An important area of interest—and dispute—among economists concerns how markets function. As we saw in the previous chapter, the basic neoclassical model is based on the idea that market systems function fairly smoothly, are largely self-regulating, and if mostly left alone will produce the most efficient economic outcomes. Others believe that market economies may serve some goals of human well-being, while failing to achieve, or even worsening, others. Those who emphasize the problems and limitations of markets often advocate for modifications through government policies and other forces of culture and ethics, to serve the overall goals of human well-being. Before we address these debates more specifically, it will be essential to understand what, in fact, economists mean by markets.

1. THREE DEFINITIONS OF MARKETS

When you think of the word “market,” you probably think of a store where you buy groceries. But in economics markets are defined more broadly and represent an important structure to guide many economic activities. The language of economics has at least three different uses of the word “market,” ranging from very concrete to very abstract, and the appropriate meaning must be judged from the context in which it appears. We will start with the most concrete and move toward the more abstract definitions. Then we will look at ways to make markets work smoothly. We end the chapter by considering the advantages and limitations of markets and by assessing three broad categories of market outcomes.

1.1 MARKETS AS PLACES TO BUY AND SELL

The most concrete and commonsense definition of a market is that it is a place where people interact physically or virtually to buy and sell things. Historically markets have been physical locations. For example, the Grand Bazaar in Istanbul, Turkey, or produce stands in African villages have flourished for ages as meeting places for people who wish to engage in exchange transactions.

**market (first meaning):** a place (physical or virtual) where there is a reasonable expectation of finding both buyers and sellers for the same product or service

The same criterion applies today, even when the “market” has become a shopping center or mall, with many retail stores sharing one huge building, or a stock or commodity exchange, where brokers stand on a crowded floor and shout orders to buy or sell. A market, as suggested by these examples, can be defined as a physical place where there is an expectation of finding both buyers and sellers for the same product or
service.

In the electronic age, the market “location” may not be physical but virtual. Amazon and eBay are modern examples of “places” where buyers and sellers can come together. Most stock exchanges have also moved to electronic trading, although a role remains for brokers on the floor of the New York Stock Exchange.

1.2 MARKETS DEFINED BY PRODUCT CATEGORIES

The term “market” can also refer to economic activity that is not confined to a single place such as a shopping mall or a website. A more general definition is that a market is a concept that covers broad product categories. For example, we can speak of the “real estate market” in a particular city or even the entire country. We can define the market for used cars, the market for wind turbines, or the market for luxury goods. Speaking of the “stock market” in a broad sense is another common example of a market defined by a product category, whereas the New York Stock Exchange would be a market according to our first definition. Economists often study trends in specific markets, such as heating oil or AT&T bonds, try to forecast what might happen in the future, or advise on the specifics of market structures.

market (second meaning): the interaction of buyers and sellers defined within the bounds of broad product categories, such as the market for used cars or the real estate market

We can define markets at various levels of detail depending on our interests. For example, in the United States, the Chicago Board of Trade operates many markets for a variety of farm products, including wheat, corn, and soybeans. Thus we can analyze the “wheat market” or be more specific and study the market for distinct varieties as “No. 2 dark winter wheat” or “No. 1 dark northern spring wheat.” Or we might delineate a market based on geographic location, such as the New England market for home heating oil.

1.3 “THE MARKET” AS AN ECONOMIC SYSTEM

In the most abstract terms, people sometimes refer to markets as an economic system, for example, describing the United States as having a “market economy” or indicating a preference for “free markets.” In this macroeconomic sense, a market economy is one that relies heavily on markets (according to both our first and second definitions) to conduct economic activities.

market (third meaning): an economic system (a “market economy”) that relies on markets to conduct many economic activities

One alternative to a market economy is a system that relies on central planning to conduct economic activities, as was the case in the Soviet Union. China retains many
elements of a central planning system, though the role of markets in China has also been expanded. But even in modern market economies, not all activities are structured by markets. For example, the distribution of resources within the core sphere is mainly based on social or family relationships and decisions about resource management are often based on scientific evidence or political preferences, rather than market forces.

The view of markets as an economic system underlies many current debates in economics. Economists who have a “pro-market” view believe that “free markets” and a laissez-faire economy (one with very little government regulation) lead to economic growth and prosperity. Other economists recognize the effectiveness of markets but believe that problems such as poverty, inequality, environmental degradation, and declining social ethics may be caused or exacerbated by unchecked and unregulated markets. As we examine different issues throughout this book, we frequently refer to these perspectives and this continuing debate.

