ECONOMICS of the PUBLIC SECTOR

THIRD EDITION

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1 The Public Sector in a Mixed Economy

FOCUS QUESTIONS

1 What are the central questions with which the economics of the public sector is concerned?

2 What are the differing views concerning the economic role of government? How have they changed over the years and what has given rise to those changes?

3 How do economists go about studying the economics of the public sector?

4 What are the principal sources of disagreement among economists about appropriate policies for government to pursue?

From birth to death, our lives are affected in countless ways by the activities of government.

- We are born in hospitals that are publicly subsidized, if not publicly owned. Our arrival is then publicly recorded (on our birth certificate), entitling us to a set of privileges and obligations as American citizens.
- Most of us (almost 90 percent) attend public schools.
- Virtually all of us, at some time in our lives, receive money from the government, through programs such as student loans, unemployment or disability payments, antipoverty programs, social security, and Medicare.

- All of us pay taxes to the government—sales taxes, taxes on such commodities as gasoline, liquor, telephones, air travel, perfumes, and tires, property taxes, income taxes, and social security (payroll) taxes.
- More than a sixth of the work force is employed by the government, and for the rest, the government has a significant impact on employment conditions.
- In many areas of production—be it cars, sneakers, or computers—profits and employment opportunities are greatly affected by whether the government allows foreign competitors to sell goods in America without a tariff or quota.
- What we eat and drink, where we can live and what kinds of houses we can live in are all regulated by government agencies.
- We travel on public roads and publicly subsidized railroads. In most communities our garbage is collected and our sewage is disposed of by a public agency; in some communities the water we drink is provided by public water companies.
- Our legal structure provides a framework within which individuals and firms can sign contracts with one another. When there is a dispute between two individuals, the two may turn to the courts to adjudicate the dispute.
- Without environmental regulations, many of our major cities would be choked with pollution, the water of our lakes and rivers would be undrinkable, and we could neither swim nor fish in them.
- Without safety regulations, such as those requiring seat belts, highway fatalities would be even higher than they are.

THE ECONOMIC ROLE OF GOVERNMENT

Why does government engage in some economic activities and not others? Why has the scope of its activities changed over the past hundred years, and why does it have different roles in different countries? Does the government do too much? Does it do well what it attempts to do? Could it perform its economic role more efficiently? These are the central questions with which the economics of the public sector is concerned. To address them, we will first consider the economic role of government in modern economies, how ideas about the role of government have emerged, and the changing role of government in the twentieth century.

THE MIXED ECONOMY OF THE UNITED STATES

The United States has what is called a **mixed economy:** while many economic activities are undertaken by private firms, others are undertaken by the government. In addition, the government alters the behavior of the private sector through a variety of regulations, taxes, and subsidies.

By contrast, in the former Soviet Union, most economic activities were undertaken by the central government. Today, only North Korea and Cuba give the government such primacy. In many Western European economies, national governments have had a larger role in economic activity than in the United States. For instance, the government of France once participated in a range of economic activities, including the production of cars, electricity, and airplanes. Since the 1980s, however, **privatization**—converting government enterprises into private firms—has been the trend in Europe, although the economic role of government generally remains larger there than in the United States.[1]

The origins of the mixed economy of the United States lie in the origins of the country itself. In formulating the United States Constitution, the founders of the republic had to address explicitly key issues concerning the economic role of the new government. The Constitution assigned the federal government certain responsibilities, such as running the post office and printing money. It provided the foundations for what we now call "intellectual property rights" by giving the government the right to grant patents and issue copyrights to encourage innovation and creativity. It gave the federal government certain rights to levy taxes—though those did not include taxes on exports, income, or net wealth. Most importantly, for the future evolution of the country, under Article 1, Section 8, Clause 3, it gave the federal government the right to regulate interstate commerce. Since so much of economic activity involves goods produced in one state and sold in another, this clause, interpreted broadly, has been used to justify much of the federal government's regulatory activities.

Throughout the history of the United States, the economic role of the government has undergone important changes. For instance, one hundred years ago some highways and all railroads were private; today, there are no major private roads and most interstate railroad passenger travel is by Amtrak, a publicly established and subsidized enterprise. It is because mixed economies constantly face the problem of defining the appropriate boundaries between government and private activities that the study of the economics of the public sector in these countries is both so important and so interesting.

DIFFERENT PERSPECTIVES ON THE ROLE OF GOVERNMENT

To understand better contemporary perspectives on the economic role of government, it can be helpful to consider the different perspectives that have evolved in the past.[2] Some of the central ideas of the eighteenth and nineteenth centuries have been critical to economic history in the twentieth century, and continue to be important today.

One dominant view in the eighteenth century, which was particularly persuasive among French economists, was that the government should actively promote trade and industry. Advocates of this view were called **mercantilists.** It was partly in response to the mercantilists that Adam Smith (who is often viewed as the founder of modern economics) wrote *The Wealth of Nations* (1776), in which he argued for a limited role for govern-

[1] For more on the case of France, see H. Dumez and A. Jeunemaitre, "Privatization in France: 1983–1993," in *Industrial Privatization in Western Europe: Pressures, Problems, and Paradoxes*, ed. Vincent Wright (London and New York: Pinter Publishers, 1994), pp. 83–105, 194.

[2] See A. O. Hirschman, *Shifting Involvements: Private Interest and Public Action* (Princeton, N.J.: Princeton University Press, 1982). Hirschman has put forth an interesting theory attempting to explain the constant changes in views on the appropriate role of the government.

ment. Smith attempted to show how competition and the profit motive would lead individuals—in pursuing their own private interests—to serve the public interest. The profit motive would lead individuals, competing against one another, to supply the goods other individuals wanted. Only firms that produced what was wanted and at as low a price as possible would survive. Smith argued that the economy was led, as if by an invisible hand, to produce what was desired and in the best possible way.

