There is no lack of information about economics. If you seek comprehensive discussions, there are textbooks, and if you prefer more specialized and scholarly analyses there are monographs and journal papers galore. If you seek information about the latest developments, there are numerous stories in the media, while TV programs, magazines, and books slake the thirst of those seeking advice on how to invest. And if you are after headier fare, and want to set your blood boiling, many editorials and magazine articles offer you harrowing tales about the stupidity and venality of the other side, and the wisdom and virtue of those who share your ideology.

# **1.1 What This Book Provides**

This book tries to satisfy a different need: to enable you to keep your head above water in this sea of valid and invalid information by empowering you to spot naive and spurious economic arguments, that is, to become a critical instead of a passive consumer of economic arguments. Accordingly, it gives many examples of spurious arguments, and explains why they are wrong. (Box 1.1 illustrates how easy it sometimes is to spot inadequacies in a popular argument, if one just takes the trouble to think about it.) Its theme is that in much, though by no means all, of economics, a little serious thinking can go a long way. Although it focuses on only one subject, economics, its emphasis on thinking things through means that it could also be described as a book on applied logic.<sup>1</sup>

However, this book is not just an exercise in negation. It does present some economic theory, because that is needed to spot spurious economic arguments. But the theory it presents is not the structured and carefully explicated version

## **Box 1.1: Federal Funding for Stem Cell Research**

When President Bush vetoed a bill to provide federal funding for stem cell research many people complained that this would obstruct the discovery of cures for many serious diseases. One may certainly disagree with the President's decision (as I do), but it is wrong to treat it, as much of the popular discussion does, as a fatal or near-fatal blow to such research. One reason is that firms hoping to gain lucrative patent rights could finance some of it, and so could charitable institutions and state governments, as California is already doing. But a more important reason is that the United States is not the only country in the world. Other countries, such as Britain and Singapore, are eager to subsidize stem cell research to gain a strong position in a promising high-tech industry. This does not mean that President Bush's decision not to fund stem cell research will have no effect. It will slow it down, since most of the scientists engaged in this research are currently in the United States. But, assuming that his decision is not overturned after the 2008 election, the main effect of President Bush's action will be that the United States will lose much of a new high-tech industry to other countries.

The reader may believe that all this is pretty obvious, and does not require any special knowledge of economics. But that is precisely my point. The pressure of media deadlines, the eagerness to score partisan points, and ideological blinkers hide many things that become obvious when one takes the time to think about them. And this book is intended to help you do so.

found in standard textbooks. It is a much less formal one, which tries to provide an intuitive "feel" for economics, something that economics courses often fail to do because of their strong emphasis on the technical apparatus of economics. Even those who have taken some economics courses will therefore find new things here.

In order to do that in the space of this average-length book, and to do it as painlessly as possible, I have avoided, where feasible – and that is in most places – theoretical concepts that would require elaborate explanations, and I have introduced as few technical terms as possible. You will not learn the lingo of economics here. For example, supply and demand curves show up only in an appendix that can be skipped without losing continuity. Introductory textbooks need an abundance of diagrams because these courses are intended to provide not only a general education in economics for non-majors, but also to provide the foundations that economics majors need for their more advanced courses. By contrast, I assume that readers of this book are not

planning to take more advanced economics courses. And why put up a fivestory scaffold to build a one-story house? Instead, I concentrate on basic economic logic. But making this logic part of someone's mental reflexes requires more than simply stating it in a persuasive way. I have therefore provided numerous examples. Proofs prove, but examples explain and convince.

Moreover, unlike writers of textbooks, I have felt no need to be comprehensive. Thus, except for a few passing comments I have omitted macroeconomics (the part of economics that deals with recessions and unemployment, expansions, economic growth, and inflation), even though my own work has been primarily in macroeconomics, because macroeconomics requires technical apparatus, and provides fewer easy ways of demonstrating the theme of this book. Two additional reasons are the currently unsettled state of macroecomics, and a wish to keep this book relatively short.

