

Economic Theory, Markets, and Government

After reading this chapter, you will understand:

1. The basic structure of economic theory
 2. Why rationality is of central importance in economics
 3. The meaning of market performance and market failure
 4. Some alternative theories of the economic role of government
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CASE STUDY: WILL COAL BE KING AGAIN?

In the nineteenth century, coal was king. It powered the industrial revolution. It was burned in factories, steamboats, railway locomotives, and parlor stoves. The steamboats, locomotives, and parlor stoves are long gone now, and except for a few basic processes like steel-making, most of industry has long since converted to cleaner fuels. Yet late in the twentieth century, king coal seemed to be regaining its crown, this time as the nation's leading fuel for generating electricity.

In 1991, coal accounted for 54 percent of electricity generation in the United States, up from 45 percent in 1970. Oil, natural gas, and hydroelectric energy all lost ground over that period. Nuclear energy's share of the market is up compared with 1970, but it has passed its peak and is declining again. By 2002, the picture looked somewhat different. Only 50 percent of electricity generation derived from coal, while gas and hydroelectric power gained some ground.

Market forces explain much of coal's success. In contrast to its dwindling oil supplies, the United States has enough coal to last for centuries. Abundance translates into low prices: As of 2002, coal was selling for \$1.26 per million British thermal units (Btu), compared to \$3.33 for natural gas having the same energy value.

But coal has its enemies. Environmentalists consider it the dirtiest of fuels. Mining coal makes a mess locally. Burning it spews out sulfur compounds, which cause acid rain, and carbon dioxide, which causes global warming. Coal is cheap enough that utilities can afford to invest in minimizing the mining and acid rain problems. But for the most part they chose not to do so. Even when required by the Clean Air act to install smokestack scrubbers on substantively modernized plants many have refused to do so. Moreover, while there is a demonstrably cleaner way to use coal called the "integrated gasification combined cycle" only one of ten new plants plans to use it. As the *New York Times* put it in May of 2005, "Dirty Secret: Coal Plants Could be Much Cleaner." The major advantage of this technology is that it will efficiently remove the problem items, sulphur, nitrogen and carbon before they are oxidized and go up the smokestack. The Utilities place little value on this benefit because the Bush administration has shown no interest in enforcing the Clean Air Act. Moreover, even though George Bush promised to do so, carbon-dioxide emissions are not regulated in the United States. If the utilities have their way there will never be any controls on emissions of carbon dioxide. The utilities led the fight to prevent the U.S. from signing the Kyoto Protocol precisely so they could avoid the 20% extra cost of using the coal gasification technology.

To win its various environmental battles as well as the economic one, coal counts on powerful friends in Washington. It helps that Senator Robert Byrd, chairman of the Senate Appropriations Committee, is from West Virginia, a major coal-producing state. Moreover, the coal industry benefits from the fact that President George W. Bush is from the largest coal-using state (Texas) in the nation, and Vice-President Cheney is from the largest coal-producing state (Wyoming). Both Texas and Wyoming are large oil producers as well. To keep the cost of producing and using coal as low as possible, the Bush-Cheney administration has illegally changed the Clean-Air Act by allowing electric utilities that use coal to avoid installing expensive pollution

control equipment for a saving of some five billion dollars. The Bush-Cheney administration has also refused to support the Kyoto Protocol which would have committed the U.S. to reduce carbon-dioxide emissions. One way to do that would be to tax carbon use. Coal contains a great deal of carbon and such taxes would surely have cut into the profits of coal companies and the electric utilities that use coal. Finally, after he was elected Bush reneged on a campaign promise to take action to reduce carbon-dioxide emissions.

Looking further into this century, no one expects the return of coal-fired trains or cars. But they do expect an increasing share of transportation to switch to electric power. And more demand for electricity will probably mean more demand for coal and thus more air and water pollution, and more global warming.

Source: Based in part on Robert Johnson and Caleb Solomon, “Coal Quietly Regains a Dominant Chunk of Generating Market,” *The Wall Street Journal*, August 20, 1992, A1. 2002 and Kenneth J. Stier, Dirty Secret: Coal Plants Could be Much Cleaner, *New York Times*, May 22, 2005. Data were obtained from the Energy Information Administration, U.S. Department of Energy.



THE COMPETITION BETWEEN coal and natural gas for a larger share of the energy markets is a typical example of economic choice. There are other choices in this domain such as nuclear, solar and wind power, all of which are renewable and thus sustainable, but cannot compete in terms of private costs and profit. In markets, the stage on which these choices are made, prices and private costs play the central role—social costs are irrelevant. As long as it is cheaper for electric utilities to burn coal or natural gas, they will do so unless moved by some external force. That external force must be the government.

ECONOMIC THEORIZING

Given the way the world works, the challenge for economists is to recognize simple patterns in complex events and to identify common elements in seemingly dissimilar situations. The chief tool for doing so is economic theory. This chapter opens by expanding on the general comments made earlier on the structure of economic theory, with special attention to aspects of theory that are important for microeconomics. This chapter will show that neoclassical microeconomic theory rests on the assumption of “rationality” which has not been directly verified. Moreover, economists who have studied human behavior in the context of households and firms have

documented many behaviors that are manifestly irrational. It is argued that without the highly questionable assumption of rationality the normative aspect of market theory, namely that markets produce an optimal allocation of resources, loses much or all of its cogency. It is also assumed that people are “strictly selfish” that is they do not account for the interests of others when making decisions. There is much evidence that contradicts this assertion. The chapter continues with a discussion of market performance and other sources of market failure, and concludes with a look at the economic role of government.

THE STRUCTURE OF ECONOMIC THEORY

To *analyze* something means to break it down into its component parts. A literary critic might analyze a novel in terms of such basic components as plot, character, dialog and the conscious or unconscious ideological agenda of the writer. A detective might analyze a murder in terms of motive, means, and opportunity. Similarly, economists look for certain common elements when they analyze the choices people make in using scarce resources to meet their wants. It is similarly useful to examine the conscious and unconscious ideological agenda of neoclassical economists. One might ask whether it is a mere coincidence that the normative economics of markets supports the political agenda of corporate and other interests that would prefer to operate in a world free of government regulation and taxation.

Objectives, Constraints, and Choices

Neoclassical economic theory consists of three types of statements: statements about objectives, statements about constraints on opportunities, and statements about choices.

STATEMENTS ABOUT OBJECTIVES In neoclassical theory terms such as *aims*, *goals*, and *preferences* are interchangeable with *objectives*. An *objective* is anything people want to achieve. Neoclassical economics is non-judgmental as to the intrinsic merits of any goal or objective. Neoclassical economics also posits that individuals wish to optimize or maximize the value of any objective they might choose. A business owner, for example, is assumed to have the objective of not merely a earning a profit, or an even satisfactory profit, but the greatest possible profit. Similarly, a consumer strives for the greatest possible material satisfaction with a given income not merely a satisfactory level of welfare. While people in any situation usually blend their pursuit of narrowly selfish “economic” objectives with family values, and social responsibilities, in the interest of parsimony (simplicity), and of keeping manageable the number of variables being analyzed, neoclassical economists tend to disregard the latter type of motivations.

In Chapter 10 we broach the topic of how individual “goals” may be generated by the production system by means of advertising. Each year about \$1100 per person is

spent advertising products in the United States. The price of every product contains the expense of advertising. For example, the Pharmaceutical companies spend about 20% of total revenues on advertising, the highest rate for any industry. When one adds in sales commissions and other “selling costs” over 1/3 of the revenues of this industry go to “selling.” While some advertising is informational, for the most part it is intended to persuade by appeals to emotions, fear, insecurity, vanity, fantasy, and guilt. The deception level in advertising ranges from simple “puffery” to misrepresentation to outright deception.

Research suggests that the average family will see about 25,000 commercials per year and that is only on TV. Over a lifetime the average person will spend three years watching commercials. A few chapters hence we will introduce the concept of a “commons”—a resource for which consumption is rival, but that people cannot be excluded from using. Thus, should one cattleman graze his animals on grass, then a rival cattleman cannot. But, tragedy results because no one can stop both of them from putting out as many cattle as they please. The result is overgrazing and the destruction of the common pasture.

In *Adbusters Magazine* [Feb. 2004], a periodical dedicated to removing the scourge of advertising from our lives, Kevin Arnold uses the metaphor of a polluted commons to illustrate the excessive presence of advertising in our daily lives, and the tragic consequences:

Driving to the airport to pick up a friend, I stop at a red light. My eyes wander to a bus-stop bench across the intersection. “Norma Whitfield –Your Real Estate Connection.” Wham. Before I have even had time to react, the advertisement has entered my mind and lodged itself between the folds of my thoughts. Another chunk of my mental landscape, grabbed without consent. There was nothing special about this ad. Every city bench is festooned with a marketing message, and my eyes have passed over thousands, possibly millions, like it before. Yet this time it stood out, somehow starker than the rest. Some balance inside had tipped, and suddenly I felt saturated. My mental landscape had been overgrazed. . . . At every level the mental commons is cluttered and commercialized. Millions of data points and marketing messages threaten to overgraze our attention. Our mind is their pasture. The question is one of freedom. We must decide whose freedom is more important, the marketer’s or our own. We need to grasp the idea of a mental commons, and to realize that it, too, can succumb to an all too human tragedy.