**laissez-faire economy**: an economy with little government regulation

**Discussion Questions**

1. In what sense is the term “market” being used in each of the following sentences? “Go to the market and get some bananas.” “The market is the best invention of humankind.” “The labor market for new PhDs is bad this year.” “The advance of the market leads to a decline in social morality.” “The market performance of IBM stock weakened last month.” Can you think of other examples from your own readings or experience?

2. Do you think the U.S. economy can be described as a free market? Why or why not?

2. **THE INSTITUTIONAL REQUIREMENTS OF MARKETS**

Contemporary markets do an amazing thing; they allow many separate decision makers, acting on decentralized information, to coordinate their behavior, resulting in highly complex patterns of economic activity. However, in order for markets to operate smoothly, they depend on a number of social, physical, and legal institutions. An institution refers to a way of structuring human activities, based on customs, culture, infrastructure, and laws. An institution can be a physical location, such as penal institutions (prisons), mental institutions (psychiatric hospitals), or institutions for residential care of elderly persons (nursing homes). However, an institution in an economic sense need not be a physical structure. It can also refer to the ways that custom, culture, and laws structure human activities. Thus we can speak of, for example, the institutional structure of health care in the United States as one that relies on private care for many working-age adults, Medicare for older adults, and Medicaid for many low-income individuals. This institutional structure also includes the federal and state laws regarding health care and health insurance, as well as customary procedures for doctor visits.

**institution**: ways of structuring interactions between individuals and groups,
including both formally constituted establishments and patterns of organization embodied in customs, habits, and laws

Many institutions help markets work more smoothly. For example, credit cards are an institution that facilitates purchases without the use of cash. Consumer protection laws are an institution that defines certain exploitative business practices as illegal. The ability to return purchased items for a refund can also be viewed as a widely accepted institution. The viewpoint that “the customer is always right” has become a cultural institution in some countries, dating back to the early twentieth century.

We classify institutions that facilitate the functioning of markets into four broad groups:

1. Institutions related to property and decision making
2. Social institutions of trust
3. Infrastructure for the smooth flow of goods and information
4. Money as a medium of exchange.

2.1 INSTITUTIONS RELATED TO PROPERTY AND DECISION MAKING

For markets to work, people need to know what belongs to whom. Ownership is usually defined through systems of property rights set out in law and enforced by courts and police. **Private property** is the ownership of physical or financial assets by nongovernment economic actors. Actors must also be allowed to make their own decisions about how to allocate and exchange resources. Prices, in particular, must not be controlled by a central planning agency; generally, they should be set by the interactions of market participants themselves.

**private property**: ownership of assets by nongovernment economic actors

The institutions of private property and individual decision making exist both formally, in codes of law, and informally, in social and cultural norms. For example, some Western economists expected markets to grow quickly in the countries of the former Soviet Union as soon as communism was dismantled and opportunities for markets opened up. This failed to occur, partly because many people living in these countries were accustomed to being told by the state where to work and what to do. Norms of individual initiative and entrepreneurship, it turns out, do not just arise naturally but need to be fostered. Nor did other sorts of market infrastructure appear quickly, and the post-Soviet Russian economy went into a severe decline for some time. When market institutions developed, they were heavily skewed towards concentration of power and oligarchy (control by a few very wealthy people).

2.2 SOCIAL INSTITUTIONS OF TRUST
A degree of trust must exist between buyers and sellers. When a buyer puts down her payment, she must trust that the seller will hand over the merchandise and that it will be of the expected quality. A seller must be able to trust that the payment offered is valid, whether it is in the form of currency, a personal check, credit card, online payment, or a promise of future payment such as an installment loan. Consider that the online auction site eBay could not operate unless winning bidders were confident that they would receive their products.

The establishment of direct, one-on-one exchanges between customers and businesses helps to build trust and makes future transactions smoother. If you have dealt with some people in the past and they treated you fairly, you are likely to choose them when it comes time to trade again. Even in sophisticated contemporary economies, this kind of confidence plays an important role. Companies know which suppliers they can count on to come through on time, and consumers patronize stores where they feel comfortable.

Reputation also can be important in creating trust. A buyer might be fleeced by a seller in a transaction, but if that buyer spreads the word, the seller may suffer a damaged reputation and a loss of customers. Online review platforms such as Yelp provide useful information about which products and merchants are reliable. Marketers try to capitalize on the tendency of buyers to depend on reputation by using advertising to link certain expectations about quality and price to a recognizable brand name, thus creating "brand loyalty" among repeat customers.

Cultural norms and ethical or religious codes can also help to establish and maintain an atmosphere of trustworthiness. The functioning of markets is facilitated by having enough members of a society subscribe to a common moral code and not betray one another’s trust.