The research that economists, particularly academic economists, do is usually complex and mathematical. But much – though certainly not all – of what economics has to contribute to the outside world, its exports, so to speak, are ideas that are simple and intuitive, and do not require the mathematical sophistication that academic economists look for in each others' work. Even those with math phobia can read and enjoy the most renowned book on economics ever written, Adam Smith's The Wealth of Nations. The only mathematical background I assume, is that readers know how to add, subtract, multiply, and divide, and can look at a chart. Box 10.1 provides the only other bits of mathematics needed, except for the equation for a straight line, which is explained in chapter 13. And even these are needed only in very few places, which can be readily skipped. If Brian Greene could write a book on modern physics that has virtually no mathematics in the text it should be possible to do the same with economics.<sup>2</sup> This is not to deny that mathematics is immensely helpful in economics, but much of economics can be understood on an intuitive level without it. Similarly, I do not assume any prior knowledge of economics other than what you find in a newspaper.

Moreover, I realize that for most people, though not for me, the feeling of satisfaction one gets from understanding a subject is less for economics than for physics. And, being an economist, I know that if you offer something of lesser value you have to do so at a lower cost. The main cost of reading a book is the time and effort required. I have, therefore, made this book much easier going than the popular books on physics that I buy, try to read, and in good part don't understand. It is intended for the coffee break, not the coffee table. Such a book should be of interest to humanists because it deals, not with ways of making a killing on the stock market, but with the way human beings spend much of their time, and, in that respect, economics is a humanity.

## **1.2 Looking around Corners**

What the book does require is a willingness to look beyond readily apparent surface effects for indirect effects, and at long-run as well as immediate effects; or putting it another way, a readiness to "look around corners," and to watch for the operation of the law of unintended consequences. That means recognizing that if the government adopts a new policy, not only will the target of this policy be affected, but so will some other conditions, perhaps in highly undesirable ways. For example, suppose the government requires airlines to install a costly new safety device that will on average save three lives per year. If your ethics tell you that saving even one life is more important than corporate profits you might be tempted to approve. But, when faced with greater expenses, airlines will raise fares. This will induce some people to drive instead of flying. And since driving is more dangerous than flying, the net result of requiring the safety device could well be more fatalities. Or, to take a more complex example: as explained in chapter 8, it turns out that a law giving artists a share in the capital gains obtained when their work is resold makes artists worse off. People often ignore such indirect effects and act like an inexperienced chess player who moves up a pawn to capture his opponent's knight, and does not consider that she will simply move the knight. Chapters 8 and 9 provide many such examples of how the law of unintended consequences frustrates good intentions.

Related to the pervasiveness of indirect effects is the pervasiveness of trade-offs. If you want more of one thing you generally have to accept less of something else; if you eat your cake now you won't have it tomorrow. Economists calls this "opportunity cost." For example, watching network TV is not free; its opportunity cost is not spending the time doing something else, as well as letting ads induce you to spend your money inefficiently. One major function of economics is to point out these sometimes hidden opportunity costs – if we restrict imports we save the jobs of some American workers, but also reduce exports, and thus sacrifice the jobs of some other American workers.<sup>a</sup> This book will provide many examples of such opportunity costs.

Both opportunity costs and the law of unintended consequences are frequently ignored, and that is not surprising. People feel a tension between what

<sup>&</sup>lt;sup>a</sup> As we reduce imports American importers pay fewer dollars to foreign exporters. This reduces the supply of dollars on the foreign exchange market, and thereby causes the dollar to rise relative to foreign currencies. As a result, American goods now cost more in foreign countries, and foreigners buy fewer of them.

both their conscience and their self-image as decent people demand of them, and what their self-interest urges them to do. One way to reduce this uncomfortable tension is to follow the call of self-interest in one's own daily activities, and at the same time to support policies that promise to improve the welfare of the poor, or to curb the spread of sexual immorality, etc.<sup>b</sup> But for that to work one must believes that these policies will do more good than harm. And it is easier to convince oneself of that if one looks only at their intended effects and avoids searching for their unintended consequences.