We will see in Chapter 10 how people’s “choices” are often heavily influenced by exploitation by advertisers of unconscious drives produced by social pressures and alienation as well as the influence of the choices of others. These have been variously labeled Bandwagon Effects, Snob Effects and Veblen Effects. The Bandwagon Effect recognizes the influence of social conformity and emulation. Snob effects are manifest when individuals refuse to purchase goods once others have them. Veblen effects happen when people purchase goods simply to produce envy in others. Advertising,

of course exploits each one of these aspects of positional goods. All of these motives manifest behaviors driven by the desire to achieve or maintain social position. Since the manipulated processes involved are unconscious or emotional rather than cognitive it is difficult to assert that choices are based on true preferences and the rational evaluation of alternatives.

STATEMENTS ABOUT CONSTRAINTS ON OPPORTUNITIES A key part of every economic theory is a statement of the constraints on the set of opportunities that are available to individuals to choose among in a given situation. In a world of scarcity, alternatives are never unlimited so constraints are universal. Some constraints relate to what is physically possible, given available resources and knowledge. The constraints both firms and households confront are manifest in the prices they face in the market place and the funds they have to allocate.

Legal rules are another important constraint on individual action. For example, it may be physically possible and worthwhile, in terms of costs and benefits, for a farmer to control insect pests by spraying DDT; however, it is illegal to do so. A particularly important set of legal constraints are those that define *property rights*. **Property rights** are legal rules that establish what things a person may use or control and the conditions under which that use or control may be exercised. For example, water rights are very important everywhere, but especially in arid regions like the American West and the Middle East.

Property rights extend to more abstract relationships as well. For example, ownership of a share of common stock in ConocoPhillips Corporation gives the stockholder a complex package of rights, including the right to vote on issues affecting the firm and to share in the firm's profits. Then there are "intellectual property rights such as software firm's copyright on a program it has produced, or a scientist's patent, which gives control over the conditions under which the program or "knowledge" may be licensed for use by others.

Moral constraints, however, are typically ignored by neoclassical economists. The notion that individuals might constrain their choices out of consideration for other family members, the community or some moral code is never considered by economists until it is used in attempt to explain what appears to be irrational behavior. The term most often used is "psychic income" which is basically a fudge factor to explain behavior that cannot be explained by reference to optimizing utility from "material goods." The classic case is the unselfish woman who gives all her money to the poor—where is the selfish utility maximizer here? The neoclassical economist responds that obviously this person gets "psychic utility" from the pleasure of others. Hence, pure altruism and pure selfishness are equally accommodated.

Economists often add such factors *ad hoc* to explain departures from rational behavior. "When all else fails, some factors that are difficult to measure are added, especially psychic costs, to some how argue that the action, however absurd on the face of it, is rational" [Etzioni, 1988, p. 141]. For example, consider the case where

Property rights

Legal rules that establish what things a person may use or control, and the conditions under which such use or control may be exercised.

celebrities are paid a fortune to endorse a product and people purchase it. It might be argued that people have been irrationally persuaded to purchase the product which is essentially no different from others except for the irrational vicarious experience involved. Neoclassical economists contend that the act is consummately rational. Given the willingness of the producer to spend so much on advertising, the consumer has rationally inferred that the product must be of higher quality. The beauty of such ad hoc explanations is that they cannot be falsified and the theory turns into a tautology—through the careful provision of after the fact explanations the theory is consistent with any imaginable behavior. For example, according to neoclassical economics, it is irrational to invest in political knowledge and to vote. Each person has only one vote and thus cannot affect the outcome of an election. Thus, while the costs of acquiring information and voting are substantial there are no benefits to be had. The idea that “I can make a difference by voting intelligently” is completely irrational. Yet, millions of people do it. Economists explain this obvious departure from rationality by posting, after the fact, a “psychic income” from doing one’s civic duty.

STATEMENTS ABOUT CHOICES The final component of an economic theory is a statement of the choice that is most likely to be made, given particular objectives and constraints on opportunities. Economists describe this process as constrained maximization or “optimizing.” For example, the next chapter will look at the choices that underlie the “Law of Demand.” There, consumers will be seen as having the objective of obtaining the greatest possible satisfaction, given the constraints placed on their opportunities by their budgets, the range of goods available, and the prices of those goods. Given those objectives and constraints, the law of demand states that people can be expected to choose to increase their purchases of a good when its price is reduced, other things being equal. This observation is predicted on the basis of the hypothesis that consumer behavior can be characterized as goal seeking through purposeful action, or, in other words, consumer choice is rational. Similarly, firm behavior is presumed optimizing, that is, directed toward profit maximization as constrained by market prices for the product, input prices, and technology.

Economic Theory and Rationality

Although all economic theories contain the three types of statements just listed, a successful theory is more than just a list—its elements need to form a coherent whole. Our understanding of the structure of economic theory would be incomplete without a discussion of a key assumption that serves to hold the three elements of a theory together: the assumption that people choose the best way of accomplishing their objectives, given the constraints they face. In other words, people are *rational*.

Rationality means acting purposefully to achieve an objective, given constraints on available opportunities. The concept of rationality is built into the definition of economics given at the beginning of this book, which speaks of choosing the best

Rationality

Acting purposefully to achieve an objective, given constraints on the opportunities that are available.

way to use scarce resources to meet human wants. To say that some ways of using scarce natural resources, labor and capital are better than others, *and that those are the ones individuals and firms tend to choose*, is to express the essence of rationality. Thus, is stated the basic normative theory of neoclassical microeconomics. Operating through markets individuals and firms will choose to allocate resources in the best possible way. This is a profoundly important assertion because it provides the basis of the “faith” people have in free market economies. As we shall see it also provides a powerful ideological weapon in the fight against government regulation and taxation of individuals and businesses. Based on this theory it is argued, following Thomas Jefferson that “the government which governs least, governs best.” Ironically, there is no doubt that were Jefferson alive today he would repudiate this statement. More so than most of his time, he was very suspicious of the concentration of commercial and industrial power and the threat it posed to “liberty.” Leaving the market alone is tantamount to giving control of society to profit motivated corporations who hold along with their champion, Milton Friedman, that having corporations operate on any other motivation than profit, such as the public welfare, is a “subversive idea.”

The assumption of rationality, so central to economics, is basically at root a psychological assertion about human nature—an assertion that people by instinct are always coolly calculating maximizers, and are not emotional or impulsive. How else can one comprehend the experiments with rats to verify the basic rationality postulate? [see box]. Indeed, some have argued that “the finding that rats behave rationally by neoclassical criteria is actually a source of concern.” The point of importance is “how sensible and wise human decision-making is.” If the rationality concept “cannot distinguish stupid from brilliant decision-making, rat from human, what does it tell us?” It tells us that the rationality postulate is quite empty, and the rat experiments “hint at the normative commitment to defend rationality at all costs” [Etzioni, 1988, p. 143].

A critic once ridiculed economists for seeing the human individual as a “lightning calculator of pleasures and pains, who oscillates like a homogeneous globule of desire under the impulse of stimuli . . . whereupon he follows the line of the resultant.”¹ The rat experiments, and the praise they receive from neoclassical economists, manifest a deep belief that some instinctive “stimulus-response” mechanism lies at the root of “choice.”

Neoclassical economists assert, to the contrary, that the rationality assumption has nothing to do with that sort of “caricature” of an instinctive “economic man.”

Neoclassical economists hold that the rationality assumption, properly understood, is simply a tool for giving structure to theories about the choices people make. Economists then fill in the specifics of the structure by observing what people do in various situations, that is, what choices they make when faced with certain opportunities. The test of whether people are rational, or not, is the extent to which people actually behave the way economists posit. It makes sense to build theories based on rational behavior because the alternative is to assume that people behave randomly—one cannot build a science, that is, a set of predictable relationships, based on ran-

domness. In fact, economists really don't care whether people actually act rationally or not. As long as people act "as if" they were rational, economic models can explain and predict their behavior.

In true science, as we have seen, no theory can ever be proven to be true. A given set of facts may be consistent with several different theories. For example, while the theory of evolution is the unifying conception of biological sciences, there are the "creationists" that offer a very different explanation for the facts observed in the biological world. A scientific theory, however, can be falsified if it is inconsistent with what we observe. Creationism is not a scientific theory because there is no way it can be falsified—God created life as we know it and that is that. How do I know?—The Bible tells me so! Indeed, even the theory of evolution cannot be falsified. When confronted with an "anomaly," scientists simply assume that there must be some evolutionary factor to account for it, but they don't know what it is. Richard Dawkins in his book the *Selfish Gene* (1976), declares that despite the impossibility of falsification, "the theory is about as much in doubt as the earth goes round the sun" [p.1]. Neoclassical economists hold an equally fervent faith in "rational choice" and all the ideological baggage that goes with it.

If theories based on the hypothesis of rational behavior are merely consistent with our observations of behavior then neoclassical economists are satisfied. Whether behavior is actually rational is a matter of secondary importance.