In addition to broad cultural ethics, markets depend on specific legal institutions, especially in large, complex, mobile societies where buyers and sellers may not know each other. Contracts are legal instruments that provide an important basis for many market transactions. **Explicit contracts** are formal, usually written, contracts that provide a legally enforceable description of the agreed-on terms of exchange. Explicit contracts can be quite complex, including many clauses to cover a multitude of contingencies (such as “If goods are not delivered by June 1, the price paid will be reduced to …”). They may involve many parties, as in a contract between a union and an employer. For formal contracts to work, there must be laws that state the parties’ legal obligation to honor contracts and establish penalties for those who fail to do so.

An **implicit contract** is said to exist when the parties have agreed informally about the terms of their exchange. Such agreement may be based on verbal discussions or on cultural traditions and normal expectations.

**explicit contract:** a formal, often written agreement that states the terms of an exchange and may be enforceable through a legal system

**implicit contract:** an informal agreement about the terms of a market exchange, based on verbal discussions or on traditions and normal expectations

In modern societies, many market encounters take place between strangers who are
unlikely ever to meet again and may not even share the same traditions and moral codes. In such cases, the formal institutions of explicit contracts are often needed. Even with a system of formal contracts, however, social norms are still essential. Detailed formal contracts are costly to write and costly to enforce. It is not practical to police every detail of every contract, and it is impossible to cover every conceivable contingency. The legal system can work smoothly only if most people willingly obey most laws and believe that it is dishonorable to cheat.

In highly marketized economies, many other institutions have evolved to deal with the issue of trust. For example, credit bureaus keep track of consumer credit trustworthiness, Better Business Bureau keeps track of complaints against businesses, money-back guarantees give consumers a chance to test the quality of a good before they commit to purchasing, and escrow accounts provide a place where money can be held until goods or services are delivered. Government agencies such as the U.S. Food and Drug Administration and local boards of health are charged with monitoring the quality and purity of many goods that are sold.

In effect, relationships, social norms, and the government-created apparatus of law are institutions that must exist side by side, reinforcing one another. None of these alone can carry the whole burden of making complex contracts work and, hence, make markets possible.

### 2.3 INFRASTRUCTURE FOR THE SMOOTH FLOW OF GOODS AND INFORMATION

A third set of institutions needed for market functioning has to do with making possible a smooth flow of goods, services, and information. Most obviously, **physical infrastructure** is needed for transportation and storage of goods. Such infrastructure includes roads, ports, railroads, and warehouses in which to store goods awaiting transport or sale. This sort of infrastructure can be most noticeable in its absence, as in economies ravaged by war or by severe weather incidents.

**physical infrastructure**: roads, ports, railroads, warehouses, and other tangible structures that provide the foundation for economic activity

In addition, infrastructure must be in place for information to flow freely. Producers and sellers need information on what, and how much, their customers want to buy; in a well-functioning marketized economy this information indicates what, and how much, should be produced and offered for sale. At the same time, consumers need to know what is available, and how much they will have to pay to get the products that are on the market. Ideally, consumers should be able to compare all potential purchases, as a basis for deciding what will best suit their needs. It seems unlikely that this ideal condition for perfect markets will ever be reached, but Web-based exchange systems such as Amazon and eBay have brought it much closer to realization.

Note that infrastructure can be provided by both private and government entities. While private companies normally own things like warehouses, delivery trucks, and computers, governments normally construct and maintain roads, ensure air traffic
safety, and make bandwidth available on the Internet. Even in an economic system that primarily relies on private markets, the role of government is critical.

2.4 MONEY AS A MEDIUM OF EXCHANGE

The final basic institution required to facilitate the operation of markets is a generally accepted form of money. Many different things have been used as money in the past. Early monetary systems used precious or carved stones, particular types of seashells, or other rare goods. Gold, silver, and other metal coins were the most common choice for many centuries. More recently, paper currency has become important. Today, the use of checks, credit cards, debit cards, and electronic payment systems further facilitate making payments for goods and services.

What makes something money? Three criteria are necessary for something to be defined as money in a market economy.

1. One obvious criterion is that money must be widely accepted as a medium of exchange. In other words, money is whatever everyone accepts as money. In this sense, money is a social institution of trust.

2. Money must provide a durable store of value. Imagine the problems that would occur if heads of lettuce were proposed as money. A form of money that starts to rot within a week or two would be difficult to use! The value of money must be relatively stable over time. In addition, money must have minimal handling and storage costs. By this criterion, paper currency is generally better than coins, and electronic transactions are better still.

3. Money must be accepted as a unit of account. When people say that something is worth $1,000, that does not necessarily mean that they are proposing to buy or sell the item. Money serves as a way of valuing things, even if no market exchange takes place.

