

## ASSUMPTIONS UNDERLYING THE COMPETITIVE MODEL AND IMPLICATIONS FOR MARKETS AND GOVERNMENT

**A**s the title suggests, the purpose of this book is to reconsider the economics of health. It does so by examining the assumptions on which the superiority of competitive approaches is based and how a failure to meet these assumptions affects health policy choices.

As we saw in Chapter 2, standard microeconomic theory suggests that if certain assumptions are met, allowing markets to function without government interference will result in *allocative efficiency*. In this situation, a society's resources are used in the most productive way: Consumers' demands are being satisfied through the most frugal use of resources.

But markets *do* fail, and government can sometimes ameliorate such failure. However, market failure is not the only justification for government intervention. Economists have posited three situations in which government intervention is in society's best interest (Musgrave and Musgrave 1989):

- When markets fail (the focus here and in most of the remainder of the book)
- When markets produce a distribution of resources that society finds unacceptable (the focus of Chapter 9)
- When the economy is unstable (not covered in this book, but covered in macroeconomics courses)

### 3.1 The Assumptions of the Competitive Model

The conclusion that reliance on markets is necessarily desirable is based on certain assumptions. No generally accepted list of such assumptions exists, although some economists have come up with different versions. Exhibit 3.1 lists the specific assumptions examined in this book, along with the chapters in which each is analyzed.<sup>1</sup> The list was drawn largely from Graaff (1971), Henderson and Quandt (1980), Mishan (1969a, 1969b), Nath (1969), Ng (1979), Rowley and Peacock (1975), and Sen (1982). The book thus centers

on description, analysis, and application of these assumptions—in particular, what happens if they are not met in healthcare markets.

Exhibit 3.1 is only a partial list of the assumptions on which the superiority of the competitive model is based. We have left out other assumptions either because they are essentially the same as those noted or because, in the authors' opinion, the health economics profession has dealt with them adequately.<sup>2</sup>

Why are assumptions so important? Why not just look at the data to see, for example, whether a healthcare system based largely on competition works better than one based largely on government? A subfield of economics called *welfare economics* addresses these questions.

Welfare economics is concerned with how a society can best organize itself to improve the well-being or welfare of its citizenry. It asks questions such as, Should we rely on competitive policies in the health services sector?

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### EXHIBIT 3.1

#### Assumptions of Market Competition and Their Further Treatment in the Remaining Chapters

#### Chapter 4: Demand for Health, Insurance, and Services

1. A person is the best judge of his or her own welfare.
2. Consumers have sufficient information to make good choices.
3. Consumers can accurately predict the results of their consumption decisions.
4. Individuals are rational.
5. Social welfare is based solely on individual utilities, which in turn are based solely on the goods and services consumed.

#### Chapter 5: Special Topics in Demand: Externalities of Consumption and the Formation of Preferences

6. There are no negative externalities of consumption.
7. There are no positive externalities of consumption.
8. Consumer tastes are predetermined.

#### Chapter 6: How Competitive Is the Supply of Healthcare?

9. Supply and demand are independently determined.
10. Firms do not have any market power.
11. There are not increasing returns to scale.

#### Chapter 7: The Profit Motive in Healthcare

12. Firms maximize profits.
13. Profit maximization results in the most efficient production and the highest consumer welfare.

#### Chapter 9: Equity and Justice

14. The distribution of wealth is approved by society.
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Again, why can't we just look at the evidence? The reason is twofold: (1) Sometimes there is no direct evidence because history provides no good examples, and (2) given the same data, different analysts often reach very different conclusions.

If the United States were to adopt a Canadian-style "single-payer" system, health economists would likely disagree about whether the population was better off under the new system or the old one. As the cynical yet apt adage goes, "where you stand depends on where you sit." Jan de V. Graaff (1971, 2–3, italics added) has written,

[W]elfare . . . is not an observable quantity like a market price or an item of personal consumption [so] it is exceedingly difficult to test a welfare proposition. . . . The consequence is that, whereas the normal way of testing a theory in positive economics is to test its conclusions, *the normal way of testing a welfare proposition is to test its assumptions*. . . . The result is that our assumptions must be scrutinized with care and thoroughness. Each must stand on its own two feet. We cannot afford to simplify much.