In the realm of positive economics, that is, explaining how the world works, rationality may be a workable hypothesis. Indeed, neoclassical economists have carped that no one has come up with a theory that works better at prediction of market phenomena. Remember, however, that people once believed that the Sun orbited the Earth and this model gave reasonably good predictions of the positions of the planets (with the proper fudging). The geocentric model was not abandoned until Copernicus came up with the model where the earth orbited the sun that gave better (but still not perfect) predictions.

Neoclassical economists use an analogy that imagines the human being as, in effect, a "black box." In this approach a stimulus is applied to the box and a response is forthcoming. If economic models can predict the response from a given stimulus then what actually goes on inside the box is irrelevant. Thus, should the stimulus be a price decline and the response an increase in quantity demanded, as predicted, the economist is satisfied that he has a useful model.

Critics of the neoclassical approach contend that one should attempt to understand the process rather than merely predict the outcome. Understanding the process is essential if one is to draw the appropriate normative judgments.

Some economists have claimed that neoclassical economics does not categorically deny that people sometimes behave in ways that cannot be explained rationally. Austrian economist, Ludwig von Mises put it this way: "The most popular objection raised against economics is that it neglects the irrationality of life and reality and tries to press into dry rational schemes and bloodless abstractions the infinite variety of

phenomena. No censure could be more absurd. Like every branch of knowledge, economics goes as far as it can be carried by rational methods. Then it stops by establishing the fact that it is faced with an ultimate given, i.e., a phenomenon which cannot—at least in the present state of knowledge—be further analyzed.”³

One can accept Von Mises assertion if one confines oneself to the domain of positive economics. Obviously, the standard economic model cannot explain everything. However, when one shifts to the normative domain things get dicey. Neoclassical economists use their theories which admittedly do not explain everything, to make assertions about the optimality of market outcomes.

When one enters the realm of normative economics whether people act rationally to maximize or not is a matter of great importance. Acting “as if” rational, simply does not cut it when one is evaluating the welfare outcome of market processes. Neoclassical economists attach great normative importance to the assertion that at market equilibrium welfare is maximized.

It is one thing to say a theory predicts a set of observations, it is an entirely different matter to contend that the observed facts manifest some kind of “optimum.” The assumption of rationality imbues the facts we observe in the market place with the notion that these observations manifest, to quote Professor Pangloss, the “best of all possible worlds.” How can one attribute the status of “best” to any outcome that admittedly may have been produced by irrational behavior?

Winston Churchill once remarked that “Democracy is the worst form of government except for all the others. Churchill, in short, was asserting that democracy was the “best” form of government. Ironically Churchill also once quipped that “the best argument against democracy was a five minute conversation with average voter.” With this quip Churchill was suggesting that while, in principle, democracy was “best,” the practice of it fell considerably short of the ideal. The normative case for democracy rests on the assumption of rationality. If democracy is to be the “best” system one must presume that the people know what is best for them and can voluntarily form wise and moral judgments. What can one say of democracy should one believe that people are incapable of forming wise judgments about what is good for them, and thus they are manipulated by others into supporting programs that are contrary to their interests? For centuries, Elitists have been making precisely this argument to justify Fascism and Aristocracy. Even Marx asserted that the “masses” would have to be controlled by a “dictatorship” until they could be forged into true democratic citizens. Thus, the foundational assumption of the normative defense of democracy is exactly the same as that for neoclassical economics—rationality.

For Professor Pangloss to have reached the profound conclusion that this is the best of all possible worlds” rationally, he would have had to compute “welfare” in every possible “world” and compare them taking full account of the future and the uncertainty involved in doing so. Such calculations imply the cognitive capacity to handle such a complex analysis and to process the data, and the willingness to do so. There is, however, a great deal of literature that suggests that people in fact do not

behave rationally in this sense. In short, people, whether managing firms or households, have neither the ability or the inclination to maximize. In short, the neoclassical theory has been falsified!

Let's look at some simple examples culled from this literature:

- Nobel Laureate (in Economics) Daniel Kahneman has studied human behavior and concluded that people are incapable of adequately analyzing complex decisions involving the future. The future involves uncertainty and thus people must estimate and use probabilities. The evidence suggests that they not only don't do this, they cannot do this. The failure is particularly acute in the area of financial decision-making. The departure from rational behavior in this context is so acute that an entire discipline called "behavioral finance" has emerged to study it. The discipline of "behavioral economics" has been challenging the neoclassical postulate of rational behavior for decades.
- Nobel Laureate Herbert Simon has demonstrated that people do not do the global search for a maximum but instead settle for a point that they find satisfactory. Thus, firms do not seek or ever attain maximum profits. Decision-makers even if they had the cognitive capacity to maximize (which they do not), do not because they are constrained by personal and social ties and often do not comprehend all aspects of their decisions. Decision-making is directed to finding an acceptable solution, considering all factors, for the problems the firm faces.

Robert Schiller, in *Irrational Exuberance* [2000] argues that even people's investment behavior often irrational. Schiller maintains that people hold a "pool of conflicting ideas" in their minds and irrationally move from one investing strategy to another on the flimsiest of evidence. People often hold views that they "attribute to real or imagined experts" that are contradictory and "half-thought out." The result, he claims are periods of herd behavior in the stock market where people simply suspend thought and follow the crowd. Misinformation passes from one person to another, like a virus spreads during an epidemic. It is this herd behavior that produces stock market bubbles and the crashes that invariably follow.

Bounded Rationality?

Thus, although rational pursuit of objectives in the face of limited opportunities lies at the heart of economics, some economic theories are based on a stricter notion of rationality than others. Economists have allowed that in some cases decision-making does not meet the full rationality standard.

Theories based on **full rationality** assume that people make full use of all available information in calculating how best to meet their objectives. The cost of making decisions, the possibility of error, and often, the cost of acquiring information are put to one side in theories based on full rationality.

Full rationality

The assumption that people make full use of all available information in calculating how best to meet their objectives.

Bounded rationality

The assumption that people intend to make choices that best serve their objectives, but have limited ability to acquire and process information.

On the other hand, some theories assume *bounded* rather than full rationality. To assume **bounded rationality** means to assume that people *intend* to make choices that best serve their objectives, but that they have limited ability to acquire and process information. They typically have to rely on partial information and use rules of thumb that do not make full use of the information they have. The “limited and costly information” aspect of this conception is, however, really little more than a “backdoor tautology” that cannot be tested. To say that the person who buys a watch from the first street vendor he encounters does so because he believed that further search would not be worth any potential savings would seem to make “satisficing” behavior rational. Evolutionary theorists will often assert that every aspect of an organism’s morphology must serve some “survival” function otherwise it would not have been selected by nature. Similarly, economists often utter the “must have” word to explain what appears to be irrational behavior. Thus, when a person jumps off the Newport Bridge, it “must” have been because this person thought that the cost of continuing to live exceeded the benefits. When a student consistently sleeps thorough his morning classes, it “must be” because he values sleep more than education. When people make a hasty, impulsive judgment it must have been because they thought the cost of making a better decision was too high. In short, seems always to be a convenient *ad hoc* factor to explain anomalous behavior.

It is most important to note that existence of bounded rationality undermines the normative assertion of the optimality of market outcomes. It may be true that with existing information people may not be able to make any better decisions, but it does not follow that a government intervention in the market cannot improve on the outcomes produced by these individual mistaken choices.

MARKET PERFORMANCE AND MARKET FAILURE

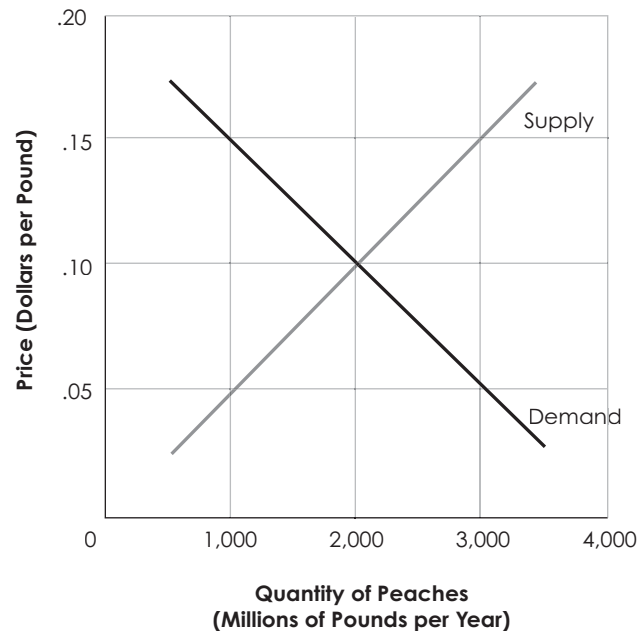
Economic choices are not made in a vacuum. They are made within the context of a set of institutions, of which markets and government are two of the most important. This section offers a preview of what coming chapters will have to say about markets, especially the key normative concepts of *market performance* and *market failure*. The next section will preview the role of government in the economy.

