathered using other types of experiments. Among the Orma herders and throughout Kenya there is an important cultural institution they call the *harambee system*. With this system it is customary to collect money to build a school or repair a road by assessing each herder a certain amount, expecting him to make a contribution that varies with the size of his herd. We asked the Orma to play a different game called the “public goods game.”

A public goods game is also explained to each player beforehand, and, like the ultimatum game, it is played anonymously and for real money. But in this game individuals play in groups rather than with a single partner, and they are asked to contribute to a common pot for the benefit of all. Once all the contributions are made, the amount in the pot is doubled and the total is then distributed in equal amounts to all the players. In this game, each player benefits from *the others* contributing, but each would personally gain the most by contributing nothing.

In the public goods game an Orma herder with a large herd who contributed one Kenyan shilling—quite a lot of money among his people—would see his contribution to the common pot doubled and then divided and distributed equally among the players in the game. Suppose there are five players. Then, the share distributed to the herder as a result of his contribution would be, say, 2/5 of a shilling, less than his original one, so he would have been better off remaining on the sidelines and just holding on to his shilling. Despite the fact that

self-interest would prescribe contributing nothing, however, the herders in fact contributed generously—and those with large herds contributed more than those with smaller ones.

We wondered if the similarity between the local customs and the experimental play of such groups as the Aché hunters in Paraguay and the Orma herders in Kenya comes about because preferences are affected by a particular group’s social institutions and norms of fairness. The large differences in institutions and norms in our sample allowed us to address this question. Accordingly, we ranked each society with reference to two aspects of its economic institutions and then sought to use the rankings to predict the results we achieved in the ultimatum games.

FIFTY-FIFTY: THE IMPORTANCE OF NORMS

On January 11, 1886, Fenner Powell, a former slave in Wade County, North Carolina, placed his X next to the signature of his landlord, W. S. Mial. Powell thereby agreed to “do all manner of work . . . as directed, and to be respectful in manners and comportment to said Mial . . . and to give to said Mial one half of all crops raised.” There was nothing unusual about this contract, and that is why it is remarkable: it is exactly the same crop share that free-born white farmers in Wade County and throughout the South agreed to pay their landlords. Why would a former slave—illiterate, excluded from voting, and subject to denigration and lynching—be allowed to keep the same share as free-born farmers whose social status and bargaining power were much greater? Finding an answer will take us far from the post-Civil War U.S. South.

In Illinois today, growing corn is big business. Using capital-intensive technologies and computer-generated business plans, some farmers cultivate 1,000 acres or more, much of it on plots rented from multiple owners. In the mid-1990s more than half the contracts between farmers and owners were sharecropping agreements, and more than four-fifths of these contracts stipulated a fifty-fifty division of the crop. In the southern part of the state, where the soil tends to be less fertile, there are counties where most of the contracts allocate two-thirds of the crop to the tenant and one-third to the owner, despite considerable variation in land quality within these counties.

Rice cultivation in West Bengal in the mid-1970s seems light years away from Illinois. In West Bengal, poor illiterate farmers eked out a bare living on plots that averaged just two acres; they resided in villages without any electronic communication, isolated by impassable roads much of the year. There was one similarity with Illinois, however: the division of the crop between sharecroppers and owners was fifty-fifty in more than two-thirds of the contracts. Ibn Battuta, the famous Arab geographer who visited Bengal, India, in 1347, had recorded exactly the same division of the crop six centuries earlier. (Of course, if each landlord had 20 sharecroppers, contracts providing for fifty-fifty crop sharing would not mean

Continued . . .

that the owners and the farmers would have equal incomes: each landlord's income would be 20 times that of the typical farmer.)

John Stuart Mill, the 19th-century English philosopher and economist, noted both the widespread pattern of equal sharing of crops and local conformity to other proportions where fifty-fifty was not the rule. Mill's explanation: "The custom of the country is the universal rule." But why fifty-fifty as opposed to fifty-two to forty-eight? Why did the Bengalis and the Americans come up with the same proportion? Even more puzzling is the question: why do fifty-fifty or two-thirds to one-third persist when the owners could make huge profits if they were only to offer lower shares on higher-quality land? And when the shares do change, as happened in West Bengal in the 1980s and 1990s, why do they all change at once?

Fifty-fifty crop shares are social *norms*—widespread practices that are followed because violating them would bring criticism, retaliation, or ostracism. Norms play an important role in all economies, placing limits on the extent to which people can simply pursue their self-interest. Often norms become values in their own right, adhered to not to avoid sanction but because people would not feel right doing otherwise.

Sources: Samuel Bowles, *Microeconomics: Behavior, Institutions, and Evolution* (Princeton: Princeton University Press, 2004), Ch. 3; Roger L. Ransom and Richard Sutch, *One Kind of Freedom: The Economic Consequences of Emancipation* (Cambridge: Cambridge University Press, 1977); Peyton Young and Mary Burke, "Competition and Custom in Economic Contracts: A Case Study of Illinois Agriculture," *American Economic Review*, vol. 91, no. 3, 2001, pp. 559–73; Pranab Bardhan, *Land, Labor and Rural Poverty: Essays in Development Economics* (New York: Columbia University Press, 1984); John Stuart Mill, *Principles of Political Economy with Some of Their Applications* (London: Longmans, Green, Reader, and Diver, 1867 [1848]).

The first basis for ranking, *cooperation*, is a measure of the extent to which the local ecology allows for a more productive use of labor when many work together. The Lamalera whale hunters were ranked first because successful whaling requires large numbers of hunters to work together, and the dispersed Machiguenga forest agriculturalists were ranked last because their production is more individualized and they gain little by collective production activities. We speculated that in groups that cannot benefit much from cooperative production there would be few norms of sharing. We also guessed that in groups such as the Lamelera, whose livelihood depends on large-scale cooperation, ways of sharing would be well developed, and these would affect how the Lamalera played our games.

The second basis for ranking, *market integration*, is a measure of the fraction of a people's livelihood that is acquired through market exchange. The rationale for this measure is as follows: the more frequently people experience market transactions, the more they will also experience beneficial sharing of the gains made possible by trading with strangers. Historically, it is a fact that before markets became widespread, most interactions with strangers were potentially dangerous, often providing occasions for violent confrontation, theft, or worse. As markets developed they habituated us to the benefits of regular interactions with strangers in which both parties can benefit as long as they follow certain rules



DOES A CONSTITUTION FOR KNAVES MAKE KNAVES OF US?

Unlike Adam Smith and David Hume, the English conservative Edmund Burke, the German revolutionary Karl Marx, and the French liberal Alexis de Tocqueville feared that harnessing self-interest, or (to use Hume's phrase) living under a constitution designed for knaves, would turn us into knaves.

... the age of chivalry is gone. That of sophisters, economists, and calculators has succeeded ... Nothing is left which engages the affections ... so as to create in us love, veneration, admiration or attachment.

—Edmund Burke, *Reflections on the Revolution in France* (1790)

Finally, there came a time when everything that men had considered as inalienable became an object of exchange, of traffic, and could be alienated. This is the time when the very things which till then had been communicated, but never exchanged; given, but never sold; acquired, but never bought—virtue, love, conviction, knowledge, conscience, etc.—when everything, in short, passed into commerce. It is the time of general corruption, of universal venality.

—Karl Marx, *The Poverty of Philosophy* (1847)

Each [person] ... is a stranger to the fate of all the rest ... his children and his private friends constitute to him the whole of mankind; as for the rest of his fellow citizens, he is close to them but he sees them not ... he touches them but he feels them not; he exists but in himself and for himself alone.

—Alexis de Tocqueville, *Democracy in America* (1830)

(you pay at the checkout, you do not take the groceries and run). Our speculation was that such experiences would give rise to societal sharing norms and that these would be reflected in the results of the experimental games.