Adam Smith's ideas had a powerful influence both on governments and on economists. Many of the most important nineteenth-century economists, such as the Englishmen John Stuart Mill and Nassau Senior, promulgated the doctrine known as **laissez faire.** In their view, the government should leave the private sector alone; it should not attempt to regulate or control private enterprise. Unfettered competition would serve the best interests of society.

Not all nineteenth-century social thinkers were persuaded by Smith's reasoning. The grave inequalities in income that they saw around them, the squalor in which much of the working classes lived, and the unemployment that workers frequently faced concerned them. While nineteenth-century writers like Charles Dickens attempted to portray the plight of the working classes in novels, social theorists, such as Karl Marx, Sismondi, and Robert Owen, developed theories that not only attempted to explain what they saw but also suggested ways in which society might be reorganized. Many attributed the evils in society to the private ownership of capital; what Adam Smith saw as a virtue they saw as a vice. Marx, if not the deepest of the social thinkers, was certainly the most influential among those who advocated a greater role for the state in controlling the means of production. Still others, such as Owen, saw the solution neither in the state nor in private enterprise, but in smaller groups of individuals getting together and acting cooperatively for their mutual interest.

On one hand, private ownership of capital and unfettered free enterprise, on the other, government control of the means of production—these contrary principles were to become a driving force for international politics and economics in the twentieth century, embodied in the Cold War. Today, the countries of the former Soviet Union and the Eastern bloc are in the midst of a monumental transition to market systems—a fundamental transformation of government's role in those economies. In the United States, the economic role of government has also changed, but the changes have arisen more gradually, in response to economic events throughout the century. There is now widespread agreement that markets and private enterprises are at the heart of a successful economy, but that government plays an important role as a complement to the market. The precise nature of that role remains, however, a source of contention.

AN IMPETUS FOR GOVERNMENT ACTION: MARKET FAILURES

The Great Depression, in which the unemployment rate reached 25 percent and national output fell by about a third from its peak in 1929, was the event that most fundamentally changed attitudes toward government. There was a (justified) widespread view that markets had failed in an important way, and there were enormous pressures for government to do something about this market failure. The great English economist John Maynard

Keynes, writing in the midst of the Great Depression, argued forcefully that the government not only should do something about economic slumps, but could. The belief that governments should and could stabilize the level of economic activity was eventually embedded in legislation in the United States, in the **Full Employment Act of 1946,** which at the same time established the Council of Economic Advisers, to advise the President on how best to accomplish these objectives.

The economy's seeming inability to provide jobs was not the only problem which drew attention. The depression brought to the fore problems that, in less severe form, had been there for a long time. Many individuals lost virtually all of their money when banks failed and the stock market crashed. Many elderly people were pushed into dire poverty. Many farmers found that the prices they received for their products were so low that they could not make their mortgage payments, and defaults became commonplace.

In response to the depression, the federal government not only took a more active role in attempting to stabilize the level of economic activity, but also passed legislation designed to alleviate many of the specific problems: unemployment insurance, social security, federal insurance for depositors, federal programs aimed at supporting agricultural prices, and a host of other programs aimed at a variety of social and economic objectives. Together, these programs are referred to as the New Deal.

After World War II, the country experienced an unprecedented level of prosperity. But it became clear that not everyone was enjoying the fruits of that prosperity. Many individuals, by the condition of their birth, seemed to be condemned to a life of squalor and poverty; they received inadequate education, and their prospects for obtaining good jobs were bleak.

These inequities provided the impetus for many of the government programs that were enacted in the 1960s, when President Lyndon B. Johnson declared his "War on Poverty." While some programs were aimed at providing a "safety net" for the needy—for instance, programs to provide food and medical care to the poor—others, such as job retraining programs and Head Start, which provides preschool education for underprivileged children, were directed at improving the economic opportunities of the disadvantaged.

Could government actions alleviate these problems? How was success to be gauged? The fact that a particular program did not live up to the hopes of its most enthusiastic supporters did not, of course, mean that it was a failure. Medicaid, which provides medical assistance to the indigent, was successful in narrowing the differences in access to medical care between the poor and the rich, but the gap in life expectancy between these two groups was not eliminated. Medicare, which provides medical care for the elderly, relieved the elderly and their families of much of the anxiety concerning the financing of their medical expenses, but it left in its wake a national problem of rapidly increasing medical expenditures. While the social security program provided the aged with an unprecedented level of economic security, it has run into financial problems that cast doubt on whether future generations will be able to enjoy the same benefits.

RENT CONTROL: A CASE STUDY IN GOVERNMENT FAILURE

In the aftermath of World War II and the Great Depression, a housing shortage developed in New York City. The failure to expand supply to keep pace with demand led to an increase in prices, as any economist would have predicted. The political response did not, however, take into account these underlying forces. When lawmakers passed rent control legislation, they failed to anticipate its full consequences, overlooking the fact that apartments were supplied by those who could turn elsewhere for better investment opportunities if the return to investments in housing fell. Advocates of rent control thus failed to anticipate that the supply of rental housing would decrease, and that the quality of services provided by landlords would deteriorate. Though the government attempted to control this deterioration by imposing standards on landlords, these attempts were only partially successful, and indeed exacerbated the decline in the supply of rental housing. There was little the city government could do to stop this, short of repealing the rent control statutes for new housing, which it eventually did, though numerous older buildings remain under rent control. Many more remain under "rent stabilization" legislation, which controls the rate of increase in rents.