Market Performance

Earlier, we defined a *market* as any arrangement that people have for trading with one another. When economists speak of **market performance**, then, they are using the efficiency norm to evaluate how well markets do the job of providing arrangements for mutually beneficial trade between individuals and of maximizing social welfare. There is no reason to believe that should every market transaction benefit both individuals, that the social welfare is maximized. First, for example, these individual transactions may harm third parties. Second, the distribution of gains from these

Market performance

The degree to which markets work efficiently in providing arrangements for mutually beneficial trade.

FIGURE 4.1 PERFORMANCE OF THE MARKET FOR PEACHES

This exhibit shows hypothetical supply and demand curves for peaches. The demand curve reflects the willingness of consumers to buy peaches, given the price of peaches and the prices of alternative goods. The supply curve represents the willingness of farmers to sell peaches, given the price of peaches and the opportunity costs of production. At any point to the left of the intersection of the curves, the price that consumers would willingly pay for a peach (as indicated by the height of the demand curve) is greater than the minimum needed to cover farmers' costs (as indicated by the height of the supply curve). Thus, up to that point, exchanges carried out at a price between the two curves are mutually beneficial to consumers and producers. At any point to the right of the intersection, the maximum amount that consumers would be willing to pay for still more peaches is less than the amount needed to cover farmers' costs. Thus, production beyond the intersection point would not be efficient. It follows, then, that a market in which production is carried out just up to but not beyond the intersection point performs efficiently.

transactions may be considered undesirable according to prevailing norms regarding fairness.

Although the details will require several chapters to work out, a simple diagram can give an intuitive idea of efficient market performance. Figure 4.1 shows two curves that represent the market for peaches. The demand curve represents the benefit of peaches to consumers as reflected by their willingness to buy peaches, given the price of peaches, the prices of alternative goods, and so on. The supply curve represents the opportunity costs of producing an additional peach as reflected by the willingness of farmers to produce and sell the product under given conditions.

At any point to the left of the intersection of the two curves, the price consumers would willingly pay for a peach (as indicated by the height of the demand curve) is greater than the minimum needed to cover farmers' costs (as indicated by the height of the supply curve). Thus, to the left of the intersection, trades carried out at any price between the two curves are mutually beneficial to consumers and producers.

However, to the right of the intersection, the maximum consumers would find it worthwhile to pay for still more peaches is less than what is needed to cover farmers' costs. There is no price at which further trades would benefit both parties, and therefore production beyond the intersection point would not be efficient.

It follows, then, that a market in which production is carried out just up to but not beyond the intersection point performs efficiently. At a lower quantity, some mutually beneficial exchanges would not occur. At a higher quantity, no price could be found that would benefit both parties. Not only is the quantity indicated by the intersection of the two curves just right, but the price is, too. Any higher price would lead to a wasteful surplus of peaches, whereas any lower price would lead to a shortage in which some consumers' wants would not be satisfied.

It is hard to exaggerate the enthusiasm that economists have for markets that generate such efficient outcomes. From those pursuing economic reform in the nations of the former Soviet Union to candidates touting new solutions to problems of American capitalism, there is widespread agreement that within large areas of economic life, markets can be an efficient means of solving basic economic problems. Yet even the most enthusiastic fans of markets recognize that they do not always function perfectly. Several conditions must be met before markets reach a stable equilibrium exactly at the intersection of the supply and demand curves. Let's look briefly at some of the situations in which market performance falls short of the ideal, again leaving details to later chapters.

Market Failure

It is always sound business to take any net gain, at any cost and at any risk to the rest of the community.

—THORSTEIN VEBLEN

Market failure

A situation in which a market fails to coordinate choices in a way that achieves efficient use of resources.

A **market failure** is a situation in which a market fails to coordinate choices in a way that achieves efficient use of resources. Of the many possible sources of market failure, four deserve special attention. We will discuss them under the headings of externalities, public goods, insufficient competition, and irrationality in production and consumption. Other sources of market failure will be mentioned more briefly.

EXTERNALITIES One type of market failure is failure to transmit correct information about scarcity in the form of market prices. For markets to perform their job efficiently, prices should reflect the opportunity costs of producing the goods or services in question. Most of the time market prices do not reflect at least a reasonable approximation of opportunity costs. As we have seen market processes invariably deplete resources and cover the world with pollution. In short, in most situations, producers' (and consumers') actions have effects on third parties, that is, people other than the buyer and seller who carry out a transaction. In short, markets rarely "get the prices right." Neoclassical economists call these third-party effects, which

Externalities

The effects of producing or consuming a good whose impact on third parties other than buyers and sellers of the good is not reflected in the good's price.

are not reflected in prices, **externalities**. Ecological economists have trouble with the concept of externalities because it treats the depletion of critical natural capital and the pervasiveness of waste pollution as external to rather than integral to the operation of a market economy. Most importantly, viewing the problem in terms of externalities promotes a remediation ethic that many ecological economists find repugnant. But, this is an issue to be discussed in more depth later in the chapter on environmental policy.

Woodrow Wilson once lamented that the “fact is we live in a system that is cruel and heartless.” One must presume he was referring to the capitalist system in which impersonal market forces are driven only by individual greed and the “bottom line”-profit. In such a system, incentives are structured to maximize profit by socializing costs, that is by shifting the costs of production onto “society” as much as possible. This means firms have the incentive to do as little as possible to protect the health or workers, customers, and the community. Worker safety, product safety, and the careful disposal of the toxic by-products of production are definitively unprofitable. A very widely used Economics Textbook contends that one of the fundamental axioms of economics is that “rational people respond to incentives.” In the competitive market system firms survive only if they can sell their product at the “competitive price.” Within such an institutional setting, firms that are careful about worker health, product safety, and the public health (at least relative to others) will generally have higher costs. Thus, to remain competitive, even a firm run by people with a social conscience, will have to “socialize costs” in order to survive. These social costs are called “externalities.”

Of course there are good externalities as well as bad ones and obviously producers are not entirely, at least directly, responsible for all bad externalities. But, it is clear that the greatest number and the most serious bad externalities are caused by producers attempting to avoid costs and thereby enhance profits.

The classic example of an externality is pollution. Suppose a utility burns coal in its boilers to generate electricity. The costs of fuel, capital, and labor come to \$.05 per kilowatt hour of electricity produced. They are called *internal costs* because they are borne by the utility itself. Those costs are reflected in market transactions—payments to coal producers, workers, stockholders and bondholders, and so on. Internal costs are part of the opportunity cost of making electricity because they represent the forgone opportunities of using the same natural resources, capital, and labor in some other industry. To stay in business, the utility must receive a price of at least \$.05 per kilowatt hour, that is, a price at least equal to the internal opportunity costs.

But the internal costs are not the only costs of making electricity, as we saw in the case study at the beginning of the chapter. In the process of burning coal, the utility spews out clouds of sulfur dioxide, soot, and other pollutants. The pollution damages health, kills trees, and corrodes buildings in areas downwind from the plant. Those effects are referred to as *external costs* of generating electricity because they are borne by third parties—people who are neither buyers nor sellers of electricity or any

of the inputs used in making it. From the viewpoint of the economy as a whole, external costs are also part of the opportunity cost of generating power. They represent the value of the factors of production that are destroyed by the pollution (such as dead trees or workers in other firms taking extended sick leave) or required in order to repair its effects repainting houses, and treating pollution-related diseases, burying the prematurely dead and compensating their families.

Suppose that pollution damage of all kinds comes to \$.02 per kilowatt hour of power produced. Added to the \$.05 in internal costs, the \$.02 of external costs brings the overall opportunity cost of steel to \$.07 per kilowatt hour. This figure reflects the value of the factors of production used directly by the utility plus those that are destroyed or diverted from other uses by the pollution.

If the price of electric power is set by supply and demand, its equilibrium value will tend toward the level of \$.05 per kilowatt hour that just covers internal costs. But this sends a false signal to users of electricity: It tells them that producing a kilowatt hour puts a smaller drain on the economy's scarce factors of production than is really the case. Thus, electricity users will use more power than they should. They will be less inclined to buy new, more efficient machinery, to design products so as to use less electricity, to shift to cleaner natural gas, and so on. In short, the market will fail to achieve efficient resource allocation because prices will have sent users the wrong information.

Neoclassical externality policy advocates "getting the prices right" by means of taxation, regulation or changes in property rights that will establish markets for pollution rights.

The Quintessential "Bad" Externality That master of black humor, Kurt Vonnegut Jr. has written that "smoking is the only respectable form of suicide" [quoted in E. Tomas Garman, *Consumer Economic Issues in America* [2002, 7th ed.], p. 406]. It may also be an acceptable form of murder. While, eventually, smoking will kill 50% of smokers, it also accounts for the deaths of over 40,000 non-smokers every year. Every year, tobacco smoke is passively inhaled by 88% of non-smokers. Passive smoking ranks behind only active smoking and alcohol consumption in the pantheon of preventable causes of death [Garman, p. 405].

In the 40 years since the Surgeon General warned the public of the dangers of smoking 12 million people have died from smoking related diseases. On average smokers lose about 13-14 years of life expectancy. The estimated cost of treating smoking related diseases is \$75 billion per year with another \$82 billion added each year due to lost productivity. The list of diseases related to smoking has just been elongated.