Using the measures of cooperation and market integration we sought to explain both a group's average ultimatum game offer and its frequency of low offer rejection. We found that the two measures—cooperation and market integration—enabled us to predict the results of ultimatum game play in most of our societies. In societies with more cooperation or greater market integration, proposers made higher offers (on average), and low offers were more likely to be rejected. The great 18th- and 19th-century thinkers Karl Marx, Edmund Burke, and Alexis de Tocqueville might be surprised to find that exposure to markets leads to higher offers (greater sharing with others) and a greater tendency to reject unfair offers. (See the box, "Does a Constitution for Knaves Make Knaves of Us?")

Our ability to predict behavior in experiments that were entirely novel situations for our subjects on the basis of our two measures of economic structure suggests that economic institutions influence preferences. Our values, likes, dislikes, and morals seem to be affected by living within a particular set of institutions—sharing food like the Aché, cooperating in acquiring food like the Lamalera, pitching in voluntarily to build a school

like the Orma, or, for that matter, competing for a job following graduation. How does this come about?

A plausible answer is that people acquire their preferences, in part, through the way they are brought up, and child-rearing practices stress values and skills that are important in a society's way of life. To test this idea, three anthropologists categorized 79 mostly nonliterate societies (similar to our 15 "small-scale" societies) according to their prevalent form of livelihood (animal husbandry, agriculture, hunting, and fishing) and their related capacity for food storage or other wealth accumulation. Food storage is common in agricultural societies but not among hunters and gatherers. These researchers also collected evidence on forms of child rearing, including obedience training ("compliance") and the degree to which self-reliance, independence, and taking responsibility ("assertion") were encouraged. They found significant variations of child-rearing practices, and they also found that these variations were correlated with differences in economic structure. They concluded, "Knowledge of the economy alone would enable one to predict with considerable accuracy whether a society's socialization pressures were primarily toward compliance or assertion."⁴

We do not need to confine our attention to anthropological studies of exotic societies to find evidence that economic institutions influence preferences. Over a period of three decades, a social psychologist, Melvin Kohn, and his collaborators have studied a number of individuals, focusing on the relationship between these individuals' positions in the authority structure of their workplaces and the extent to which they value obedience and discipline or self-direction and independence both in themselves and in their children. The hypothesis was that people who routinely take orders on the job value obedience and discipline, while those who give orders value autonomy. Kohn's collaborative study of Japan, the U.S., and Poland (when it was still ruled by a Communist government) found that in all three countries people who exercise self-direction on the job also value self-direction in other realms of their life (including child rearing and leisure activities) and are less likely to exhibit fatalism, distrust, and self-deprecation. Kohn and his coauthors argued that ". . . social structure affects individual psychological functioning mainly by affecting the conditions of people's own lives,"⁵ and they concluded that ". . . the experience of occupational self-direction has a profound effect on people's values, orientation, and cognitive functioning."⁶

The facts presented above suggest that the way goods are produced and distributed in any society conditions what one must be or do to make a living. Hunters must be independent-minded and physically fit, industrial workers and clerical staff must be willing to take orders, and entrepreneurs must be self-motivated. Economic institutions thus impose characteristic patterns of interaction on the people who make up a society, affecting who meets whom, on what terms, to perform which tasks, and with what expectations of rewards. These patterns, in turn, influence the process by which people mature and change over their lifetimes, forming their personalities, habits, tastes, identities, and values—in short, their preferences.

⁴Herbert Barry III, Irvin L. Child, and Margaret K. Bacon, "Relation of Child Training to Subsistence Economy," *American Anthropologist*, vol. 61, 1959, pp. 51–63.

⁵Melvin L. Kohn, *Class and Conformity: A Study in Values* (Homewood, Ill.: Dorsey Press, 1969), p. 189.

⁶Melvin L. Kohn and Kazimierz M. Slomczyński, *Social Structure and Self-direction: A Comparative Analysis of the United States and Poland* (Cambridge, Mass.: B. Blackwell, 1990), p. 967.

Economic institutions shape people's preferences in part because institutions determine what kinds of individuals will be successful, and people try to copy the successful, either in their own likes, dislikes, and values or in raising their children. But in most societies the job of socializing young people is not left entirely to parents. Schools, religious institutions, and other organizations play a major part in bringing up the next generation.

If you look at the curriculum of a school, you might get the impression that its only objective is to teach skills such as reading, writing, math, and the ability to use a computer. But a closer look at what goes on in the classroom and how rewards are distributed among students shows that schools do something else, too: they teach children how to behave. The fact is that getting a good grade requires more than knowledge of the subject, and there is a study that proves this. It shows that to get good grades one also has to develop certain personality traits. (Many students already know this.) More surprising, however, is the study's additional finding that the personality traits rewarded with high grades in the classroom are the same as those rewarded with favorable rankings by supervisors in the workplace.

Here is the study. One of us (Edwards) used a peer-rated set of personality measures to predict supervisors' ratings of workers in both private and public employment. Peer-rated personality measures are based on how individuals are seen by people similar to, or in the same situation as, themselves. Such measures are expressed in words such as *tactful*, *creative*, and *punctual*. One of Edwards's collaborators, Peter B. Meyer, used the same peer-rated personality variables to predict differences in high school students' grade point averages from what would be predicted on the basis of their SAT and IQ scores.

Edwards found that certain peer-defined personality traits—perseverance, dependability, consistency, punctuality, tactfulness, and being able to "identify with work" and "empathize with others"—were highly correlated with positive supervisors' ratings, whereas to be judged by one's peers as being creative or independent meant receiving poor ratings from supervisors.⁷ Meyer found virtually identical results for the high school students in his grading study: the correlations between their grade point averages and 12 personality traits are nearly the same as the correlations observed in Edwards's study of employees.⁸ Thus, both teachers and employers reward the same personality traits. The conclusion: schools teach more than skills, and they also cultivate (or at least they reward) the kinds of personality traits that employers prefer.

All human societies have developed elaborate ways of teaching the preferences and beliefs required for normal functioning as an adult. In many hunter-gatherer societies children accompanied their parents as they stalked game and searched for fruits and nuts, learning the skills necessary to live by these means. Before the emergence of capitalism, most production took place within families—in small workshops, on farms, and the like—and a person could learn most of what was necessary to function in the economy from parents and relatives. Also, the skills required did not change much from generation to generation.

⁷Richard C. Edwards, "Personal Traits and 'Success' in Schooling and Work" (*Educational and Psychological Measurement*, spring 1977) and "Individual Traits and Organizational Incentives: What Makes a 'Good' Worker?" *Journal of Human Resources*, winter 1976.

⁸Samuel Bowles, Herbert Gintis, and Peter Meyer, "The Long Shadow of Work: Education, the Family, and the Reproduction of the Social Division of Labor," *The Insurgent Sociologist*, summer 1975.

Capitalism changed all this. It created huge workplaces in which thousands of strangers come into contact with one another, and rapid technological change may now render the skills of one's parents obsolete even before retirement becomes an option for them. As capitalism has become the preeminent economic system, schools have come to play an essential role in the socialization process. Moreover, the personality traits that schools foster—dependability, consistency, punctuality—now make it possible for large numbers of strangers to work together even if the bonds of kinship, loyalty, and affection are absent.

CONCLUSION: THE COOPERATIVE SPECIES

Humans are unique among animals in that large numbers of unrelated people cooperate to produce the goods and services we require. We also cooperate in pursuing other projects such as raising the next generation and engaging in warfare.

All animals compete: for food, for survival, for reproductive success. Some animals exchange goods and services. For example, fish called "cleaner fish" remove parasites from the skin and mouths of larger fish, providing health services in return for a good meal. The Greek scholar Herodotus described a similar exchange more than two and a half millennia ago:

Because [the crocodile] spends its life in water, its mouth is filled with leeches. With the exception of the sandpiper, all other birds and animals run away from it. The sandpiper, however, is on good terms with it because it [the sandpiper] is of use to the crocodile. When the crocodile climbs out of the water and onto land, it yawns widely . . . and then the sandpiper slips into its mouth and swallows the leeches. This does the crocodile good and gives it pleasure, so it does not harm the sandpiper.⁹

Some animals even respect property rights. Spiders do not intrude onto the webs occupied by other spiders (unless the intruder is much bigger). A male Hamadryas baboon does not attempt to steal food that is in the possession of another one.