Money: a medium of exchange that is widely accepted, durable as a store of value, has minimal handling and storage costs, and serves as a unit of account

In most cases, money is created or sanctioned by national governments. However, this is not essential. For example, cigarettes have been used as a form of money by prisoners of war. (Once the convention of cigarettes as money became established, they acquired value even to non-smokers as a medium of exchange). Also, communities smaller than national governments can create their own money. These local currencies are typically exchangeable for goods and services within the community by participating merchants and individuals. In recent years, local “time-banking” currencies have appeared in some communities in the United States and elsewhere. People earn time dollars by performing valuable services for others or for the community as a whole, such as child care, tutoring, or building repairs. Time dollars can then be used to pay for other services or used instead of “normal” dollars to purchase products from local merchants (see Box 3.1).

BOX 3.1 TIME BANKING
Time banking is a system of exchange where time, not money, is the unit of value. Time banks bring together unused human resources with unmet human needs. When you join a time bank, you indicate what services you might be able to offer others: financial planning, computer debugging, handyman repairs, child care, taking someone to a doctor’s appointment, etc. For each hour (or fraction of an hour) you spend helping others, you accrue “deposits” in the time bank. Then when you require services, you can “withdraw” accumulated time to request help from others.

Time banks differ from exchange through markets in several important ways. First, everybody’s time is normally considered equally valuable. Whether one is performing nursing services, tutoring new immigrants in English, or driving someone on errands, all activities earn time credits at the same rate (1 hour = 1 credit). Second, exchange through time banks helps build social relationships and community spirit. Many time bank members note that performing activities eventually comes to be viewed as spending time with friends rather than work. In fact, according to one time bank director a majority of members don’t claim credit for all hours logged.1 Another interesting feature is that time banks can particularly flourish during economic downturns when traditional employment is difficult to find. Thus one can still feel they are contributing to society, and accruing credit for needed services, without paid employment.

According to the organization TimeBanks, there are about 500 time banks in the United States, with as many as 50,000 members.2 In 2017 a time bank was created in the United Kingdom to provide care and companionship for elderly people, partially funded by the UK government. In this system, people contribute time helping others to eventually be redeemed when they themselves need assistance later in life.3 Time banking has become popular in New Zealand, where businesses and organizations can also participate, offering goods and services in exchange for time credits rather than money.4

Discussion Questions

1. When you shop on-line, how do you know that you can trust the seller to deliver the goods as promised? What is necessary for the social institution of trust to work, and how might it break down, in on-line transactions?
2. Are you aware of situations in some countries or regions where physical and communications infrastructure is lacking, or poorly maintained? How do you think this affects economic development in these regions?

3. TYPES OF MARKETS

Markets take a wide variety of forms. They can be classified according to what is sold, how prices are determined, and the period covered.

3.1 MARKETS DEFINED BY WHAT IS SOLD
Recall from the previous chapter that we defined two basic market types—product and factor markets—in the traditional model of economic activity. In this section we further classify different types of markets.

The most obvious and well-known product markets are those in which people buy goods and services from businesses. Such **retail markets** deal in food, books, clothes, and so on. Some retail markets sell, instead of tangible objects, services such as banking or repairs for your car. Retail markets may be supplied directly by producers, but more often (especially with sellers of goods, rather than services) they are supplied by companies that trade in **wholesale markets**, buying final goods from suppliers and acting as intermediaries between producers and retailers. Transactions in wholesale markets often involve very large quantities. For example, Walmart and most other discount retailers don’t actually produce the products they sell, but purchase them in bulk from suppliers in wholesale markets.

**retail markets**: markets where goods and services are purchased by consumers from businesses, generally in small quantities

**wholesale markets**: markets where final goods are purchased by retailers from suppliers, normally in large quantities

We can differentiate between wholesale markets and **intermediate goods markets**, which involve sales of unfinished products between businesses, such as the purchase of sheet metal by an automobile company. **Resale markets** are product markets for items that have been previously owned. Used-car markets are resale markets, as are markets for antique furniture. Most shares traded in stock markets are also being resold, having been previously owned by other investors. In **commodities markets**, raw materials such as agricultural products, minerals, or petroleum are bought and sold.

**intermediate goods market**: a market for an unfinished product

**resale market**: a market for an item that has been previously owned

**commodity market**: a market for a raw material

The **labor market** is a type of factor market, defined as the set of institutions through which people who wish to work offer to sell their services to employers: businesses, public agencies, nonprofit organizations, and households other than their own. Unlike a physical object, labor cannot be produced first and then handed to the buyer; rather, the worker promises to do something in return for a promised payment of wages. Labor markets are sufficiently different from other types of markets that this topic warrants separate treatment (in Chapter 10).