It has been known for sometime that cigarette smoking was linked to cancer of the bladder, esophagus, larynx, lung and mouth. Also linked are chronic lung disease, chronic heart and cardiovascular disease, osteoporosis, peptic ulcers and reproductive problems. In 2004, the Surgeon General announced that several other maladies have been linked to smoking—acute myeloid leukemia, cancers of the

cervix, kidney, pancreas and stomach, abdominal aortic aneurysms, cataracts, peritonitis and pneumonia. Linked but not conclusively so were colorectal cancer, liver cancer, prostate cancer and erectile dysfunction. Despite these alarming statistics, the percentage of the population that smokes is still 22% and is declining at a rate of less than 1% every three years [List Linking Smoking to Diseases Expands, Associated Press, may 27, 2004].

Of course, smokers bear the burden of a shorter, less healthy life, but much of the economic costs of their treatment and ill-health falls on taxpayers, employers, and premium payers of private health insurance. Taxpayers support Medicaid and Medicare. Employers have to bear the cost of absenteeism and lower productivity. Other people in health insurance groups must pay higher premiums to cover the cost treating the excess health problems of smokers. Finally, smokers cause fires. Thus, the net benefit curve for society lies below that of smokers (below the market demand curve). Thus, since the market demand determines quantity demanded, cigarettes are over-consumed from the social perspective. The situation is not all bad. From a fiscal point of view, society benefits because smokers do not live as long so collect less social security benefits. This benefit shifts the net social benefit curve up and reduces the over-consumption externality.

Good Externality Sometimes individuals will consume a good that provides a positive externality. Lojack, for example, is an anti-theft system which is installed in automobiles. People who install it do so in order to recover stolen cars quickly. The system allows tracking of the auto when stolen and usually leads to quick apprehension of the thieves. However, when Lojack begins to penetrate an area auto thefts decline, that is, the risk of a theft falls for all in the area (and hence for the insurance company). Since the crooks do not know which cars have Lojack, they avoid all of the autos in the area. Thus, even those car owners who have not paid to have Lojack installed derive a benefit. However, as individuals decide to install Lojack based only on their private benefit; this social external benefit is ignored. The actual social benefit curve lies above the market demand curve. Thus, Lojack is under consumed, that is, society would benefit if more cars had it installed. Some insurance companies offer a small premium reduction if Lojack is installed in order to encourage its use and reduce their loss experience. The company benefits by a reduction in the overall risk of auto-theft and the quantity of Lojack consumed gets closer to the optimal amount.

Public goods

Goods that (1) cannot be provided for one person without also being provided for others and (2) when provided for one person can be provided for others at zero additional sum.

PUBLIC GOODS The goods and services discussed in all the examples used to this point—chicken, cars, apartments, and so on—share two characteristics or *properties*: (1) The supplier can decide to supply the good to some people and to exclude others; this is termed the *property of exclusion*. (2) Use of a unit of the good by one person limits the possibility of use of that unit by other people; this is termed the *property of rivalry*. Some goods do not possess the properties of exclusion and rivalry, however. These are known as **public goods**. Lacking the property of exclusion, they

**APPLYING ECONOMIC IDEAS 4.1****PRIVATE PROVISION OF PUBLIC GOODS**

Many economists argue that private firms cannot supply public goods because of the assurance and free rider problems that arise whenever goods have the properties of nonexclusion and nonrivalry. In practice, however, private firms and voluntary organizations often do find methods of providing goods that have these properties. Examples include broadcast radio and television, computer software, and amenities like streets and parks in residential neighborhoods.

In some cases private firms simply alter the product in a way that makes it possible to exclude free riders. Thus, television signals can be scrambled so that they can be received only by subscribers who rent a decoder; computer software can be copy protected so that the original purchasers cannot make free copies for their friends; and streets can be equipped with toll booths. In this case, the good ceases to be a public good, even though it continues to have the property of nonrivalry.

Exclusion has its disadvantages, however. The necessary technology may be expensive and less than fully reliable, and the attempt to exclude may be offensive to customers the firm would like to attract. To avoid these disadvantages, private firms and voluntary organizations often use other techniques to provide public goods.

- One approach is to link the public good to an ordinary good, offering the two as a package deal. Thus, public radio stations send their contributors magazines

with movie reviews and program guides; computer software companies provide advice via telephone to legitimate registered purchasers; and real estate developers find it worthwhile to build residential streets as part of a package included with the sale of private homes.

- Another approach is to build on the psychological satisfaction of contributing to a good cause or the psychological discomfort of being recognized as a free rider. This works best in small communities where everyone knows everyone else. But organizations like public radio stations can achieve something of the same effect by publicly thanking contributors over the air.
- Still another device is the "assurance contract." Sometimes people hesitate to contribute to a good cause because they fear their contribution will be in vain unless others join them. In such a case, the provider can accept pledges of support that will be activated only if an agreed minimum of support is received. Thus, families might be asked to contribute checks to a fund to build a neighborhood playground on the understanding that the checks will be returned uncashed if the necessary minimum is not raised.

As these examples show, the economic category of "public good" does not always mean a good that must be provided by the government.

cannot be provided for one person without also being provided for others. Lacking the property of rivalry, once they are provided for one person, they can be provided for others at no extra cost. Public goods, like externalities, are a potential source of market failure—they will not be supplied in a market system that is driven by profit and the "pay to play" principle. As public goods are critical to the public welfare, the failure of the market to provide them is a matter of no little importance.

Perhaps the best example of a public good is national defense. One person cannot be protected against nuclear attack or invasion without the protection being extended to everyone. Also, it costs no more to protect a single resident of an area than to safeguard an entire city or region. Of course other goods may lack the properties of exclusion or rivalry to some extent. These can be called quasi-public goods. Police protection provides one example: In their functions of promoting public safety in general and deterring street crime, the police are providing a public good. But, many police-type services are provided by the private sector. In Mexico City people

hire private body guards to protect them from kidnappers. Firms hire private security firms to guard their property and so on. Maintenance of urban streets, the provision of parks, even the space program has been cited as examples of goods that are neither purely public nor purely private.

Private firms have difficulty making a profit selling products that, once they are provided to one customer, become available to others at no additional cost. To see why the market may fail in such cases, imagine that someone tries to set up a private missile defense system—call it Star Wars, Inc.—to be paid for by selling subscriptions to people who want protection from a nuclear attack. There are two reasons I might choose not to subscribe. First, I know that if my neighbors subscribed and got their homes protected, my home would be protected too, even if I did not pay; I could take a *free ride* on a public good paid for by others. Second, I might be willing to contribute if I had *assurance* that at least, say, 1,000 of my neighbors did so. That would raise enough money to buy at least one missile. But I would not contribute without the assurance that this minimum would be met. Contributing along with just 500 neighbors would buy only half a missile, which would be useless, and my contribution would be completely wasted.

Economists have long argued that the *free-rider problem* and the *assurance problem*, which make people reluctant to contribute voluntarily to the support of public goods, mean that government may have to provide those goods if they are to be provided at all. (We say *may* because, as *Applying Economic Ideas 4.1* illustrates, some things that have the characteristics of public goods are provided by private firms.) However, many goods and services that are provided at public expense are private goods to some extent. Take education, for example. The primary beneficiaries of public education are students. It is not impossible to exclude students from the schools. Private schools do this as a matter of course. Only a few schools, public or private, operate on an “open admission” basis. Others select their students according to neighborhood, ability to pay, or scholastic achievement. Education clearly has the property of rivalry in consumption under certain conditions. Students cannot be added to a full school without removal of another student. But if the school has empty seats then the cost of an additional student is zero and consumption of education is nonrival. Moreover, education fits the definition of a public good because it has the benefit of promoting good citizenship, and building a skilled labor force, the benefits of which are nonrival. Finally, free education is essential to meeting the norm of equal opportunity to everyone regardless of income. The benefit of living in a society that meets out normative standards is also nonrival.

INSUFFICIENT COMPETITION A third source of market failure is insufficient competition. As we have seen, market prices should reflect opportunity costs if they are to guide resource allocation efficiently. In the case of harmful externalities, market failure occurs because prices fall below opportunity costs. Where competition is insufficient, however, market failure can occur because prices are too high.

Monopoly

A situation in which there is only a single seller of a good or service.

As an extreme case, consider a market in which there is only a single seller of a good or service; such a market is termed a **monopoly**. Residential electric service is a frequently cited example. Suppose that Metropolitan Electric can generate power at an opportunity cost of \$10 per kilowatt hour. Selling electric power at that price would guide customers in choosing between electricity and other energy sources, such as oil or coal, and in undertaking energy-saving investments, such as home insulation and high-efficiency lighting.

If homeowners could buy electricity from anyone they chose the way they buy eggs or gasoline, the forces of competition, acting through supply and demand, would push the market price toward the level of opportunity costs. The utility would not sell power at a price below opportunity costs because doing so would put it out of business. Further, in a competitive market any seller that tried to raise prices much above opportunity costs would be undercut by others.