But in no other species but *Homo sapiens* do thousands of unrelated individuals work together to accomplish a common project, whether it be building cars, providing medical insurance for citizens, or making war. (Ants, bees, and some other so-called eusocial insects cooperate on a grand scale, but it is all in the family: the members of a hive or nest, even if they number in the thousands, are mostly relatives.) How do we do it?

In part, these feats of cooperation are accomplished because, distinct from other animals, we are able to devise laws and organizations that go beyond the family, such as governments and firms. These often provide the incentives and constraints that induce people to work together effectively, even if they are entirely self-interested.

Self-interested behavior is not characteristic of successful organizations, however. The soldier who goes to war may do it for the money or because he was drafted and had no choice. But as any officer knows, such motives do not inspire people to become good soldiers.

⁹ Herodotus, *The Histories* (New York: Oxford University Press, 1998), p. 122.

All forms of human cooperation, including those capable of winning in warfare, are best understood by considering motives other than self-interest. These include envy or spite toward others as well as concern for others and the aspiration to see certain principles upheld. The success of humans as cooperators is much less puzzling once one realizes that economic man is just one kind of human, and not a very common one at that. Far more common are people who, at least some of the time, are reciprocators or altruists and, for better or worse, care about others. Humans are cooperative on a scale unmatched by any other animal because we have preferences that lead us to act in cooperative ways.

Our last question: how did we get this way? Part of the answer concerns human nature. We have the intellectual capacity to devise general ethical rules to live by, and we also have the linguistic capacity to communicate these rules among ourselves, to report violations of the rules, and to coordinate the punishment of those who break them. In addition, we are acutely sensitive to praise and blame, experiencing such *moral emotions* as shame, which serve as powerful incentives to avoid wrongdoing. It is worth noting that Adam Smith titled his first book *The Theory of Moral Sentiments* and devoted it to the analysis of exactly this aspect of human life. The moral emotions as well as the intellectual and linguistic capacity to devise and enforce social norms are part of human nature. They are not part of cat nature, or spider nature, or baboon nature.

The content of ethical rules—just what it is that they bid us to do and not do—is also, to some extent, a matter of human nature. Incest evokes disgust and shame among most humans, irrespective of the culture they grow up in, as do a number of unhealthy practices such as living with personal uncleanness or ingesting unhealthy substances. But most of the content of our ethical norms is learned: it comes from culture, not nature.

People in most societies actively teach the value of curbing our selfish desires and behaving in altruistic or reciprocal ways under appropriate circumstances. For most people (but not, of course, for sociopaths), acting in accordance with such teachings becomes an objective that is embedded in our preferences, becoming thus more than just an external constraint. That is why most of us, most of the time, do not steal even when we could get away with it.

But what about those who, like *Homo economicus*, are clever enough and immoral enough to steal when they *can* get away with it? Why do they not succeed in taking advantage of and eventually outcompeting their more ethical neighbors for the goods necessary for survival? If this happened, would not the ethical ones have to respond by becoming like the immoral ones? We hear of cases of unethical behavior being rewarded and going unpunished all the time.

The answer is that a group made up of economic man types would not function successfully as a unit. Who would come to the defense of the group in an attack by an external enemy or help out during a drought or other ecological crisis? Not economic man. In his second great book, *The Descent of Man* (the first was his better-known *The Origin of Species*), Charles Darwin, the founder of the modern theory of biological evolution, came to the following conclusion:

When two tribes of primeval man, living in the same country, came into competition, if . . . one tribe included a great number of courageous, sympathetic and faithful members, who were always ready to warn each other of danger [and] to aid and defend each other, this

tribe would succeed better and conquer the other. . . . Selfish and contentious people will not cohere, and without coherence nothing can be effected.¹⁰

The point of Darwin's statement is clear: in competitions among groups, those whose members have learned how to cooperate—that is, *not to compete* with one another—often win. Think of team sports. Darwin spoke of tribes as groups that would benefit from having a preponderance of cooperative members. The same reasoning applies to firms, neighborhoods, ethnic groups, and nations.

Thus, it is not that our good cultures beat out our bad nature. Rather, our cultures and our nature work together to make *Homo sapiens* the uniquely cooperative species that we are. The fact that we are cooperative means that nice guys do not always finish last. The reasoning that explains why nice guys do not always finish last also makes clear that neoclassical economists sometimes overrate the value of competition as a source of progress. Cooperation is also necessary.

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¹⁰ Charles Darwin, *The Descent of Man* (Amherst, N.Y.: Prometheus Books, 1997 [1871]), Ch. 5, "On the Development of the Intellectual and Moral Faculties During Primeval and Civilized Times."

CHAPTER 3

A Three-Dimensional Approach to Economics

Understanding capitalism has become essential for anyone who reads the newspaper, watches the nightly news, listens to political candidates, or simply wonders why it is so hard to find a good job or get enough free time. Since capitalism is an economic system, understanding capitalism requires some knowledge of economics. But what *kind* of economics? We call the approach presented in this book *three-dimensional economics*, and we often refer to it simply as *political economy*.

Political economy is a term we use for a theory that analyzes capitalism in terms of the three dimensions of competition, command, and change.

Until the beginning of the 20th century the term *political economy* was used to refer to all of economics, and the field itself encompassed most of what is now divided up among the social sciences: anthropology, sociology, psychology, and political science, as well as economics. But around 1900 the term *political economy* was replaced by *economics*, and the boundaries of the discipline were narrowed: the study of markets became its primary focus. Inquiries into politics, psychology, history, and other aspects of society were then left to the other social sciences. Thus, it is no accident that anthropology, sociology, psychology, and political science came into existence as separate fields at about this time.

We prefer to use the older term *political economy* (rather than *economics*) to describe our approach because one cannot understand contemporary societies very well unless politics, economics, psychology, and the other social science disciplines are all brought together to study the complexities of modern life. Another way of describing the *political economy* approach, then, is to say that it is *interdisciplinary*.

Many people believe that the approach presented here makes more sense and is a more useful way of understanding our economy than what is sometimes called *neoclassical*

economics—the “conventional” approach that is set forth in most economics textbooks. Ultimately, however, everyone who seeks to understand capitalism needs to consider a number of approaches to economics and decide which one, or which combination, makes the most sense and is the most useful.

What is certain is that no one should accept a particular approach to economics just because it is what some experts believe. Each person must make a choice for herself or himself, asking: “Does this make sense to me?” “Does this help me understand things that I have experienced and believe to be true?” Of course, not all opinions about economics are equally valid. A useful approach to economics, whether it be political economy or some other approach, must be logically sound, internally consistent, and helpful in explaining what is known about economic reality (“the facts”).

The main idea of this chapter is that *political economy considers all three dimensions of economic life: competition, command, and change*. The main points of the chapter are:

1. Capitalism is an *economic system*.
2. Every economic system can be analyzed in terms of three dimensions: a horizontal dimension (*competition*), a vertical dimension (*command*), and a time dimension (*change*).
3. Economics is about *values* (what ought to be) as well as *facts* (what is). It is useful to make values—and their role in any particular economic analysis—explicit. The values adopted in this book are simple: an economy should provide all members of a society with an equal opportunity to lead a flourishing life, and this objective is more likely to be achieved if the economy is *efficient, fair, and democratic*.

The fundamental concepts introduced in this chapter will be used throughout the book and will be further developed in later chapters.

ECONOMIC SYSTEMS AND CAPITALISM

Over the span of human history people have organized their economic activities in many different ways. The variety of economic systems runs the gamut from tribal commonwealths, slavery, and feudalism to self-sufficient households, capitalism, and state socialism.

What all these systems have in common—what makes them *economic systems*—is that they are all *ways of organizing the human labor needed in every society to produce the goods and services that support life*. No matter what type of society it is situated in, an economic system will determine *what work is done, how it is done and by whom, and to whom the resulting products are distributed*.