## **1.3 Ideological Stance**

This book differs not only from textbooks, but also from "advocacy books," that is, those books that try to persuade you of a certain political line. At their best such books can provide much insight, but they generally present only one side of the issue, and when not at their best they tend to insist either that a market economy is a virtually faultless generator of human happiness; or else, that the world would be a wonderful place if it were not for corporate greed. What I do advocate, is treating economic issues as grist for serious thinking, rather than as an opportunity to strike an emotionally satisfying position. To be sure, a large share of the arguments that I question come from the liberal side.<sup>c</sup> But that is not meant to imply that conservatives are on the whole smarter than liberals; but it is due to liberals advocating more policy changes than conservatives do, and therefore facing more often the temptation to jump from a desired outcome to the advocacy of some policy, without adequately considering its unintended consequences. And it is such jumps, whether by liberals or conservatives, that are the target of this book. My disagreements with liberals are primarily not with their goals but with the means by which they hope to attain them. For what it it's worth, I have voted

<sup>&</sup>lt;sup>b</sup> No, this is not a matter of hypocrisy. Hypocrites lay claim to virtues that they know they do not possess. The people I am talking about do not realize that they are advocating certain policies primarily to make themselves feel good.

<sup>&</sup>lt;sup>c</sup> The terms "liberal" and "conservative" are slippery. They are not synonyms with Democratic and Republication or with pro-business and anti-business. Thomas Sowell (*A Conflict of Visions*, New York, Basic Books, 2007) provides much deeper definitions; liberals believe in the perfectibility of man and his capacity to reason, and want to change institutions to improve man, while conservatives don't. But since this is a book on economics my use of these terms focuses primarily on one aspect of this distinction: liberals are more inclined to favor government intervention in the market than are conservatives. On this definition, those who advocate favorable tax treatment for certain industries are liberals, not conservatives.

Democratic in most presidential elections. Within limits I am not opposed to helping the poor, but only to inefficient and counter-productive attempts to do so.

Here is an example. As I am writing this (July 2008) the sub-prime mortgage crises has caused undeserved suffering for many people. I feel sorry for many of them. Yet I strongly oppose some policies that would largely alleviate their problem, such as Senator Clinton's proposal to freeze for five years interest rates which are set to rise on variable rate sub-prime loans. Such a freeze would send a message to potential mortgage lenders that making variable rate loans, or for that matter any, mortgage loans, has become riskier since in the future they may again not be allowed to receive the interest rate set in the contract. They will respond by charging higher interest rates on mortgage loans when they do make them. Another possible indirect effect of forcing lenders to freeze mortgage rates might be a significant fall in the value of the dollar as foreign investors come to believe that property rights in the United States are no longer sacrosanct, and therefore reduce their holdings of US securities and sell the proceeds in the foreign exchange market. Still another indirect effect, this one favorable, is that limiting the number of foreclosures would ameliorate the fall in house prices, and thus avoid or ameliorate what could become a serious recession. On the other hand, the losses lenders would suffer if mortgages are renegotiated would limit the credit they make available to other potential borrowers. A further effect is that bailing out borrowers would create expectations of future bailouts, and hence tempt people to take out mortgages on terms they cannot afford. And there is also the question of whether the government has the right to confiscate some of the lenders' property, because that is what reducing the interest rate to which they are contractually entitled surely amounts to.

Here is another example. In 2007 the Bush administration tried to reduce greenhouse gas emissions and oil imports (and thus oil prices) by requiring greater use of gasahol. In doing so it ignored two indirect effects. First, the production of gasahol generates more greenhouse gases than its use saves. Second, using more corn to produce fuel leaves less corn available as food, and thus drives up food prices. Poor people in Mexico, for whom corn is a major component of their diet, have been particularly hard hit, but a rise in corn prices increases other food prices too, as consumers substitute away from corn towards other foods.