**labor market**: a market in which employers interact with people who wish to work

**Financial markets** are markets for loans, equity finance, and financial assets such
as stocks and bonds. An economic actor who needs money may get a loan from a bank. Businesses may sell shares of stocks—that is, partial ownership rights in the firm—as a way to raise funds via “equity financing.” Although corporations sometimes issue new shares of their stock to raise funds, as just noted nearly all the activity on stock markets is resale of existing stocks.

financial market: a market for loans, equity finance, and financial assets

Some markets operate outside the law. Underground markets (also sometimes called black markets) are illegal markets. It might be that the good or service itself is illegal, as are heroin, smuggled antiquities, and murder for hire. Or it may be that the markets deal in legitimate goods but in illegal ways. For example, smugglers may sell cigarettes or imported perfume at prices that do not include payment of required taxes.

underground market: a market in which illegal goods and services are sold or legal goods and services are sold in an illegal way

3.2 MARKETS DEFINED BY HOW PRICES ARE DETERMINED

At first glance, it might seem as if many consumer retail markets violate one of the institutional requirements for markets that we mentioned above: that prices must generally be allowed to be set by the interactions of market participants themselves. In an old-fashioned open-air bazaar or flea market, buyers and sellers haggle about prices. But in a typical retail setting in an industrialized society, you do not “interact” so directly with the retailer to determine the price of bread or a shirt. The price is listed on the shelf, a tag, or directly on the product. Either you pay the posted price set by the seller, or you do not buy the item.

posted prices: prices set by a seller

Even though you do not haggle with the cashier at The Gap or at the supermarket, the fact that you can decide whether to buy is itself a form of interaction. Over time, retailers will take note of what moves off the shelf most quickly and will then order more of it and may also raise its price. They will also take note of what does not sell so quickly and will then reduce their order from wholesalers or mark the items down. The retailers’ purchases from the wholesalers, in turn, give the suppliers information that they can use in deciding how much to order or produce and how to set their prices.

So while you may not be able to bargain directly, your actions, in combination with the actions of other customers, ultimately affect the prices and quantities offered in the market. These adjustments should tend, at least in theory, to lead posted prices to reflect what economists call the market-determined price, or market price, of the item. Market price, discussed in detail in Chapter 4, is the prevailing price for a specific good or service at a particular time in a given market. The posted price will normally reflect the market price if markets are competitive, the flow of information is good, the adjustment process is given enough time, and no big changes in market conditions
occur in the meantime.

**market price:** the prevailing price for specific good or service at a particular time in a given market

**Auction markets** are markets in which an item is sold to the highest bidder. Auction markets are often used when the appropriate price for an item is relatively unknown and there are many possible buyers or sellers. Although in the past auction markets were commonly limited to goods such as antiques and artwork, the advent of online auction sites such as eBay have made auction markets much more prevalent. Real-world auctions offer interesting opportunities to observe how market values are determined.

**auction market:** a market in which an item is sold to the highest bidder

In some auction markets, an opening price is set low and then potential buyers top one another’s bids until only one bidder remains. This type, of auction, formally called an open auction is what many people first think of when they think of an auction, and it is the main type of auction used on eBay. In a sealed-bid auction, all bidders secretly submit the price they are willing to pay for the item, and whoever submits the highest bid gets the item. Other types of auction markets include Dutch auction, where the quoted price starts high and drops until someone is willing to buy, and double auction, in which both sellers and buyers state the price that they are willing to make transactions. Stock exchanges are examples of double auction markets.

Finally, in markets with **bargaining**, a single buyer and a single seller negotiate the price of an item, for which no definitive market value has been established. Residential real estate, for example, is generally sold by using such negotiated agreements, as are used cars. (Sometimes there is also a posted price, but both parties understand that it is merely a starting point for negotiation.

**bargaining:** an activity in which a single buyer and a single seller negotiate the terms of their exchange

Salaries of high-level managers, professionals, and unionized employees—and, notably, of sports and entertainment stars—are commonly set by bargaining. The presence of potential other buyers and sellers, however, is obviously important in determining the relative bargaining strength of the two parties. A seller who knows that he or she can easily find other eager buyers, for example, will quickly walk away from an unfavorable deal. A seller with fewer options will have less ability to hold out for good terms.

**Discussion Questions**

1. Reviewing the different types of markets outlined in this section, think about whether you have ever directly participated in a market of each type. If so, describe specific instances.
2. The Internet has opened up a whole new set of markets for everything from
antiques to airplane tickets. Pool your knowledge with that of others in the class, and, for the types of markets listed in this section, think of as many examples as possible that are online.