Economic systems are *relationships among people*. These relationships may be direct, face-to-face relationships, such as the interaction that occurs when you buy an orange from a grocer. At the other end of the spectrum, they may be relationships between people in different parts of

An **economic system** is a set of relationships among people that organizes the labor processes all societies need to sustain life.

the globe, for example the Iowa farmer producing grain that will later appear as bread on a table in Egypt. The relationships that make up economic systems may also be embodied in customs, laws, constitutions, political parties, or business corporations.

Economic relationships are shaped in important ways by the physical things and technologies used in production as well as by other factors such as geography, customs, religion, and whether production is primarily agricultural, industrial, or postindustrial (knowledge-based). Nevertheless, the *social relationships* among the various economic actors—producers and consumers, slave owners and slaves, feudal lords and serfs, employers and employees, borrowers and lenders—are the defining qualities of an economic system. Thus, the distinguishing features of any economic system may be seen in the social interactions among the economic players, and these interactions may be, in varying degrees, cooperative or competitive, altruistic or avaricious, equal or unequal, democratic or authoritarian.

How human work is organized differs from one economic system to another. To understand how work is organized in any particular society one must examine its economic system. The economic system that is the focus of this book, capitalism, is the one that prevails, in one way or another, throughout most of the world today.

Capitalism is quite familiar to most of us. In various forms it is the economic system not only of the United States but also of Great Britain, Japan, Chile, France, Russia, Mexico, Brazil, Germany, South Africa, and, indeed, more than 100 other countries. Thus, we can study capitalism directly because we experience it every day of our lives.

In a capitalist economic system most goods and services are produced at the direction of employers (businesspeople, entrepreneurs, capitalists, or managers of firms) who seek to make profits by selling the produced goods and services in markets. Most people in capitalist economies work for someone else (their employers) and receive a wage or salary in return. So work is organized for the purpose of making a profit; the employer, or his or her appointed manager, is the boss at the workplace; and goods, services, and people’s capacity to work—their labor time—are all exchanged through markets.

To understand capitalism one must find answers to a number of questions. How is work organized? How do markets operate? How much of the output when sold will go to profits, how much to wages, and what will determine the relative magnitudes of these two types of income? Why do some workers get paid more than others? Who decides what technologies will be used, and on what basis will such decisions be made? How does our capitalist economy affect the way we develop as human beings? How does it condition our culture, influence our political system, and alter our natural environment? And, in turn, what reverberations will all these effects have on the capitalist economy itself?

THREE-DIMENSIONAL ECONOMICS

In this book the complex relationships of a capitalist economy are examined, taking into account all three dimensions of an economic system: competition, command, and change.

Competition

Competition, or the horizontal dimension in economics, refers to aspects of economic relationships in which voluntary exchange and choice among a large number of possible buyers and sellers play the predominant role.

The first dimension is called "competition," and it refers to that aspect of an economic system in which exchanges of one sort or another play the most important part. In capitalism, of course, competition and exchange occur primarily in markets. For example, when a motorist chooses to buy gasoline at a particular gas station, it is obvious that he or she is making a choice between competing suppliers.

The competition dimension of the economy is a *horizontal* one: it can be thought of as involving a relative equality of power among those offering the choices, engaging in exchanges, and competing with one another.

In the gas station example, for instance, the sellers of gasoline must compete with one another to entice the motorist to come to their pumps. In the contest for customers, the gas suppliers are equal in the following sense: none can dictate to any other—or to the motorist—where the motorist will buy gasoline.

Political economy shares with conventional economics the view that an analysis of how competition works is essential to any attempt at understanding the economy. (As we point out in Chapter 11, however, political economy differs from the conventional approach on how competition actually takes place in a capitalist economy.) When, as in capitalism, much of economic life is organized in markets—not based, say, on ancient customs or on decisions imposed by central planners—markets are the terrain on which most of the competition is carried on and where most of the choices are made by individuals and firms.

Command

Command, or the vertical dimension in economics, refers to aspects of economic relationships in which power plays the predominant role.

The second dimension is called "command," and it refers to those aspects of economic relationships that involve power, coercion, hierarchy, subordination, or authority. In capitalist (and many other) societies, command is a central aspect of the workplace, the household, and the government. It concerns relations among nations, classes, races, men, women, and other groups in society as well.

The command dimension is regarded as *vertical* because it necessarily involves people or groups who are unequal, some being "higher up" in a hierarchy than others. One person or group is "dominant," while the others are "subordinate."

It is not always easy to distinguish command from choice. Suppose a thief points a gun at someone and demands, "Your money or your life!" This is *literally* a choice. The victim could presumably choose to surrender either the money or his or her life, yet the thief's threat is easily recognizable as *in fact* a command to hand over the money.

A less extreme example would be a situation in which a boss asks a worker to do something and the alternative to carrying out the boss's request is to get fired. It may seem here that the worker has the choice of doing or not doing what the boss has asked, but, in reality, the boss's request is a command.

Although the prospect of getting fired is not comparable to the possibility of losing one's life, for many people the loss of a job will cause financial disaster. This, in turn,

A has **power** over B if by imposing costs on B (or threatening to do so) A can cause B to act in a way that is to A's advantage.

will make it difficult to put food on the table, make the mortgage payments, or land another job.

One form of command is what we call "power." We define power as follows. A has power over B if by imposing costs on B (or threatening to do so) A can cause B to act in a way that is to A's advantage. The employer has power over the employee in this sense.

Command may be exercised, however, without threats and costs being imposed. It may just be that one party influences or shapes the conditions under which another party will be making a choice. Thus, corporations often use their financial resources to alter the conditions under which consumers make choices. If, for example, an aspirin producer's television commercials can convince consumers that its product is "stronger," works "faster," or is "recommended by most doctors," people going to the store in search of relief for headaches will tend to choose this product more frequently.

The point of the aspirin commercial example is that command is not only the ability to impose costs on others. It is also the ability of one person or group to control others' information, playing upon their fears, hopes, insecurities, or other emotions and thereby influencing their actions in order to promote the interests of the powerful person or group. Thus, in the case of advertising, command is often used in subtle—and sometimes not so subtle—ways to shape or condition choice.

Command is used in many other ways to influence outcomes. Examples of such influence include corporations making campaign contributions to sway the voting patterns of legislators or other politicians, companies hiring recent immigrants to work long hours for low wages in unsafe or unhealthy workplaces because such people have few other employment opportunities, and other circumstances in which money and power give one person or organization the ability to influence the actions of another. As we observe in later chapters, many economic relationships involve both choice and command, with neither one operating exclusively.

Change

Change, or the time dimension in economics, refers to the historical evolution of people and economic systems.

The third dimension of economic systems is called "change." It concerns the passage of time and the ways in which, over time, the operation of an economic system will change the system itself. In capitalism, change occurs because big profits can be made by changing the existing conditions—by building new and better machines, by designing novel products

to meet previously unknown needs, by expanding production, or by building factories in distant corners of the world.

Central to the changefulness of capitalism is the system of investment for profit that creates an inexorable tendency for the economy to expand. With its expansionary drive, capitalism alters the conditions in which it operates—and within which people live and die. Capitalism's continuous expansion also transforms the ways in which the system itself actually works.

Change is called the "time" dimension because change always occurs through time. Thinking about change necessarily involves using concepts such as "before" and "after," "old" and "new," or "early" and "late."

Emphasizing the change dimension of economics reminds us that each economic system works differently at different points in time. It also brings out the fact that people participating in an economic system develop over time.

Each economic system has a history, and the way each system functions at any particular point in time will depend, in part, on its history. For example, American capitalism works differently in the 21st century from the way it worked in the 19th and 20th centuries, and although it is still capitalism, an analysis of how it works in the present must be informed by a consideration of the ways in which it has changed. Similarly, American capitalism today differs from, say, German capitalism, in part because the 19th- and 20th-century histories of these two countries differed.