Thus, the Clinton proposal, the Bush gasahol initiative, and similar proposals, have many indirect effects, and I cannot be certain whether their net effects are favorable or unfavorable. But what I am certain about is that one should consider such indirect effects before deciding whether to support or oppose these proposals. Fostering such a mindset is a much more crucial objective of this book than is the teaching of technical concepts, such as oligopoly, comparative costs, and regression coefficients.

Along these lines some readers, both liberals and conservatives, will find something disconcerting in this book. This is an admission of uncertainty and of the limitations of our knowledge. (The bumper sticker on my car says "Don't believe everything you think.") Since the 1990s, political partisanship has sharpened and we now live in an era of bad feeling. This book is a plea for open-mindedness and a greater willingness to see both sides of an issue. It tries to show liberals that free markets, by which I mean markets operating with only narrowly circumscribed government intervention (i.e., protection of property rights and prohibition of fraud, and perhaps of certain types of monopoly), are generally an extraordinarily efficient tool for enhancing productivity and incomes. And it tries to show conservatives that there are some situations in which government intervention enhances efficiency, and that, in any case, economic efficiency is not the only criterion by which to judge a policy.

All the same, regardless of whether you are a liberal or a conservative you can read this book without fear that it will sap your deeply held commitment on broad issues of economic and social policy, because these commitments usually involve much more than the considerations of economic efficiency that are the primary subject of this book. For example, you may discover here that a free market is much more efficient than you thought, but still believe that considerations of justice or of social cohesion – topics not discussed here – justify extensive government intervention. Or conversely, the criticisms of free markets discussed here may convince you that free markets are not all that efficient, and yet you may continue to be a stalwart supporter of free markets, because you believe that government intervention is even less efficient, or that it is an unacceptable interference with economic freedom.

## **1.4 Economics Embedded in Philosophy and Sociology**

Since the nineteenth century, economists have striven to make economics more akin to natural science or mathematics This has led them to isolate the economic aspects of a problem from its usually less tractable ethical and sociological aspects. For economists, this shedding of non-economic aspects of problems has been a fruitful and convenient research strategy. But it does make things harder for general readers, whose interest in economic problems is part and parcel of their interest in the broader social and ethical problems

in which the economic problems are embedded. And what makes this worse, much worse, is that economists usually do not tell them what philosophical and sociological aspects of the problem need to be melded with the economic aspect that they have studied. To avoid leaving the reader in this position I do pay attention to some controversial issues that are outside of economics. But since I can claim no expertise on them, and since there is usually no generally accepted answer, I merely raise these issues without pretending to resolve them.

## **1.5** My Own Biases

At this point I should confess my own ideological preconceptions, so that you can be on guard against my biases. I am a conservative in the sense that I accept the tragic vision of life, as set out, for example, by Thomas Sowell, a vision that quakes at the difficulties and dangers that arise in trying to improve the world. If you classify people into those who believe that every problem has a solution, and those who believe that every solution has a problem, put me into the latter group. I see most policy choices as requiring trade-offs, often painful ones, rather than as requiring only that one take an enlightened and morally correct stance.

More specifically, I believe in a free-market economy, but I do not *believe* in it. I recognize that it has some serious faults, and also that the case for it requires value judgments on which people may readily differ. My belief in a free-market economy is based less on a sunny view about how it works than on pessimism about the alternative, and on a belief that the best is the enemy of the good. Through the profit motive, a market economy provides a way, though admittedly an imperfect one, of communicating the wishes of consumers to producers, while communicating to consumers the admittedly imperfectly measured costs of providing various goods. For the political process to improve on it, would, in most cases, require much more knowledge than we possess, and also much less self-interested behavior on the part of those making the decisions.