We must get our theory right when applying economics to health, and understanding the validity of the assumptions is key. If we do not, then we blind ourselves to policy options that might enhance social welfare, many of which simply cannot be derived from the conventional economic model.

### 3.2 Can Government Fail Too?

Markets are problematic in healthcare, with respect not only to providing services equitably but also to providing them efficiently. This issue is a major focus in this book, and it also raises the key policy question: Would government do any better? Well more than 100 years ago, economist Henry Sidgwick (1887) stated, "It does not follow that whenever laissez-faire falls short government interference is expedient; since the inevitable drawbacks of the latter may, in any particular case, be worse than the shortcomings of private enterprise."<sup>3</sup> A century later Mark Pauly (1997, 470) expressed a similar view, noting that "a government staffed by angels could undoubtedly do a better job than markets run by humans."

Indeed, just as markets may fail, so might government (Tullock, Seldon, and Brady 2002). The field of economics has devoted considerable effort to studying market failure, but less on developing a comparable theory of government failure. This fact is not terribly surprising. For such analyses to be tractable, simplifying assumptions is necessary. Economists

have successfully analyzed consumers by assuming they focus on maximizing utility, and firms by assuming they seek to maximize profits. But a convincing theory of government behavior cannot be captured by employing a few simplifying assumptions.

Charles Wolf (1979, 1993) conducted some of the pioneering work in the area of government failure. Wolf contended that just as a market may fail, government intervention may fail for similar (though not precisely the same) reasons. Government, according to Wolf, faces a number of challenges, including the difficulty of defining and measuring outputs (e.g., the *quality* of education), the fact that it is monopolistic by nature and doesn't have to adhere to a "bottom line" of profits or losses, and politicians' preference for quick fixes rather than long-term solutions. As a result, government can operate inefficiently and in some cases inequitably, since it is often beholden to special interests.<sup>4</sup>

Some of these criticisms apply to markets. When markets carry out activities that are traditionally government responsibilities (e.g., primary education), they have comparable difficulty defining outcomes. And just as government workers are not subject to profit-and-loss statements, evidence indicates that employees and managers in private industry often serve their own goals rather than those of the shareholders.

Other economists have contributed to one aspect of understanding the potential for government failure, an area sometimes called the *economic theory of regulation*. George Stigler (1971) is usually credited as pioneering this field, although it had antecedents within and outside of the economics literature.<sup>5</sup> Researchers and laypersons alike have taken what Stigler calls a more idealistic view of regulation—that it serves the public interest by improving efficiency (e.g., correcting externalities and controlling the behavior of monopolists) and equity (e.g., redistributing income from the wealthy to the poor) (Feldstein 1998) or by protecting health or enhancing safety.

Stigler found this *public interest theory* unsatisfactory and proposed instead what is sometimes called *capture theory*—which is the opposite of the public interest theory. Rather than serving the public, regulation serves those it is designed to regulate. Viewed this way, regulation is, by its nature, anticompetitive and anticonsumer.

How can regulated industries capture the regulators whose role, purportedly, is to keep them in check? To answer this, Stigler considered the political process. Just as firms attempt to maximize profits and individuals attempt to maximize utility, so do politicians attempt to maximize their self-interest. Politicians, he believed, are interested in retaining their power, and for that to occur they need votes and money. Special interest groups can provide this but will do so only if the politician can offer them something in return. That "something" is regulations that, through a variety of means,

make members of the group better off. Examples include regulations that prevent or discourage competition, price supports or subsidies, and actions that harm competitors that sell substitute goods.

But why would consumers allow this to happen? Stigler hypothesized that their interests were too disparate; consumers could not possibly be expert enough to keep up with all industries, and even if they could, they would not bother, because cost-increasing regulations for a single product would have little overall effect on their disposable incomes.