Thirty years after the War on Poverty began, poverty has not been eradicated from America. Both critics and supporters of the government's programs agree that good intentions are not enough: many programs designed to alleviate the perceived inadequacies of the market economy have had effects markedly different from those their proponents anticipated. Urban renewal programs designed to improve the quality of life in inner cities have in some instances resulted in the replacement of low-quality housing with high-quality housing that poor people cannot afford, thus forcing them to live in even worse conditions. Homelessness has become an increasing concern. Though many programs designed to promote integration of public schools have succeeded, because of residential segregation, public schools are no better integrated than private schools. A disproportionate share of the benefits of farm programs has accrued to large farms; government programs have not enabled many of the small farms to survive. Allegations that government welfare programs have contributed to the breakup of families and to the development of an attitude of dependency provided part of the rationale for the massive overhaul of the welfare system in 1996.

Supporters of continued government efforts claim that critics exaggerate the failures of government programs. They argue that the lesson to be learned is not that the government should abandon its efforts to solve the major social and economic problems facing the nation, but that greater care must be taken in the appropriate design of government programs.

GOVERNMENT FAILURES

While market failures led to the institution of major government programs in the 1930s and 1960s, in the 1970s and 1980s the shortcomings of many such programs led economists and political scientists to investigate government failure. Under what conditions would government programs not work well? Were the failures of government programs accidents, or did they follow predictably from the inherent nature of governmental activity? Are there lessons to be learned for the design of programs in the future?

There are four major reasons for the systematic failures of the government to achieve its stated objectives: the government's limited information,

its limited control over private responses to its actions, its limited control over the bureaucracy, and the limitations imposed by political processes.

1 *Limited information.* The consequences of many actions are complicated and difficult to foresee. The government did not anticipate the precipitous increase in expenditures on medical care by the aged that followed the adoption of the Medicare program. Often, government does not have the information required to do what it would like to do. For instance, there may be widespread agreement that the government should help the disabled, but that those who are capable of working should not get a free ride at public expense. However, limited information on the part of government may preclude it from distinguishing between those who are truly disabled and those who are pretending.

2 *Limited control over private market responses.* The government has only limited control over the consequences of its actions. For example, we noted earlier that the government failed to anticipate the rapid increase in health care expenditures after the adoption of the Medicare program. One reason for this is that government did not directly control the total level of expenditures. Even when it set prices—such as for hospital care and doctors' services—it did not control utilization rates. Under the fee-for-service system, doctors and patients determine how much and what kinds of services are provided.

3 *Limited control over bureaucracy.* Congress and state and local legislatures design legislation, but delegate implementation to government agencies. An agency may spend considerable time writing detailed regulations; how they are drafted is critical in determining the effects of the legislation. The agency may also be responsible for ensuring that the regulations are enforced. For instance, when Congress passed the Environmental Protection Act, its intent was clear—to ensure that industries did not pollute the environment. But the technical details—for instance, determining the admissible level of pollutants for different industries—were left to the Environmental Protection Agency (EPA). During the first two years of the Reagan administration, there were numerous controversies over whether the EPA

had been lax in promulgating and enforcing regulations, thus subverting the intentions of Congress.

In many cases, the failure to carry out the intent of Congress is not deliberate but rather a result of ambiguities in Congress's intentions. In other cases, problems arise because bureaucrats lack appropriate incentives to carry out the will of Congress. For instance, in terms of future job prospects, those in charge of regulating an industry may gain more from pleasing members of the industry than from pursuing consumer interests.[3]

4 *Limitations imposed by political processes.* Even if government were perfectly informed about the consequences of all possible actions, the political process through which decisions about actions are made would raise additional difficulties. For instance, representatives have incentives to act for the benefit of special interest groups, if only to raise funds to finance increasingly expensive campaigns. The electorate often has a penchant for looking for simple solutions to complex problems; their understanding of the complex determinants of poverty, for instance, may be limited.

Critics of government intervention in the economy, such as Milton Friedman, formerly of the University of Chicago, now at Stanford University, believe the four sources of government failure are sufficiently important that the government should be restrained from attempting to remedy alleged or demonstrable deficiencies in markets.

ACHIEVING BALANCE BETWEEN THE PUBLIC AND PRIVATE SECTORS

Markets often fail, but governments often do not succeed in correcting the failures of the market. Today economists, in ascertaining the appropriate role of government, attempt to incorporate an understanding of the limitations of both government and markets. There is agreement that there are many problems which the market does not adequately address; more generally, the market is fully efficient only under fairly restrictive assumptions (see Chapters 3 and 4).

But the recognition of the limitations of government implies that government should direct its energies only at those areas in which market failures are most significant *and* where there is evidence that government intervention can make a significant difference. Among American economists today, the dominant view is that *limited* government intervention could alleviate (but not solve) the worst problems: thus, the government should take an active role in maintaining full employment and alleviating the worst aspects of poverty, but private enterprise should play the central role in the economy. The prevalent view attempts to find ways for government and markets to work together, each strengthening the other. For instance, governments rely more heavily on markets and marketlike mechanisms.

But controversy remains over how limited or how active the government should be, with views differing according to how serious one considers the failures of the market to be and how effective one believes government is in remedying them. Economists such as Michael Boskin and John Taylor of Stanford University (who served on the Council of Economic Advisers during the Bush administration) and Martin Feldstein of Harvard University (who served as chairman of President Reagan's Council of Economic Advisers) advocate a more limited role. On the other hand, economists who have served on the Council of Economic Advisers under Democratic administrations, such as Alan Blinder of Princeton, Laura D'Andrea Tyson of Berkeley, and Charles Schultz of the Brookings Institution, advocate a more active role.

[3] This view has been particularly argued by George Stigler. See, for instance, his "Theory of Regulation," *Bell Journal*, spring 1971, pp. 3–21.