However, utilities do not compete in selling to residential customers. Every home, after all, is connected to only one set of power lines. In this case, if not restrained by government regulation, a utility could substantially increase its profits by charging a price higher than opportunity costs. Of course, raising the price would mean that less power would be sold as customers moved up and to the left along their demand curves. But up to a point, the greater profit per kilowatt hour sold would more than outweigh the effects of the reduction in quantity demanded.

If too high a price is charged, homeowners will get a false message regarding the opportunity cost of electricity. They may make substitutions that are not economically justified. For example, they may switch from electricity to oil for heat even in regions where cheap hydroelectric power is available, or from electric air conditioning to gas air conditioning even in areas where the opportunity cost of electricity is below that of gas.

Market failures due to insufficient competition are not necessarily limited to the extreme case of monopoly. Under some circumstances, competition among a small number of firms may also lead to prices that are above opportunity costs, especially if the firms engage in collusion. The circumstances under which competition is or is not sufficient to ensure the efficient operation of markets is the subject of an enormous body of economic research and of more than a few controversies, as we will see in coming chapters.

MONOPSONY**Monopsony**

A market where there is a single buyer of a good or service.

A **monopsony** is defined as a market where there is a single-buyer of a good or a service. The classic example is the one-company town of old where there was only one significant employer be it a timber mill, coal mine, textile mill, steel mill, automobile factory, cotton plantation and so on, which obviously had a substantial bargaining

power advantage over potential employees who had at best only marginal employment alternatives and were relatively immobile. The typical result was low wages, often paid in script that could be redeemed only at the monopolistic “company store.” A classic country tune, made famous by Tennessee Ernie Ford, lamented that “you load 16 tons (of coal) and what do you get?—another day older and deeper in debt—St. Peter don’t you call me cuz I can’t go—I owe my soul to the company sto.” It was just as true for other mining, textile and plantation systems. It was called peonage and was a national scandal during the 1920s and 1930s.

In many cases workers responded to such a bargaining disadvantage by attempting to form unions, that is to bargain collectively rather than individually. In effect, the union became a monopoly on the supply of labor and was able to some extent to countervail the power of the employer. Despite great, and often violent resistance from employers, unions became very powerful in industries like mining, steel, autos, and other industries that had developed mass production methods including meat-packing’s disassembly lines. Unfortunately, as the fortunes of these industries declined during the deindustrialization of the 1970s and 1980s brought on by foreign competition in both the U.S. and the global market, the unions declined with them.

A more contemporary example is major league baseball and major league sports in general. In each sport a new player is drafted by a team and can negotiate only with that team. The team is a monopsonist, the only potential buyer of his services. If a player chooses to refuse the contract offer of the team that drafted him, he simply does not play. It is only after a few years of indenture that a player becomes a “free agent” and can bargain with any team. Indeed, if the player is good enough, he is now a monopolist and may reap substantial “rents” as teams compete for his unique services.

Wal-Mart is also, to a significant extent, a monopsonist. Because Wal-Mart can sell so much of any producer’s product, it can exact substantial price concessions from producers wishing to sell through Wal-Mart. Wal-Mart consumers therefore potentially benefit from this monopsonistic “purchasing power” if Wal-Mart lowers its prices to reflect its power-discounts rather than taking the discount as a profit. Wal-Mart may also be a dominant employer in many rural labor markets and may have additional opportunity to exercise monopsony power. Wal-Mart pays notoriously low wages, and offers paltry employee benefits. Thus, the question “who benefits from Wal-Mart’s monopsony power” is not so simple as it might first appear.

The most significant case of monopsony is one that does not exist—the federal procurement of drugs for Medicare and Medicaid. One might ask that since the federal government buys tens billions of dollar worth of drugs each year, “why does it not bargain with the drug companies for better prices the way the Canadian government does?” Americans, who can, love to buy drugs in Canada because they are at least 30% cheaper there. Yet the Medicare drug program just enacted by Congress in 2005, specifically prohibits the federal government from negotiating drug prices with the pharmaceutical companies.

Neoclassical economists object to Monopoly and Monopsony on efficiency grounds, that is, they force the market system away from the desired competitive outcomes. As we will demonstrate later, economists have no basis for making such assertions unless the rest of the economy is completely free of imperfections such as externalities, taxes, tariffs, quotas, and monopolies in other markets. What we can say is that monopolies/monopsonies tend to have substantial effects on the distribution of income and wealth and typically, as we have seen above, the outcomes are not those of which the average person would approve.

Socially Irrational Consumption

Neoclassical economists have reverence for consumer preferences as revealed in the demand curve as willingness to pay. It is assumed that consumers know best what is good for them and that they get the full value they anticipate when they purchase the good. After having read Chapter 10, the student may have a very different take on the value people get when they make purchases of consumer goods. Several decades ago the Rolling Stones gave us the song, “I can’t get no satisfaction.” Bad grammar aside the song title captures the position of many critics of markets—people do not get value for their money or at least not as much as they expected. Thus, if we were to imagine the demand curve as a “benefit” curve, the real, that is to say, “actually realized,” benefit curve would be lower or to the left of the one that is manifest in markets. Thus, while people were willing to pay for a certain expected benefit, it is often not realized when social factors impinge on the actual utility derived from the good.

There are several sources of this problem. First recall that consumption is quite social in character and people often consume goods which give them some positional advantage over others. When others acquire these goods, however, the positional advantage is lost and the utility of the good declines. For example, when a person spends more on education to “get ahead” they find that they cannot realize that ambition when others have done the same. Similarly, when one buys the new high speed car, they find little satisfaction from owning it when others have done the same. The “status gain” is lost, and little pleasure is gained on congested roads. Finally, how much validation can we give to a system that satisfies wants that it has itself created through advertising and alienation?

OTHER MARKET FAILURES Some economists would list other sources of market failure in addition to the three just discussed. For example, the macroeconomic phenomena of inflation and cyclical unemployment are sometimes considered to be market failures. Certainly, an economy that is subject to excessive inflation and unemployment provides a poor environment in which to coordinate the actions of buyers and sellers of individual goods and factor services. However, the effects of inflation and unemployment, together with policies intended to keep them under control, lie outside the scope of the microeconomics course.

THE ECONOMIC ROLE OF GOVERNMENT

We are now vibrating between too much government and too little government and the pendulum will finally fall in the middle. —Thomas Jefferson, 1788

The Government is best which governs least. —Thomas Jefferson

I believe every human mind feels pleasure in doing good to another. —Thomas Jefferson, 1816

The market is rational; the government is dumb.
—Richard Armey, economist and once Republican House Majority Leader

While markets play an enormous role in answering the key questions of what, how, and for whom, not all economic decisions are made in markets. Some important economic decisions are made by governments at the local, state and federal level.

If we want to understand the microeconomic role of government, a good place to begin is by asking, “why does government play any role in the economy at all?” Why, that is, cannot all decisions be made by households and private firms coordinating their actions through markets? Economists offer two answers, one based on the notion of market failure, the other on that of *rent seeking*. The answers are partly contradictory and partly complementary. Each will figure prominently in coming chapters, and each deserves a brief preview here.

The Market Failure Theory of Government

According to the market failure theory of government, the principal economic role of government is to step in where markets fail to allocate resources efficiently and fairly. Each type of market failure calls for a particular type of governmental intervention.

Take the case of pollution. Earlier we gave the example of a utility whose contribution to air pollution caused \$.02 worth of damage for every kilowatt hour of electricity. Government can do a number of things to correct the resulting market failure. For example, it can require the utility to install pollution control equipment that will prevent poisonous gas from escaping into the atmosphere.

When markets fail to supply public goods, government also is called in. Often, as in the case of national defense, the government simply becomes either the producer, as in the case of a standing army, or the provider of the privately produced defense goods through the procurement process. In other cases, such as education, which most economists consider to be in part a public good, the government need not be the sole producer. Private schools and colleges are encouraged with subsidies and tax benefits to add to the supply of education produced by public institutions.

Government has attempted to remedy market failures arising from insufficient competition in a variety of ways. In some cases government uses *antitrust laws* to pre-

serve competition by punishing price-fixing and other conspiracies, preventing mergers of competing firms, or even by breaking large firms up into a number of smaller ones. In other cases, such as the electric power industry, *regulation* is used to control prices charged by a monopoly firm. In a few cases, such as the Tennessee Valley Authority's electric power facilities, the government itself may become a monopoly producer of a good or service.

The Neoclassical Public Choice Theory of Government

The “Chicago School” (a very politically conservative economics department) of Neoclassical Economics developed a new “conservative” theory to counter the traditional “liberal” market failure theory. Obviously, one implication of market failure is the need for some type of government remedy. The new theory, known as “Public Choice,” undermines this conclusion by asserting that government policy rather than serving the public interest, is often controlled by special interests that use the government to raise their incomes. While there is certainly some truth to the assertions of the Public Choice model, it has generally failed to provide much empirical support for the general applicability of the theory. As Mueller (1979) has opined, “the degree to which economic models of democracy offer superior explanatory power [over other models] is still in doubt” [p. 5]. Moreover, Public Choice theory diverts one from seeing the true nature of political corruption in the United States.