We can extend this theory to regulatory agencies. Legislators do not have time to directly oversee all aspects of government, nor do they and their staffs have the necessary expertise. These tasks are delegated to administrative agencies. The employees of these agencies are arguably motivated “by job security and higher salaries [which] are more likely to occur when an agency’s budget is expanding” (Feldstein 1998, 30). This budgetary expansion, however, will only happen if the agency’s behavior is in accordance with the legislature’s desires.

Over the years economists have honed the economic theory of regulation. The major contribution was made by Sam Peltzman (1976), who formalized the theory and worked out some of the kinks. Just as the public interest theory ignored the interests of special interest groups, Stigler’s theory seemed to put all of the power in the hands of special interests. Under his formulation, this was a single special interest group—the highest bidder for the favors of the regulator.

Peltzman theorized that regulators would not necessarily serve a single special interest group. Rather, they would consider all competing interests, although not equally.<sup>6</sup> By trying to serve a variety of interests, a self-interested politician or regulator would gain more, in a sense, by trying to make everyone happy. But this might not give consumers as much clout as producers. Those groups that are best able to concentrate their resources toward a particular goal tend to be most influential in the regulatory process.

An extensive literature related to the economic theory of regulation, but with a wider scope, is a school of thought called *public choice* or *rational choice* (not to be confused with the *public interest* literature that assumed that regulation benefits society by improving efficiency and the distribution of resources). Public choice theory studies (among other things) how public organizations make decisions (Stanbury 1986). This theory has been characterized “as the economic study of nonmarket decision making, or simply the application of economics to political science” using the assumption “that man is an egoistic, rational, utility maximizer” (Mueller 1989, 1–2). Its proponents have examined such issues as why people vote, the implications of rulemaking by majorities and alternatives to it, the formation of coalitions and political parties, and theories of government and bureaucratic behavior.<sup>7</sup>

The basis of public choice theory is that individuals act in their own interest. Politicians seek election or reelection to retain power, prestige, and sometimes wealth. Government workers seek job security, pleasant working conditions, and higher pay; one way to achieve the latter is to increase the size of their agency or the number of people they supervise. Interest groups form to obtain favors from government. In return, they provide campaign contributions, attempt to sway the public in favor of certain positions or candidates, and perhaps provide useful information about voter preferences.

A number of criticisms have been leveled at public choice theory. On the theoretical side, it is unclear whether public officials act in a solely self-interested manner. For example, the theory predicts that political parties and individual candidates will focus almost entirely on enticing voters by espousing centrist positions, but often this is not the case—as witnessed by the emergence of the far right-of-center Tea Party in the United States. Similarly, the theory leaves little room for ideology in politics; rather, it assumes politicians choose the positions most likely to get them elected rather than seek election so as to implement their vision<sup>8</sup> and that civil servants are similarly driven by factors devoid of ideology. The theory is not always wrong—it surely describes many actors in the political scene—but it may be unrealistically cynical. In addition, public choice theory has been criticized as being inconsistent with empirical evidence of actual behavior in a number of areas (Green and Shapiro 1994). One area in particular that has received criticism is citizen involvement in public affairs. Public choice theory does a poor job of explaining why people vote in elections (when their chance of influencing an election is almost nil) or vote to raise their own taxes (Mueller 1989).

Despite their shortcomings, these theories have helped raise society's awareness of government's *potential* for self-serving behavior. This understanding alerts the public to areas in which government failure is most likely to be manifested and, consequently, assists the public in averting its manifestations. As noted by Dennis Mueller (1989, 465):

[F]rom a knowledge of past mistakes we can design institutions that will avoid similar mistakes in the future. Public choice does provide us with this knowledge. Because of this, I remain optimistic . . . even about the possibility that this research may someday help to improve the democratic institutions by which we govern ourselves.

### 3.3 Market Versus Government: A False Dichotomy

All countries rely on both markets and government. Insisting on one or the other creates a false dichotomy. Rather, societies need to determine *where*

each is most appropriate and how best to mix the two. In this regard, one of the leading exponents of the notion of government failure, Charles Wolf (1993, 7), wrote:

The actual choice is among imperfect markets, imperfect governments, and various combinations of the two. The cardinal economic choice concerns the degree to which markets or governments—each with their respective flaws—should determine the allocation, use, and distribution of resources in the economy.