THE MIXED ECONOMY

- The United States is a mixed economy, in which both the public and private sectors play an important role.
- The roles played by government—and views concerning what they should be—have changed markedly over time.
- An important motivation for government's undertaking certain activities is actual or perceived failures of the market.
- There has been increasing recognition of the limitations of government, of "government failures" as well as market failures, which arise from

  Limited information

  Limited control over private market responses

  Limited control over the bureaucracy

  Limitations imposed by the political process

THE EMERGING CONSENSUS

As important as they are, the differences in views of government's economic role are far smaller than the differences a hundred years ago, when socialists advocated a dominant role for government and laissez-faire economists advocated no role for government at all. Contemporary rethinking of the role of government has been reflected in two initiatives, **deregulation** and privatization. The first, begun under President Carter, reduced the role of government in regulating the economy. For instance, the government stopped regulating prices for airlines and long-distance trucking. While Presidents Bush and Reagan criticized the regulatory burden imposed on business by government, regulations continue to grow, partly in response to the growing recognition of market failures, such as those associated with the environment and the near collapse of the banking system. The Democratic Congress, worried that a recalcitrant administration would refuse to implement the laws adequately, increasingly wrote legislation reducing the regulatory discretion of the executive branch. The Clinton administration sought a balance: while recognizing the need for regulation, it also recognized that many regulations were overly burdensome, their benefits less than their costs, and that there might be more effective ways of obtaining the desired objectives. Major reforms were instituted in such areas as banking, telecommunications, and electricity. In some of these areas, such as telecommunications, it became clear that the scope for competition was far larger than had previously been thought. Parallel reforms occurred throughout the world. In some cases, the enthusiasm for deregulation seemed to be carried too far. The economic crisis in East Asia in 1997—as the savings and loan debacle in the United States, which cost taxpayers billions and billions of dollars, had done a decade earlier—brought home the importance of financial market regulation.

The second initiative, privatization, sought to turn over to the private sector activities previously undertaken by government. The privatization movement was much stronger in Europe, where telephones, railroads, airlines, and public utilities were all privatized. In the United States, since government ran few enterprises, there was much less scope for privatization. Perhaps the most important, and controversial, privatization was that of the United States Enrichment Corporation, the government agency responsible for enriching uranium. (Low-enriched uranium is used in nuclear power plants; highly enriched uranium is used to make atomic bombs. The same process and plants are used to make both.) The privatization, which was approved in 1997 and completed in 1998, raised profound implications for U.S. national security. For instance, it complicated subsequent nuclear disarmament discussions because of conflicts of interest between the privatized firm and national security. To many, this privatization appeared to be a case of the ideology of privatization gone amok—government had lost the sense of balance between the private and public sector required to make a mixed economy work.

WHAT OR WHO IS THE GOVERNMENT?

Throughout this chapter we have referred to "the government." But what precisely is the government? We all have some idea about what institutions are included: Congress and state and local legislatures, the President and state governors and mayors, the courts, and a host of the alphabet-soup agencies, such as the FTC (Federal Trade Commission) and the IRS (Internal Revenue Service). The United States has a *federal* governmental structure—that is, governmental activities take place at several levels: federal, state, and local. The federal government is responsible for national defense, the post office, the printing of money, and the regulation of interstate and international commerce. On the other hand, the states and localities have traditionally been responsible for education, police and fire protection, and the provision of other local services, such as libraries, sewage, and garbage collection. Though the Constitution asserts that all rights not explicitly delegated to the federal government reside with the states and the people, the Constitution has proven to be a sufficiently flexible document that the exact boundaries are ambiguous. While education is primarily a local responsibility, the federal government has become increasingly involved in its support.

The constitutional provision giving the federal government the right to control interstate business has provided the basis for federal regulation of almost all businesses, since almost all businesses are involved, in one way or another, in interstate commerce.

At the local level, there are frequently several separate governmental structures, each having the power to levy taxes and the responsibility for administering certain programs. In addition to townships and counties, there are school districts, sewage districts, and library districts. In 1992, there were 85,000 such governmental entities in the United States, down from 155,000 in 1942.[4]

The boundaries between what are public institutions and what are not are often unclear. When the government sets up a corporation, a public enterprise, is that enterprise part of the "government"? For instance, Amtrak, which was set up by the federal government to run the nation's interstate passenger railway services, receives subsidies from the federal government, but otherwise it is run like a private enterprise. Matters become even more complicated when the government is a major stockholder in a company, but not the only stockholder. For instance, prior to 1987 the British government owned up to 50 percent of the shares of British Petroleum.

What distinguishes those institutions that we have labeled as "government" from private institutions? There are two important differences. First, in a democracy the individuals who are responsible for running public institutions are elected, or are appointed by someone who is elected (or appointed by someone who is appointed by someone who is elected . . .). The "legitimacy" of the person holding the position is derived directly or indirectly from the electoral process. In contrast, those who are responsible for administering General Motors are chosen by the shareholders of General Motors, while those who are responsible for administering private foundations (such as the Rockefeller and Ford foundations) are chosen by a self-perpetuating board of trustees.

Secondly, the government is endowed with certain rights of compulsion that private institutions do not have. The government has the right to force you to pay taxes (and if you fail, it can confiscate your property and/or imprison you). The government has the right to seize your property for public use provided it pays you just compensation (this is called the right of eminent domain).

Not only do private institutions and individuals lack these rights, but the government actually restricts the rights of individuals to give to others similar powers of compulsion. For instance, the government does not allow you to sell yourself into slavery.

In contrast, all private exchanges are voluntary. I may need your property to construct an office building, but I cannot force you to sell it. I may think that some deal is advantageous to both of us, but I cannot force you to engage in the deal.