Any economic system will undergo further change in the future. The present and even the future will become the past: what *is* today will *not be* tomorrow. Indeed, as noted in Chapter 1, capitalism is the most dynamic—or “changeful”—economic system yet to be observed in history.

Of course, many factors other than the normal, everyday functioning of the economic system may cause economic and social changes. A list of noneconomic change-inducing events might include wars, plagues, new discoveries, climate change, religious upheavals, or new scientific breakthroughs. In some cases the economic analysis presented in this book may help to explain why these events occur. However, this analysis is mainly concerned with change as it emerges from the routine and persistent operation of the economic system. Similarly, with regard to human development the concern here is with how people adopt new tastes, values, ways of life, and even religions at least partially in response to their changing experiences of working and making a living.

The emphasis it gives to change is one of the qualities that distinguish political economy from neoclassical economics. This and other differences are summarized in the table at the end of this chapter.



ECONOMICS, POLITICS, AND HISTORY

Economics is the study of *how people interact with one another, with nature, and with the other things they require in order to produce their livelihoods.* The three-dimensional approach to economics takes the view that, as important as they are, the processes of competition and market exchange on which conventional economics focuses are only part of the story. Processes of competition and market exchange are important. Indeed, they are the first dimension referred to in the triad of “competition, command, and change” that defines three-dimensional economics. However, the other two dimensions, command and change, are just as important.

The vertical dimension of political economy, command, takes the existence of power relationships into account. Conventional economists do not include these relationships in their analyses; instead, they leave power to be studied by

political scientists. Abba Lerner, a prominent conventional economist, once commented that economics had become the “queen” of the social sciences by focusing only on those political problems that had already been solved. When political problems—such as a society’s choice of a particular framework of laws or a system for the administration of justice—have already been solved, the ensuing relations can be conducted solely on the basis of contracts and market exchange.

Three-dimensional economics does not limit itself to the study of solved political problems. Focusing on command as one of the most important aspects of human social life, it sees the economy as a place where power plays a decisive role and where there have been—and continue to be—endless and often bitter struggles between workers and their employers, between buyers and sellers, and among giant corporations. Thus, one reason for the presence of the word *political* in *political economy* is the recognition of the fact that power relationships are an important aspect of any economy.

The third dimension of three-dimensional economics, change, suggests that studying economics also means studying history. The process of change in society cannot be understood without considering the past and how it changed, eventually becoming the present. Change in political economy may be contrasted with the static approach of conventional economics that freezes time at a moment. Economic reality, according to political economy, is better represented dynamically—as a process of change rather than a frozen state of affairs. It is a movie compared to the neoclassical snapshot.

From the standpoint of political economy, the usual distinctions among the disciplines in the social sciences—history, political science, economics, sociology, anthropology, and psychology—are quite arbitrary. These distinctions divide social reality into parcels that reflect the traditional boundaries among university departments, but they obscure our understanding of how the economy works.

NEOCLASSICAL ECONOMICS

The neoclassical (or conventional) approach to economics, mentioned in both this chapter and the previous one, sees capitalism as a system of markets. The label *neoclassical* is given to conventional economics because this approach presents an updated version of some of the ideas of 18th- and 19th-century “classical” economics, the founder of which, Adam Smith, will be discussed in the next chapter. Neoclassical economics is thus primarily an explanation of how markets and market systems work.

Neoclassical, or conventional, economics is an economic theory emphasizing the horizontal dimension of markets and voluntary exchange.

Neoclassical economics is mainly about competitive markets, that is, markets with many buyers and sellers, and it offers explanations of how economic systems made up of many competitive markets function. While understanding markets is essential to understanding capitalism, the neoclassical approach is founded on three very restrictive assumptions. The first, “economic man” (*Homo economicus*), was discussed in the previous chapter.

The second assumption underpinning the neoclassical approach is that when studying a market transaction, all essential aspects of it are covered in a contract. Accordingly, all other aspects and consequences of the exchange are treated as being of secondary importance.

A **contract** is an agreement, either written (explicit) or unwritten (implicit), that commits two or more parties to taking certain actions, such as making payments and delivering goods or services.

A **complete contract** is one that fully specifies—in ways that the courts will enforce—everything that each party to the contract is to do as a result of the contract.

An **incomplete contract** is an agreement between two or more parties that leaves out certain aspects of an exchange and requires or imposes, upon one party or another, significant enforcement costs.

The concept of a *contract* is significant not only in economic analysis but also in many other areas, for example, the law. It is defined as an agreement, either written (explicit) or unwritten (implicit), that commits two or more parties to taking certain actions, such as making payments and delivering goods or services.

Neoclassical economists assume that contracts are *complete* in the sense that the *prices* resulting from them take into account everything that is important about a particular transaction. This is sometimes referred to as the *complete contracting assumption*. A *complete contract* is one that fully specifies, in ways that the courts will enforce, everything that each party to the contract is to do as a result of the contract.

In making the assumption that all market transactions are based on complete contracts, neoclassical economists take for granted that the contracts into which we enter, explicitly or implicitly, whenever we buy or sell something are “complete” in the sense that (a) they cover everything of interest to both parties to an exchange, and (b) they can be enforced at no significant cost to either party. In contrast, an *incomplete contract* between two parties is one that leaves out certain aspects of an exchange and requires or imposes, upon one party or the other, significant enforcement costs.

When a new car is purchased the contract is quite complete: the specifications of the car are described, the price is given, the payment plan is made clear, the warranty is spelled out, the limits on the liabilities of the producer are stated, and so on. When an employer hires a worker, however, the contract does not even mention some of the most important aspects of the bargain, such as the exact task (or tasks) the employee may be

assigned to do or how hard he or she will be expected to work. The incompleteness of employment contracts is one of the most important issues given attention in the political economy approach. (Credit contracts are incomplete, too, but for a different reason: the exact amount the borrower is to repay is clearly specified, but the contract may be unenforceable if the borrower is broke when the time comes to repay.)

In making the complete contracting assumption, conventional economists picture a world in which exchanges are *voluntary* (the very idea of a contract implies that both parties have voluntarily agreed to it). Coercive—“command”—relationships are not in the picture because if everything that matters in an exchange has already been settled by contract, there is nothing for the exercise of power to be *about*. As the example of the employment contract makes clear, however, what is left out of an incomplete contract may have to be resolved by command. Moreover, when an employer issues an order to an employee, it may be necessary to hire a supervisor to make sure that the order is obeyed. In this case, the salary paid to the supervisor is a cost to the employer of having the contract enforced.

If the price paid for something in a market exchange *did* reflect all relevant aspects of the exchange, one could say “you get what you pay for,” and vice versa. Thus, in the neoclassical economists’ world, the things you might enjoy but do not have to pay for (such as the love of a friend or your neighbor’s beautiful garden) are assumed to be either unimportant or the subject matter of some other discipline. Similarly, the things we get but would rather not get and are not paid to accept (such as a difficult supervisor or environmental pollution) are not given much attention.

Externalities occur when some of the effects of a market exchange are not reflected in the price and are thus “external” to the participants in the exchange.

Side effects on people other than those directly involved in a transaction are termed “external effects,” or *externalities*. They are called this because they are said to be “external” to the transaction itself. For example, the price one pays for gasoline does not reflect the costs imposed on others as a result of its consumption—carbon monoxide emissions, smog, health costs, traffic congestion—so all such effects are externalities of the purchase and consumption of the gasoline. Economists generally agree that externalities are a fact of life in any modern economy. But in practice

they are taken to be the exception, not the rule. The issues are: How widespread are they? And what should be done about them? Externalities are discussed at length in Chapter 9 of this book.

The third important assumption of neoclassical economics is that *increasing returns to scale* generally do not occur. The term *increasing returns to scale* refers to a situation in which expanding the rate of output—or the *scale*—of a productive activity makes possible a reduction in the average cost of producing a unit of output. In this situation, enlarging the scale of production will have the effect of *increasing* the *return* (net profit) per unit as additional units are produced (since the average cost of producing each unit will be falling).