4. ADVANTAGES AND LIMITATIONS OF MARKETS

In the previous chapter, we talked about the strengths and weaknesses of each of the three economic spheres—core, public purpose, and business. As we conclude this chapter with a discussion of the advantages and limitations of markets, it will be evident that these topics overlap, especially the strengths and weaknesses of the business sphere. The reason for this is obvious: the business sphere operates entirely through markets. The essential characteristic that is common to businesses and to markets is the dominant role of the profit motive—as distinct from the motives of the other two spheres. We noted earlier that this is not the only motive for businesses; however, in individual companies, as in the market as a whole, this motive affects many decisions and outcomes.

Also, people’s motives may differ when they are interacting in markets as opposed to other situations. In markets, people act as “consumers” and are often looking to get the best deals. In doing so, they may not pay sufficient attention to the harmful external effects of their purchasing decisions. In seeking the lowest prices consumers may not consider the working conditions of those employed to make various products, often in developing countries. This doesn’t mean consumers don’t care about the environment or the welfare of others, but sometimes as we interact in markets it is less obvious how to express these views than it is when interacting in the core sphere. People may have different preferences depending on whether they are acting as buyers or sellers, compared to when thinking of themselves as parents, students, voters, or volunteers.

4.1 OVERVIEW OF ADVANTAGES AND DISADVANTAGES OF MARKETS

In this section we offer a preliminary overview of the advantages and disadvantages of markets. We will spend considerable time in the text discussing these topics in more detail.

Markets clearly have many advantages. Competition among sellers in markets means that goods and services can often be provided to people at affordable prices. Markets encourage innovation, continually leading to new products such as iPhones, electric cars, and streaming video. Of course many workers have jobs producing goods and services for sale in markets.

Markets also foster a steady flow of information, in terms of prices and volumes of sales, that encourages producers to respond flexibly to consumer desires. Profits provide feedback to sellers about whether resources are being used in ways that individuals are willing (and able) to pay for. Markets also give people a considerable amount of freedom in deciding which activities to engage in, and they encourage some beneficial forms of innovation and social cooperation.

We will see in Chapter 6 that under certain assumptions markets result in the “best” outcome for society. Economists can estimate the benefits that accrue to sellers and
buyers in markets and recommend ways to make markets work more efficiently. Markets can also be thought of as a type of democracy in which all participants can express their views by buying some items and not others.

Against these advantages, markets have a number of limitations and disadvantages. As we have noted, the idealized model of a completely free private market (as in the basic neoclassical model) rarely exists in practice. Actual market-oriented economies always include a mixture of decentralized private decision making and more public-oriented decision making. This is because real-world economies include a number of important, complex factors that are not taken into account in the basic neoclassical model, as laid out in Chapter 2. We have already mentioned the issues of externalities and public goods in the previous chapters; these topics will be discussed in detail in Chapters 13 and 14. Some other issues that we will briefly define and discuss here are transaction costs, market power, questions of information and expectations, and concerns over human needs and equity.

**Transaction Costs**

**Transaction costs** are the costs of arranging economic activities. In the basic neoclassical model, transaction costs are assumed to be zero. If a firm wants to hire a worker, for example, it is assumed that the only cost involved is the wage paid. In the real world, however, the activity of reaching a hiring agreement may involve its own set of costs.

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

The firm may need to pay costs related to searching, such as placing an ad in print or on the Web or paying for the services of a recruiting company. The prospective worker may need to pay for preparation of a résumé and transportation to an interview. One or both sides might hire lawyers to make sure that the contract’s terms reflect their interests. Because of the existence of such costs, some economic interactions that might lead to greater efficiency, and that would occur in an idealized, transaction cost-free, frictionless world, may not happen in the real world.

**Market Power**

In the basic neoclassical model, all markets are assumed to be “perfectly competitive,” such that no one buyer or seller has the power to influence the prices or other market conditions that they face. In the real world, however, we see that many firms have **market power**. For example, when there is only one firm (a monopolist) or a few firms selling a good, they may be able to use their power to increase their prices and their profits, creating inefficient allocations of resources in the process. Workers may also be able to gain a degree of market power by joining together to negotiate as a labor union. A government, too, can have market power, for example when the Department of Defense is the sole purchaser of military equipment from private firms.

**market power:** the ability to control, or at least affect, the terms and conditions of
a market exchange

Businesses may also gain power by their sheer size—many corporations now function internationally and have revenues in the tens of billions of dollars. The decisions of individual large corporations can have substantial effects on the employment levels, economic growth, living standards, and economic stability of regions and countries. Governments may need to factor in the responses of powerful business groups in making their macroeconomic decisions. National or state leaders may fear, for example, that raising business tax rates or the national minimum wage may cause companies to leave their country or state, and go elsewhere. Corporations frequently also try to influence government policies directly, through lobbying, campaign contributions, and other methods. We explore the implications of corporate size at more length in Chapter 18.