Government is thus fundamentally different from other institutions in our society. It has strengths—its ability to use compulsion means that it may

[4] *Statistical Abstract of the United States, 1997,* Table 474.

be able to do some things that private institutions cannot do. But it also has weaknesses, as we shall discuss in greater detail in later chapters. Understanding these strengths and weaknesses is an essential part of assessing what should be the role of the government in our mixed economy, and of determining how government can most effectively fulfill that role.

THINKING LIKE A PUBLIC SECTOR ECONOMIST

Economists study *scarcity*—how societies make choices concerning the use of limited resources—and they inquire into four central economic questions:

What is to be produced?
How is it to be produced?
For whom is it to be produced?
How are these decisions made?

Like all economists, public sector economists are concerned with these fundamental questions of choice. But their focus is the choices made within the public sector, the role of the government, and the ways government affects the decisions made in the private sector.

1 *What is to be produced?* How much of our resources should be devoted to the production of public goods, such as defense and highways, and how much of our resources should we devote to the production of private goods, such as cars, TV sets, and video games? We often depict this choice in terms of the **production possibilities schedule,** which traces the various amounts of two goods that can be produced efficiently with a given technology and resources. In our case, the two goods are public goods and private goods. Figure 1.1 gives the various possible combinations of public goods and private goods that society can produce.

Society can spend more on public goods, such as national defense, but only by reducing what is available for private consumption. Thus, in moving from *G* to *E* along the production possibilities schedule, public goods are increased, but private goods are decreased. A point such as *I*, which is below the production possibilities schedule, is said to be *inefficient:* society could get more public goods and more private goods. A point such as *N*, which is above the production possibilities schedule, is said to be *infeasible:* it is not possible, given current resources and technology, to have at the same time that quantity of public goods and that quantity of private goods.

2 *How should it be produced?* Under this question are subsumed such decisions as whether to produce privately or publicly, to use more capital and less labor or vice versa, or to employ energy-efficient technologies.

Other issues are also subsumed under this second question. Government policy affects how firms produce the goods they produce: environmental protection legislation restricts pollution by firms; payroll taxes that

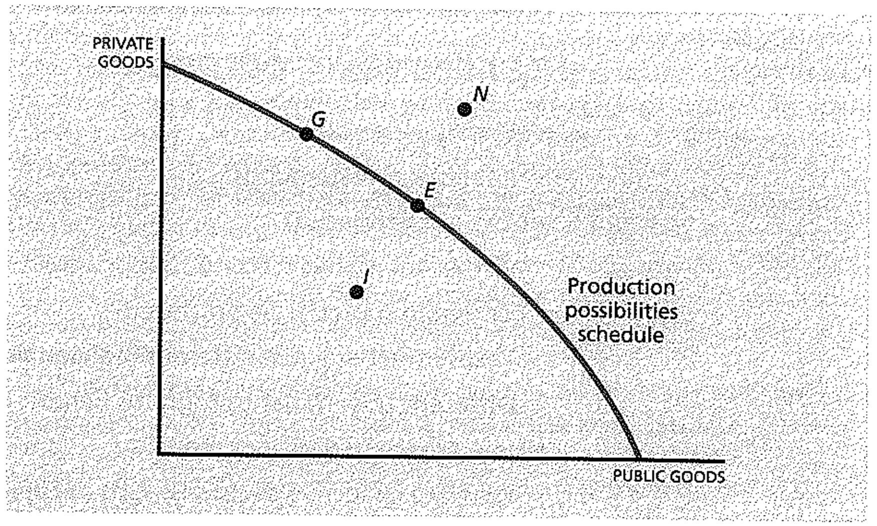

FIGURE 1.1 **Society's Production Possibilities Schedule** This depicts the maximum level of private goods that society can enjoy for each level of public goods. If society wishes to enjoy more public goods, it has to give up some private goods.

firms must pay on the workers they employ may make labor more expensive and thus discourage firms from using production techniques that require much labor.

3 *For whom is it to be produced: the question of distribution.* Government decisions about taxation or welfare programs affect how much income different individuals have to spend. Similarly, the government must decide what public goods to produce. Some groups will benefit from the production of one public good, others from another.

4 *How are choices made?* In the public sector, choices are made *collectively*. Collective choices are the choices that a society must make together—those, for instance, concerning its legal structure, the size of its military establishment, its expenditures on other public goods, etc. Texts in other fields of economics focus on how individuals make their decisions concerning consumption, how firms make their decisions concerning production, and how the price system works to ensure that the goods demanded by consumers are produced by firms. Collective decision-making is far more complicated, for individuals often disagree about what is desirable. After all, just as some individuals like chocolate ice cream and some like vanilla ice cream, some individuals get greater enjoyment out of public parks than do others. But while with private goods the individual who likes chocolate ice cream can simply buy chocolate ice cream and the individual who likes vanilla ice cream can buy vanilla ice cream, with public goods we must make a decision together. Anyone who has lived in a family knows something about the diffi-

KEY ECONOMIC QUESTIONS

- What is produced?
  Public or private goods?
- How is it produced?
  Within the public sector or the private?
- For whom should it be produced?
  Taxes affect amount different individuals have to spend.
  Different government programs benefit different groups.
- How are these decisions made?
  How are collective decisions, such as those concerning the supply of publicly provided goods and taxes, made?

culties of collective decision-making (should we go to the movies or go bowling?). Public decision-making is far more complex. One of the objectives of public sector economics is to study how collective choices (or, as they are sometimes called, social choices) are made in democratic societies.

The recognition of this divergence of views is important in itself. It should make us wary of expressions such as "It is in the public interest" or "We are concerned with the good of society." Different policies may be good for different individuals. One should carefully specify who will benefit from and who will be harmed by a given policy.