Neoclassical economists assume that, beyond a modest scale of production, increasing returns are rare enough to ignore for most purposes. This in turn allows them to say that, in general, the average cost of producing a unit of a good will rise (or at least will not fall) as the rate of output is increased. This assumption flies in the face of the facts, namely, the prevalence in modern economies of large-scale production that allows many goods and services to be turned out at lower and lower costs per unit. (Think of music, drugs, and this book.) The significance of the widespread presence—and growing importance—of increasing returns in modern economies is discussed at length in Chapters 9 and 20.

Why is the assumption of *nonincreasing returns* essential to neoclassical theory? If the assumption is false and increasing returns prevail, competition among many small- or medium-sized firms cannot be the normal state of the economy. Smaller firms will find it impossible to survive because larger firms will be able to produce at lower cost. When this is the case the larger firms will be able to drive the smaller firms out of the market, and there will tend to be more monopoly than competition—and the economics of competitive markets will be of little interest.

There is an additional reason why increasing returns may make the competitive markets of neoclassical economics the exception rather than the rule. The outcomes of competition will often depend not just on which firm delivers a better product at lower cost. Market success may also depend on a firm’s political influence, its ability to get a head start and enter a market first, or just the luck of being in the right place at the right time. Whatever the reason, if a firm gets to be a certain size before others do, it will have the

advantage of being able to produce at a lower cost than its (actual or potential) competitors. Its greater size—and the cost advantage flowing from increasing returns—will enable it to leave the competition behind.

The three assumptions that underpin and define neoclassical economics can best be understood as part of a worldview dating from the 17th-century physics of Isaac Newton. From the standpoint of this worldview, all social and physical phenomena involve knowable and predictable motions of atomlike particles. Thus, the complete contracting assumption is a way of limiting an observer's view of the interactions among the particles so that these interactions may be seen as obeying a few simple laws. Similarly, the economic man assumption establishes the principle of motion of each particle. Finally, the nonincreasing returns assumption eliminates the advantages of head starts and accidents, so the past history of the interacting particles does not influence their current relationship. The end result, in neoclassical theory, is that the economy is viewed as a smoothly running machine, not one with the sometimes harmonious but more often conflict-ridden and sporadically chaotic human interactions that actually occur in a capitalist economy.

The neoclassical approach may be summarized in three interrelated points. First, the economic machine, as seen by a neoclassical economist, operates continuously and indefinitely into the future without any change in its basic design. It may need repair or replacement parts from time to time, but the machine itself—the economy—is relatively trouble free and not very accident prone. Its few problems, such as recessions or technological unemployment, can easily be taken care of.

Second, change does not occur as a result of the workings of the economic system itself. If something in the economy should happen to change, it will do so only as a result of an *external* influence, such as a major technological innovation or the spontaneous emergence of a new fad in consumer tastes. The development of the Internet, with its corresponding expansion of electronic communication or the sudden proliferation of peoples' desires for running shoes and designer clothing might be seen as examples of such "external" influences. In fact, however, such innovations and changes in consumer tastes do not occur entirely as a result of forces external to the economy. Rather, they are most often brought about by capitalism's drive to increase profits, expand markets, and sell more products.

Finally, since the economy remains unaffected by its own operation, it does not have a history. It does not, in itself, have a past, present, or future. Thus, neoclassical economics presents only a "static" analysis of the economy—static (or "stationary") in the sense that it is not "dynamic." When this shortcoming is considered along with its (previously discussed) lack of interest in power (command) relationships, one may conclude that the conventional approach offers only a one-dimensional analysis of capitalism, focusing exclusively on competition and exchange on the supposedly level playing field of the market.

VALUES IN POLITICAL ECONOMY

Most people with an interest in economics care not only about how our economy works (or does not work), but also about what is good or bad about it and how it might be made to work better. The economy is the subject of much controversy and debate. It used to be

said that if you wanted to avoid an argument, stay away from politics or religion. Today, better advice might be: don't mention economics.

Debate in economics is not only about "what is"; it is also about "what should be." This is sometimes referred to as the difference between "positive" (or "scientific") economics and "normative" (or "policy-oriented") economics, but, in fact, the boundary is not always clear. The "what is" question has to do not only with facts but also with their *interpretation*. Thus, differences arise when people disagree about what the facts are—and *what they mean*. The question "what should be," on the other hand, cannot even be addressed without explicit reference to *values*. In this case differences arise when people disagree about which situations are better and which are worse.

Getting the facts and their interpretation right is an essential task for *any* approach to economics. The facts regarding "what is" must be determined with enough accuracy that people with varying points of view can agree on them. Statements about how the economy works are either true or false, however difficult it may be to determine which, and one's judgment of their truth or falsity should not depend on one's values.

When one is choosing to examine a particular aspect of "what is," however, the choice will usually be strongly influenced by one's view of "what should be." If one places a high value on individual freedom of choice and less on fairness, one might be more interested in studying the way that markets and governments may affect one's freedom than in figuring out why women are generally paid less than men. This last topic would be of greater interest to someone who attaches a higher value to fairness. Nobody can be equally interested in all aspects of the economy, and your values will help you decide which economic questions you would most like your economic investigations to illuminate. You need to have some idea about where your lost car keys are in order to know where to point your flashlight.

Values also provide a basis for judging whether we think an economic system is good or bad, or, more specifically, what processes or outcomes of an economic system are better or worse. If you value democracy highly you probably have a very negative opinion of dictatorial regimes such as the ones that prevailed in the former Communist countries. But if you care a lot about increasing the amount of material goods available in a society, you have to be impressed by the record-setting increases in output achieved by Communist-ruled China in the last quarter of the 20th century. There are, of course, a number of different values, or criteria, on the basis of which one may, explicitly or implicitly, evaluate an economic system.

We evaluate economic systems on the basis of how well or how poorly they organize economic activities so as to provide opportunities for all their participants to lead flourishing lives. Our use of the biological term *flourish* is deliberate: plants flourish—as long as they have enough water, sunlight, and nutrients. In Chapter 14 we discuss some of the elements that people need in order to flourish. But certainly they cannot flourish when they lack adequate food and health care, when they are not free or are denied opportunities for learning, or when they are not respected both as individuals and as members of groups.

The most basic question regarding an economy is how does it affect people. And while each individual may have his or her own definition of "the good life," an economy that provides more people with more opportunities to lead flourishing lives is judged to be better than an economy that provides fewer people with fewer such opportunities. An economy is

thus evaluated on more than just “economic” outcomes—individuals’ incomes, for example. It is assessed on *all* of the ways it affects its participants.

How, then, are we to determine what is needed for a flourishing life? Can we say that one person’s passion for opera is such a need, while another’s craving for a BMW is not? In fact, though, judgements are not hard to make about many of the important issues to which our evaluation criteria may be applied. Imagine a child starving in a country where large quantities of grain are fed to cattle on their way to becoming steaks. Most people would not regard this as a good allocation of grain, even though this conclusion requires making a judgment about the value of a steak to one person relative to the value of enough nutrition to produce a healthy child to another. The world as we know it—sadly—poses many more problems similar to the steak vs. the hungry child than to the BMW vs. the opera.

An economy can provide the means for a flourishing life, or it can hinder the achievement of one. Of course, whether individuals actually do lead happy and free lives will be influenced by many more variables than how the economy is organized. To a significant degree, the achievement of a flourishing life will depend on the choices one makes. But economies can create conditions favorable to the achievement of a flourishing life, or they can generate conditions that make it difficult to live with dignity, freedom, and happiness.

An economy will impede the achievement of flourishing lives if jobs are mind-numbing or unsafe, if children die young of easily preventable diseases, if people remain illiterate or are not free to speak their minds or practice the religion of their choice, if malnutrition is common, if people are stigmatized because of their race, sex, or sexual orientation, or if other conditions that limit opportunities are generated. An economy is better to the extent that it reduces or does not create such conditions—not just for a few people but for everyone and to the greatest possible extent.