Many eons ago some organic chemicals combined into living cells. Why should one expect that their descendents have learned to govern themselves efficiently? And if we cannot govern ourselves efficiently, shouldn't we limit the role of government? (This raises an interesting question about the culture war: shouldn't one expect Darwinians to reject the optimistic view of man, and therefore to settle for a market economy, and that believers in intelligent design and therefore in the perfectibility of man, should favor

government intervention?) My conservative ideology is consistent with concern about the plight of the poor and with a wish to help them, but it is inconsistent with supporting policies merely because they are *intended* to help the poor.

Since one of the functions of this book is to interpret economics to noneconomists I should also admit my biases with respect to economics. Most economists are what they themselves call "mainstream economists," rather than "heterodox economists," such as Marxists. And since I am in the mainstream tradition that is the type of economics I serve up. But I am critical of the formalist turn it has taken in the last few decades, usually associated with the much greater use of mathematics, and prefer a more intuitive approach that aims more for insight than for rigor. This will show up not only in specific comments I make, but also in what topics I discuss. Although, by and large, this book aims to present the common viewpoint of mainstream economists I have not tried all that hard to suppress my own idiosyncrasies.

# **1.6 What Is to Come?**

Here is a brief description of what is to follow: The next two chapters (2 and 3) describe the field of economics. They discuss topics such as what economists do, the tools and techniques they use, and what economics can and cannot accomplish. This may help you to decide how much credence to give to the subsequent chapters, and whether to invest more time in reading economics, as well as what biases to watch out for.

Much of the prevailing confusion in discussions about economics and economic policy results from the use of vague or emotion-laden terms, and from the failure to distinguish between seemingly similar concepts, as well as from the misapplication of some concepts. Chapter 4, therefore, looks at some terms that are used in popular as well as in professional discussions of economics and politics, and shows how they can mislead, while chapter 5 discusses the often sharp difference between certain concepts that in many discussions are treated as though they were identical.

Another source of confusion is the failure to understand the principles that determine how resources are allocated, and how the prices of goods are determined. Chapter 6, therefore, discusses the price mechanism. The success of an economy depends in substantial part on providing the right incentives for work and risk taking. Everyone knows in a general way that these are important, But God is in the details, and these details are not so well known; hence chapter 7 discusses them.

With this background we are finally in a position to evaluate many debates about microeconomic policies. And, as chapters 8 and 9 illustrate, one can get far in doing so simply by using common sense to look for the indirect effects of some policies instead of jumping to *seemingly* obvious conclusions. Some of the issues discussed in these chapters are important policy problems, but some others are minor, chosen only because they provide a convenient way of showing how to apply economic reasoning. A reader who works through the discussion of these issues should be in a position to deal with many other economic issues as they arise – and that is the purpose of this book.

Contrary to the impression one gets from introductory economics courses, economics is not just "a bunch of theory." Most economists spend much the major part of their working time doing empirical economics. And although the category of empirical economics includes purely verbal discussions of historical events, the bulk of this empirical work involves numbers, and hence statistics. The economic arguments found in the news media, too, frequently rely on statistics. Hence, if you want to learn how to protect yourself from spurious economic arguments you have to know something about statistics. Neither blind faith in numbers, nor the mantra "figures don't lie, but liars figure" will do. Just like purely verbal claims, claims based on numbers need critical appraisal. And this is true also in other fields, such as medicine. It is, therefore, no wonder that *New York Times* columnist David Brooks advised students bound for Harvard to read Reinhold Niebuhr and Plato's *Gorgius*, to "take a course on ancient Greece . . . [and] *take statistics*."<sup>3</sup>

This may seem strange to those whose interests are primarily humanistic. But it shouldn't, because what you have to learn about statistics differs sharply from what is taught in the formula-laden, math-dominated statistics course you may have been forced to take in college. These courses have to be almost entirely mathematical because their primary task is to teach you how to calculate various statistical measures such as standard deviations and regression coefficients. Here, the purpose is to get you to understand what these measures mean, what their limitations are, and above all how to differentiate between valid and invalid claims based on them. Focusing in these aspects of statistics, rather than on the how-to aspect, brings out the humanistic aspect of statistics. One important humanistic theme is the need to combine extensive and mottled knowledge and observations into a succinct and comprehensible theme, and another is how to draw conclusions as best we can from the incomplete information that we have. Behind its cobweb curtain of equations and mathematical proofs this is what statistics is about: inference under conditions of incomplete quantitative information.