ANALYZING THE PUBLIC SECTOR

In addressing each of the fundamental economic questions, there are four general stages of analysis: *describing* what the government does, *analyzing* the consequences of government action, *evaluating* alternative policies, and *interpreting* the political forces which underlie the decisions government makes.

1 *Knowing what activities the public sector engages in and how these are organized.* The complexity of the government's operations is so great that it is difficult to assess what its total expenditures are and what they go for. The budget of the federal government alone is a document that is more than 1000 pages, and within the budget, activities are not easily compartmentalized. Some activities are undertaken in several different departments or agencies. Research, for instance, is funded through the Department of Defense, the National Science Foundation, the National Institutes of Health, and the National Aeronautics and Space Administration, among others. Also, a department such as the Department of Health and Human Services undertakes a myriad of activities, some of which are only vaguely related to others.

Further, as was already noted, taxes and expenditures occur at several different levels: in some places, individuals pay not only federal and state taxes but separate taxes to their school district, their township, their county, the jurisdictions that provide their water and sewage, and their public library.

2 *Understanding and, insofar as possible, anticipating the full consequences of these governmental activities.* When a tax is imposed on a corporation, who bears the tax? At least part of the tax will be passed on to consumers through higher prices, or on to employees as wages fall. What are the consequences of the government's changing the age of retirement for social security? Of a tax credit or deduction for college tuition? Will universities respond by raising tuition so a college education will be hardly more affordable than before?

The consequences of government policies are often too complicated to predict accurately, and even after a policy has been introduced, there is often controversy about what its effects are. This book attempts not only to present all sides of some of the major controversies, but also to explain why such disagreements have persisted, and why they are difficult to resolve.

3 *Evaluating alternative policies.* To do this, we need not only to know the consequences of alternative policies, but to develop criteria for evaluation. First we must understand the objectives of government policy, and then we must ascertain the extent to which a particular proposal meets (or is likely to meet) those criteria.

Many government programs have multiple objectives. For example, the United States has a program to clean up hazardous waste sites, not only to protect health, but also because such sites may be an impediment to economic development. Some policies are better at achieving one objective, others may be better at achieving others. We need a framework for decision making in such situations: How do we think systematically about the trade-offs in evaluating alternative policies?

4 *Interpreting the political process.* Collective decisions, such as whether to subsidize farmers or to build a supercollider, or how much to spend on education, get made through political processes. How can we explain which alternatives are chosen? Economists identify the various groups that benefit

ANALYZING THE PUBLIC SECTOR

- Knowing what activities the public sector engages in and how they are organized
- Understanding and anticipating the full consequences of these government activities
- Evaluating alternative policies
- Interpreting the political process

or lose from a government program and analyze the incentives facing these groups to attempt to mobilize the political process to promote outcomes favorable to them. They also ask how the structure of government—the "rules of the game" (the rules by which Congress works, whether the President can veto specific items within a bill or only the bill as a whole, and so on)—affects the outcomes. Then they try to push the question further: What determines how the rules of the game are chosen? In addressing these questions, economics and political science merge. Economists, however, bring a distinct perspective to the analysis: they emphasize the importance of economic incentives in the behavior of participants in the political process, and therefore of economic self-interest in determining outcomes.

ECONOMIC MODELS

A central part of the analysis of the economics of the public sector is understanding the consequences of different policies. Economists, however, sometimes disagree over what those consequences will be. The standard way that science has found to test competing theories is to carry out an experiment. With luck, the results of the experiment will bear out the predictions of only one theory, while discrediting others. But economists ordinarily do not have the possibility of doing controlled experiments. Instead, what economists can observe are the uncontrolled experiments that are being done for us in different markets and in different time periods; the historical evidence, unfortunately, often does not permit us to resolve disagreements about how the economy behaves.

To analyze the consequences of various policies, economists make use of what are called **models.** Just as a model airplane attempts to replicate the basic features of an airplane, so too a model of the economy attempts to depict the basic features of the economy. The actual economy is obviously extremely complex; to see what is going on, and to make predictions about what the consequences of a particular change in policy will be, one needs to separate out the essential from the inessential features. The features one decides to focus on in constructing a model depend on the questions one wishes to address. The fact that models make simplifying assumptions, that they leave out many details, is a virtue, not a vice. An analogy may be useful. In going on a long road trip, you may use several maps. One map, depicting the interstate highway system, provides an overview, enabling you to see how to get from the general area where you are to the general area where you wish to go. You then use detailed maps to see how to get from your point of origin to the expressway, and from the expressway to your final destination. If the interstate highway map showed every street and road in the country, it would be so large that its usefulness would be limited; the extra detail, though important for some purposes, would simply get in the way.

All analysis involves the use of models, of simple hypotheses concerning how individuals and firms will respond to various changes in government policy, and how these responses will interact to determine the total impact on the economy. Everybody—politicians as well as economists—uses models in discussing the effects of alternative policies. The difference is that economists attempt to be *explicit* about their assumptions, and to be sure that their assumptions are consistent with each other and with the available evidence.

NORMATIVE VERSUS POSITIVE ECONOMICS

In their analysis, economists also try to identify carefully the points in their analysis where values enter in. When they describe the economy, and construct models that predict either how the economy will change or the effects of different policies, they are engaged in what is called **positive economics.** When they attempt to evaluate alternative policies, weighing up the various benefits and costs, they are engaged in what is called **normative economics.** Positive economics is concerned with what "is," with describing how the economy functions; normative economics deals with what "should be," with making judgments about the desirability of various courses of action. Normative economics makes use of positive economics. We cannot make judgments about whether a policy is desirable unless we have a clear picture of its consequences. Good normative economics also tries to be explicit about precisely what values or objectives it is incorporating. It tries to couch its statements in the form "If these are your objectives . . . , then this is the best possible policy."