Whether an economy contributes to a flourishing life for all the members of a society will depend on a number of aspects of the way the economy works. Among these are its efficiency, its fairness, and the degree to which it is democratic.

Efficiency

The term **efficient** is applied to a labor process if the effort, time, intelligence, creativity, raw materials, natural environment, information, and machinery used in it are applied in a way that enhances people’s well-being by equipping them with the things and the free time needed to lead a flourishing life.

One criterion for evaluating an economic system is that it should be *efficient*. There are many definitions of efficiency in economics (see box, “Efficiency, Profitability, and ‘Pareto Optimality’”). We use the term to mean that labor and inputs are used well rather than wasted. Inputs include effort, time, intelligence, creativity, raw materials, the natural environment, and machinery. Using these inputs well (rather than wasting them) means using them to enhance people’s well-being by equipping them with the things and the free time needed to lead a full life. An economic system that uses its resources more efficiently than another is, according to this criterion, a better economic system. It is better because it increases people’s freedom to use their time and energy for noneconomic ends such as leisure, play, and learning.



EFFICIENCY, PROFITABILITY, AND “PARETO OPTIMALITY”

Like much else, “efficiency” is a debated topic in economics. Our definition is: *Efficiency* requires that the effort, time, intelligence, creativity, information, raw materials, natural environment, and machinery used in production should be so devoted as to enhance people’s well-being by equipping them with the things and the free time needed to lead a flourishing life.

This is not to be confused with *profitability*, which occurs when a firm’s sales revenues exceed its costs, taking account of all the inputs paid for by the firm. In Chapters 13 and 20 we give examples of why profitability and efficiency are not the same thing.

Engineers think of efficiency as a relationship between physical inputs and outputs. A production process is said to be *technically efficient* if, given the existing technology, the output of it cannot be increased without using more of at least one of the inputs.

Pareto optimality, named after the economist Vilfredo Pareto (Pa-RAY-toh), who first thought it up about a century ago, is the definition of efficiency preferred by many economists. An outcome is a Pareto optimum (sometimes called *Pareto efficient*) if there exists no *other* outcome (using available resources and technologies) that would make at least one person better off without making anyone worse off.

If there is some alternative use of inputs and outputs that has the win-win quality that some could be made better off and none worse off, the outcome is said to be *Pareto inefficient*. Notice two things, however. First, there are a very large number of Pareto (efficient) optima, each with a different distribution of goods among the members of society. Second, even if some people are starving while others feed caviar to their cats, the result will be Pareto efficient if there is no way of redistributing the goods that makes the poor better off *without making the rich worse off* (the cats do not count).

Efficiency refers to the production of *useful* goods and services. The production of goods and services that are not useful should be left out of the efficiency calculation. For instance, the production of advertising (beyond the extent to which it simply informs the consumer) is highly profitable—this is why it is produced—but it is not useful. The same may be said of some forms of military goods production during peacetime.

All inputs used in the production of useful goods and services, whether they are paid for or not, must be entered into the efficiency calculation. One input that is often not taken into account is the natural environment. A profitable factory that uses up clean water by

adding toxic wastes to it may, in fact, be inefficient when all of its inputs are considered. This is because in addition to the inputs it pays for, the factory is also using up (consuming or destroying) a part of the natural environment.

Still another input that is frequently ignored is household labor. When we consider all the useful inputs and outputs of an economic system, we include work in the home as well as the labor that is organized in factories and elsewhere.

Another input that is often overlooked is labor effort. This is not the same as the *time* that a worker spends "at work." An assembly line that speeds up production may increase a company's profits, but it may not be efficient if the increased output is made possible only by an even larger increase in the employees' work effort, leaving them with greater fatigue at the end of the day and increased susceptibility to health problems. One way of thinking about this aspect of efficiency is to consider people and their health not only as inputs in the production process but as outputs of it as well.

Fairness means that people in an economic system suffer the burdens and enjoy the benefits of that economic system equitably.

Fairness

A second criterion for evaluating an economic system is *fairness*, which involves the distribution of the system's burdens and benefits. Burden refers to sacrifices such as the work necessary to produce goods and services; benefit refers primarily to the use of what is produced. Who does how much work? And who consumes the products of the work that is

done? Just as in evaluating the efficiency of an economy, all the costs of—and gains from—production need to be included.

A fair economic system would be one in which its burdens and benefits were distributed *equitably*. When judged according to this criterion of fairness, an economic system that distributes its burdens and benefits more equitably than another does is a better economic system. It is better because it recognizes the equal worth of all human beings. When each person is valued equally, the pleasures of each are equally worthy of being promoted, and the pains of each are equally worthy of being avoided. Thus, though each of us is different, we are the same with regard to our right to enjoy pleasures and avoid pain.

The belief in the equality of human worth as an ethical benchmark may be seen as coming from a variety of sources. Virtually every religion considers each human being to be equal in the eye of whatever god is held to be supreme in the particular religious faith. The authors of the U.S. Declaration of Independence proclaimed in 1776: "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights."

Many, possibly most, people would agree with the framers of the U.S. Constitution: people should have equal rights to participate in governing their societies and to be respected as individuals. But *what else* should be equal? Hardly anyone would argue that every individual should have exactly the same things, for this would not respect differences among people with regard to what they like and dislike. Some people work hard and long because they value material things, while others value leisure or nonmaterial pleasures more and therefore work less; it does not seem fair that both sets of people should receive the same quantity of material goods. Thus, while equality is a value endorsed in this book, it is important to be able to answer the question: *equality of what?*

The answer offered here—and one that is widely shared not only in the U.S. but also throughout the world—is that people should have an *equal opportunity* to live a good life, however they may conceive of this objective. Equal opportunity requires that, insofar as it is possible, people should be equally free of impediments to fashioning for themselves the kind of life they want, as long as the exercise of their freedom does not limit or otherwise impinge on the pursuit of a good life by others.

Of course, there will always be impediments to doing what we would like to do. For example, it sometimes happens, as it did to one of the authors of this book, that a person dreams of becoming a musician, but falling short on talent, has to settle for going through life as an economist! Equal opportunity simply means that people should be equally free of those impediments that are within our power to remove.

Some violations of equality of opportunity are obvious, as when employers or landlords discriminate against people on the basis of their race, sex, or age. But there are many less blatant forms of inequality, and they are to be found in most societies. When some children attend well-equipped schools and are taught by outstanding teachers while other children do not have comparable facilities or teachers, opportunity is unequal. When poor people must pay more for groceries because, for example, lacking a car they must shop at small neighborhood stores, or when people must pay higher interest rates to borrow money because of their race, sex, or where they live, opportunity is unequal. If some young people start off life with an expensive college education and a trust fund while others have only debts that have been passed on to them by their parents, opportunity is unequal. When, as a result of different starting points, some hard-working people earn only the minimum wage while other people, working no harder, take home hundreds or even thousands of dollars per hour of labor, opportunity is unequal.

Unlike the idea of *equal outcomes*, the objective of *equal opportunity* often requires people to have access to different things or to be treated in different ways. For example, people with health problems need more medical attention than do those without them. Children with dyslexia or other learning disabilities need more attention at school to have the same learning opportunities as do others. Children of parents who cannot or will not help them with their homework may also need more help at school if equality of opportunity is to be achieved.

The criterion of fairness will always be controversial. Should it apply equally to everyone in the world? Or should it be applied only within a single nation? If the answer is that it should be applied worldwide, then we say that it is unfair that a child growing up in a particular part of India will, as a result of poor living conditions, live 20 years less than a child of the same age growing up in Norway.

A final question: to what extent is it fair to give people second or third chances? If certain people drink their way through college and, as a result, end up poor and unemployed, does fairness require that they be temporarily supported while they undergo job training?

Democracy

The third criterion for assessing an economic system is *democracy*. One important part of this criterion questions the extent to which the economic system promotes (or hinders) the

democratic functioning of the government. Another part asks whether the system allows for the accountability of power when it is exercised in the economy. An economic system that promotes democracy in both areas is better than one that does not. It is better because the ability to influence a decision that has an effect on you gives you greater control over your life.