We will proceed with a straight-forward description of the “rent-seeking behavior” that is the heart of Public Choice Theory and then we offer some critiques.

The market failure theory of government is sometimes criticized for being more of a theory about what the government ought to do than about what it actually does. The problem, say the critics, is that too many government programs, rather than correcting market failures, seem to promote inefficiency or inequality in markets that would function reasonably well without government intervention. Price supports for milk are an example. Price supports tend to produce wasteful surpluses. Further, although some benefits go to farmers who are in financial difficulty, thus serving the goal of fairness, many of the subsidies go to farmers who are financially well off.

Critics of the market failure theory maintain that government policies should be understood not in terms of broad social goals like efficiency and fairness but in terms of how people use the institutions of government to pursue their own self-interest. This approach to policy analysis is known as **public choice theory**.

Public choice theory

The branch of economics that studies how people use the institutions of government in pursuit of their own interests.

RENTS AND RENT SEEKING One of the key concepts of public choice theory is *economic rent*. In everyday language, a *rent* is simply a payment made for the use of something, say, an apartment or a car. Public choice theorists use the term in a more specialized sense, however. An “economic rent” is any payment to a factor of production in excess of its opportunity cost. An example is the huge income earned by professional athletes—an income much higher than these persons could earn working

the same amount time in any other line of work. Rents are also generated when an asset like a home appreciates in value even though the homeowner did nothing to improve the property. Corporations that own oil in the ground earn rents when market forces force up oil prices. In short, rents are ubiquitous in the economy. The key element in the concept of rent in these cases is that they are merely a redistribution of income. When players get more income, the owners get less. The supplier of oil gets more income at the expense of the oil consumer. Indeed, every price change in the market place redistributes rents between suppliers and demanders.

The theory of rent-seeking views the government as a huge trough of taxpayer money. Firms, workers, and resource owners naturally seek to redistribute that money into their bank account. Rent-seekers also understand how government powers can alter prices (price supports or price ceilings, tariffs and on) in a way that is advantageous to them. A dollar earned through a government program that raises the price at which a firm sells its output or lowers the prices at which it buys its inputs is worth just as much as a dollar of profit earned through purely private efforts at innovation. In some cases it may even be better. Profits earned from innovation in a competitive market may be short lived because rivals will soon come out with an even better product or introduce an even cheaper production method. However, government regulations can not only create opportunities to earn rents but also shield those opportunities from competitors. Obtaining and defending rents through government action is known as **political rent seeking**.

Consider the case of milk price supports, which, as we saw earlier, are explained in terms of the market failure theory of government as a program to insure a fair income to farmers. Public choice theorists see this policy as a classic case of *political rent seeking*. Because a large portion of the benefits of price supports go to a small proportion of farmers who are not in trouble, broad-ranging programs generating rents for all farmers will draw much wider political support than programs more narrowly targeted only on rich farmers. Without the political support of the relatively poor farmers, say public choice theorists, programs for the rich farmers would not get the votes they need in Congress.

Government restrictions on competition are another way of generating rents. For example, tariffs and import quotas on clothing, cars, sugar, steel, and other products shield domestic firms and their employees from foreign competition. The firms thus are able to earn rents by raising prices above the competitive market level, and the employees are able to earn rents in the form of higher wages. Examples of government restrictions on competition can be found within the domestic economy as well. For example, licensing fees and examinations restrict the number of competitors who can enter such professions as law and medicine and often even such occupations as manicuring and hair styling. Of course, each of these can be rationalized as being in the public interest by insuring that practitioners meet some minimum standard of competence. Our society has long ago rejected the notion of “caveat emptor” [let the buyer beware] as an adequate means for protecting consumers from the incompetent.

Political rent seeking (rent seeking)

The process of seeking and defending economic rents through the political process.

FROM THE LAW OF UNINTENDED CONSEQUENCES TO GOVERNMENT FAILURE The notion that government policies do not always promote efficiency and equity is not new. Economists have long been aware of the law of unintended consequences—the tendency of government policies to have results other than those desired by their proponents. But public choice theory goes beyond the notion of unintended consequences, which could be traced simply to incomplete analysis on the part of policymakers. Rather, the element of rent seeking in the formulation of government policy suggests that there is a systematic tendency for government programs to cause rather than to cure economic inefficiencies—a tendency, that is, toward government failure.

Government failure

A situation in which a government policy causes inefficient use of resources.

In introducing the notion of government failure, public choice theorists do not intend to imply that government always makes a mess of things or that the market always functions perfectly; rather, they demonstrate that both the market and government are imperfect institutions. In deciding whether a given function is better performed by government or the market, the possibilities of government failure must be weighed against those of market failure.

A Critique of Public Choice Theory

“Public Choice can be defined as the economic study of nonmarket decision-making, or simply the application of economics to political science,” that is to “voter behavior, party politics and bureaucracy, and so on” [Dennis Mueller (1979) *Public Choice*, p. 1]. As we have seen above Public Choice theory sees government being diverted from the truly democratic realization of efficient objectives due to the activities of selfish individuals who organize their voting power to promote their goals and objectives at the expense of the commonwealth. This power stems from the recognition by these “interests” that certain political agendas will serve them well coupled with the “rational ignorance of voters,” who as individuals lose or gain little as a consequence of public policy.

As Robert Kuttner has observed, “in their zeal to impeach economic intervention,” Public Choice theorists, “go further and impeach democracy itself” [Robert Kuttner (1997), *Everything For Sale*, p. 333]. This “body of work,” Kuttner claims, “has provided the self-confident theoretical underpinnings for the appalling claim that intervention in the economy is perverse because democratic life is doomed” [p. 333]. Paraphrasing Jefferson then, the “best” response to this state of affairs is to narrow the role of the government to the “least” possible.

Robert Kuttner, a well known and unapologetic liberal economist, has offered a cogent critique of the Public Choice literature in his 1997 book, *Everything for Sale*. We shall examine this critique in some detail in a later chapter, but for now we confine ourselves to two comments.

First, Kuttner finds it ironic that in the free market theory, consumers “have all the information they need to buy cars, and invest in stocks,” but in the political

arena, they are, due to their imperfect knowledge, “hopeless patsies” [p. 334]. The Public Choice theorist responds that there is really no inconsistency here. Voters are “rationally ignorant,” they claim, because information is costly and there is no benefit to be gained by an informed vote. Unlike “interest groups” who merge their votes, any single voter has no impact on the election so why bother to get better information.

To this Kuttner responds, “well why bother to vote at all?” The most egregious anomaly (failed prediction) of the public choice literature, is that, since the benefits are negligible and the costs are not, a rational individual will not vote at all!

Second, Kuttner claims that Public Choice Theory is an elaborate diversionary action that hides the true source of corruption in American Politics—Corporate Money. Corporate money “buys what should not be for sale in politics” [p.345]. Lately, Kuttner observes:

money has become newly influential in political life. As campaigns become more expensive, money tends to drive out more civic forms of political participation. Politics is increasingly becoming an enterprise built on polling, mass mailing, and paid TV commercials, all of which cost lots of money and involve few citizens. Politicians spend a great deal of their time raising money from wealthy donors. Several of our most public-minded legislators have recently quit public life because they found the fund-raising imperative so demeaning and corrupting [p. 345].

Clearly, this is a “form of special interest politics rather different from that posited by Public Choice theory. It is not a case of individuals organizing themselves into groups or coalitions to maximize their influence as voters. It is, rather, the use of money to directly purchase illegitimate influence in defiance of the core democratic principle of one person, one vote” [p. 345]. Yet, Public Choice theory, which itself has fed well at the conservative funding table, is “almost entirely silent on the disproportionate purchase of influence by big money” [Kuttner, p. 347]. While no reasonable person would deny that organized self-interest can undermine the public interest to some extent, there is no doubting that the mainstay of special interests now is influence purchased with money. It is money that now controls the political agenda in a manner that precludes legislation that may either harm elites (e.g., tax increases) or serve broad popular interests (e.g., universal health care).

Thus, if money is the root of the matter, one need not draw the inference that politics is inevitably corrupt. No government is ever going to be perfect, but ours can be much better if money is taken out of politics, say, for starters, by providing public financing for all elections and requiring that TV give equal free time to all candidates.



SUMMARY

1. What is the basic structure of economic theory?

Economic theories are constructed from statements about people's objectives, aims, and preferences; statements about the constraints on available opportunities; and statements about how people choose among the available opportunities so as to best meet their objectives.