Consider the positive and normative aspects of a proposal to levy a $1-per-case tax on beer. Positive economics would describe the effect the tax would have on the price of beer—would the price rise by the full $1, or would producers absorb some of the price rise? On the basis of that analysis, economists would go on to predict how much beer consumption would be reduced, and who would be affected by the tax. They might find, for instance, that since lower-income individuals spend a larger fraction of their income on beer, these people would be affected proportionately more. Studies may have indicated that there is a systematic relationship between the quantity of beer consumed and road accidents. Using this information, economists might attempt to estimate how the beer tax would affect the number of accidents. These steps are all part of describing the full consequences of the tax, without making judgments. In the end, however, the question is, *should* the tax be adopted? This is a normative question, and in responding to it economists will weigh the benefits of the tax revenue, the distortions it induces in consumption, the inequities caused by the fact that proportionately more of the tax is borne by lower-income individuals, and the lives saved in road accidents. Furthermore, in evaluating the tax, economists will also want to compare it with other ways of raising similar amounts of revenue.

This example is typical of many such situations that we face in economic policy analysis. Through positive economic analysis, we identify some gainers (the roads are safer) and some losers (consumers who pay higher prices, producers who have lower profits, workers who lose their jobs). Normative economics is concerned with developing systematic procedures by which we can compare the gains of those who are better off with the losses of those who are worse off, to arrive at some overall judgment concerning the desirability of the proposal.

The distinction between normative statements and positive statements arises not only in discussions of particular policy changes but also in discussions of political processes. For instance, economists are concerned with describing the consequences of the majority voting system in the United States, where the proposal that gets the majority of votes wins. A major

MUSGRAVE'S THREE BRANCHES

Richard Musgrave, one of the great public finance economists of the twentieth century, thought of the government as having three economic branches. The first was the *stabilization* branch; its responsibility was to ensure that the economy remained at full employment with stable prices. How this was to be done was the principal subject of courses in macroeconomics. The second branch was the *allocation* branch. Here, the government intervened in how the economy allocated its resources. It did this directly, by buying goods like defense and education, and indirectly, through taxes and subsidies, which encouraged some activities and discouraged others. The third branch, the *distribution* branch, was concerned with how the goods that were produced by society were distributed among its members. This branch was concerned with issues like equity, and the trade-offs between equity and efficiency. The economics of the public sector focuses on the latter two branches, though the issues arise in other economic courses as well, such as those that deal with regulation.

Today, we recognize that government activities in all three branches are intertwined, and cannot be neatly compartmentalized in the way that Musgrave envisaged. Still, his "three branches" provides a convenient way of looking at the myriad of activities in which the government is engaged.

group of economists, led by Nobel Prize winner James Buchanan of George Mason University, has focused on *describing* the impact of political processes on social choices (hence, these economists are often referred to as the *social choice school*).

What will be the consequences—in terms of patterns or levels of taxation or expenditure, or the speed with which these change in response to changed circumstances—of requiring a two-thirds majority for increments in public expenditures exceeding a certain amount? What will be the consequences of increasing politicians' pay? Of restricting private contributions to political campaigns? Of imposing campaign spending limits, or a variety of other proposals for reforming the financing and conduct of political campaigns? Of public support for political campaigns? But economists are also concerned with *evaluating* alternative political processes. Are some political processes better, in some senses, than others? Are they more likely to produce consistent choices? Are some political processes more likely than others to yield equitable or efficient outcomes?

6 DISAGREEMENTS AMONG ECONOMISTS

Unanimity is rare in the central questions of policy debate. Some individuals think affirmative action or bilingual education is desirable, some do not. Some think that the income tax should be more progressive (i.e., that wealthy individuals should pay a higher percentage of their income in taxes, while poor individuals should pay a lower percentage); some believe it should be less progressive. Some agree with the recent decision to provide a tax credit for college tuition; some believe the money could have been spent in better ways, including ways that are more effective in providing education for the poor. Some believe that capital gains should be taxed like any other form of income; others think capital gains should receive preferential treatment. One of the central concerns of policy analysis is to identify these sources of disagreement.

Disagreements arise in two broad areas. Economists disagree about the consequences of policies (about the positive analysis) and about values (about the normative analysis).

DIFFERENCES IN VIEWS ON HOW THE ECONOMY BEHAVES

As we have seen, the first question economists ask in analyzing any policy is, what are its full consequences? In answering this question, they have to predict how households and firms will react. In 1696, England imposed a tax on windows, under the Act of Making Good the Deficiency of the Clipped Money. At the time windows were a luxury, and the houses of the wealthy had more windows than those of the poor. The window tax could be thought of as a rough substitute for an income tax, which the government did not have the authority to impose. The government should have asked, how much do people value light in their houses? One could imagine a policy debate among the king's advisers about what fraction of the population would value light so little that, rather than pay the tax, they simply would survive with windowless houses. At the time, there were no statistical studies upon which the king could rely. (In fact, many people did not value light highly, and so the government raised less revenue than anticipated, and more homes were darker than anticipated.)

Today, economists often disagree about the best model for describing the economy, and even after agreeing about the nature of the economy, they may disagree about quantitative magnitudes. For instance, they may agree that increased taxes discourage work, but disagree about the size of the effect. → A standard model that many economists employ assumes that there is perfect information and perfect competition—every firm and individual is so small that the prices it pays for what it buys and receives for what it sells do not depend at all on what it does. While most economists recognize that information and competition are both imperfect, some believe that the model of perfect information and perfect competition provides a close enough approximation to reality to be useful; others believe that—at least for some purposes, such as the health care market—the deviations are large, and that policy must be based on models which explicitly incorporate imperfect information and competition.