Information and Expectations

In the basic neoclassical model, in which purely decentralized decisions lead to efficient outcomes, people are assumed to have easy access to all the information that they need to make good choices. This analysis is static; that is, it deals with an idealized case in a timeless manner. The model does not consider the time taken to obtain information or make decisions. In the real, dynamic, world, obtaining good information and dealing with future uncertainties may make economic decision making difficult.

**static analysis:** analysis that does not take into account the passage of time

**dynamic analysis:** analysis that takes into account the passage of time

A manufacturing business, for example, might be considering whether to borrow funds to build an additional factory. If the company’s directors were able to know exactly what the demand for its products will be like in the future and what interest rates will be—along with additional information about things such as future wages, energy costs, and returns on alternative investments—the decision would be a simple matter of mathematical calculation.

But the directors will have to guess at most of these things. They will form expectations about the future, but these expectations may turn out to be incorrect. If their expectations are optimistic, they will tend to make the new investment and hire new workers. Often optimism is “contagious,” and if a lot of other business leaders become optimistic, too, then the economy will boom. If, however, people share an attitude of pessimism, they may all tend to cut back on spending and hiring.

Because no one business wants to take the risk of jumping the gun by expanding too soon, it can be very difficult to get a decentralized market economy out of a slump. How people get their information, how they time their actions, and how they form their expectations of the future are all important topics that are not addressed in the basic neoclassical model. Taking these factors into account suggests why markets sometimes do not work as smoothly as that model suggests.

*Human Needs and Equity*
Another important issue concerns distribution of income and the ability to pay for goods and services. In the basic neoclassical model, the only consumer demands for goods and services that can affect the market are those that are backed up by a consumer’s ability to pay. This has several implications.

First, there is nothing in the model that ensures that resources are distributed in such a way that people can meet their basic human needs. If a few rich people have a lot of money to spend on diamonds, for example, while a great number of poor people lack the money to pay for basic health care, “free markets” will motivate producers to respond to the demand for diamonds, but not to the need for basic health care.

For this reason, governments often adopt more deliberate policies of economic development, government provision, subsidies, or income redistribution, to try to ensure that decent living standards become more widespread. These policies can sometimes incorporate market mechanisms and sometimes replace them.

Second, the model does not take into account nonmarketed production, such as the care given to children, the sick, and the elderly by family and friends. There is nothing in the basic neoclassical model that ensures that these sorts of production will be supplied in adequate quantities and quality.

Lastly, it is also the case that problems such as unemployment and inflation tend to affect some people more than others, so how a country deals with these problems also has distributional consequences.

Clearly, although market systems have strong advantages in some areas, they cannot solve all economic problems. Economists sometimes use the term market failure to refer to a situation in which a market form of organization leads to inefficient or harmful results. Because of the existence of public goods, externalities, transaction costs, market power, questions of information and expectations, and concerns for human needs and equity, economic systems cannot rely on “free markets” alone if they are to contribute effectively to present and future human well-being.

**market failure:** situations in which markets yield inefficient or inappropriate outcomes

To some extent private nonmarket institutions may help remedy “market failure.” For example, a group of privately owned factories located around a lake may voluntarily decide to restrict their waste emissions, because too much deterioration in water quality hurts them all. Likewise, a widespread custom of private charitable giving may help alleviate poverty. But sometimes the problems are so large or widespread that only government, public actions at the national or international levels seem to offer a solution. Exactly how much government action is required, and exactly what governments should do, however, are much-debated questions within contemporary economics.

### 4.2 ASSESSING MARKET OUTCOMES
Unfortunately, too often the debate about markets comes down to one side being “pro-market” while the other side is “anti-market.” We seek to avoid such a polarizing distinction in this text. Such broad generalizations often reflect a lack of knowledge about the details of markets and economics. But it is only by knowing these details that we are truly able to understand when markets do, and do not, work effectively at enhancing well-being.

So rather than trying to decide whether you are “pro-market” or “anti-market,” we encourage you to think of three broad categories of market outcomes, assessed on a case-by-case basis:

1. Situations in which market outcomes are reasonably efficient, fair, and sustainable, with only limited government involvement required.
2. Situations in which market outcomes are reasonably efficient, fair, and sustainable only with significant government involvement.
3. Situations in which market outcomes are not efficient, fair, and/or sustainable, necessitating provision through non-market institutions (such as government).

We can evaluate market outcomes in terms of three factors: efficiency, fairness, and sustainability. We will learn how economists define the efficiency of markets in more detail in Chapter 6. The issues of fairness and inequality will be addressed in Chapters 11 and 30. The topic of environmental sustainability is covered in Chapters 13, 14 and 33. But for now we can begin to consider potential examples in each of these three categories.