2. Why is rationality of central importance to economics?

To be rational means to act purposefully to achieve one's objectives, given the available opportunities. Neoclassical economists assume *full rationality*, which means that they assume that people make full use of all available information, and are able to calculate how best to meet their objectives. Many economists have found in their studies that people are incapable of acting rationally due to limits in cognitive ability. It has been shown that people tend to satisfice rather than maximize. In short, in the absence of rational behavior it is very difficult to apply any of the normative criteria used in microeconomics

3. What is the meaning of market performance and market failure?

Market performance refers to how efficiently markets do their job of providing arrangements for mutually beneficial trade. Ideally, markets would make it possible to carry out every possible mutually beneficial trade, in which case they would operate perfectly efficiently. *Market failure* is ubiquitous, and consequently markets usually fail to carry out their job efficiently. *Externalities*, *public goods*, and insufficient competition (leading to *monopoly*) are among the most widely discussed sources of market failure. Markets also fail when they deliver goods that do not satisfy any real need. This is called socially irrational consumption. When goods are purchased under the influence of advertising, they satisfied a created need so no satisfaction can be had. When people make irrational decisions it is difficult to

consider market outcomes efficient. Moreover, many goods are "positional" in nature so that the purchase of them produces less satisfaction than expected when others also purchase them.

4. What are some alternative theories of the economic role of government?

According to the market failure theory of government, everything that markets can do efficiently should be left to them. Government should intervene only in order to correct market failures, whether they be narrowly or broadly defined. Another theory maintains that many government policies are not efforts to correct market failure but, instead, result from *political rent seeking*. Rent seeking technically refers to the process of seeking payments in excess of opportunity costs, but it usually means using power in some form to extract profits from the government or a corporation.

KEY TERMS

Property rights	Market failure
Rationality	Externalities
Ockham's razor	Public goods
Full rationality	Monopoly
Socially irrational consumption	Public choice theory
Market performance	Economic rent
	Political rent seeking

CASE FOR DISCUSSION

The Noodle Cartel

In China's remote western section the staple food is noodles not rice. "There have always been enough noodles, though. Noodles served in a scorching, spicy broth in the winter or al dente in the summer, tasty, warm, filling and cheap. Lanzhou beef noodles call for chives, red peppers, beef bouillon and noodles, a recipe that to the unschooled seems

mundane but one that many locals consider a subtle art.”

In February (2006), as noodle consumers in the city of Lanzhou arrived for their morning ration at the approximately 70 noodle shops in the center of town, an unpleasant surprise awaited them: The price of a bowl of Lanzhou pulled beef noodles was going up. Once only 27 cents for a large bowl, the price would now be about 31. In this particular town, the neighborhood, “is like a carcass left over from the old socialist economy: decrepit state-owned factories, many of them now closed, and vast numbers of laid-off workers, many scraping by on minimal welfare benefits. Most of the Chinese people “still live on margins so slender that a bump of 4 cents for a bowl of noodles constitutes real money.” Needless to say, “a full-blown noodle controversy arose, with price fixing by a noodle cartel being alleged. Local officials promised to investigate.”

Many shop owners said it was merely market forces driving up prices due to the rising cost of labor. “But was it really just the market? The market has no barriers to free entry so the number of noodle shops in the city has risen, increasing supply and leading one to expect a decline in prices due to competition. Similar events had occurred in a nearby town, Anning.

Shortly after a price increase in Anning, “a newspaper broke a major scandal: The Beef Noodle Price Hike, a Price-Fixing Scheme.” The paper documented a coordinated pricing scheme, led by a small group of noodle shop owners, who had made threats against any owners who resisted.” One owner confirmed the pressure tactics: “They came over and handed this to me,” he said, showing a two-page agreement that called for every shop owner to raise prices. “They said, ‘If you don’t raise your prices, we’re going to tear down your shop sign.’”

The same owner also commented that noodle shops do indeed face a problem of too much supply and too little labor: “Of course, what they are saying is true. We are not making a lot of money. And it is hard work.” None of the alleged ringleaders are con-

fessing to any wrongdoing. And, nearly all of the noodle shops in much of the city are still charging the higher price. An exception is Master Zhang’s Beef Noodle, a dingy storefront in the Anning District that opened in late December. The owner has struggled to make a living since he lost a factory job more than a decade ago. He entered the noodle business. When he got a visit from the noodle cartel, his wife signed an oath to honor the price increase. But after seeing the newspaper coverage, he cut his price to the normal rate. “I had a lot fewer customers after I raised the prices,” to make matters worse, a new shop just opened around the corner so a price cut was necessary to meet the competition and to keep up sales. So, like owners of every other Lanzhou noodle shop, this one hopes to succeed by giving Lanzhou residents what they most seem to want—good noodles at a fair price. “It’s all going to depend on the taste of the noodles,” he said. “If people like the taste, they will slowly start coming.”

Source: Excerpted from Jim Yardley, Noodle prices rise along with Chinese tempers, *New York Times*, 3/4/2006.

QUESTIONS

1. What would Adam Smith have to say about developments in Lanzhou?
2. What pressures will tend to break up this cartel?
3. How could noodle producers use political power to solve the oversupply problem?

Medicare Plan D Drug Insurance Program

In 2005, President Bush established the Medicare Plan D drug insurance program. The purpose was to reduce the cost of drugs to the elderly who had been complaining bitterly about exorbitant and ever-rising drug costs. Many elderly had resorted to purchasing drugs in Canada and illegally bringing them back to the U.S., or buying them from Canada over the

internet—also illegal. Drugs are cheaper in Canada because the government runs the health care system there and uses its purchasing power to get lower prices from the drug companies.

Common sense would dictate that any drug provisioning system be incorporated into the existing Medicare system where the government would negotiate prices with the drug companies. Due to the fact that Medicare is very cost efficient it would also keep administrative costs to a minimum. Instead, Bush responded to the pressure to do something about drug costs by setting up Plan D—a system where private “for profit” insurance companies would sell drug insurance policies to the elderly. It was bad enough that this program was confusing and more costly to administer, but the legislation that created Plan D specifically prohibited the government from negotiating with drug companies for better prices. Moreover, it has been estimated that the drug companies will pocket an extra \$2 billion each year because they will no longer have to give rebates on drugs purchased by the government for the elderly poor. The projected 10 year cost to the government of the program is projected to be about \$700 billion.

What a great deal: more costly administration and more costly drugs. The bounty of free enterprise, American style, a cynic might say. Unfortunately, truth behind the story would make even the most cynical sad. Paul Krugman, a Princeton economist, tells the tale:

Consider the career trajectories of the two men who played the most important role in putting together the Medicare (Plan D) legislation.

Thomas Scully was a hospital industry lobbyist before President Bush appointed him to run Medicare. In that job, he famously threatened to fire his chief actuary if he told Congress the truth about cost projections for the Medicare drug program.

Mr. Scully had good reasons not to let anything stand in the way of the drug bill. He had received a

special ethics waiver from his superiors allowing him to negotiate future jobs with lobbying and investment firms—firms that obviously had a strong financial stake in the form of the bill—while he was still in public office. He left public service, if that’s what it was, almost as soon as the bill was passed, and is once again a lobbyist, now for the drug companies.

Meanwhile, Representative Billy Tauzin, the bills’ point man on Capitol Hill, quickly left Congress once the bill was passed to become president of Pharmaceutical Research and Manufacturers of America, the powerful drug industry lobby.

Surely both men’s decisions were influenced by the desire to please their potential future employers. And that undue influence explains why the drug legislation is such a mess.

There may be some hope for reform. The greedy Republicans want to have it all their way in the “revolving door” scam. Tom DeLay, driven out of his powerful position the House due to his own unethical relations with lobbyists, had required of all corporations and other interests that they hire only Republicans so do their lobbying. Now that ought to make the Democrats mad!

QUESTIONS

1. Cronyism and corruption are common in Washington and the “Bushies” have surely raised it to an art form. Do you think that such corruption is inevitable? Can we have better government though reforms to reduce the influence of lobbyists and the “revolving door” between the government and the public sector?
2. How much of a role do you think campaign contributions from big Pharmaceutical companies might have had in this fiasco?
3. Why are there no such scandals in social democracies such as Sweden, Denmark, Norway, Finland, Iceland or New Zealand? Does it mean that

government is not inherently corrupt? Why so much corruption in the United States? Is the United States meaningfully democratic?

END NOTES

1. Thorstein Veblen, "In Dispraise of Economists," in *The Portable Veblen*, ed. Max Lerner (New York: Viking Press, 1958), 232–233.
2. Economist Robert H. Frank of Cornell University argues that some emotional behavior associated with feelings such as rage, guilt, or shame can be understood in terms of economics even though they are not "rational" in the sense of serving the immediate practical goals of the individual on a situation-by-situation basis. As an example, he cites the case of a person who, because of feelings of guilt or pride, would not steal from her employer even if certain not to be detected. A person known to have such "irrational" feelings would have an advantage in seeking promotion to a position of trust in the firm, and the presence of many such individuals would make the firm as a whole function more smoothly. In this and other cases cited by Frank, the expectation that people will respond to situations in emotional rather than in narrowly rational terms facilitates economic coordination. See *Passions within Reason* (New York: W. W. Norton, 1989) and "Beyond Self-Interest," *Challenge* (March–April 1989), 4–13.
3. Ludwig von Mises, *Human Action*, 3rd ed. (Chicago: Henry Regnery, 1966), 21.
4. For a representative collection of papers on the theory of rent seeking, see James M. Buchanan, Robert D. Tollison, and Gordon Tullock, eds., *Toward a Theory of the Rent-Seeking Society* (College Station: Texas A&M Press, 1980).