We cannot resolve these disagreements, but what we can do is to show how and when different views lead to different conclusions.

Even when economists agree about the kind of response a particular policy will elicit, they may disagree about the magnitude of the response. This was one of the sources of dispute about the consequences of President Clinton's 1993 health care proposals. Most economists believed that providing health insurance to more people would lead individuals who previously did not have insurance to consume more health care—one of the motivations of the program was that many of those without health insurance were getting inadequate care. But there was disagreement about how much more they would consume. The answer to this question affected what the cost of any program would be.

Although a central concern of modern economics is ascertaining the magnitude of the response of, say, investment, to an investment tax credit, of consumption to a change in the income tax rate, of savings to an increase in the interest rate, and so on, it is an unfortunate fact that various studies, using different bodies of data and different statistical techniques, come up with different conclusions. As economists obtain more data and develop better techniques for analyzing the limited available data, some of these disagreements may be resolved.

DISAGREEMENT OVER VALUES

While the two previous sources of disagreement—concerning the best model for describing the economy and about quantitative magnitudes, such as the size of the response of savings to interest rates—arise within positive economics, the final source of disagreement lies within normative economics. Even if there is agreement about the full consequences of some policy, there may be disagreement about whether the policy is desirable. As has already been noted, there are frequently trade-offs: a policy may increase national output but also increase inequality; it may increase employment but also increase inflation; it may benefit one group but make another group worse off. Any policy, in other words, may have some desirable consequences and some undesirable consequences. Individuals may weigh these consequences in different ways, some attaching more importance to price stability than to unemployment, others attaching more importance to growth than to inequality.

On questions of values, there is no more unanimity among economists than there is among philosophers. This book will present the major views and assess some of the criticisms that have been leveled against each.

REVIEW AND PRACTICE

SUMMARY

1 In mixed economies, such as the United States, economic activity is carried on by both private enterprise and the government.

2 Since the time of Adam Smith, economic theory has emphasized the role of private markets in the efficient supply of goods. Yet economists and others have come to recognize important limitations in the ability of the

private sector to produce efficient outcomes and meet certain basic social needs. The attempt to correct these failures has led to the growth of government's role in the market economy.

3 The government, however, is not necessarily the solution to private sector failures. The failure of many public programs can be attributed to four factors: (a) The consequences of any action by the government are complicated and difficult to foresee. (b) The government has only limited control over these consequences. (c) Those who design legislation have only limited control over the implementation of the government programs. (d) Politicians may act to further special private interests; more generally, political processes are complicated and need not yield efficient outcomes.

4 The United States has a federal government structure, with certain activities primarily the responsibility of states and localities (such as education) and other activities primarily the responsibility of the federal government (such as defense).

5 Economics is the study of scarcity, how resources are allocated among competing uses. Public sector economics focuses on choices between the public and private sectors and choices within the public sector. It is concerned with four basic issues: what gets produced, how it gets produced, for whom it gets produced, and the processes by which these decisions are made.

6 In studying the public sector, positive economics looks at the scope of government activity and the consequences of various government policies. Normative economics attempts to evaluate alternative policies that might be pursued.

7 Disagreements about the desirability of policies are based on disagreements about the appropriate assumptions for describing the economy, such as how competitive the economy actually is, disagreements about how strongly the economy will respond to policy initiatives, and disagreements about values.

KEY CONCEPTS

Mixed economy	Deregulation
Privatization	Production possibilities schedule
Mercantilists	Economic models
Laissez faire	Positive economics
Full Employment Act of 1946	Normative economics

QUESTIONS AND PROBLEMS

1 Consider the following discussion of a program of price supports for farmers:

a The objective of our farm program is to ensure that all farmers have a reasonable standard of living. The way it does this is to ensure that farmers receive fair prices for their commodities. It is no more right that farmers should produce for substandard prices than that workers should work for substandard wages.

b Our farm program has been a failure. The benefits of the price subsidies accrue largely to large farmers (because they produce more). Many farmers still have incomes below the poverty line. The high prices have induced increased production, which has meant high costs for the government. Acreage restrictions have had only limited effect, since farmers have kept their best land in production. Direct grants to farmers would be preferable to our price support program.

Which of the statements in this discussion are normative, and which are positive? (The fact that you disagree with a normative statement or that you think a particular "positive" statement is inaccurate does not change the nature of the statement.)

Identify the sources of disagreement: Are they due to differences in values and objectives? To differences in perceptions about the nature of the economy? Or to a failure on one (or the other) side of the debate to take into account the full consequences of the government's action?

2 For each of the following programs, identify one or more "unintended" consequences:

a Rent control

b Minimum wages

c Medicare (free hospital care to the aged)

d Improved highways making suburbs more accessible to the city

e Forced integration of central-city schools

f Agricultural price supports

g Lowering the speed limit to 55 miles an hour to save on gasoline

h Providing health insurance to children who currently are underinsured

i Banning advertising of cigarettes (Hint: Consider the consequences of increased life spans for the social security system.)

j National testing standards for schools

3 There has been considerable concern that our social security (old-age and survivors insurance) program is not adequately financed: with expected birth rates, death rates, and increases in payroll tax collections, the current level of benefits can only be sustained with increases in tax rates. Some believe that the appropriate response is to reduce the current level of bene-

fits, others that the appropriate response is to increase taxes in the future. Still others, worried about the effects of even higher tax rates but believing that lowering the benefits of those presently receiving social security would be unfair, argue that benefits in the future should be cut.

In this discussion, separate out the positive statements from the normative statements. To what extent are the disagreements attributable to differences in views of the economy?