Which category would the market for T-shirts in the United States fall into? A quick search on Amazon suggests that one can purchase a basic T-shirt for under $10, with hundreds if not thousands of choices. Significant competition among many producers means that prices are low. This suggests a relatively efficient market. The T-shirt market may also be considered fair, as virtually anyone in the U.S. who wants a T-shirt can afford one. Another, more difficult, equity issue is the working conditions of the workers making the T-shirts. The environmental impacts of a T-shirt may also be difficult to assess, as it depends on the materials used, how far it is transported, whether it is dyed, etc. We will consider this exact issue in Chapter 9. But overall, there is limited government involvement in the T-shirt market in the U.S. and we may reasonably suggest that this market could be classified in the first category, even though some may argue that more government regulation is needed to ensure fairness and sustainability.

As an example of a good that might be classified in the second category, consider the market for gasoline in Europe. While gasoline is provided by private companies in European markets, it is heavily taxed to account for its environmental impacts. Gasoline taxes in European countries are typically $3-$4 per gallon. As we will see in Chapter 13, unregulated gasoline market outcomes are both inefficient and unsustainable.

Finally, what goods and services would fall into the third category? Some are rather obvious, such as national defense and major highways—which are nearly always provided by governments rather than private markets. But what about education and health care? In many countries, these are provided by the government and funded by taxes. Yet in the United States, health care in particular is often provided by private
markets. Whether these markets are efficient and fair is a subject of strong debate. Meanwhile, health care in Switzerland is provided almost entirely through private markets, but health insurance is compulsory and highly regulated to ensure fairness. For example, no one pays more than 8 percent of their annual income for health insurance in Switzerland. So whether health care is classified in the second or third category may depend on the country.

In short, we need to assess markets contextually—yet another reason for the title of this book. We need to understand the contexts in which markets work well, the contexts in which government regulation is needed, and the contexts in which markets do not result in acceptable outcomes. But before we can intelligently categorize different situations, we need to develop a deeper understanding of how markets actually operate. We begin that task in Chapter 4.

Discussion Questions

1. On a sheet of paper, draw two columns. In one column, list some historical and contemporary advantages of market exchanges, and in the other, list some disadvantages. Can you give examples beyond those listed in the text?
2. “Indeed, it has been said that democracy is the worst form of government,” said British Prime Minister Winston Churchill (1874-1965), “except all those other forms that have been tried from time to time.” Some people make the same claim about more market-oriented forms of economic systems. What do they mean? Do you agree or disagree?

REVIEW QUESTIONS

1. Give three different meanings of the term “market.”
2. Describe four main categories of institutional requirements for markets.
3. Give several examples of ways in which trust can be established.
4. Give several examples of the infrastructure necessary for markets to function.
5. List eight different types of markets in terms of what is sold.
6. List three major types of markets in terms of how prices are set.
7. What are some of the major advantages of markets?
8. How do transaction costs affect the workings of markets?
9. What are some of the implications of market power?
10. What is the difference between static and dynamic analysis?
11. Identify three major categories of market outcomes, based on efficiency, fairness, and sustainability.

EXERCISES

1. Give an example of each of the following:
   a. A retail market
   b. A commodity market
   c. A resale market
d. A financial market
e. An underground market
f. An auction market
g. A market with bargaining

2. Imagine trying to run a contemporary market economy without each of the following. What problems do you think would arise? What might people have to do to get around the lack of each one?
   a. Money
   b. The expectation that most people will not cheat
   c. An organized way of keeping people from adulterating foods or selling medicines that do not work
d. A system of roads, canals, or railways
e. Phone and computer connections
   f. An expectation that individuals will take the initiative in decision making

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

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Explicit contract</td>
<td>1. Failure to account for environmental externalities</td>
</tr>
<tr>
<td>b. A strength of markets</td>
<td>2. A signed lease for an apartment</td>
</tr>
<tr>
<td>c. Implicit contract</td>
<td>3. An example of financial markets</td>
</tr>
<tr>
<td>d. Transaction cost</td>
<td>4. The expectation that roommates will contribute to rent</td>
</tr>
<tr>
<td>e. A drawback of markets</td>
<td>5. Legal services to draw up a contract</td>
</tr>
<tr>
<td>f. A car loan</td>
<td>6. An example of commodity market</td>
</tr>
<tr>
<td>g. A used bike sold on craigslist</td>
<td>7. Effective information flow</td>
</tr>
<tr>
<td>h. The sale of crude oil to ExxonMobil</td>
<td>8. An example of resale market</td>
</tr>
</tbody>
</table>

REFERENCES


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5 https://taxfoundation.org/how-high-are-other-nations-gas-taxes/.