And for that you need numeracy. Numeracy is not mathematics, you can be exceedingly good at it without knowing much math – and you can know much math without being numerate.<sup>d</sup> It consists of the knack of spotting when an argument based on data is spurious, and also the knack of drawing the sometimes hidden message out of sets of data – it was said about one economist, Nobel laureate Simon Kuznets, who was especially good at this, that he could "make the data sing." Former Federal Reserve Chairman Alan Greenspan was also a master at this. A third aspect of numeracy is knowing the approximate magnitudes of economic variables, such as GDP or the federal deficit. This book does not deal with the latter, if you want to know the GDP or the deficit, then look them up. Nor does it does it pay much attention to drawing subtle messages out of data, doing that requires experience as well as aptitude. But it does train you in spotting errors dressed in the garb of statistics.

Accordingly, this book has five chapters – albeit two of them short ones – on empirical economics and statistics. The first of these three chapters (10) is about reading – yes, plain old reading, but reading critically. Its two appendices show you several limitations of some sets of data that many readers accept as though they were unchallengeable "facts." The American public would be shocked if it knew how questionable are some of the data that provide the bases for certain important polices. It would probably be even more shocked if it realized that even with the best will in the world not much can be done about this.

The following short chapter (11) takes up two seemingly simple subjects, the meaning of percentages, and how to read graphs, and shows that they are not all that simple after all.

Just about all our economic data are samples, and samples can be deceptive. They may be too small, and they may be intentionally or unintentionally biased. So the next, short chapter (12) deals with these problems, particularly with biases in selecting the sample. The penultimate chapter (13) takes up regression analysis, the primary statistical tool used in economics and many other fields to connect causes and effects. This is inherently precarious because all that the data can show is the existence or absence of co-movements among

<sup>&</sup>lt;sup>d</sup> Here is an example: to reduce their risks, financial institutions look for a set of assets whose values have in the past moved in different directions, so that their risks washed out. To do that, someone who is better at math than at numeracy will use a sophisticated mathematical model to calculate the correlation in the values of assets and stop there. Someone who is numerate may or may not use such a model, but will also eyeball the data to see if the negative correlation holds up in periods of financial stress when excessive risk may lead to bankruptcy, and is not just the product of the normal periods, which predominate in the data.

certain variables along with the nature of any co-movements, and the leap from co-movement to causation is dangerous.

At this point, some readers may feel like throwing up their hands and concluding that the potential pitfalls of statistical analysis are so great, that it cannot be used to make an even half-way convincing case for anything. To show that such pessimism is unwarranted, the last chapter gives some examples of the successful application of regression analysis. The book concludes with a brief epilogue suggesting further reading.

One final point: like many authors, I think that everyone should read every word I have ever written, but I realize that this is a distinctly minority opinion. Accordingly, the book has a loose enough structure that readers can skip some chapters, and go on to read subsequent ones – except for chapter 13, which is based on chapter 12. I have also used several appendices and many boxes, so that it is easy to skip many topics.

## Notes

- 1 For a well-written introduction to that field see Jamie Whyte, *Crimes against Logic*, New York, McGraw-Hill, 2005.
- 2 Brian Greene, The Elegant Universe, New York, W.W. Norton, 2004.
- 3 David Brooks, "Harvard Bound? Chin Up," *New York Times*, March 2, 2006, p. A 29 (italic added).