Indeed, all countries use markets and government, in varying degrees, to determine the allocation of goods and services in healthcare. The choice is not either/or; markets and government can and do complement each other. Markets improve on government by helping ensure that consumer demands are met and resources are not squandered. Governments improve on markets by ensuring that poor and sick individuals have access to care and that providers and insurers do not reap unreasonable profits from selecting healthier patients (Morone 2000; Rice et al. 2000). Thus, each country must decide how much government involvement to employ and just where government should intervene in markets. In the following chapters, we argue that acceptance of the assumptions listed in Exhibit 3.1 has made market solutions seem more effective than they actually are in solving key social problems in healthcare. How different countries integrate markets and government is further addressed in Chapter 12.

## Notes

1. The assumptions about externalities will not be self-explanatory to the noneconomist reader; see Chapter 5 for clarification.
2. One exception is the theory of the second best. Suppose two or more of the assumptions in Exhibit 3.1 are not met. It might seem reasonable for public policy to focus on trying to improve one of these particular market imperfections, but this is not necessarily the case. The theory of the second best states that if multiple factors cause a market to deviate from the assumptions of market competition, then it is not necessarily appropriate to try to make the market more competitive in selected areas (Lipsey and Lancaster 1956–1957).

A hypothetical example in the healthcare field should help clarify this concept. Suppose two of the assumptions on which economic competition is based do not hold: There are few firms, which results in market power, and consumer information is poor. The theory shows that more competition in one of these areas will not necessarily bring us any closer to an optimal state

and, in fact, may have the opposite effect. If there are a limited number of firms, then better information about price might allow firms to set prices as in a cartel (Fielding and Rice 1993). Or if information were limited, then as the number of physician firms in an area rose, it would become increasingly difficult for consumers to keep track of prices and reputation in the market. As a result, consumers might have to pay higher physician prices than they would otherwise (Satterthwaite 1979; Pauly and Satterthwaite 1981). Thus, even within the economic model, increased competition may not always be desirable.

Because so many of the assumptions of the competitive marketplace are not met in the health area, second-best considerations are pervasive. The most important one, perhaps, is the very existence of health insurance. When consumers have health insurance, the price they pay out-of-pocket for services is less than the cost of providing the services. (In a competitive marketplace, prices and costs are equivalent in the long run.) The theory of the second best tells us that other competitive policies therefore are not necessarily optimal in the presence of health insurance.

One problem with using second-best considerations to critique competitive economic policies in the health area is that, realistically, none can pass a second-best test. Often, several aspects of a market do not conform to the assumptions of competition. None of the arguments made in this book rely on second-best considerations. Readers wishing to pursue this topic should examine Robert Kuttner's (1997) book, *Everything for Sale: The Virtue and Limits of Markets*, for a detailed analysis of applying this theory to the health sector and to several other markets.

3. This quote was obtained from Wolf (1993, 17).
4. Wolf's analysis has been critiqued by Le Grand (1992). He posits that government failure is better considered separately with regard to different types of government intervention in a market (e.g., provision, taxation/subsidy, regulation) and goes on to consider such failure in each of these contexts.
5. In the economics literature, see Mancur Olson's book, *The Logic of Collective Action* (1965). To cite one noneconomic example, in the 1960s historian Gabriel Kolko observed, "The dominant fact of American political life at the beginning of this century was that big business led the struggle for the federal regulation of the economy" (High 1991, 1).
6. Regulators, like consumers and firms, are assumed to reach an equilibrium in which the ratio of marginal benefits to marginal costs is equalized—here, across competing interest groups. We can view marginal benefits as the extra political support or contributions regulators receive from a particular interest group, and marginal costs as the loss of support or contributions. If certain groups, such as producers, can marshal their resources better than consumer

groups, then under the theory politicians and regulators would focus more of their attention on aiding such groups.

7. For a detailed review of the public choice literature, see Mueller (1989); for a critique, see Green and Shapiro (1994).
8. Some public choice theorists have tried to incorporate ideology into models of competition among political candidates, but this makes it hard to distinguish the theory from more traditional ones used in political science (Green and Shapiro 1994).