Democracy is a process with three characteristics: the exercise of power is accountable to those affected by it, civil rights and personal liberties are guaranteed, and citizens have relatively equal access to political resources and influence.

Democracy is a process that has three characteristics: accountability of power, respect for civil liberties and other guarantees of individual choice, and equal opportunity for effective political participation. First, decision makers (whether in the government or elsewhere) must be held accountable to the people affected by their decisions. This requires periodic review and possible replacement of public officials by means of democratic elections. Those who wield power in the economy—owners of firms, for example—can be held accountable by similar means. Democratic governmental bodies can regulate the actions of firms. If there is competition among many firms, consumers can hold sellers accountable for bad products by switching to other sellers—“voting with their pocketbooks”—and firms failing to serve consumers well will be eliminated.

Second, there must exist guarantees for the exercise of the civil rights and personal liberties that are commonly associated with democratic citizenship. The rights to freedom of speech and assembly, for instance, are essential for democratic decision making.

Third, the citizens in a democratic polity must have approximately the same amount of resources with which to participate in the democratic process; this is necessary if citizens are to have roughly equal opportunity to influence how decisions are made. A system in which everyone can vote but a few people—campaign contributors, for example—have more political influence than everyone else is not democratic.

Democracy does not mean that all decisions have to be made through voting. Individuals should be free independently to make any decisions that will have consequences entirely or mainly felt only by the individuals themselves. For example, the choice of which food to consume for dinner is almost always a decision that affects only the eater or the eater's family.

When a decision imposes unavoidable effects on many people, however, democracy requires that individual choice give way to collective democratic decision making. For example, the choice between closing down or modernizing an old factory will affect many people: the investors, the workers, the consumers of the product, the people who live near the plant and may be bothered by its noise or pollution, the community that depends on the property taxes on the plant, and so forth. In this case, the democracy criterion holds that individual choice—for instance, the plant owner's right to choose whether to close the plant—is undemocratic. If this criterion is applied, all those affected by the decision must be able to participate in the decision-making process.

Of course, to call the owner's decision undemocratic does not mean that the value of democracy should trump the values of efficiency or fairness. Either or both of these may recommend against a democratic decision. In the plant-closing example, for instance, it is not easy to see how the competing claims of the consumers, neighbors, workers, owners, and others could all be accommodated. Should each be given one vote? Or should plant

closings be regulated by democratic national governments to minimize their adverse effects?

Some economists would think it odd to suggest that a private firm should be run democratically. Conventional textbooks ignore the exercise of power in the economy and treat organizations such as corporations simply as pass-through structures: inputs go in one side and products come out the other. If no power is exercised, there is nothing to democratize. Moreover, the right of people to participate in a decision-making process, the outcome of which affects their entire community, is not considered to be a problem that falls within the purview of economics.

Democracy and command are not necessarily inconsistent, although a command can certainly be undemocratic. For instance, orders issued by dictators or rules imposed by employers will be undemocratic if the people affected by the orders or rules have had no influence in the processes that led to their issuance or imposition. But a command may also be a means of carrying out a democratic decision. Take, for example, a national environmental protection law that was formulated with popular participation and then voted on and passed by a democratically elected legislature. To enforce this law, a governmental agency, backed by a federal court, may have to order polluters to stop polluting. In a different kind of situation, the command given to a worker by a democratically chosen manager in a worker-owned and worker-run cooperative would be another example of a democratic command. Implementing and enforcing democratic decisions requires commands.

Economic systems may be judged according to how well they meet the criteria of efficiency, fairness, and democracy. Some systems may be evaluated more favorably according to one or two of these standards, while other systems perform well in relation to one or more of the other criteria. For example, slavery was efficient—at least in the production of some crops—but it was unfair and undemocratic. In contrast, production by independent producers (for instance, independent farmers who owned their own land in colonial New England) was probably less efficient than slavery, but it was fairer and more democratic. It is also possible that the ability of an economic system to perform well in relation to the standards of efficiency, fairness, and democracy will change over time as the economic system itself changes.

Moreover, it may be difficult for any economic system to make consistent progress toward meeting all three criteria simultaneously or with the same speed. For example, the efficiency criterion may conflict with the democracy standard in the following way: the achievement of efficiency—say, production of the greatest possible amount of useful goods and services with limited quantities of inputs—may require intense competition and a high degree of mobility of labor and capital, while these very same elements may make it difficult for worker-owned (or otherwise democratically controlled) enterprises or stable, democratically governed communities to survive.

Necessarily, then, our evaluations of economic systems will result in more complex judgments than simply “good” or “bad,” “better” or “worse.” Also, it is highly unlikely that everyone will agree on all of the issues involved. Each person's conclusions will depend on his or her own values, and as long as we remain autonomous individuals our values and the conclusions we reach on the basis of them will inevitably differ. To the

TABLE 3.1 Contrasting Perspectives on the Economy

Neoclassical Economics	Political Economy
The main social relationships studied involve competition among self-interested people or between the firms in which they work.	The social relationships studied are cooperative as well as competitive, and generosity and reciprocity are considered along with self-interest.
Most economic interactions take the form of complete contracts.	Many economic interactions are not governed, or governed completely, by contracts.
Economic outcomes are determined by market forces. Power is exercised only by monopolies and governments.	The exercise of power is an important determinant of economic outcomes, even in competitive markets. Many economic outcomes are determined through bargaining between the parties or agents involved.
Constancy is the rule; change occurs only in response to forces outside the economic system.	Change is the rule, constancy the exception. Change, both in economic systems and in people, takes place through the workings of the economic system itself.
People's tastes and needs are determined largely by human nature or by other influences outside the economic system.	People's tastes and needs change and are strongly influenced by the economic system.
Knowledge and science evolve outside the economic system, governed by noneconomic forces.	Knowledge and science are strongly influenced by the economic system and by the exercise of power within it.
Economic inequality is given little attention and is measured by a single scale: income inequality.	Economic inequality is many-sided, encompassing differences of race, gender, status, property ownership, authority, income, political rights, and citizenship.
Economies are evaluated according to how well they do in relation to a limited view of efficiency.	Economies are evaluated according to how well they foster everyone's chance to lead a flourishing life; economic efficiency, fairness, and democracy can support the achievement of this goal.
Increasing returns to scale (costs declining as output expands) are absent or may be ignored.	Increasing returns are common in modern economies and therefore must be taken seriously.

degree that diversity and debate are good indicators of a healthy democratic society, such differences are to be welcomed.

In this book the values of efficiency, fairness, and democracy are not explicitly brought into the description and analysis of how capitalism works. Indeed, our analysis of capitalism should stand or fall without regard to a particular reader's values. The important question is whether the political economy approach offers a more fruitful way of understanding capitalism than that provided by neoclassical economics. We conclude this chapter with Table 3.1 summarizing the differences between the two approaches.

Microeconomics deals with what individuals, families, and firms do (and why).

The contrast in Table 3.1 between neoclassical economics and political economy is of course not the only way one can subdivide economics. Indeed the subject is usually broken down into *microeconomics*, which is concerned with what individuals, families, and firms do (and why), and

Macroeconomics is about how the decisions of individuals, families, firms, and governments produce outcomes—such as economic progress or stagnation, inflation or unemployment—for society as a whole.

macroeconomics, which is about how decisions of the same individuals, families, and firms, together with government policies, determine outcomes for society as a whole. In Part 2 of this book—"Microeconomics"—we look at how buyers and sellers interact in markets, how firms seek to increase their profits, and how conflicts between employers and their employees regarding wages and work are resolved. In Part 3—"Macroeconomics"—we examine the interactions of individuals, firms, and governments, asking how they result in economy-wide outcomes affecting such things as incomes and opportunities, wealth and poverty, growth and stagnation, employment, unemployment, and inflation.

Having introduced the basic concepts of three-dimensional economics in this chapter, we proceed in the next chapter to review the contributions of six great economists to the development of this approach.

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